

Analysing Disrupted Health Sectors

A Modular Manual

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**World Health
Organization**

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To Amelia

~

To Camilla and Sara. They know why

To comment and provide feedback on this manual you can e-mail: griekspoor@who.int

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List of acronyms used in the manual

ADB	African Development Bank
AIDS	Acquired Immuno-Deficiency Syndrome
CAP	Consolidated Appeal Process
CCA	Common Country Assessment
CERF	Central Emergency Response Fund
CHAP	Consolidated Humanitarian Assistance Programme
CHW	Community Health Worker
DAC	Development Assistance Committee
DFID	Department for International Development (UK)
DHS	Demographic and Health Survey
ECHO	European Commission's Humanitarian Office
EIU	Economist Intelligence Unit
EM	Essential Medicines (or Essential Drugs – ED)
EPI	Expanded Programme on Immunisation
EU	European Union
GAVI	Global Alliance for Vaccines and Immunizations
GDP	Gross Domestic Product
GFATM	Global Fund to fight AIDS, Tuberculosis and Malaria
GNI	Gross National Income
GNP	Gross National Product
HiT	Health Care Systems in Transition
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HQs	Headquarters
HRs	Human Resources
HRD	Human Resources Development
HRH	Human Resources for Health
HSP	Health Sector Profile
HSR	Health Sector Reform
IASC	Inter-Agency Standing Committee
ICRC	International Committee of the Red Cross
IDPs	Internally Displaced Persons
IFIs	International Financial Institutions
IFRC	International Federation of the Red Cross and Red Crescent Societies
IHL	International Humanitarian Law
IMF	International Monetary Fund
INRUD	International Network for Rational Use of Drugs
I\$	International Dollars
LFA	Logical Framework Approach
MDGs	Millennium Development Goals
MDTF	Multi-Donor Trust Fund
MICS	Multiple-Indicators Cluster Survey
MoF	Ministry of Finance
MoH	Ministry of Health
NGO	Nongovernmental Organization
OCHA	Office for the Coordination of Humanitarian Affairs
ODA	Overseas Development Assistance
OECD	Organisation for Economic Co-operation and Development

PCNA	Post-Conflict Needs Assessment
PEM	Public Expenditure Management
PHC	Primary Health Care
PIU	Policy Intelligence Unit
PKO	Peace-Keeping Operation
PPP	Purchasing Power Parity
PRSP	Poverty Reduction Strategy Paper
SWAp	Sector-Wide Approach
TA	Transitional Authority(ies)
TBA	Traditional Birth Attendant
TFs	Trust Funds
UN	United Nations
UNDP	UN Development Programme
UNHCR	Office of the UN High Commissioner for Refugees
UNICEF	UN Children's Fund
WB	World Bank
WFP	World Food Programme
WHO	World Health Organization

**List of
acronyms used
in the manual**

Foreword

Chronic crises have become a constant feature of the global landscape. The current economic meltdown is bound to cause more social and political instability as poverty and inequality increase. Unrest mounts within countries and tensions rise between states.

As Director-General of WHO, Margaret Chan, recently stated on the impact of the global crisis¹: *“The world is in a mess, and much of this mess is of our own making. Events such as the financial crisis and climate change are not quirks of the marketplace, or quirks of nature. They are not inevitable events in the up-and-down cycle of human history. Instead, they are markers of massive failure in the international systems that govern the way nations and their populations interact. They are markers of failure at a time of unprecedented interdependence among societies, capital markets, economies, and trade. In short, they are the result of bad policies. We have made this mess, and mistakes today are highly contagious.”* This manual wants to contribute to understanding what is needed to avoid the negative impact of “bad policies” in the health sector.

The manual has a long story. It originated as an idea of Alessandro Loretto, a long-serving, now-retired WHO colleague, back in 2002.

The manual was commissioned to fill the gap existing in this area: neither guidance documents, nor training materials specifically devoted to the analysis of health systems in crisis were available, and the scarcity of analysts versed in this field was evident. It was hoped that a dedicated manual would shorten the learning process of analysts, and reduce the number of mistakes and false starts. Additionally, the multiplication of crises all over the world called for the expansion of this type of analyses.

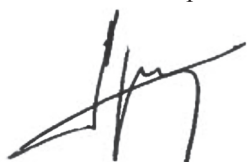
The authors of this manual, Enrico Pavignani and Sandro Colombo, worked in Mozambique in the 1990s, where they had the opportunity to appraise the difficulty of conducting an analysis of a severely-disrupted health sector, as well as the benefits deriving from a better understanding of the system.

A large part of this manual was written in 2002–2003, but as the work progressed, it was felt that the sample of stressed health sectors on which the manual was built had to be enlarged. Progressively, Sudan, Liberia, Iraq, the Democratic Republic of the Congo, Somalia, Uganda and the occupied Palestinian territory were studied in some detail. Studies about other countries also became available. They provided grounds for verifying the soundness of the approaches proposed by the manual, and offered additional insights and materials to be included in it.

Many colleagues contributed to this manual and to the accompanying training materials. The modules composing the manual enjoyed a wide circulation, and were used by a variety of analysts, field workers and academics, who were generous with their feedback. A formal peer-review, conducted at the end of 2007 by the Department of Recovery and Transition Programmes in the Cluster of Health Action in Crises at WHO, resulted in further enrichment of the manual.

Along the way, two independent but closely-related training courses, of which one is co-sponsored by WHO, Merlin and IRC, were born from this manual. They gave the authors the opportunity to discuss the contents of the manual with participants coming from crisis-affected countries, and to test many exercises that were progressively incorporated in the manual. Other training events, conferences and encounters provided further occasions for strengthening the manual, clarifying some concepts and adding missing parts to it.

Peter Walker² has said that the main challenge of relief, and its essence, is *“to make hard decisions under pressure and with minimal information”*. The quote applies also to chronic emergencies, the subject of this manual. Also in these contexts, hard decisions taken can have huge implications on the life and well-being of the victims of emergencies, also beyond the end of the crisis itself. We hope that this manual may contribute to making right decision when facing hard choices to recover disrupted health sectors.



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1 Chan M (2009). The impact of global crises on health: money, weather and microbes. Address at the 23rd Forum on Global Issues, Berlin, Germany, 18 March 2009.

2 Walker P (1995). Coordination. Always finding the wrong answers to the right questions. In DHA Perspective 1995, Department of Humanitarian Affairs, Geneva; quoted in: Benini AA (1997). Uncertainty and information flows in humanitarian agencies. Disasters, 21 (4): 335-53.

The manual in a nutshell

Objective To provide guidance to analysts of health sectors in crisis. This includes countries on the verge of an economic, political and/or military catastrophe, protracted crises and situations of transition from disaster to recovery. The **intended users** are apprentice analysts, already with field experience, familiar with quantitative techniques, attempting to analyse a disrupted health sector.

Content After the introduction, eleven thematic modules cover the main areas relevant to the study of health sectors in crisis, offering practical advice, experiences from the field, tools, references and suggestions for further study. Subsequently, *Module 13* deals with the practical production of a health sector profile. *Module 14* complements the thematic modules with sources of information, definitions and references. *Module 15* proposes exercises intended to explore further the issues covered by the manual. Most modules include stand-alone *Annexes*, which cover selected topics considered of special interest.

Approach Practical, experience-based, and action-oriented. For each important aspect, ways of analysing the situation are suggested. Patterns recurring in disrupted health sectors are described and discussed. Instruments for data collection and analysis are proposed. Common pitfalls are illustrated and ways to overcome them are suggested. The manual offers materials for use, rather than for reading. It is supposed to become a companion, kept on the desk by the apprentice analyst and consulted as the need arises. In each single troubled context a great deal of adaptation of the materials included in the manual must be anticipated by the user.

Conceptual premises

- Making (rough) sense of a chaotic environment is usually possible, if adequate effort is spent over a sufficient time span. The scattered and unused information that is usually available in such contexts, if exploited in full, may become the primary source of intelligence.
- The returns from robust intelligence work at health system level, in terms of effectiveness, efficiency and equity of healthcare provision, may be substantial.
- A comprehensive analysis may penetrate the situation better than the isolated scrutiny of single issues.
- Sensitivity to context is key to effective interventions. Ideology, blueprints and fashions, although commonplace, are useless for gaining true insights into protracted crises.
- Intelligence arises from the cross-fertilization of insider knowledge and international experience of previous crises.

Caveats

- No theme is exhaustively explored in all its possible subtleties. To that effect, valuable texts, accompanied by brief comments, are recommended.
- Whereas the proposed analysis is carried out from a national viewpoint, the attained results should also be relevant to actors working at the local level.

Module 1

Introduction

The crisis environment

Protracted – mainly man-made – crises multiply the world over, confronting the public health practitioner with daunting challenges. Healthcare delivery fragments and deteriorates, memory and knowledge are eroded, and power disperses. Unreliable and incomplete information hampers sound decision-making, while fast-evolving conditions increase uncertainty. Operating costs escalate. Security concerns add to stress and limit the space for manoeuvre. Even in this unfavourable environment, action cannot be postponed. Tough decisions have to be taken anyway, with or without the support of valid insights.

The vagueness of terms (none of them fully satisfactory) used in the literature to characterize these situations reflects their variety: complex (political) emergencies, protracted crises, fragile or unstable countries, etc. The common feature linking these situations is that people's lives are endangered to such a degree that an external intervention becomes necessary. These crises range from short-term, fairly intense conflicts threatening small populations, such as Kosovo and Timor-Leste, to state collapses of catastrophic dimensions across vast, inaccessible areas, such as the Democratic Republic of the Congo, where mortality rates attained previously unheard of levels (Coghlan et al., 2006).

Politics, rather than evidence and lessons learnt in other similar contexts, shape decision-making and resource allocation in a complex emergency. *“Action is always ahead of understanding.”* (Pain and Goodhand, 2002). Big mistakes are made and valuable opportunities are missed. Poorly documented lessons remain unlearned. Information and intelligence become crucial to temper the dominance of politics and ideology, as well as to reduce the gap between expanded needs and scarce resources, which is magnified by crisis.

Health sectors adjust to crises in spontaneous ways (see *Module 8* for a discussion). These adaptive responses are often inevitable; in some cases, they are even helpful for the short-term survival of the health sector. The main concern relates to their long-term, serious negative consequences. Adaptive responses tend to take place at the micro-level, and go undetected or partially understood. The recovery of a crippled health sector is unlikely to materialize spontaneously. It has to be actively steered in a favourable direction.

Crises magnify pre-existing problems and create new ones, often hidden behind a curtain of uncertainty. The significance of certain distortions may become apparent only once the crisis is over, *when it is too late to address them*. Thus, the timely recognition of problems and trends can trigger corrective action. Crises provide unique opportunities for change, opportunities that resolute decision-makers can grab. Hence the importance of studying crises during their unfolding, rather than postponing analyses and decisions to more propitious times.

Given the difficulty of understanding the events taking place in a protracted crisis, health services analysts are usually reluctant to embark on comprehensive studies, preferring instead to explore narrower, more manageable issues. Equally restrained, involved aid organizations are not used to commissioning reviews of the level of ambition commonplace in stable health sectors. But little understanding of a complex system can be gained from the study of its detached components. And the internal features of a system are heavily influenced by the context, i.e. by the other systems it interfaces with. To succeed in penetrating troubled health sectors, adequate conceptual tools, integrating field experiences into a holistic framework, are needed.

The starting point of this manual (based on the experience gained by working in protracted crises) is that *making (rough) sense of a chaotic environment is usually possible, if adequate effort is spent over a sufficient time span*. Chaos presents patterns, sometimes original but often recurring across crises, which make it surprisingly understandable. Given the potentially large returns of an investment in intelligence,

in terms of the effectiveness, efficiency and equity of healthcare provision, it is well worth the effort in a majority of cases.

The manual

Standard technical textbooks and training courses offer approaches stressing precision and control, making them unsuitable to war-torn, unstable environments, where incomplete, inconsistent or contested datasets are the rule. Specific surveys, difficult and expensive to carry out and feasible only in secure areas – thus hardly representative of the whole population – cannot be used as standard tools. As the field situation evolves fast, information becomes quickly outdated. The analyst must rely on poor data, complemented by qualitative information, personal memories and old documents to fill information gaps and to guide interpretation. The triangulation of different sources and methods helps to discard flawed information and validate findings. The present manual strives to convey to users the art, as well as the science, of making sense of troubled health sectors.

The manual reviews patterns commonly occurring in disrupted health sectors, and discusses many of the pitfalls that may undermine their analysis. Unique features recognized in certain environments are singled out and commented upon. The manual is essentially practical and action-oriented, with many real-life examples. Ways to collect, clean, validate, compile and make sense of relevant data, potential sources of information, as well as main dimensions and issues to analyse, are all discussed. Pointers to quick ways of gaining a rough understanding of relevant aspects of troubled health sectors are offered for consideration, without the pretence of studying these aspects in detail (which in these situations is often unfeasible and in some cases undesirable). The scope of the proposed analysis is countrywide. Nevertheless, global results should also be relevant to actors working at the local level.

Most if not all the situations, problems and approaches discussed in the manual are inspired by actual work carried out in several disrupted health sectors, frequently specified in the text. Far from being an off-the-shelf methodology to be applied to every possible context, this manual is intended to provide assistance to the analyst, so as to shorten the learning period and to draw attention to some of the mistakes that may occur in these situations. A great deal of adaptation to each specific context is needed.

The manual does not attempt to cover all the relevant fields: epidemiology and public health, health system analysis, health economics, etc. Instead, it tries to show features unique to disrupted health sectors and to suggest practical ways of gaining insights about a given situation. The manual is about *what to do* as much as *what not to do*. Given the multiple situations that the analyst may confront, a broad array of conceptual approaches and practical tools is presented. Some will be more appropriate than others to a specific context at a given point in time. Some peculiar situations will call for the development of original instruments, not (yet) included in this manual. Substantive field testing in different settings is anticipated for the materials here presented, which will remain a work-in-progress over a certain period. Feedback from users of the manual is warmly welcomed.

Whereas the main focus of the discussion is on full-fledged crises, the manual should be valuable also for the analysis of borderline situations, while the crisis is building up. To understand the main patterns of a weak health sector *before* events precipitate an actual crisis can provide extraordinary benefits later, at the onset of an emergency, by suggesting to old and new actors the broad direction of the needed interventions. Furthermore, collecting and analysing information is easier before the crisis unfolds in all its gravity.

Many of the issues covered by the manual are controversial, or in progress. An honest effort has been made to present the terms of the discussion, to recommend helpful

Why develop a new manual?

Aims and content

references and to throw light on aspects inadequately considered by the ongoing debate. In most cases, the point of view of the authors has been included. As any point of view, it will look debatable to readers holding different opinions. Indeed, any analysis of a disrupted health sector is subject to controversy, which can be better managed by recognizing existing problems, than by ignoring or trivializing them, as is often the case in practice.

Audience This manual is intended for public health professionals, economists and social scientists, in or outside the World Health Organization (WHO), with field experience, who receive the task of assessing a disrupted health sector, particularly in a recovery perspective. The users of the manual are supposed to be familiar with the quantitative approaches used in statistics, economics and public health. To fill the gaps existing in the conceptual and technical weaponry of the prospective users, selected manuals and papers are suggested in the *Recommended Reading* sections and in the *Glossary* found in *Module 14*. Given the extremely broad scope of the analysis covered by the manual, no exhaustive expertise is anticipated from the prospective analyst. Rather, a firm commitment to explore the fields encompassed by the analysis and some ability for autonomous learning are required.

How to use this manual The manual is conceived as a set of thematic and self-contained modules, all related to each other, but to a certain degree usable alone to carry out sub-sector studies, if necessary. This approach has implied a certain degree of repetition across modules. Some of the annexes supplementing the modules are conceived as introductory guides to specific issues of particular interest in an unstable situation. Other annexes offer practical suggestions about ways of addressing certain key information gaps.

The reader may follow the sequence of the modules proposed below, or may prefer to jump to an area of particular interest. Even in the case of a sub-sector analysis, *Modules 2 to 6* have to be considered as essential background reading. *Module 12. Formulating strategies for the recovery of a disrupted health sector* supposes familiarity with most of the issues covered by the other modules. *Module 13* offers practical suggestions about the production of a health sector profile, along with concrete examples. Sources of useful information, a glossary of definitions and concepts, and introductory notes to specific violence-affected health sectors are presented in *Module 14. Resources*. *Module 15* proposes exercises intended to offer hands-on practice on the issues covered by the manual, and check the extent of learning attained by its user.

Synthesis of the main themes discussed in the manual

Several themes emerge from the discussion of different areas and shape the way issues are addressed throughout the manual:

- *The essential feature of the broad analysis needed in unstable situations is its accuracy* in relation to the main problems and constraints. Decision-makers need to be reasonably confident that a major problem singled out by the analysis is not an artefact, bound to disappear once data improve. *Precision*, desirable but usually unattainable, is a lesser concern, because of the aggregate and approximate nature of most countrywide allocative decisions, thus not seriously affected by the imprecision of the estimates upon which they are based. See *Module 2* for a further discussion of this issue.
- *The primary source of understanding is the often vast amount of unused information* generated by the multiple players involved in the crisis, complemented by historical data necessary to give depth to the analysis. Huge strides towards comprehending the main systemic features of the health sector and its evolution over time can be registered by exploiting in full the wealth of disconnected pieces of information scattered around in the health environment.

- *To be helpful, the analysis has to be comprehensive*, i.e. to encompass all the relevant dimensions of the health sector and their reciprocal links. Without a holistic perspective, there is serious danger of missing the main patterns of the whole picture.

“In India, ten blind men were asked to describe an elephant. Since each blind man was located at a different part of the animal’s body, they produced ten different descriptions of the elephantine system. Each claimed to have a unique understanding of the system, and an argument ensued.” (Ellencweig, 1992).

Unfortunately, a disrupted health sector lacks the elegant coherence of an elephant. Rather, it results from the deposit over time of many layers of disparate decisions and events. The recognition of its oddities and understanding of the reasons behind them are therefore key to obtaining true intelligence of the sector. Given the marked tendency of discrete sub-sector components to evolve disconnected from each other (information systems from management ones, hospitals from Primary Health Care facilities, disease-control programmes from mainstream services, human resources from financing, etc.), the study of present or absent linkages provides insights of superior order and relevance to decision-making.

- *Health systems must be studied alongside the political, economic, military, administrative, legal, cultural, and often criminal factors that influence their inner workings.* During a severe crisis, external determinants are frequently preponderant in shaping the way health systems cope, evolve, survive or collapse, and sometimes recover. A narrow focus on health issues is always inadequate and in some cases misleading.
- *A truly explanatory analysis must focus on the structural distortions* that condition the functioning of a health sector, regardless of the policies, strategies and delivery models nominally adopted. An underfunded health sector with an under-skilled workforce, crippled by poor management practices and shaken by a conflict, performs below acceptable standards even after a reform package has changed some rules of the game. *Setting the fundamentals right takes logical precedence over choosing the delivery model or the basic service package.* Time and again, the priority-setting debate ignores the logical hierarchy of *means* to be used in different *ways* to attain chosen *goals*. For instance, prioritizing safe motherhood means in many contexts addressing the severe shortage of midwives first and then second, the limited access to emergency surgical services, i.e. to intervene on the *hardware* needed by managers to materialize policies.
- *The once-in-a-lifetime opportunities for change offered by a crisis can be grabbed only if recognized and understood.* A prolonged period of turbulence changes any health sector irreversibly. Influential actors may passively accept changes (whatever their features may be), or actively try to steer them in a desirable direction. Most actors are unable to understand the systemic events taking place under their noses during a protracted crisis, and fall back on ideology, clichés, and standard procedures. Widely shared intelligence may inspire sound decisions or at least limit the damage caused by uninformed ones.
- *Imported standard approaches may be passively adopted and even thrive in the short term, but they are unlikely to take firm root,* unless they find genuine champions within the country. When these champions are truly familiar with the local context, they can adapt imported approaches to it, in this way responding to local problems and, in turn, appealing to other stakeholders. The incorporation of progressively indigenized (or perceived as such) approaches into local policies may ensue.
- *Policies, strategies and plans are meaningless when disconnected from explicit resource and capacity constraints.* Despite the technical difficulties of studying

resource and capacity patterns and forecasting their evolution in troubled contexts, these issues are too important to be neglected.

- *Emergency-induced approaches may have serious long-term implications for the recovery and the development of troubled health sectors.* Well-meant decisions taken in the heat of an emergency by action-oriented minds may irremediably doom to failure long-term structural processes. The most documented example is the proliferation of health facilities, often misplaced, wrongly sized or inappropriately laid out, fuelled by donor largesse, that inevitably jeopardize the long-term sustainability of resource-strapped health sectors. Additionally, this heritage puts in jeopardy the equity of future allocative decisions. Another example may refer to the boom of unplanned, decentralized and often privatized medical education, which floods the labour market with unneeded doctors of questionable competence. By recruiting these cadres (usually the only political option open to weak health authorities), the health sector incorporates a distortion with long-term negative implications. A third example is the common decision of leaving health workers to fend for themselves, free of administrative controls. After years of *laissez-faire*, reintroducing sound regulatory measures may constitute an impossible challenge for health authorities.
- *Certain crucial patterns may be older than the crisis* (which may highlight as well as hide them), cannot be explained by it, and will continue to confront policy-makers long after the crisis is over. A long-term assessment that looks beyond the limited timeframe of the crisis, which implies a review of documents anterior to it, coupled with interviews of old actors, is necessary to understand and address the structural distortions affecting the health system.
- *No formalized, “technical” approach can substitute for common sense, a solid cultural background, field experience and familiarity with the issues at stake*, at least in a poorly-known and unstable environment. Rapid assessments, logframes, strategic planning, cost-effectiveness assessments, are just examples of “rational” decision-making approaches, used over the years in unstable situations. The aim of these conceptual instruments of very different nature is to give order to chaotic pictures and confidence to stressed managers, which goes a long way towards explaining their popularity. The danger embedded in these instruments is to mistake the simplification of a complex reality, obtained by applying them, as an adequate representation of it. Despite the merits the seasoned observer may ascribe to these approaches, in many instances they have been used beyond their scope and applied to contexts unsuitable to them. Given the neatness of the constructions these instruments produce in skilled hands, against the scary ground situations typical of protracted crises, the actors’ over-reliance on them is hardly surprising.
- *Learning from previous crises is possible*, provided that it is actively pursued. The crisis environment, the state of mind of actors, and the culture prevailing in the aid community, all militate against learning. To overcome the objective obstacles to learning, additional, purposeful efforts are called for. Learning from previous crises does not translate into identifying the “best practice” so eagerly sought by donors. Learning relates to the “how”, “when”, and “why”, as much as to the “what” to do in ambiguous and turbulent processes. Accepting high levels of uncertainty about present features and likely outcomes of stressed health systems is the first step to be taken towards adopting the elusive best practice of donor parlance.
- Over the past twenty years, several crises have been studied. As experience has accumulated, important patterns have been identified across situations. *Genuine understanding implies the recognition of diversity as well as of similarity.* No universal thread is likely to hold in every crisis. Conversely, no crisis is unique

to such a degree that experience gained elsewhere proves useless. Considering the serious mistakes that can be avoided, as well as the better results that can be achieved by learning from previous crises, determined efforts in its pursuit appear well spent indeed.

Learning objectives

After studying a module and the accompanying recommended reading, completing the related exercise, and applying concepts, approaches and tools to real situations, the user should gradually become able to analyse the corresponding specific area of a disrupted health sector. This expertise implies the ability to:

- Collect and review the available thematic documentation, disentangling reliable and relevant data from flawed ones.
- Identify the main information gaps and conceive ways to overcome them.
- Formulate appropriate questions to be posed to informants.
- Identify the main structural features of the area under study, including present resource and capacity levels.
- Search and find additional relevant documentation, particularly in relation to unclear or controversial issues.
- Identify the main actors involved in the health sectors and understand their agendas.
- Compare the area under study with equivalent ones, documented in other disrupted health sectors, and identify similarities, as well as differences.
- Select the lessons learnt elsewhere that may be relevant to the area under study.
- Identify the main structural distortions affecting the area under study and conceive realistic measures to address them, while recognizing the resource and capacity implications of such measures.
- Build realistic scenarios, based on alternative explicit assumptions about the crisis outcome (persistence, deterioration or recovery), making clear to stakeholders the likely effects of their decisions. Project future resource envelopes according to realistic assumptions. Cost the financial implications of alternative policy options.
- Present the findings of the thematic analysis in a clear, concise way, adjusted to each specific audience.
- Sustain an evidence-based negotiation with concerned stakeholders about the strategic choices to be made in the health sector. This capacity implies the understanding of the positions of different stakeholders.

Modular structure of the manual

Module 1 Introduction

The introduction provides an overview of the main features of health systems in crisis and of different analytical approaches called for by distressed situations. The conceptual underpinnings of the manual are sketched. A set of learning objectives is provided. The contents of each module are then briefly presented. Thematic reading paths and lists of the true stories and of the tables included in the manual conclude the module.

The reading of the *Introduction* is recommended to every perspective user of the manual. In this way, the reader will become familiar with its architecture, and will be in a position to choose the modules relevant to his/her own area of interest. Also, the location of important topics related to the area covered by a module, but presented elsewhere, will be facilitated.

Module 2 Making (rough) sense of (shaky) data

The module reviews the information field, in this way introducing several of the main themes and issues to be discussed, sometimes in detail, in the manual. First, customary information systems are briefly described, including the way they adjust – or conversely, succumb – to the crisis. How figures can or cannot be manipulated to be turned into information and intelligence is discussed. Many key features of information, such as validity, precision, relevance, and their relative importance, are briefly covered. Approaches to data cleaning, as well as many common flaws usually undermining the usefulness of available data, are reviewed. The convenience of exploiting in full the vast amount of disconnected data frequently available in disrupted environments is highlighted. Information uses, the design of information systems, and ways of disseminating the collected information are touched upon in the final part of the module.

Annex 2 presents several important indicators, potentially relevant to the study of disrupted health sectors, commenting about their usefulness, strengths and shortcomings.

Module 3 Understanding the broader country context: past, present and future

Module 3 introduces the user of the manual to many aspects considered as helpful to gaining an understanding of a country in crisis. As the field is immense, the selection of issues to be discussed has been necessarily restrictive. No topic is dealt with in detail; historic, political, military and economic patterns are briefly covered. Stress is given to examining the nature of the disruption, in order to foresee its likely evolution, and to draw useful lessons from other countries. Then, specific topics are covered: population displacements induced by violence, politics and information management, and the role of international media in humanitarian crises. After a discussion of the aid directed to disrupted countries, and how it should be studied, the meaning of decentralizing the state administration in war-torn contexts is reviewed. A closing chapter considers the difficult issue of foreseeing the future of countries in crisis, the stark choices facing stakeholders, and their implications for the health sector.

Annex 3 discusses the rationale, aims and format of *Post-Conflict Needs Assessments*, as observed in several countries in transition. Preliminary lessons learnt by participating in such exercises are offered for consideration.

Studying health status and health needs

Module 4

In assessing the health status and health needs of the population of countries in crisis, attention must be paid to the way population, mortality, nutrition and morbidity data are generated, their meaning and their limitations. The module highlights common flaws undermining the usefulness of available datasets. Inferences that can be drawn from the figures produced in violent contexts are discussed, alongside the value for decision-makers that these estimates bear. Controversial findings are discussed as revealing examples. Conceptual aspects related to rapid health assessments and surveillance mechanisms in crisis environments are reviewed. Advice is provided to enable the reader to explore the documentation on health status and needs of a given crisis country, to recognize and discard flawed data, and to assemble a reliable country-wide picture.

Annex 4 discusses the knowledge gained to date about the complex relationships between conflict, HIV/AIDS and health systems.

Understanding health policy processes

Module 5

This module explores the foggy field of policy making, non-making and unmaking in troubled health sectors, drawing from documented situations as diverse as Afghanistan, Angola, the Democratic Republic of the Congo, Kosovo, Mozambique, Sri Lanka and Uganda. Common patterns are described and approaches to policy analysis are discussed. Ways are suggested to check whether stated policies actually translate into concrete measures. The coordination of external resources, usually a key issue in protracted crises, is covered. The main features of the most influential actors interacting in the policy arena are described.

Annex 5 discusses the rationale for establishing a *Policy Intelligence Unit*, its main features and the practical steps leading to it.

Analysing health financing and expenditure

Module 6

Module 6 explores the crucial but intricate field of health financing and expenditure, first discussing ways to study the main sources of internal and external financing, the aggregate resource envelope that the health sector relies on, the composition of health expenditure, and how to assess prevailing allocative patterns. Then, a detailed review of the many variables to be taken into consideration when forecasting the future resource envelope, followed by practical ways to proceed in the formulation of sensible projections, is presented. The module also includes a discussion of sustainability in war-ravaged health sectors and of its policy implications. Throughout the module, particular emphasis is given to the many information traps that must be negotiated to reach meaningful conclusions about health sector financing and expenditure.

Annex 6a provides practical advice about carrying out a survey of external resources, usually a much-needed if challenging exercise in every aid-dependent situation.

Annex 6b reviews concepts, terms and applications of cost analysis, another often-neglected but essential area for policy formulation, planning and management of healthcare activities, particularly in view of a recovery process.

Module 7 Analysing patterns of healthcare provision

The key aspects of healthcare provision to be considered when analysing a health sector in crisis are discussed in this module. Coverage of the most important health services, service loads of healthcare facilities, efficiency, effectiveness and the quality of the provided care stand out as basic elements to be studied. To assist in the analysis of the ways a health sector functions, and in the discussion related to its recovery and reform, a review of healthcare delivery models is provided. The value of essential health service packages is then appraised. The second part of the module deals with specific aspects of healthcare provision, such as prescription patterns, vertical programmes, urban health care, mobile health services, and relief health care.

Annex 7 discusses rationale, modalities, benefits and limitations of contracting for health services, an approach adopted in some health sectors emerging from conflict and being considered for adoption in many others.

Module 8 Studying management systems

This module explores the constellation of management systems in operation during a protracted crisis, the way they change under stress, as well as how they interact and occasionally collide among themselves. The need to consider informal institutions alongside formal ones is stressed. Aid management tools are reviewed in some detail. The scope for health planning in a disrupted environment is covered, as well as the features that planning needs to assume in order to be meaningful. The challenges of regulating healthcare provision in a crisis context are briefly explored. After a review of empirical considerations related to the revamping of crippled management systems, a discussion of capacity and capacity-building in a disrupted health sector closes the module.

Annex 8 briefly examines the relevance of the Sector-Wide Approach (SWAp) concept and the feasibility of its pursuit in troubled contexts, and sketches SWAp-oriented initiatives to be considered in such contexts as possible ways forward.

Module 9 Studying the healthcare network

The module examines the ways healthcare networks evolve under the effects of disruptive forces. After a broad review of composition, balance and shape of the overall network, relevant aspects – such as geographical distribution, ownership, physical and functional conditions of health facilities – are discussed. The need to disentangle new patterns as they emerge from old distortions, which may worsen during the crisis, is stressed, and techniques are suggested to aggregate available figures into useful indicators for the study of the network. Particular attention is given to hospitals and PHC facilities, as well as to their mutual relationships. The difficulties of planning the recovery of a disrupted health network are sketched, alongside ways to tackle them.

Annex 9 offers practical guidance on the building of a summary database of health facilities.

Analysing human resources for health

Module 10

Module 10 reviews the many aspects to be considered in the study of a health workforce. It starts with the most common developments witnessed in troubled health sectors. It then discusses the size and composition of the workforce in relation to the population to be served and the healthcare network to be operated. The main features of the workforce of several battered health sectors are summarized, highlighting similarities as well as differences.

Training, attrition, job descriptions, deployment, staffing patterns and staff performance are in turn considered, as is the subject of volunteer health workers, a prominent feature in many protracted crises. Issues related to regulating human resources are touched upon. The role of expatriate staff is briefly covered. The challenges posed by the integration of formerly rival health workers into a unified workforce are considered. Civil-service and salary provisions and constraints are in turn discussed. The module concludes with a review of strategies to be adopted to restructure a distorted and dilapidated workforce.

Annex 10 presents the post-conflict restructuring of the Mozambican health workforce. The baseline situation is compared to the human resources for health resulting from implementing a 10-year plan. Achievements are singled out alongside shortcomings.

Studying the pharmaceutical area

Module 11

The module discusses the patterns observable in the pharmaceutical area of most conflict-affected health sectors. The usual difficulties in data gathering and intelligence faced in such contexts are amplified by the peculiar features of the pharmaceutical field, which demands some additional expertise from analysts of health systems. First, drugs policy is reviewed in its main components, namely policy formulation, drug selection, registration and quality assurance, regulation, financing, procurement and distribution. Then, key logistical aspects of the drug cycle are discussed: production, warehousing, distribution and waste. The merits of alternative approaches to these functions are compared. The ways pharmaceutical areas adapt to disruption if left to their own devices are described, alongside the reform opportunities offered by protracted crises. A discussion of the steps required to restructure the area closes the module.

Annex 11 presents a map of actors and activities in the Southern Sudanese pharmaceutical area, sketched in spring 2006.

Formulating strategies for the recovery of a disrupted health sector

Module 12

The module discusses practical ways to approach the recovery of a disrupted health sector, suggesting step-by-step iterations aimed at appraising and costing merits and drawbacks of different broad aggregate options available to policy-makers. Ways to project the effects of conservative recovery strategies, alongside those induced by the adoption of alternative service delivery models, are described. Flaws common in troubled health sectors and possible policy responses are sketched. The methods described are intended to be applied to a transitional context, such as during the last years of a conflict, when peace negotiations are under way and a final settlement is expected.

Annex 12 presents summaries of some completed reconstruction processes, proposed as empirical reference frames for decision, when future opportunities for recovery emerge in troubled health sectors.

Module 13 Producing a health sector profile

The practicalities of developing a health sector profile (HSP) are introduced, starting by describing its nature and goals, then discussing timing, preparatory work, political and organizational aspects of the exercise. Indicators to be collected, a few hints related to interviews, the management of the gathered information and the writing of the report are in turn reviewed. A production template is presented, sketching the many issues to be kept in mind during the study. A barebones approach to carrying out a rapid exploration of a disrupted health sector, within a tight time constraint, closes the discussion. After it, several examples of HSPs, born out of different situations, are briefly reviewed.

Annex 13 proposes a concise way of mapping the information collected on a troubled health sector, using the example of Somalia in 2008, presenting together main issues, doubts about findings, policy options, and relevant lessons learnt.

Module 14 Resources

This module brings together several resources considered as valuable for the study of health sectors in crisis. First, some sources of relevant information are briefly reviewed. A table follows with definitions of many relief or aid management instruments and related references. A glossary of concepts and definitions, covering a range of key epidemiological, statistical, economic, financial, management and aid-related terms, is included. The module is closed by introductory notes to selected health sectors in crisis, complemented by recommended reading.

Module 15 Exercises

This module proposes exercises intended to encourage the reader to deepen her/his understanding of the issues covered by the manual. Ideally, after studying each thematic module, the reader should complete the related exercise. Most exercises are based on original materials produced in actual health sectors in crisis. A mix of quantitative and qualitative approaches is used along the module, to reflect the work that an analyst needs to realize to reach an adequate understanding of the health systems under study. Some exercises aim at familiarising the reader with analytical tools presented in the manual, and at extracting valuable meaning from them. The difficulty of the exercises roughly increases as the reader proceeds through the module. Each exercise is followed by its feedback, which offers what the authors of this manual consider as satisfactory answers.

Thematic reading paths

Some key themes are discussed many times across the manual, from different and hopefully complementary perspectives. By their importance, these themes deserve full, stand-alone modules. For the time being, and for the sake of keeping the manual manageable, they remain distributed over several modules. The interested reader may find useful the reading paths related to *Aid*, *Health planning*, *Primary health care* and *Recovery from conflict to peace*.

Module	Chapter	Aid
3	The politics of humanitarian aid Aid patterns <i>Annex 3: Post-conflict needs assessments</i>	
5	Actors Understanding coordination	
6	Sources of financing. External assistance <i>Annex 6a: Why and how to carry out a survey of external resources</i>	
8	Managing aid <i>Annex 8: SWAp-oriented instruments in conflict-affected and post-conflict health sectors</i>	
14	Relief/Aid management instruments/Coordination mechanisms	
15	<i>Exercise 3. Projecting aid to the health sector, in order to reach some set targets</i>	

Module	Chapter	Health planning
2	Using available information to develop projections <i>Annex 2: Monitoring patterns and trends in the health sector: indicators to be considered for choice</i>	
6	The present resource envelope Patterns of allocative decision-making Forecasting the future resource envelope, in a recovery perspective	
7	Healthcare delivery models	
8	Managing aid Prevailing planning practices	
9	Planning the recovery of the healthcare network <i>Annex 9: Why and how to build a database of health facilities</i>	
10	Strategies to restructure a distorted and dilapidated workforce	
11	Restructuring the pharmaceutical area	
12	Formulating strategies for the recovery of a disrupted health sector (entire module)	
15	<i>Exercise 2. Choosing indicators to monitor the recovery of the Somali health sector</i> <i>Exercise 9. Choosing summary functional criteria to classify health facilities</i> <i>Exercise 10. Assessing a post-conflict plan to strengthen human resources for health</i>	

Primary health care

Module	Chapter
7	Coverage of health services Assessing the effectiveness and efficiency of health service delivery Healthcare delivery models Essential health service packages Vertical programmes Urban healthcare delivery Mobile healthcare provision Health care of displaced populations <i>Annex 7: Contracting for health services</i>
	8 <i>True Story No. 14. Spontaneous development of healthcare provision in a war-affected district</i>
	9 Primary Health Care (PHC) facilities (<i>but the whole module relates to PHC</i>)
	10 Job descriptions, training contents and professional qualifications Staffing patterns Semi-professional cadres: community health workers (CHWs), volunteers, aides, etc.
	11 Supply schemes by ration kits
	12 Common systemic flaws and possible policy responses
	15 <i>Exercise 7. Considering pros and cons of contracting out health care provision</i>

Recovery from conflict to peace

Module	Chapter
3	The outcome of the disruption A basic typology of conflicts Decentralization in a disrupted country The future country context: implications for the health sector <i>Annex 3: Post-conflict Needs Assessments</i>
	5 <i>True Story No. 7. "Big Bang" health sector reform in Kosovo, 2001–2006</i> Formulating a new health policy at the start of a transition from war to peace <i>Annex 5: Establishing a Policy Intelligence Unit</i>
	6 Forecasting the future resource envelope, in a recovery perspective Contextualizing sustainability
7	Healthcare delivery models Essential health service packages <i>Annex 7: Contracting for health services</i>
	8 <i>True Story No. 13. Sector budget support to provincial recurrent expenditure in Mozambique in the 1990s</i> Regulation Decentralization in a fragile health sector Revamping crippled management systems Assessing existing capacity Capacity building <i>Annex 8: SWAp-oriented instruments in conflict-affected and post-conflict health sectors</i>

Module	Chapter	Recovery from conflict to peace
10	Integrating formerly rival health workers National human resource development strategy Strategies to restructure a distorted and dilapidated workforce <i>True Story No. 17. Rationalist planning in a politically-charged context: human resources for health in Angola during the transition from war to peace</i> Main lessons learnt in previous crises <i>Annex 10: Restructuring the workforce in a post-conflict health sector. Mozambique 1990–2002</i>	
11	Restructuring the pharmaceutical area <i>Annex 11: Mapping actors and activities in the Southern Sudanese pharmaceutical area</i>	
12	Formulating strategies for the recovery of a disrupted health sector (entire module)	
13	<i>Annex 13: Supporting the recovery of the Somali health sector</i>	
15	<i>Exercise 12. Drawing general lessons from documented health recovery processes</i>	

Further Study

Across the manual, *Recommended reading* and *References* have been selected without any pretence of exhausting the field under scrutiny. The goal of these entries is to help the user of the manual explore an issue in a fairly short study time, rather than to gain familiarity with the whole relevant literature, which in many cases is huge. On several occasions, no satisfactory materials addressing a specific issue in disrupted environments were found. In these cases, the choice fell back to good discussions of the issue in stable health sectors. For an example, see below Green, 2007.

Recommended reading (general)

Abel-Smith B (1994). ***An introduction to health: policy, planning and financing***. London, Longman.

“The book does not pretend to be value-free. It starts from the value premises underlying the ‘Health for All’ programme. The premises are that all people have a right to health, in so far as this can be achieved. It follows from this that the aim of equity ... should underline health policies”. The book tries to cover the whole range of the world socio-economic contexts (including the former Soviet Union), thoroughly avoiding the dissociation between health policy in affluent and poor societies, so common until a few years ago in the literature on “developing countries”. The issues faced by planners, economists and politicians are the same: resource scarcity, political pressures, priority-setting, cost containment, inadequate implementation. What makes the difference is the mix of “environmental” constraints. Not surprisingly, in poor countries the task is tremendously complex.

Abel-Smith acknowledges that there is little scope for optimism, but argues that lack of action by government (i.e. leaving the health market to the natural course of the events, or – better said – unregulated) is out of the question, if equity is the key concern. Therefore, *“it is better to plan than not to plan”*; *“no plan is realistic until it is costed”*; *“a modest plan is safer than an ambitious plan”*; *“it is easier to add to a plan later on than cut it back”*; *“a plan can be based on alternative scenarios from very pessimistic to modestly optimistic”* and so on. Are evidence and common sense the ultimate life jackets for the world’s poor? This golden booklet, testament of a lucid as well as principled thinker, seems to believe that.

Green A (2007). ***An introduction to health planning for developing health systems***. 3rd ed. Oxford, Oxford University Press.

A classic textbook, clear, comprehensive and readable, which offers the best available review of the field, thoroughly balancing techniques with real-world concerns and constraints. Green provides a fair appraisal of the most influential ideas that have shaped health systems world-wide, examining their strengths and weaknesses, as well as the assumptions and values they are built upon. In spite of portraying the difficulties of planning health care in developing countries and admitting its unsatisfactory record to date, the book nonetheless succeeds in conveying the necessity of supporting decision-makers with rational, evidence-based approaches, stripped of ideological elements and wishful thinking. Worthwhile reading for every practitioner interested or already involved in health planning. Even if the book does not address the specific features and additional constraints of health planning in troubled environments, it provides a wealth of general insights and instruments, against which crisis-adapted approaches can be developed.

Kaldor M (2006). ***New and old wars: organized violence in a global era***. 2nd ed. Cambridge, UK, Polity.

An important book, arguing that the organized violence affecting many areas of the world can be understood only through a new paradigm, which breaks away from the traditional vision of war still upheld by politicians and the military, at least in the Western world. “... [T]he new wars involve a blurring of the distinctions between war (usually defined as violence between states or organized political groups), organized crime (violence undertaken by privately organized groups for private purposes, usually financial gains) and large-scale violations of human rights (violence undertaken by states or political organized groups against individuals).”

Organized violence in the twenty-first century is characterized by global connections, local manifestations, a high degree of informality and decentralization, and identity politics. While they differ sharply from modern wars fought between states, the new wars present also pre-modern features. Ignoring the reality emerging on the ground exposes governments to fatal risks. The war in Iraq has tragically confirmed the analysis expounded in this book, that old approaches to war are dangerously inadequate in a global era.

Morgan P (2005). ***The idea and practice of systems thinking and their relevance for capacity development***. European Centre for Development Policy Management. Available online at: www.capacity.org, accessed 23 August 2008.

Fascinating and surprisingly accessible discussion of the potentials and drawbacks of systems thinking, once applied to development practice. The limitations of reductionist approaches to systemic issues are clearly laid down. The need for moving away from mental models and organizational structures poorly adapted to a complex, fuzzy, changing world is well argued.

Whether systems thinking as it stands today represents the way forward remains an open question. The approach is appealing, but not always rewarding or even meaningful. “*Systems thinking is thus always struggling to balance mystery with mastery, between failing to understand anything of significance and claiming to understand everything.*” Formidable conceptual, cultural and institutional barriers have to be overcome before systems thinking is adopted in standard development practice. But that the aid industry desperately needs a breath of fresh air is beyond question.

The interested reader may investigate the field further in:

Ramalingam B, Jones H, Reba T and Young J (2008). ***Exploring the science of complexity: Ideas and implications for development and humanitarian efforts***. Overseas Development Institute. Working Paper 285. Available online at: www.odi.org.uk, accessed 26 November 2008.

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Coghlan B et al. (2006). *Mortality in the Democratic Republic of Congo: a nationwide survey*. Lancet, 367:44–51.

Ellencweig AY (1992). *Analysing health systems: a modular approach*. Oxford, Oxford University Press.

Islam M, ed (2007). *Health Systems Assessment Approach: A How-To Manual*. Submitted to the U.S. Agency for International Development in collaboration with Health Systems 20/20, Partners for Health Reform^{plus}, Quality Assurance Project, and Rational Pharmaceutical Management Plus. Arlington, VA: Management Sciences for Health.

Pain A, Goodhand J (2002). *Afghanistan: current employment and socio-economic situation and prospects*. Geneva, International Labour Organisation.

True stories presented in this manual

Number	Title	Module
1	Comparing coverage figures in Sudan	2
2	Population figures in Mozambique	2
3	Understanding the evolution of the Afghan health sector	3
4	Interpreting mortality data in Iraq	4
5	Rapid needs assessments in the Iraqi health sector in 2003	4
6	Policy studies in Angola in the 1990s	5
7	"Big-bang" health sector reform in Kosovo, 2001–2006	5
8	Making an inventory of NGO projects in the Sudanese health sector	5
9	The transaction costs of coordination: negotiating a standard salary policy in Afghanistan, 2002-2003	5
10	Summary indicators, Sudan 2002	6
11	Estimating the health expenditure of the Iraqi health sector in 2004	6
12	Coordinating aid in the political vacuum of Somalia	8
13	Sector budget support to provincial recurrent expenditure in Mozambique in the 1990s	8
14	Spontaneous development of healthcare provision in a war-affected district	8
15	Devolution in Sri Lanka	8
16	The composition of the healthcare network in Afghanistan	9
17	Rationalist planning in a politically-charged context: human resources for health in Angola during the transition from war to peace	10
18	Drug donations to Mozambique in 2000	11
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21	The saga of the Palestinian Health Sector Review 2003-2007	13

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A basic typology of conflicts	3
Gross national income (GNI) and aid per capita in war-torn areas (US\$)	3
A simplified chronology of the health sector in Angola	3
Comparing post-conflict needs assessments	Annex 3
Demographic indicators for selected countries in crisis	4
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Size of health teams, by type of facility	10
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A glossary of concepts and definitions	14

Module 2

Making (rough) sense of (shaky) data

"True genius resides in the capacity of evaluation of uncertain, hazardous, and conflicting information."

Winston Churchill

Contents

The module presents an overview of the information field. It introduces, sometimes in detail, several of the main themes and issues to be discussed throughout the manual. First, customary information systems, and the way they adjust – or often succumb – to crisis, are briefly described. We then discuss how figures can or cannot be manipulated to be turned into information and intelligence. Key features of data, such as validity, precision, relevance, and their relative importance, are considered. Approaches to data cleaning, and many common flaws usually undermining the usefulness of available data, are reviewed. Particularly highlighted is the value of using the vast amount of disconnected data frequently available in disrupted environments. Information uses, the design of information systems, and ways of disseminating the collected information are the final part of this module.

Annex 2 presents several important indicators, potentially relevant to the study of disrupted health sectors, alongside comments on their usefulness, strengths and shortcomings.

Introduction

In complex emergencies, marked by uncertainty and instability, the information base is generally weak and fragmented. Information systems are badly affected and sometimes collapse; their coverage is invariably reduced¹, communication and access to troubled areas are difficult, data are outdated and incomplete, standardization is poor, and the collection and analysis of data clash with other priorities. Some say that the *strongest indicator of a crisis is the lack of information*, often in spite of the availability of large amounts of unused data. Even in an extremely disrupted situation like Afghanistan in 2002, health data, although incomplete, of variable quality and scattered among different sites, were available. However, the capacity to compile them, judge their accuracy and make sense of them in a comprehensive way was absent. In most such cases lack of coordination, overcrowding of autonomous players, communication and security constraints, fast-evolving environments, and loss of institutional memory are the main causes of this state of affairs.

The information environment

Before the crisis, the health sector may have maintained several routine information systems:

- A *disease-oriented system*, focusing on morbidity and mortality reporting, sometimes called *Health Information System*, often including a *surveillance* sub-system geared to identifying communicable disease outbreaks. Usually it is the oldest system in place.
- An *administrative control system*, reporting about staff, facilities, activities, equipment etc. Often internally split, with, for example, personnel presented in a way unlinked to facilities, or to outputs, or even to salary expenditure.
- A *financial information system*, reporting budgets and expenditures, usually according to general financial procedures established by the ministry of finance (MoF) and enforced across the whole public sector. Such financial information systems, usually designed to satisfy central administrative requirements, often poorly accommodate the needs of sectors devoted to service delivery over most of the country's territory, which are naturally concerned with peripheral operations.
- Several *special information systems*, implanted by vertical programmes or some central departments, sometimes to address the shortcomings of the mainstream

¹ The resulting reduction of coverage is often *differential*: areas that become non-covered due to insecurity or other reasons may become different in other respects, including health.

systems, in other cases to adhere to international standards, such as for certain disease-control programmes.

Usually, these routine information systems are run distinct from each other, according to the instructions and the requirements of different agencies. Thus, cross-checking expenditure figures against output data may be impossible due to the mutually inconsistent design of the respective systems. Each system has been conceived in isolation, to reflect the different needs and points of view of epidemiologists, managers, accountants, and donors. Attempts at correcting this functional fragmentation so that most information is collected and analysed within the same consistent system, have taken place in a variety of situations, in some health sectors several times, with limited success. In fact, to design a comprehensive information system able to satisfy the requirements of most concerned parties at all levels of healthcare management is a daunting challenge.

Alongside routine information systems, a wealth of data is usually collected by dedicated surveys. In some cases, the choice of these instruments is due to the nature of the information needed, ill-suited for routine collection. New surveys are launched also because those who promote them are unaware of the yield of routine systems, or because they consider their results unreliable or inadequate, or just because they ignore the existence of other surveys. In most cases, different departments or agencies carry out similar surveys in isolation, duplicating efforts in a way that makes the merging of the collected data difficult or impossible.

The picture sketched above, prevailing in most stable health sectors, is likely to degenerate during a protracted crisis: some data collection activities close down, whereas others survive so crippled that their outputs become meaningless. Ad hoc data collection systems are implanted by newcomers. Virtually all aid agencies support in one way or another information-related initiatives. Surveys proliferate, as all parties promote them to appease their hunger for information. Cavalier approaches are commonplace, to such a degree that “rapid appraisal methods” in some cases might be more accurately described as “misleading or meaningless appraisal methods”. Dissemination of the available information suffers greatly, so that a large part of information collected remains unused. Shared resource centres close down or become disorganized. Old information is lost. Most organizations respond to this decay by establishing their own information storage capacity, which frequently remains inaccessible to outsiders. As important insights fall into oblivion, the same studies are repeated time and again.

In entrenched crises, no *information system* can objectively be recognized as such. Rather, the analyst wanders in a murky *information environment*, filled with figures but barren of facts, where the few good data are hidden by lots of bad ones and the *noise* of irrelevant information. Unused information “building blocks” are usually available in the environment, often shelved and forgotten in the most unexpected places. Before launching new rounds of data collection, a serious effort at extracting further understanding from what is already on offer (although sometimes at a high retrieval cost) should be made. Beyond gaining intelligence through this digging and collating work, analysts can identify in this way the main information gaps to be addressed by future studies.

Information sources

Useful information can be obtained from disparate sources:

- *Documentation centres* maintained by United Nations (UN) or donor agencies, or government departments. Of uneven quality, they vary from country to country. Their data are often aggregate at national level, which can make them less useful. A tour of most of these documentation centres is always needed. Gaining access to some of them may be difficult. In many cases, precious information is

available abroad, at the headquarters (HQs) of an international agency or at an academic institution.

- *Routine information* collected by the government (Ministry of Health [MoH], MoF, etc.). Health authorities tend to maintain some reporting activity, generating data that frequently await compilation. Most departments prepare some figures, rarely cleaned or cross-checked and usually incomplete. Statistical reports may have been published over several years, but stopped being produced as the crisis deepened. Additionally, government officials may be reluctant to publish or share with outsiders data of an “internal” or “classified” nature. Indeed, in a country ravaged by internal conflict, health information may sometimes be of some military or intelligence interest. Besides these concerns, awareness of the flaws of the collected information may discourage its disclosure to external scrutiny.
- *Evaluation and supervision reports*. Heterogeneous materials often offer pieces of information that can become useful for a systemic analysis. Aspects not covered by routine information systems, such as patterns of prescription, can be explored by tapping these sources. Also, they may help to validate routine information findings.
- *Standardized surveys*, such as the *Multiple Indicators Cluster Survey* and the *Demographic and Health Survey*:
 - The Multiple Indicators Cluster Survey (MICS) is a household survey programme developed by the UN Children’s Fund (UNICEF) to fill the data gaps common in many countries regarding the situation of women and children. They are repeated every five years, which make a trend analysis usually possible. The MICS includes indicators about health status (maternal and child mortality), nutrition, access to water and sanitation and health practices. The survey consists of three parts: a household questionnaire, a questionnaire of women aged 15-49, and a questionnaire for caretakers of children under 5. The first round of MICS was conducted in more than 60 countries; since 2005 it has expanded to cover maternal and newborn health care, malaria, knowledge of HIV/AIDS etc. Mortality data derived from MICS cannot be directly compared with those estimated from retrospective mortality surveys (see Module 4) because of the different methodology. Online source: www.childinfo.org.
 - The Demographic and Health Surveys (DHS), supported by the United States Agency for International Development (USAID), focus on fertility and mortality, health status, family planning and nutrition in developing countries. Common methodologies and survey instruments are utilized across countries, so that indicators are comparable. DHS surveys have a country focus and, due to the relatively small sample sizes, an analysis at regional level is usually not possible. To overcome this difficulty, census data have been combined with DHS data for within-country analysis. DHS have been carried out in more than 70 countries around the world. Their scope has recently expanded to cover health practices, anthropometric indicators, sexual behaviour, HIV and socio-economic information. The web site www.measuredhs.com includes survey tools and datasets for cross-country comparisons. As for comparison of mortality with the traditional retrospective surveys, the same limitations of MICS apply. For a discussion of DHS in conflict settings, see Drapcho and Mock (2000).
- *Survey data* (often available at NGO offices). Surveys promoted by nongovernmental organizations (NGOs), usually focusing on the areas covered by them, may be of limited geographic or thematic scope. In some cases, it is possible to assemble several pieces of information from disparate surveys. More often, incompatible data presentations make findings unsuitable for aggregation.

- *Surveillance schemes*, sometimes established and maintained by aid agencies or NGOs.
- *Databases and data repositories* managed by research or academic institutions, such as the CE-DAT, run by the Centre for Research on the Epidemiology of Disasters (CRED), which compiles standardized data on the human impact of conflict and makes them public online.
- *Media*, which often suffer from insufficient quality and/or coverage of data, but may represent a useful source of information, mainly when primary data are not available. Caution in using these data is always required.
- *Personal files maintained by knowledgeable people*, who may have amassed precious documents covering past events. Veterans of protracted crises, spurred by the collapse of official documentation capacity, may purposely start collecting valuable information to preserve it from loss. In some cases, even outsiders with a lasting relationship with a troubled health sector may have maintained rich collections of reports, which may span several years. Files maintained by knowledgeable people are doubly precious, because they are likely to result from a quality selection, whereby useless or flawed documents have already been discarded. Also, informants can provide useful clues about the relevance and accuracy of the materials they have kept.

Email contacts are helpful to approach prospective informants, to explain to them what information is sought and to obtain data. Given the outward migration elicited by a protracted crisis and the quick turnover of actors, a conspicuous proportion of the information obtained may come from abroad.

- In most situations, knowledgeable insiders relate to each other through *informal information networks*, which can represent the most useful, reliable and inexpensive source of understanding. For the outsider analyst, to penetrate these loops can represent the single most important step towards gaining true insights into the situation. Knowledgeable people are essential not only as sources of information, but also as checkers of the validity of the analysis eventually carried out. The outsider analyst sometimes stumbles fortuitously into such a loop. But a proactive, interactive approach, which openly offers to interested colleagues the information already collected, can increase the chance of success. Unfortunately, some knowledgeable people are reluctant to share the information they control. Also, certain agencies or departments within agencies tend to remain secretive. Given that the active exchange of data increases their quality, secretive parties are unlikely sources of first-class information or analysis.

Definitions of selected concepts used in the module

Term	Definition
Accuracy	The degree to which a measurement or an estimate based on measurements represents the true value of the attribute that is being measured (see validity below).
Bias	Deviation of results or inferences from the truth, or processes leading to such deviation. Its presence leads to inaccuracies.
Data	Raw material - facts and figures, not analysed.
Indicator	Variable that indicates or shows a given situation, and thus can be used to measure change.
Information	The meaningful collection, manipulation and transformation of data in a way that enhances the comprehension of the studied events.
Precision	The quality of being sharply defined through exact detail.

Term	Definition
Proxy	Indicator of something which is, by its complex nature, inherently unmeasurable.
Random Error	Error generated by an imprecise measurement.
Shorthand	Indication of something which one could in theory measure, but measuring of which would be very costly.
Validity	The degree to which a measurement measures what it purports to measure. Sometimes used as synonymous of <i>accuracy</i> . For the subtle distinction, see Last (2001).

Note: Additional terms, extended definitions, as well as related sources and recommended readings are presented in the *Glossary* included in *Module 14. Resources*.

Data, Information, Intelligence

“All receipt of information is necessarily the receipt of news of difference” (Bateson, 1980).

Rough data convey little meaning. Once processed in the right way, they are transformed into *information*, i.e. into something contributing to the understanding of a particular aspect under scrutiny. When relevant pieces of information are brought together into a meaningful picture, the resulting understanding may rise to a level qualitatively superior to the one provided by the separated pieces. *Intelligence*, or deep knowledge of an issue, of an order not previously available to everybody, is obtained.

For instance, the absolute number of deaths registered during a crisis is not particularly instructive. Once related to the studied population and turned into a rate, it becomes more interesting, because it is now possible to make comparisons. Tabulated over time, it may show *change*, hence offering further meaning. Comparing these clues to rates and trends computed during other crises gives a measure of the seriousness of the situation, which improves the understanding of events. Disaggregated by sex, age, ethnic and social group, provenance, exposure to certain events, main working activity etc., it may suggest the factors behind the vulnerability or the resilience of some people. Further intelligence of events emerges in this way, by bringing together disparate pieces of information, so that the eventual picture makes sense. Sensible and effective actions may be conceived and introduced.

The manipulation of figures must be purposeful. To disaggregate the recorded deaths is totally useless, if the cause of death did not discriminate among targets. Clearly, collecting and manipulating vast arrays of figures in the hope that something interesting emerges is a waste of time². Unfortunately, this is precisely what many information systems keep doing.

Indicators

“Indicators are a way of seeing the big picture by looking at a small piece of it” (quoted in von Schirnding, 2002). Well-chosen indicators are extremely helpful. Badly-chosen ones may be extraordinarily misleading. Even good indicators may lead to wrong conclusions, hence to misconceived actions, when they are mis- or over-interpreted. A common pitfall is to mistake the indicator for the issue of higher order it was supposed to represent, and pursue a change in the indicator for its own sake. An eloquent example of this misconstruction, which has deeply influenced international health policy for decades, is given by Graham (1989), in relation to mortality, chosen as a proxy for health status, in the hope that the outcomes of health interventions carried out to improve the latter would be captured by measuring the former:

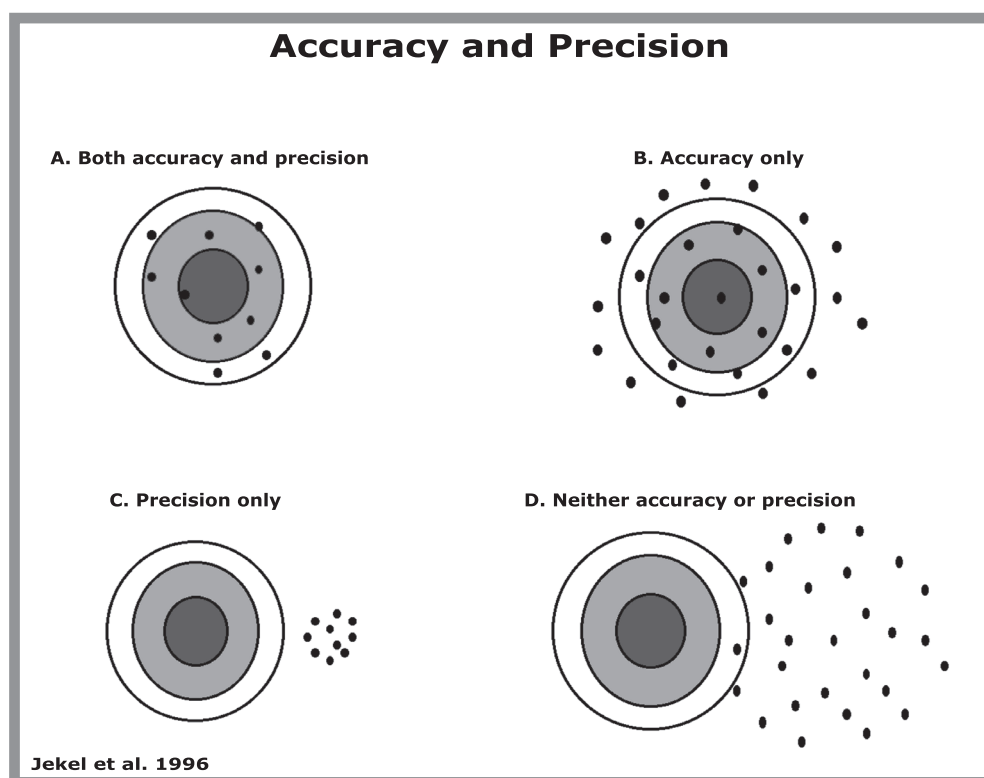
² This is equivalent to “data dredging” in epidemiological studies, where a huge number of variables is collected and then related to a large number of outcomes, with one in 20 of the associations examined being “statistically significant” (Smith and Ebrahim, 2002).

“The role of mortality measures in setting health priorities seems to have gone full circle. Initially the major justification was based on the apparent ease of measurement, relative to other outcomes. In the high mortality situations in developing countries, however, the major health strategies, especially with regard to infants and children, became ‘mortality driven’. Success became synonymous with mortality reduction and contributed to the emphasis on medical technology. Mortality reduction became the goal, not just the measure”.

For a comprehensive discussion of indicators, refer to Lippeveld, Sauerborn and Bodart (2000).

Accuracy, precision, relevance, cost of indicators

In a complex emergency, as important decisions are taken on the basis of incomplete information, timeliness takes precedence over precision. Lack of technical skills and/or security conditions impose the use of “quick and dirty” information. In unstable situations, precise estimates may be a waste, *“little more than an exercise in the quantification of misery”* (Adeyi and Husein, 1989, quoted in Sandiford, Annett and Cibulskis, 1992): populations move, an outbreak flares up, the access to food decreases. Then, the situation on the ground may have changed by the time the findings of a survey are available.



Summary findings are acceptable for a health manager under pressure: *“precise quantification of incidence or prevalence rates rarely influences the choice of programmes offered by the health services”* (Sandiford, Annett and Cibulskis, 1992). Losses in *precision* are not an important issue when a response is urgently required or decisions will be taken in any case, and imprecise estimates do not change a course of action. *Accuracy*, instead, is crucial for guiding action. In fact, inaccurate data may result in wrong decisions, leading to avoidable deaths or suffering and to waste of resources.

When John Maynard Keynes said *“It is better to be vaguely right than precisely wrong”*, he alluded to this crucial distinction. And, we can add, it is better to be vaguely right and on time than precisely right and late.

The aspect under study may be pictorially portrayed as a target and the measurements

as shots. A is rarely attainable in protracted crises, whereas C and D are plainly misleading. B remains the best possible approximation even if the obtained estimates diverge to a large degree from the true value. In the box below, the concept is applied to the hypothetical estimate of a crude mortality rate. Clearly, if C and D were retained as reliable estimates, wrong decisions might be made, whereas estimate B would offer an acceptable guidance for action.

Information does not come for free, particularly in a crisis. The desired features of information (validity, relevance, completeness, timeliness, precision) must be related to the use of this information, the capacity of decision-makers to use it and the resources that are in place for implementing those decisions. The cost incurred in collecting an indicator should be a function of the decisions related to it. When they bear important present and future implications and indecision about the best course of action prevails among actors, the high cost of collecting relevant and unambiguous indicators is fully justified. Otherwise, expensive surveys may be launched to provide technical respectability to decisions already taken on political, ideological, or convenience grounds. When this is the case, a reconsideration of the chosen approach is rarely triggered by the survey findings. The survey is likely to be a waste of resources.

The real cost of collecting indicators is usually unknown, but in some cases is high, particularly with dedicated surveys, or when the start-up investment needed to implant a routine system is taken into account. In violent environments, the risk incurred by surveyors and those surveyed must be included among the costs of the obtained information.

Accurate vs. Precise Measurements

Assuming that in the area X in August 2002 the "real" (unknown) Crude Mortality Rate was **1.6/10,000/day**

1.5 (1.4 - 1.7) would fall in the **A. category**: an accurate (unbiased) and precise estimate

1.2 (0.8 - 1.9) would fall in the **B. category**: an accurate but imprecise estimate

0.6 (0.3 - 0.8) would fall in the **C. category**: an inaccurate (biased) but precise estimate

0.6 (0.1 - 1.2) would fall in the **D. category**: an inaccurate (biased) and imprecise estimate

Note: Confidence intervals shown in parentheses

When the choice of indicators is discussed, the cost of collecting them is usually given only cursory consideration. The opportunity cost, that is the output of busy health workers foregone because of data collection, may be high. Furthermore, the opportunity cost of allocating scarce technical capacity to collecting data of marginal policy value may be enormous. Conversely, when a collection system is already in place and is under-exploited, to demand additional output from it makes good economic sense.

Developing "hunches" for figures

Strengthening the information base is the starting point of any analysis. The spotting of unreliable figures is based on common sense, experience and some logical assessment of the data set. Previous first-hand exposure to the phenomena under study greatly facilitates the task of the analyst. Having participated in health service

delivery attaches additional meaning (and emotional content) to the gathered data and assists in the singling out of aberrant figures. Also, it enables the analyst to take full advantage of contextual information.

Linking indicators related to the same areas, or referring to sequential steps in a chain, may lead to the identification of oddities, figures that don't fit into the picture, or raise doubts about the validity of other data. In most cases, the review of available data yields several values for the same indicator, sometimes produced by different sources, sometimes by the same agency or department, unable to consolidate data because of its internal fragmentation. In this common situation, diverging figures must be compared for reliability, so as to select the ones looking the least problematic, given a certain context. Of course, these decisions imply rather subjective judgments and call for the frequent revisiting of old choices, which new data might have proved as unwise.

True story No. 1 Comparing coverage figures in Sudan

In Sudan in 2002, two coverage values for attended deliveries were found:

- **deliveries attended within health facilities: 12%**
- **deliveries attended by skilled staff: 57%**

Clearly, such a high coverage of deliveries attended by skilled staff against an extremely low proportion of deliveries attended within health facilities would be possible only if home care were very developed. Alternatively, 'skilled staff' could encompass also traditional birth attendants (TBAs). This possibility, in order to be accepted, should be checked against the number of TBAs trained during recent years and considered as active. Unfortunately, no related report was found. As other available coverage figures were rather low, as shown in *True story No. 10*, the lower coverage value (for deliveries attended within health facilities) of 12% was retained as more consistent with the overall picture.

Suspect data can be checked at their source and corrected, or rejected when no supporting evidence of their validity is found. Outputs disproportionate to reported inputs, outcomes raising doubts about outputs, or reported achievements unheard of in other protracted crises are just examples of suspect figures. Ratios and rates using the same denominator, such as population, once compared and found widely divergent, alert the analyst to potential problems.

Merely using the information, triangulating it with other sources, checking its internal consistency, and comparing it with other standards allows for the identification of data weaknesses, and suggests ways to overcome them. Spotting unreliable data puts pressure on data collectors, who in this way are made aware that their work is scrutinized and critically assessed. As a result, the next reports may become stronger. Not using the information because it is of low quality is too often a comfortable excuse for not probing it. Dismissing available information as unreliable and useless is likely to turn into a self-fulfilling prophecy: sooner or later the unused information becomes unreliable and useless.

The lack of information, if judiciously addressed is, the best "piece of information" for crisis decision-making. The manager, at least, knows that s/he has to investigate further, using all available sources and local intelligence. If the issue or the

geographical area for which no information is available is important, s/he knows that something is wrong. Actions contingent upon this weakness may be designed and altered as soon as information improves. Conversely, the lack of information may lead decision-makers to despair about their chances of understanding events in the field and trigger evidence-free decisions. Even worse, the lack of information may embolden ideology-driven players, who are left free to proceed with their favourite approaches, unrestrained by solid counter-arguments.

Important insights may be obtained exploring what *reports do not mention*. In official documents, silence about or only cursory, vague reference to the ongoing conflict is a surprisingly common finding. Thus, districts occupied by rebel forces may be quietly removed from the list of reporting health authorities, to reappear months or years later, as the fortunes of war change.

Comparing the indicators obtained with others related to countries affected by similar crises helps to strengthen the analysis. The finding of a strikingly dissonant figure may call for a further quality check to identify possible mistakes. If that peculiar value is confirmed as reliable, the presence of a feature unique to the disrupted health sector under scrutiny can be considered for further investigation. For instance, in the table *Health Expenditure for selected war-torn countries* included in *Module 6*, the indicator *Private health expenditure as % of GDP* for Cambodia (7.8%) is recognizably out of range. Most reports point to the post-war expansion of private healthcare provision as a special feature of the Cambodian health sector, thereby confirming this finding and calling for a thorough analysis of its implications.

Indicators from other troubled countries may also help when having to choose among competing values of the same indicator, whose reliability cannot be directly checked. In the absence of better criteria, the figure(s) found as the most consistent with similar contexts may be cautiously and temporarily preferred to others.

As faulty figures are discarded and credible data are retained and assembled in a sort of mental patchwork, an increasingly more meaningful and consistent picture of the health sector, or of discrete parts of it, can be built. New reliable data may fit easily into this picture, or force the analyst to reconsider it. Confidence in the profile of the health sector emerging from the fog of wrong figures, unsubstantiated claims, inconsistent data, and unproven beliefs increases. *Annex 13* presents a matrix condensing the main features of the Somali health sector in 2008.

To improve their validity and internal consistency, broad preliminary findings may be submitted for verification to knowledgeable people. Also, field visits must be used to confirm or conversely question a pattern tentatively suggested by available data. For instance, aggregate national figures may suggest gross overstaffing, such as in Angola. Field workers, as well as data from a sample of facilities, may confirm or challenge this conclusion. Field trips may or may not strengthen the feeling that total figures pointed to something real. Conversely, a failure to confirm the existence of overstaffing may suggest that the payroll is inflated by many ghost workers or that staffing patterns are uneven, with overstaffing in some areas and understaffing in others. In this second case, the original data suggesting overstaffing must be revisited, corrected if necessary and re-interpreted.

Field trips must be prepared in advance, by assembling the information available at national level related to the area to be visited, and allowing for enough time to cross-check it against findings collected at the local level. Short, hurried trips with many participants are unlikely to allow for careful work. Field trips provide a precious opportunity to expand the range of informants beyond the narrow circle of English-speaking, aid-centred people approachable in the capital city. Different, sometimes dissonant voices may be heard, in this way enriching the reading of the overall situation. Caution is needed to avoid the common trap of considering field workers as genuine and more reliable sources of information than informants based further away. Both sources are influenced by their prejudices, limited points of view, and

personal interests at stake. Both sources are helpful, once these forces are factored in and the data obtained are checked against reality.

Proceeding in the analysis, *the overall solidity of the gathered information influences the level of analytical depth that can sensibly be pursued*. Large chunks of data may be found inadequate to such a degree that no analysis is justified, or only broad, mainly qualitative considerations are permitted. The thorough review of output figures may reveal so many problems and inconsistencies that no serious comparison with previous years can be considered meaningful. In some cases, where national data must be rejected but disaggregated data can be accessed, some figures reported by some provinces or districts may look acceptable. These figures can provide precious clues about the issue under study.

Strengthening available data means in most instances *discarding* a large part of them. The emerging profile is likely to be barebones, composed of a reduced set of *facts* that have withstood scrutiny and can be reasonably retained as confirmed, of some sensible *conjectures* (to be clearly worded as such) to be checked further before being accepted, and of many popular *claims* that have not passed an evidence test. The dismantling of some of the many unproven beliefs that abound in troubled environments is perhaps the best single service a thorough study can render to decision makers. No better guidance to analysis can be found than the following mocking words, uttered at the birth of modern science:

“... mentalities better equipped for loquacity and ostentation than for reflections upon and investigations into the most hidden works of nature. Rather than be reduced to offering those wise, clever, and modest words, ‘I don’t know’, they hasten to wag their tongues and even their pens in the wildest absurdities” (Galilei, 1632).

Summing up: a pragmatic classification of the data found in a protracted crisis

The review of a troubled health sector produces a vast amount of data of assorted quality. From the point of view of the analyst, the collected data fall in the broad groups presented in the following table.

Type of Data	Ways to deal with this type of data	Examples
Irremediably flawed data, for which no better alternative is available	They should be discarded without hesitation from any serious analysis. If they are frequently used in other documents, they can be referred to with a firm advice to drop them, corroborated by the reasons they are considered unacceptable. The key point is that no inference must be drawn from them. A blank cell is a better information than a surely wrong figure.	Figures compiled using wrong definitions, or without adopting explicit definitions. Also, coverage figures obtained from convenience samples (usually severely affected by security conditions). Also, figures challenging common sense, like service coverage above 100%, or figures too good for the context under scrutiny.
Data without source (or from an inaccessible source)	They should be handled with care, particularly aggregated ones. When it is impossible to understand the way they were obtained, they should be discarded. Disaggregated data can at least be checked for internal consistency. If used, their serious drawback should always be mentioned.	Total health expenditure per head in Sudan in 2002 was estimated at \$17.5. The original document did not give any detail about the way this estimate was computed.
Incomplete data (without denominator, period, area etc.)	Interesting, but of limited usefulness. They should be kept aside, while ways to strengthen them are pursued.	The number of deaths in a crisis, without information about the size of the affected population, or the period referred to.
Apparently accurate data, whose value or meaning is hard to accept	The findings of apparently careful studies may diverge to a large degree from expected levels or from international standards, or may just challenge common sense. The source of these findings must be scrutinized if possible, to try to identify the reasons behind the surprising figures. Sometimes, a different definition may explain the discrepancy. If no flaw is found, these data can be used, provided a warning is attached. An equivalent cautionary word must be added to the results of computations based on these questionable data.	In Afghanistan in 2002, the provision of a Basic Package of Health Services was costed at \$4.55 per head. This value looked extremely low by any international standard, and also when compared with figures from other poor countries. This low estimate appeared even more difficult to retain, given the rugged Afghan terrain, which inflates delivery costs.
Sound data, but unrelated to the issue under analysis	They should be dropped from the analysis, even if they look interesting. The danger lies with the reasoning and not with the internal accuracy of the data. To avoid this rather common fallacy, careful assessment of the issues and self-restraint are demanded. No flawed inference should be drawn from data referring to aspects different from those under study.	Studying the performance of a health sector using the wrong proxy. For instance, the outputs of a vertical programme, like the Expanded Programme on Immunization (EPI), are poorly related to systemic performance.

Type of Data	Ways to deal with this type of data	Examples
Imprecise data, looking approximately trustworthy	They can be used in most computations and analysis, provided their imprecision is not masked. Ranges, rather than point-estimates, are better suited to convey the underlying imprecision. When several figures, although remarkably dissimilar, point to the same broad direction, the confidence in these figures increases.	By the mid-1990s, the size of the Angolan health workforce was estimated by different sources to be between 25,000 and 35,000. All available figures suggested that the workforce was grossly oversized and needed aggressive restructuring. A precise counting would not change the broad policy measures needed to address this problem. <i>See True story No. 17.</i>
Educated guesses	Common when no hard data are available, but some reference figures are needed to estimate an important variable. They can be very helpful, provided their tentative nature is not forgotten. An effort to scrutinize the assumptions used to arrive at the educated guess must be made (particularly when the variable to be computed is very important). If the assumptions are sensible and the resulting figures look reasonable, they can be retained. Sometimes, educated guesses are accepted just because they are not challenged by hard data.	In Iraq in 2003, the private contribution to health expenditure was guessed at 40% of the total. The only available information was that private spending had thrived during the last years, because of the decline of subsidized health care. The 40% share looked reasonable and no objection could be raised against it. Thus, it was accepted as a temporary working value. <i>See True story No. 11.</i>
Sound, precise and relevant data	Such things are rarely seen in troubled environments. When good data do exist, they usually refer to small, controlled situations, like a refugee camp. Thus, their findings cannot be generalized. Claims of accuracy and precision for data related to large populations or areas raise justified scepticism.	Thanks to a dramatic improvement in Liberian security conditions, in 2007 it was possible to carry out a nation-wide Demographic and Health Survey, which included HIV testing. The overall HIV prevalence rate was measured at 1.5%. The 2006 estimate, based on few sentinel sites in urban areas, was 5.7% (Liberia Institute of Statistics et al, 2007).

The following diagram summarizes the recommended actions, based on the type of data discussed in the table above.

Type of data	Action
Sound, precise and valid data	Use the data
Imprecise, looking trustworthy, valid	
Educated guesses, in the lack of data	
Data without source	Scrutinize the data
Incomplete data (no denominator, no reference period etc.)	
Apparently accurate data, whose value or meaning is difficult to interpret/accept	
Flawed/biased data, for which no better alternative is available	Drop the data
Sound data, but not relevant to the issue under analysis	

Common sources of information flaws

- *Computing mistakes.* Sometimes errors are evident at first sight, as when rates or ratios are out of range or a time series presents figures oddly diverging from the rest. Along the same lines, similar figures reported by authorities known to operate markedly different health services raise suspicion. If reports consist of many tables, the most obvious mistakes may be corrected by cross-checking their contents and spotting their internal inconsistencies. Flaws may not be very obvious when crude data are considered in isolation. The comparison and manipulation of data, by increasing the meaning attached to them, highlight their problems.
- *Incomplete reporting.* Shaky communication and supervision lines make incomplete reporting commonplace. If data are reported in an aggregated form, this shortcoming cannot be recognized or can only be suspected in cases where figures are seriously inferior to the expected ones. Losses of reports of disease cases along the notification chain may be conspicuous, particularly when the surveillance system is stretched over many steps.

In certain cases, available data can be adjusted to obtain approximations that diverge to a smaller degree from true values. If a certain district has only reported its outpatient activities for some months of the year, the district total annual figure obtained by adding only the reported values would under-represent true outputs. If the number of available monthly reports is known (say, seven), an approximation of the total output can be obtained by adjusting it, on the assumption that the reported months were representative of the missing ones. In this case, the total of seven reported months should be divided by 7 and multiplied by 12 to obtain an approximation of the annual output. Of course, the fewer monthly reports available, the less acceptable this adjustment becomes. Similar adjustments can be introduced for missing reports from some facilities within a district, if the output of these facilities during previous periods is known. In this case, the assumption would be that the volume of activities does not vary dramatically over time.

- *Disregard of, or lack of access to, information related to partners or competitors.* A district authority may report only the staff included in the public payroll, in this way excluding the health workers hired by NGOs but posted to public health facilities. In decentralized settings, MoH reports may fail to incorporate health care delivered by local councils, under the ministry of local administration (or equivalent). Equally, federal administrations may notify only budget data related to central ministries. Data related to health care provided by relief agencies tend to remain apart from data related to mainstream services.

Public officers tend to overlook charity-owned facilities, whose activities are often ignored in their reports. In large cities, privately-provided health care (a substantive proportion of which is usually informal) is usually under-reported, despite its conspicuous volume. True health care consumption can be much higher than what can be inferred looking at official reporting. For instance, in Luanda at the end of the 1990s, the activities of about 500 authorized private outlets and of an unknown number of unauthorized ones were largely missing from MoH statistics. The very low official levels of healthcare consumption were a gross underestimate of the true situation.

- *Using different quality thresholds for accepting or rejecting problem data* induces serious inconsistencies across datasets. Some reporting officers may retain obvious mistakes and aggregate them into totals, hence hiding them from scrutiny. Other more demanding information officers may drop whole datasets, in this way reporting to higher levels only cleaned figures, which unfortunately grossly underestimate the true values. Unsurprisingly, the most diligent health

authorities tend to be conservative in their reporting, i.e. to discard flawed data, which translates into reporting lower levels of activity. Indeed, they may even be criticized because of their supposed low patient loads, or service coverages.

True story No. 2 Population figures in Mozambique

During the civil war, up to four million Mozambicans sought refuge abroad, whereas internally people concentrated in secure areas. Official coverage figures, however, were never corrected to allow for these considerable population displacements. In this way, official coverages seriously under-estimated actual consumption of health services inside the country. After the peace agreement (1992) and a massive repatriation process largely regarded as successful, a proper census was eventually carried out in 1997. The resulting Mozambican population was two million smaller than expected on the basis of projections made from the pre-war (1980) census: a reduction caused by war-induced excess deaths, plus an unknown but large number of people who settled abroad and never returned home. The smaller denominator obviously resulted in higher coverage figures from 1997 onwards, an increase which was hailed by several distracted commentators as induced by revamped health services.

- *Biases, or deviations of results or inferences from the truth*, may lead to invalid conclusions. Figures collected in protracted crises seldom use random sampling techniques; therefore, they are particularly susceptible to biases. On the other hand, being predominantly descriptive (i.e. not aiming to draw causal inferences) they are protected from certain biases that affect analytical studies. Dealing with biases is first of all a matter of being aware of them when planning a study, collecting the data and interpreting the findings.

Particularly relevant to assessments in emergencies is the survival bias, which may occur in a severe crisis with very high mortality. As individuals who otherwise would have been included in a survey are removed from the sample by death, the survey's results underestimate the pattern under study. It has been alleged to play a role in underestimating the mortality in Somali refugee camps in the late 1980's and in mortality studies in eastern Democratic Republic of the Congo.

- *Using different denominators*, both population estimates and definitions of population sub-groups, is a common source of inconsistencies, particularly with population figures. No satisfactory census data are usually available in complex emergencies and even the best figures are prone to be "massaged" by field operators according to their convenience. In Angola in 2002, the Government reported four million internally displaced people (IDPs) – 30% of the total population – whereas the UN Humanitarian Coordination body registered only 1.5 million IDPs as beneficiaries of assistance programmes (UN, 2002). Before accepting local population figures, such as number of IDPs or refugees, likely to be inflated in order to access emergency aid, cross-checking them with estimates related to the national population and other provinces or districts is worthwhile³. In this way, the most outlandish values can be discarded and the least problematic ones retained. The use of the same estimates in the work of all partners should be energetically advocated, so as to incur consistent rather than conflicting inaccuracies. The former are much less troublesome than the latter.

³ About the 'politics of numbers', see Crisp (1999).

- *Using different numerators*, by adopting inconsistent case definitions (e.g. cholera and watery diarrhoea cases), may result in a mix of diseases, whose comparison may induce a bias.
- *Inconsistent levels of aggregation make the linking of some datasets impossible*. For instance, staff may be aggregated into the provincial payroll, because salary payments are processed at this level. On the other hand, functioning facilities are usually presented in district reports. Linking these two datasets to assess deployment patterns and to estimate workloads may be impossible. Along the same lines, expenditures may be compiled according to accounting criteria incompatible with health management decisions. Thus, “travel costs” tell little about the activities (referral, prevention, education, logistics) actually carried out. In this case, correct figures may fail to translate into actual information.
- *Inappropriate levels of aggregation may mask important patterns*. Service outputs are usually presented according to some partition criterion, as by province or region. Large administrative units are rarely homogeneous. They may host a mix of ethnic groups, different economic activities, layers of wealth, environments. When this is the case, the overall average number of outpatient contacts per head, to take an example, is likely to fall well below that of better-off groups, but to exceed to a large degree that of the worst-off communities.

Policies conceived to improve service consumption across the whole administrative unit may fail to recognize the need to concentrate inputs in a specific marginalized area or population group. In many countries, an example of this aggregation flaw is found in the region that includes the capital city. The surrounding areas are often dramatically underserved, due to the ability of the city to siphon off all available resources. This local disadvantage may be hidden in the regional average, and overlooked when neglected areas are considered for targeted support.

The way out is not disaggregating data into the smallest possible units. This would break the picture into too many pieces and hide broad patterns. Indeed, similar areas may be safely aggregated, with important gains in the clarity and economy of the analysis. The solution lies between the two extremes. Large heterogeneous administrative units can be tabulated into a few sizeable, but more homogeneous sub-units. By the same token, contiguous small units spanning regions or provinces, but sharing similar patterns may be merged into meaningful chunks. The country’s health map would diverge from the official administrative one, but would gain in value for the health manager.

- *Just-in-case data collection*, whereby potentially interesting figures are recorded without a clear assessment of their use, is unfortunately widespread, not only in fossilized routine information systems. Sudden events, such as the opening of unforeseen space for manoeuvre for NGOs and aid agencies, due to a dramatic change in the fortunes of the war, may trigger this kind of initiative. Based on the (frequently misplaced) assumption that little or no information is already available, newcomers may embark on a spree of field exercises (sometimes called “rapid needs assessments”), where a disparate array of data of unclear use is collected in the hope that they will prove useful later, at some unspecified upper level of analysis and decision-making. These exercises may absorb vast resources, divert attention from actual service provision and fuel unjustified hopes among recipients. Rarely have unfocused data been adequately translated into true insights. *True story No. 5* in *Module 4* depicts an eloquent example of this flawed approach.
- *“Fossil” figures*. Given the scarcity of data, certain figures, once incorporated into widely circulated documents and endorsed by authoritative agencies, may be used and re-used, even if they are known to be flawed, taking on a life of their own.

After multiple quoting, the original sources and their shortcomings are forgotten. Thus, guess estimates never based on actual evidence are accepted at face value as solid figures. For instance, the deaths caused by the Sudanese civil war were estimated at 1.5–2 million many years ago. Later, despite the continued raging of the war, war-attributable deaths failed to rise. The 1.5–2 million figure calcified into a fossil, quoted in countless reports without relation to field findings. In other contexts, it is said that a lie, repeated often enough, becomes truth.

The uncritical use of “brand” sources may discourage the pursuit of more useful information. Instead of reporting a figure that is old, biased or referring to a different context, to state that in a given setting the maternal mortality ratio is unknown, but likely to be very high, is usually adequate to inform related decisions.

- *Idealized vs. actual patterns.* Some aspects of health care provision are particularly prone to idealized constructions. Referral functions, access to health care, treatment guidelines, the upholding of legislation, and standard health unit teams are portrayed in official documents in a way that is widely disconnected from what is recognizable in the field. Repetition may lead to the replacement of the “should be” with a reassuring “is”, to be sometimes vehemently defended as a fact. Rough checks may help to assess the situation. For example, standard treatment guidelines may exist at MoH level, but remain unknown or unavailable at facility level. Field surveys may offer clues about the true picture. In Sudan in 2001, a detailed study of four health areas found that only 28 out of 55 surveyed health facilities were functioning. Access to basic health care was therefore dramatically lower than officially reported.
- *Data out of context tell little and may be misleading.* Knowledge of local contexts is critical to interpret data and produce information. For example, a sudden increase in the reported cases of a communicable disease may be interpreted as an outbreak by analysts based far away from the site, when it may originate from the reactivation of laboratory services after a war-induced interruption.
- *Using different criteria* to assess whether a facility is “functioning” or a vehicle is “available” or a piece of equipment is “in order”. Without clear-cut definitions, detailed instructions, considerable training and sustained supervision, the collected reports will be useless. For instance, in relation to “functioning facilities”, a rigorous compiler might include only those staffed according to standard levels, adequately supplied and regularly reporting their activities. Another reporting officer could count also facilities known to function below certain standards, while a third compiler might include even facilities failing to report for months or years, whose status is unknown to health authorities. *A practical way of assessing the reliability of a dataset is to look at the collection tools used to generate it.* When forms have been sent to respondents without accompanying instructions on how to fill them in, the resulting dataset is likely to be seriously flawed, particularly when the issues to which the collected data are related are not standardized in everyday practice, or the questions are formulated in vague terms.
- *The misinterpretation of correct data,* arising from the poor understanding of quantitative techniques, is commonplace among health professionals. In this way, old estimates referring to a totally different situation may be associated with ongoing interventions, as monitoring indicators. Or, regional figures belonging to larger samples may be used for flawed internal comparisons, because of insufficient sub-sample sizes. Further, a decrease in the reported cases of a communicable disease may be interpreted as due to an effective intervention, when it is part of a natural seasonal or annual trend. For instance, after a severe outbreak of measles, few new cases have to be expected, regardless of immunization activities. A common mistake is to consider morbidity and mortality figures, generated by sentinel sites located in secure areas, as indicative of the national situation.

- *Over-reliance on quantitative techniques* frequently affects the work of statisticians and economists, too often fond of squeezing sophisticated but unfortunately meaningless quantitative analyses from irreparably flawed datasets. This sort of “forgery” – sometimes unintentional – is common in stable situations. In troubled environments, it may go unnoticed to a higher extent, because of the pressing demands for data and the difficulty of validating what is available. State-of-the-art multiple regressions or statistical tests may be unwisely applied to datasets where many figures are missing and the available ones are questionable. The temptation to “refine” data analysis with these techniques increases with the ease of use of computer software, whose operations most information practitioners can neither follow nor understand. Poor data should be discarded, rather than “analysed” or, if retained, laid bare without bells and whistles for the open scrutiny of information users, with a warning note attached.
- *The application of elegant presentation techniques to poor datasets* is widespread and mounting, given the “make-up” facilities offered by information technology. Appealing charts, colours, sounds, drawings and maps convey messages and suggest quality information, irrespective of the validity of their content. In this way, unacceptably poor information may remain disguised. As no manipulation of unreliable information can overcome its weaknesses, it should not be indulged. A case in point is geographic information software, which is increasingly used to map health facilities or disease patterns. With the levels of unreliability that affect population data, facility functions and case reporting in protracted crises, these popular maps may be useless or grossly misleading.

Uses of information

Good information is a necessary prerequisite to, but not a guarantee of, good decision-making. It is assumed that if accurate, timely and relevant data are gathered, processed and transmitted to decision-makers, they would choose the “best” options. Uncertainty, complexity and competing pressures, however, disprove this linear model. Decision-making involves political and personal values and tradeoffs: “*any choice of output indicator as a basis for decision-making, necessarily incorporates value judgements*” (Sandiford, Annett and Cibulskis, 1992). In the heated environment of a complex emergency, tainted by multiple and conflicting interests, a neutral use of information is impossible⁴.

Information may also be deliberately non-used: a frequent strategy in difficult contexts, where the line of least resistance is usually the most attractive and unwelcome data can easily be criticized because of their weaknesses. Furthermore, not all information can be discussed. How realistically can a government in crisis be asked to discuss its mistakes or its own eventual demise? *Informational exclusions* are as important as actual data for making judgements.

Paralysis by Analysis is a special case of non-decision-making, due to the *perceived* lack of information. It may arise from a sincere desire for perfection but it may also represent a strategy devised at blocking necessary action. For example, where it is known that malaria is a major problem, an exact quantification of its magnitude should not be considered as a pre-condition for the launching of anti-malaria activities. At the opposite end of the spectrum, there is *Extinction by Instinct*: pressures to act, wrong assumptions or “field experience” force decisions not backed by systematic analysis (Langley, 1995). In a crisis, the latter mechanism usually prevails. Sometimes, both mechanisms co-exist; for example donors and NGOs take action inspired by what was successful in another troubled country, while national authorities decide to wait. Different perceptions of urgency, different biases, timeframes, priorities, available resources, and technical capacity can explain this disconnection of responses.

4 For a short discussion, see *Politics and information management* in Module 3.

Different information for different purposes

The attributes of the information needed at different decision levels change, moving from field settings up to the aggregated and even further to the systemic level. The producers of information should keep clearly in mind the duties, goals and needs of the targeted users, in order to tailor their product to clients and avoid that *“much of the material remains unprocessed, or if processed unanalysed, or if analysed, not written up, or if written up, not read, or if read, not used or acted upon. Only a minuscule proportion, if any, of the findings affect policy, and they are usually a few simple totals”* (Chambers, 1983, quoted in de Kadt, 1989).

1. **Information for field managers** must be timely, relevant and compelling.

It is common wisdom that information should be analysed and used close to where it is collected and action is needed. Operational decisions that are taken far away from the field are prone to errors, because contextual factors are ignored. Aggregate information may hide the impact of the emergency on particular areas or groups, or obscure inequalities in the response. Further, the time for transmission of data from the periphery to higher management levels implies that response (e.g. to an outbreak) is implemented too late and too slowly. On the other hand, the capacity for analysis can be lacking at field level and there might be the need for engaging experts working at HQs or even abroad. In addition, information at local level is useful only if decision-making and capacity for action are decentralized.

2. **Information for allocative decision-making** must be timely, valid, fairly aggregated and comprehensive.

The end user of information who sits in the MoH of the disrupted country, or in the far-away ministry of foreign affairs of a western capital, and is requested to make decisions on the allocation of resources, needs mainly aggregated information. The comprehensiveness of information is particularly relevant in fragmented settings, where each actor possesses and reports only a partial view of the whole picture. Thus, a NGO working in a certain district may apply for donor financing, stressing the underfunding of district health care, while at the same time failing to mention three other NGOs active in the same district. Donor officials are forced to make decisions based on such partial information.

3. **Information for structural change**, such as introducing a reform in the health sector, must be valid, comprehensive, retrospective and possibly prospective.

For instance, a health sector heavily biased towards hospital care may consider the introduction of new, PHC-oriented categories of personnel, redeployment of staff, the redesign of health facilities and the offering of different health services. The planning of such a move implies review of training, recruitment and deployment practices, rethinking of the network as well as of supervision and supply systems, a change in the interplay of incentives, and the financing of an entire new layer of health services. Solid information on the existing health sector, its human resources, network, management systems, and financing mechanisms, as well as information offering an understanding of the factors that shaped the sector along its present lines, are needed as a foundation for such an ambitious and sensitive reform.

Changes over time, potentially the most precious clues for understanding some issues, are consistently the scarcest sort of information in protracted crises. To complement the scanty quantitative information about temporal changes, interviews with knowledgeable sector informants may prove invaluable to grasp past settings, their evolution and the forces that shaped the sector in originating the present patterns. In the absence of relevant time series, analysts usually fall back on static pictures of the sector. Without a broad comprehension of the way

the sector has changed over time, chances that any structural reform actually addresses the main problems are negligible.

Using available information to develop projections

Thinking about the future in an unstable environment may seem a waste of time and energy to many participants, who are usually absorbed by daily, erratic events. Prevailing uncertainty notwithstanding, several arguments can be formulated to encourage forward thinking:

- The disruption, particularly when protracted, affects the health sector in its fundamental patterns; a return to the pre-crisis situation is very unlikely. Most spontaneous changes are highly unfavourable to sector development. Thus, anticipating the direction taken spontaneously by the health sector is essential to devising appropriate measures to control undesirable changes and to encourage favourable ones.
- New policies are called for by the changed situation, as well as by the demands of new entrants to the sector. In distorted ways, a complex emergency opens up a sector to international influences. Forecasting resource availability, emerging needs and implementing capacity helps to choose the most appropriate and affordable policies among the many competing proposals likely to be tabled.
- Despite the daily chaos everybody is aware of, once considered in aggregate terms the sector may show consistent patterns, which can be appraised with a degree of confidence. For instance, no details about physical destruction are usually available; nonetheless, reasonably robust estimates of the reconstruction bill can be elaborated.
- Developing projections about future patterns is a powerful way to test the reliability of available data and the solidity of the understanding of the sector gained so far. Producing projections puts pressure on analysts and decision-makers to clean data, revisit assumptions, find new elements to be introduced into the computations.

Projections are deductions about future patterns, given a set of chosen conditions. They are frequently designed to answer the “*What if..?*” question. Chosen conditions may be highly hypothetical or even unrealistic. *Forecasts* are projections formulated using realistic assumptions. In many cases, they are predictions of the situation likely to arise from the present settings if no change takes place, or by incorporating change, if this is considered as highly probable.

“...forecasts are usually no more than educated guesses dressed up in sophisticated ways. If the guesses (‘assumptions’) are wrong, the forecast will be wrong. The further one forecasts into the future, the more the assumptions are likely to be wrong. Thus forecasts usually tend to be reasonable for a few years ahead but then become progressively worse. The margin of error increases” (Newell, 1988).

In disrupted health sectors, additional problems compound the inherent difficulty of forecasting. Incompleteness of datasets, scarcity of time series, the reluctance of many parties to disclose information, the limited control of players on events, the disproportionate influence of certain unpredictable factors on eventual results, are just some of the elements making forecasting a demanding practice.

Projections are based on the following building blocks:

- **data.** *Example: size and composition of the workforce.* This information may be needed to project the salary bill, or to estimate the service coverage to be attained, or the cost of retraining health workers.
- **assumptions.** *Example: donor funding will expand in the post-war period.* Assumptions may be based on educated guesses, an appraisal of known trends,

or policy statements by important actors. A firm engagement by an influential player, such as the World Bank (WB), to funding the health sector, may offer grounds for expecting donor largesse.

- **qualitative assessments**, held to be reasonably true. *Example: unregulated, informal private practice expanded during the conflict.* This assessment may be based on observable patterns, such as a boom of urban clinics. To be used, these considerations must sometimes be turned into a quantitative value. For example, a study of the Sudanese health sector (Decaillet, Mullen and Guen, 2003) supposed private out-of-pocket expenditure to attain the same magnitude of total government health spending, or 1% of gross domestic product (GDP). In this case, the value attached to a largely-undisputed finding (that private spending is substantial) is somewhat arbitrary. A more reliable figure must replace it as soon as it becomes known.
- **“patterns” observed in comparable environments.** *Example: regulatory provisions are difficult to enforce in post-conflict settings.* This finding, if considered applicable to the situation under study, may help to project the expected revenues generated by user fees, or the impact of measures aimed at regulating drug imports.

For most of the issues whose future evolution deserves close scrutiny, the number of variables to be considered and the range of variation among them are large. Hence, projections may produce very diverging results. This should not be surprising. *Alternative scenarios for the future of an out-of-balance sector must be dramatically different, according to the many ways events may unfold.* Decision-makers should not consider projections as predictions (because of the variety of possible outcomes), but rather as powerful aids to appraise the likely results of the choices they make (or, as in many cases, they don't make); choices that will shape events and eventually decide the future of the sector.

Modules 6 and 12 explore in greater detail the field of elaborating projections, building scenarios, and comparing the consequences of alternative choices.

A few tips may be worth considering in relation to forecasting in a disrupted environment:

- Keep calculations simple and transparent to the users of the projections. The inadequacy of the dataset on which projections are based usually rules out sophisticated analyses. Refining the projections depends to a large extent on the input of stronger data and more cogent assumptions; complex computing techniques are fairly immaterial.
- Start with a simple, stripped-down model, incorporating only the most important variables. This is usually sufficient to reach preliminary conclusions and elicit useful feedback from knowledgeable people. Add variables only if they affect the results to such an extent that there is a change in the understanding of the studied issue, and henceforth the decisions to be taken.
- Clearly formulate the assumptions behind the forecasts and attach them to the results every time these are presented.
- Frequently revisit the steps followed in producing the projections, incorporating new data as they become available or reformulating assumptions when necessary.
- Submit projections to knowledgeable people. Even if some of them are not used to forecasting techniques, they may contribute with their “feelings” about the trustworthiness of results. Computations may be adjusted accordingly.
- Do a sensitivity analysis, testing how sensitive the findings of your analysis can be to the change of key assumptions.

- Help decision-makers work out the policy implications of the projections retained as the most compelling. Implications may be masked, or unpleasant to such a degree that many stakeholders are reluctant to accept them. Clarifying implications early in the policy discussion avoids arguments later on and reduces the risk that support is withdrawn when difficult decisions are needed.

The design of information systems

Sometimes the problem is not the lack of data, but their excess. Even where “easy” process indicators are available and appropriate, expensive epidemiological data are collected and analysed, sometimes to measure the health impact of programmes, more often by entrenched routine, whose rationale has been long forgotten. Many surveillance systems demand the reporting of a “*laundry list of most diseases known to mankind*” (Henderson, 1976). For example, the health management information system in Afghanistan in 2002 included more than 30 diseases. Given the low coverage of health services, the scarcity of skilled workers in rural areas, the weak transport and communication systems, the geography of the country and the weak response capacity, the coverage, quality, and therefore utility of these data were limited.

Data do not speak for themselves. They must be selected, processed and put into context in order to become intelligible and useful. The designers of health information systems, in many cases health professionals themselves, used to dealing with peers within MoHs, often disregard the fact that not all managers can make sense of technical information. In troubled contexts, many decision-makers are generalists or specialists of other fields, such as economics or law, for whom health information is useful only if it is simple and complements information from other sectors.

Data speak only to those who are prepared to listen. Many action-oriented players involved in a troubled health sector are culturally deaf to figures, unable or disinterested in taking advantage of the available information.

A crucial decision confronting the designer of an information system is to determine the level of aggregation of data at the different steps of the path linking the data producer to the different users, each level being a function of the nature of the decision to be based on such information. Broad resource allocation decisions, such as attributing a preferential share of financial inputs to a worse-off province, should be based on data aggregated to the level that enables the spotting of such a disadvantage. Feeding decision-makers with the customary stack of detailed service coverage data would be redundant and even counterproductive, if the gap suffered by the province is masked by the excess of figures. To achieve aggregation levels appropriate to each decision level, management structure, data needs and flows must be analysed before designing any information system. Obviously, such an analysis is out of place in any sector in a permanent state of flux.

During a crisis, initiatives aimed at redesigning information systems should be postponed. This is a medium-/long-term endeavour, poorly adapted to troubled environments, which should not divert energies from more pressing priorities. Too often, newcomers start new data gathering schemes, bypassing existing systems. Instead, squeezing value from existing data often provides better returns. Furthermore, an assiduous exploration of existing information systems strengthens them and offers precious indications about their strengths and weaknesses, in light of which their future overhaul can be designed.

Disseminating the collected information

Whereas the production of valuable information attracts attention and resources, its dissemination is often neglected, even by the very promoters of its collection. Why this is the case is unclear, particularly when the high costs of producing information are considered. Information technology has greatly facilitated data storage, retrieval

and dissemination, but at the same time has flooded information users with an unmanageable amount of data, inside of which the small proportion of useful ones is hidden. Having reached conclusions reckoned of some interest to stakeholders, the analyst must take steps in order to ensure that the information s/he produced is effectively used. Several considerations may be of interest:

- In the information market, supply vastly exceeds absorption capacity. To catch the attention of busy officials, the collected information must be packaged in an attractive way. Given the opportunities offered by information technology, attaining good presentation standards is usually easy. Unfortunately, too often high-quality data are presented in a dreary way. Alternatively, misguided enthusiasm in “embellishing” data may eventually make them tiresome to read or obscure, increasing the chances that they are shelved without being examined by the target audience.
- Condensed information is more likely to attract the attention of readers than long documents. When the technical nature of the information implies a lengthy exposition, a strong summary is mandatory. Many copies may be reproduced and widely circulated, so as to increase interest in the main report. Writing a clear, exhaustive and interesting summary is difficult, so adequate time and energies should be devoted to this task. The summary is too important to be left to the last day of work of an exhausted team.
- Language is often an issue. In troubled environments, too large a proportion of the available information remains in English, thus inaccessible to many local actors. Obtaining an accurate and readable translation of technical reports is expensive and difficult. Caution, care and resources are needed to strengthen translations to the level they become reliable and useful. To the reader fluent in the local language, the flawed language disfiguring so many documents supposedly prepared by recipient governments is as embarrassing as it is telling about their origins.
- Language is also an issue in relation to the technical jargon used, which should be selected according to the main audience of the collected information. The same content should be rewrapped to become interesting and accessible to health workers, to politicians, to economists etc.
- Some influential and energetic people have great dissemination capacity, which can be tapped. Once promoted by such individuals, the dissemination of a report is greatly enhanced. Formal or informal contacts with these information “gurus” should be actively pursued.
- Given the propensity of documents to get lost in unstable environments, anticipating a good measure of redundancy in disseminating them is worthwhile. Thus, hard copies should be produced in quantities generously exceeding the number of perspective users. Informal distribution should complement formal channels (which for hierarchical organizations mean that often documents do not reach their potential users). Meetings may be used to brief participants on the availability of reports and to share copies with them.

For further discussion, see *Module 13. Producing a health sector profile*.

Recommended Reading

Last JM, ed. (2001). ***A dictionary of epidemiology***. 4th ed. New York, Oxford University Press.

A classic, invaluable companion, which needs no recommendation. The dictionary includes also useful entries on acronyms used in international health, and on social-science concepts relevant in the health field.

Lippeveld T, Sauerborn R, Bodart C, eds. (2000). ***Design and implementation of health information systems***. Geneva, World Health Organization.

Comprehensive, clear and realistic overview of the field. The specific features of analysing information in disrupted environments are not discussed. Essential background reading. Particularly worthwhile is *Chapter 3 "Using information to make decisions"*.

Sandiford P, Annett H, Cibulskis R (1992). **What can information systems do for primary health care? An international perspective.** *Social Science and Medicine*. 34:1077–1087.

A landmark discussion of the main issues related to information systems and of the drawbacks that limit their effectiveness. Unfortunately, more than a decade after the writing of this paper, many of the shortcomings singled out by it continue to undermine information systems in many health sectors. Too many data are generated, too little understanding is drawn from them, decision-making remains evidence-free, unrealistic expectations about the benefits of information technology are fuelled. In most cases, information systems need fundamental rethinking along the lines suggested by this paper. Information is part and parcel of sound management systems. It weakens and degenerates when management practice is poor. To strengthen information without overhauling management systems bears little promise of real progress.

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Annex 2 Monitoring patterns and trends in the health sector

Indicators to be considered

The following table reviews some indicators and focuses on practical aspects of data collection, manipulation and interpretation. In any given country, these indicators need experimentation, adaptation and validation before they are adopted for general use. The final decision always depends on a trade-off between the value for decision-making of the information provided by an indicator on the one hand and its availability, reliability and cost on the other.

In protracted crises, after the breakdown of routine information systems, indicators produced by field surveys are frequently the only ones available, particularly in the areas of mortality, morbidity and coverage. However, they are rarely drawn from random samples of national coverage, or even random samples at all. Also, they tend to portray a situation at a given point in time, which is sometimes of limited informative value. Considerable caution is therefore in order before generalizing survey findings.

No disrupted health sector has the capacity to monitor all the aspects proposed in the table below. The selection of the few indicators to be collected and studied depends on the issues considered as the most important in the policy agenda. In a sector starved of resources and with anecdotal evidence of conspicuous wastage, indicators related to efficiency might be the most relevant. In another sector, where the workforce is perceived as grossly unbalanced and in need of aggressive restructuring, another sub-set of indicators should be chosen.

The difficulty of collecting some indicators must also be taken into account. In severely troubled environments, the monitoring of certain indicators would entail heavy costs and high chances of failure, despite the efforts expended. To fall back on rough proxies may constitute a sensible strategy. The short life of most indicators in an unstable environment is another important criterion to keep in mind when an information-gathering initiative is conceived. Only data related to decisions to be taken within a short time span stand a chance of being used. Detailed inventories of facilities, personnel and equipment, if carried out before the capacity to intervene emerges, are likely to end up in a waste of time, resources and skills.

The proliferation of concerns and “priorities” that usually affects disrupted health sectors pushes towards the collection of many indicators. Capacity constraints regularly undermine this purpose. The net result is that few or any indicators are actually collected, attentions are dispersed in many directions and evidence-free decision-making remains dominant.

The indicators discussed in the table presented below are mainly of systemic interest, i.e. they point to global characteristics of the health sector. The thematic modules composing the manual present additional indicators, related to the specific area under discussion.

Indicator	Dimension to be Monitored/Usefulness	Sources/Ways of collecting the Indicator(s)	Remarks
<i>Total inputs (expressed in financial terms, by region, level of care, source, ownership, rural/urban and adjusted per head)</i>	<i>Inputs.</i> Provides indications related to the system's costs, its geographical equity and global and relative efficiency (when related to outputs)	Data provided by the government, (MoF, MoH etc.), non-state groups (rebels etc.), UN agencies, donors, NGOs etc. need to be aggregated in monetary terms. Investment figures should be computed apart.	Tend to underestimate important contributions, such as patient payments or external resources (particularly from NGOs). May require the use of extrapolated data, when comprehensive ones are not available, which may be difficult and generate unreliable results. If certain inputs are computed at subsidized prices (such as drugs in many cases), it may be incorrect to aggregate their value with others provided at market price. The judicious use of shadow prices may address this difficulty. Because of the depopulation of rural areas and the concentration of IDPs in urban and peri-urban areas, studying the rural/urban split may lead to flawed conclusions. When migratory movements (internal and abroad) involve a large proportion of the population, all indicators adjusted "per head" are grossly misleading and should be avoided.
<i>Investment, by region, level of care, ownership, rural/urban and adjusted per head</i>	<i>Inputs.</i> Crucial to anticipate the sector future patterns and demands, in terms of costs, service mix, efficiency, equity, ownership etc.	Due to the fragmentation that prevails in most situations, obtaining reliable information is labour-intensive. Consider building a national investment permanent database.	Should be analysed jointly with information related to the present conditions of the health care network. The patterns of the ongoing investment help in assessing the enforcement of stated policies. Whereas the investment decisions of single autonomous actors may be in line with declared policies, the aggregate patterns may look strikingly at odds with the same policies. The <i>Investment/Development</i> Budget of government, donors and NGOs often includes recurrent expenditure, which needs to be identified and removed to avoid gross overestimates.
Aggregate service units (if considered reliable and acceptable)	<i>Outputs.</i> Provides direct estimates of service volumes, their geographical distribution, ownership and contributions by level of care	The Health Management Information System (HMIS, but it can be called differently) is the main source. Due to their weaknesses, source data may need substantive manipulation to become useful. Specific info sources, such as NGOs, can be used to complement and validate HMIS data. In situations of rampant informal privatization of healthcare provision, a large proportion of service outputs may go unreported	As different services require different inputs and imply different costs, their outputs cannot be directly aggregated, but need adjustment by a weighting system, which attributes a higher value to the more resource-intensive class of services. Criteria for weighting different services and adjusting source data have to be developed, tested and agreed upon by experts. The weights can be based on total service unit costs. For specific sub-sectors, a different set of weights may be required. For staffing, basing the weights on average attendance times would be preferable, whereas for drug distribution, average treatment costs per broad categories of care may be a more reliable guide. The aggregate output distribution may influence resource allocation decisions, particularly at macro-level (narrowing the level of analysis makes these estimates progressively less useful). The original data set used to compute aggregate outputs may be used to study broad patterns of service mix. If a global aggregate indicator is found unreliable, sub-global aggregates, such as in-patient and out-patient volumes, may be used instead. This (more conventional) alternative implies more detailed work when it comes to using outputs to compute several important ratios, such as workloads, and multiply the number of indicators needed to characterize any production unit (region, district, facility etc.).

Indicator	Dimension to be Monitored/Usefulness	Sources/Ways of collecting the Indicator(s)	Remarks
<i>Ratio of global inputs to global outputs and its evolution over time</i>	<i>Efficiency.</i> Crucial indicator, whose computation is unfortunately fraught with difficulties	Its computation depends on the format eventually chosen for <i>Inputs</i> and <i>Outputs</i>	<p>When the technical content of the provided care differs dramatically across areas, levels of care or over time, to draw conclusions about efficiency from the <i>inputs/outputs ratio</i> is incorrect. If aggregated estimates of <i>inputs</i> and <i>outputs</i> are not available or are considered unreliable, a global efficiency index is impossible to compute.</p> <p>Instead of computing an actual ratio, which would suggest a technical precision unsupported by the available information, the presentation of the relationship between inputs and outputs may remain deliberately impressionistic. A time series of aggregate inputs and outputs may convey how these two variables evolve in relation to each other, providing a precious “feeling” of the situation.</p>
<i>Staff workloads</i>	<i>Efficiency.</i> Useful in redeployment of staff and to project the future workforce	HMIS or facility-based surveys (often carried out by NGOs)	The selection of a sub-set of facilities providing reliable and complete data is recommended. It should be presented as global and then disaggregated by region, class of facility, level of training, level of care, ownership. It is easier to compute if an aggregated measure of output is introduced. Given the frequent counting of ghost workers among active staff, any administrative estimate of workloads should be checked in the field before being retained as valid.
<i>Bed Occupancy Rate</i>	<i>Efficiency</i>	HMIS	Same as above. It may show dramatic oscillations, depending on epidemics, population movements, availability of skilled staff, drugs or food etc.
<i>Financial Implementation Rate, by source</i>	<i>Efficiency.</i> Essential criterion for the allocation of non-wage funding	In most cases, routine data need to be complemented by reports and studies	Needs to be linked to planned and real outputs. Aggregated by cost centre, region, level of care (when possible). Special attention to be paid to absorption of external funds (given its frequently low levels). Misleading in high-wastage situations, quite common during protracted crises.
<i>TB Treatment Success Rate</i>	<i>Effectiveness and Efficiency</i>	TB-control programme, where this is in place	When the TB control programme is vertical, this indicator says little about the systemic performance of the health sector. The same holds for other vertical programmes. It can be taken also as an indicator of effectiveness.
<i>Ratio of the average service consumption per head of a privileged group to a destitute one</i>	<i>Equity.</i> Condenses imbalances in a single index and, if followed over time, shows whether they are being redressed	Data source is the HMIS (already aggregated as <i>Outputs</i> , see corresponding entry), or specific studies	Useful only in situations where population figures are available and large migrations are not under way. It may be particularly interesting when comparing refugees, IDPs and residents of areas not directly affected by the crisis. It may require substantial adjustment of incomplete data sets to become reliable. Should be considered every time major investments are discussed. It may lead to major redistributive decisions within the health sector.
<i>Proportion of the population with access to basic health services</i>	<i>Equity</i>	HMIS, reports prepared by special programmes, surveys	A workable definition of “access to basic health services” must be formulated and associated to this indicator when it is presented. Using routine data, a range of utilisation figures, from the lowest coverage to the highest one, can be retained as a proxy for “access”.
<i>Ratios of health facilities to served populations, by geographical area, rural/urban etc.</i>	<i>Equity</i>	Available inventories of health facilities and mapping	To be meaningful, these figures need to assume fairly homogeneously distributed populations within the studied areas, which is usually not the case, particularly in war-torn contexts with major population movements. Ideally, these indicators should be refined, looking at the percentage of people having access to critical services, such as surgical theatres, maternity wards, labs, EPI delivery points etc. A more instructive indicator would be the <i>Proportion of population within 5 or 10 kms of a designed health unit</i> , which is usually not computable because of the limitations of census data.

Indicator	Dimension to be Monitored/Usefulness	Sources/Ways of collecting the Indicator(s)	Remarks
<i>Inpatient Case-Fatality Rate for selected conditions</i>	<i>Effectiveness</i>	Facility-based surveys	Consider computing this rate for a basket of major communicable diseases; these should be chosen considering the effectiveness of available standard treatment for a given level of care. For instance, a basket of inpatient cases of malaria, diarrhoea, acute respiratory infections, sepsis and meningitis would provide an informative, if rough, estimate of the existing capacity to tackle effectively serious common conditions at PHC level. To study higher-level care, other common conditions deserving surgical treatment could be added or considered apart (obstructed labour, acute abdomen, major traumas).
<i>Proportion of post-operative infections after elective surgery</i>	<i>Effectiveness</i>	Facility-based surveys	Simple, straightforward indicator, which should be computable even in troubled contexts.
<i>Proportion of rational prescriptions within a sample</i>	<i>Effectiveness and Efficiency</i>	Facility-based surveys	The well-known International Network for Rational Use of Drugs (INRUD) methodology is simple, reliable and informative. It should be used extensively, as a strategy to improve quality of care and to counteract waste, particularly in situations where drugs are scarce.
<i>Patient compliance</i>	<i>Effectiveness</i>	Surveys	Exit interviews may be misleading. Home visits provide more accurate information.
<i>User satisfaction</i>	<i>Effectiveness</i>	Surveys	Difficult to study and standardize. Interview results may be very misleading. Before adopting this concept, a robust and sensitive methodology must be developed. Results should always be considered together with an expert assessment of the quality of care provided.
<i>Infant Mortality Rate</i>	<i>Outcomes</i>	High-quality surveys with large samples	Often estimated using indirect <i>retrospective</i> methods, such as the sisterhood one (WHO and UNICEF, 1997), that measure past rather than present mortality. Thus, these values should not be used to draw conclusions, such as the impact of ongoing interventions, about present patterns, particularly in a fast-moving context.
<i>Maternal Mortality Ratio</i>	<i>Outcomes</i>	High-quality surveys with even larger samples	
<i>Workforce structure (new enrolments, attrition, skills, age, gender, employer) and deployment</i>	<i>Human Resources</i>	HMIS, dedicated inventories	To obtain reliable figures in very fragmented situations is difficult. Deployment needs to be disaggregated by main categories: level of training, gender, region, urban/rural, facility ownership, level of care. In countries with a very high HIV prevalence, the workforce structure may change quickly. Be wary of "ghost workers", very common in troubled situations.
<i>Average teams per class of facility</i>	<i>Human Resources</i>	Routine data need to be validated by facility-based surveys	Given personnel movements, actual over- and under-staffing patterns in relation to routine reports are common. Possibly aggregated by training level (i.e., university-, mid-, basic-), skilled vs. unskilled. Sub-samples of facilities reporting complete data may be compiled as representative proxies. Combining these data with workloads, the <i>average service volume per class of facility</i> (very useful to study the network in view of restoring, expanding or rationalizing it) may be computed. In disrupted situations, to find overstaffing associated to reduced service outputs is common.

Indicator	Dimension to be Monitored/Usefulness	Sources/Ways of collecting the Indicator(s)	Remarks
<i>Inputs and outputs of the pre-service training system</i>	<i>Human Resources</i>	A specific study is usually needed	It could be computed as cost per trainee or per year of training, by level of training and by training facility.
<i>Inputs and outputs of the in-service training system</i>	<i>Human Resources</i>	A specific study is usually needed	It could be computed as cost per participant per day of in-service training. Due to the dispersion of in-service training activities, collecting these data is labour-intensive. Average figures should be taken with caution, because exposure to in-service training varies dramatically within the workforce (with over-trained workers against neglected ones). Given the over-reliance on in-service training, typical of protracted crises, studying this area is particularly relevant.
<i>Drug total imports, by source of funding and adjusted per head</i>	<i>Drugs</i>	MoH data need to be complemented with reports prepared by donors, NGOs and private importers.	Unavailable in most cases, or grossly underestimated. To collect reliable figures is very difficult and labour-intensive, particularly for the private sector and for donations. Caution is needed in aggregating widely different prices of the same drug. Comparing drug prices purchased through different channels provides precious indications of the sort of measures needed to improve drug availability.
<i>Drug distribution by region, rural/urban, ownership and level of care</i>	<i>Drugs. Equity</i>	Where centralized, shared mechanisms are in place, the use of routine information is usually possible. In other cases, specific studies are needed.	It is an essential component of <i>Total Inputs</i> , discussed above. Beyond financial figures, the appropriateness of the drugs available at each level of care should be studied (the supplying of drugs inappropriate for a given level of care is a very common finding).
<i>Waste and pilferage along the supply line and at facility level</i>	<i>Drugs. Efficiency</i>	A tracer study is usually needed to throw light on this issue.	Usually overlooked during a protracted crisis, this information may provide crucial contributions to the policy discussion and to the conception of a recovery strategy.
<i>Drug availability at facility level</i>	<i>Drugs</i>	Facility-based surveys	A number (5–10) of vital drugs should be selected as markers. The indicator could be expressed as proportion of selected drugs available over the studied period.
<i>Absolute level of financing, disaggregated by source and management responsibilities</i>	<i>Financing</i>	Consider the implanting of permanent capacity, to carry out this review at regular intervals.	To be followed over time. Estimates of patient contributions need specific studies and are difficult to obtain. The external share of total financing helps to gauge the degree of discretion to be enjoyed by future governments. Trends are as important as absolute figures.
<i>Expenditure structure, by cost centre, region, urban/rural, level of care, ownership</i>	<i>Financing</i>	A specific study with a substantial field component is usually needed.	Crucial to address existing imbalances, spot gaps and devise measures aimed at rationalizing health care provision. To consolidate contributions may be extremely complex. Should be complemented and validated by costing studies at facility level.

Module 3

Understanding the broader country context: past, present and future

Lindsay Hilsum: "When reporters don't know what is happening, they call it anarchy".

Mark Duffield: "When aid workers don't know what is happening, they call it a complex emergency".

(quoted in Keen and Ryle, 1996)

Contents

This module introduces the user of the manual to many aspects helpful to gaining an understanding of a country in crisis. As the field is immense, the selection of issues to be discussed has necessarily been restrictive. Stress is given to scrutinizing the nature of the disruption in order to foresee its likely evolution, and to draw useful lessons from other countries. Topics discussed include: population displacements induced by violence; politics and information management; and the role of international media in humanitarian crises. The patterns of aid directed to disrupted countries, and how they can be analysed, are then covered. The subject of the meaning and implications of decentralizing the state administration in war-torn contexts follows. The closing chapter considers the difficulty of foreseeing the future of countries in crisis, the stark choices facing stakeholders, and their implications for the health sector.

Annex 3 discusses the rationale, aims and format of *Post-Conflict Needs Assessments*, as carried out in several countries in transition. Preliminary lessons learnt by participating in such exercises are offered for consideration.

Closely-related modules:

No. 4. Studying health status and health needs

No. 6. Analysing health financing and expenditure

No. 8. Studying management systems

Introduction

While some recent conflicts, like those of Afghanistan, Mozambique, Rwanda and Sudan, have attracted the attention of historians and researchers, others, such as Angola, the Democratic Republic of the Congo and Somalia, have remained inadequately documented and only partially understood. As time elapses and memories and files are lost, the chance that light is thrown on these latter conflicts decreases.

In most cases, and especially at the height of a crisis, historic insights are as scarce as they are invaluable. Special efforts are needed to penetrate the political, military and economic picture, with the support of incomplete and unsatisfactory materials.

The country context affects what happens in the health sector, and what can be done within it. Without a degree of understanding of the conflict and its root causes, of its actors and their respective agendas, and of the changes – both those with short-term and long-term consequences – induced by violence in the fabric of a troubled country, an analysis of the health sector will remain lame. Further, measures aimed at sustaining health services during the disruption and at encouraging their recovery afterwards would be ineffective, or short-lived. The temptation is always strong to work around conflict (Goodhand and Atkinson, 2001), handling it as an unfortunate nuisance. Gaining awareness of past and present political, economic and military events dramatically strengthens the analysis of the health sector.

Alongside countries stricken by widespread violence, many others present features that suggest a deep crisis. Recent work has bundled this heterogeneous group under the label of “fragile states” (for a definition, see *Glossary* in *Module 14*). They include countries with repressive governments (Myanmar, Zimbabwe), poor governance (Chad, Nigeria), localized conflict (Indonesia, Nepal, Sri Lanka, Uganda), chronic ethnic unrest (Ethiopia), or economic crisis (Burundi, Tajikistan).

In most instances, the various aspects of fragility are intertwined. Given their intrinsic weakness, many of these fragile states may collapse in the future, in some cases suddenly. Their health sectors deserve a thorough study, even in the absence of large humanitarian operations or donor engagement. Several of these health sectors have already been explored in some detail. Many others (e.g. Democratic People’s Republic of Korea, Myanmar) lack satisfactory, comprehensive assessments, because of the resistance of defensive governments to unbiased inspection or lack of

interested donors, agencies and researchers. Frequently, the available analysis omits references to the ongoing crisis, in this way supplying a distorted, sanitized picture. This glaring omission gives a measure of the sensitivities fuelled by the crisis.

The causes of the disruption

*“Conflict is a **dynamic** social process in which the original structural tensions are themselves profoundly reshaped by the massive disruptions of war. Therefore ‘root causes’ may become decreasingly relevant in protracted conflicts which have led to the transformation of the state and society” (DFID, 2002).*

According to Yanacopulos and Hanlon (2006), a conflict is “any struggle or confrontation between groups or individuals over resources or power”, and as such it is a natural process in any society that, under some circumstances, can become violent with “armed conflict” and can further escalate into war. Conflict is not always destructive or a prelude to war: it can be part of the processes of change and development.

Conflicts arise from a multiplicity of intermingled factors. Political control, poverty, injustice, scarcity as well as abundance of resources – unequally distributed – have been singled out by observers of different disciplines as the main drivers. Political analysts tend to highlight the “grievances” of certain groups as the main causes of conflict. Conversely, economists see “greed” – or search for maximizing wealth – as the main explanatory factor.

Examples of greed- and grievance-fuelled conflicts abound, to support all interpretations. A thorough review of the conflicts of the last decades suggests that economic factors, usually related to control of strategic resources, play a dominant role, particularly in perpetuating a conflict, even if this has been ignited by political causes. And even conflicts constructed as grievance-induced by the main actors may be better understood by looking at their political economy. Further, conflicts may be ignited by the abundance – rather than shortage – of primary resources, mainly if the national economy is not diversified and is highly dependent on a primary commodity. “Resource” conflicts confirm their essentially non-political nature by proving singularly resilient to peace-making efforts: in these wars “*winning may not be desirable*” since the resulting chaos is instrumental to sustaining illegal and violent economies (Keen, 1998). In these conflicts only effective interventions at a political level, sometimes coupled to a peace-making component, can offer a solution. Measures aimed at a political dispensation that addresses the unfair (real or perceived) treatment suffered by certain groups, without considering the causes of violence, may miss the point in most cases of contemporary conflict. In these contexts, reconciliation approaches based on “universal values”, such as justice, equity or humanity may deliver peculiarly blunt and ineffective results.

Recognizing this reality contributes to explaining the low profile enjoyed by healthcare provision in pure resource conflicts, such as in Angola or the Democratic Republic of the Congo, in contrast to politically-motivated struggles. In the latter ones, health initiatives may play a role in contributing to peace-building, with warring parties gaining mutual understanding on a comparatively neutral, technical ground and even genuinely understanding the interests of their constituencies. In other contexts, health initiatives may be tolerated by enemies who still do have the intention to win the hearts and minds of the population they control. However, to competing predators only interested in extracting wealth by violent means, health is a non-issue. A settlement may arise only from addressing the real interests of belligerents in the political and economic sphere.

The political economy of civil wars

Conflicts and economies are bound by mutual, complex links. Poor economic performance, by eroding the legitimacy of the state, as well as limiting its capacity

to control events within the country and fulfil its basic responsibilities, may be instrumental in eroding good governance. In these situations, conflict opportunists may arise internally, or establish alliances with external actors attracted by local resources to be exploited and by the impunity enjoyed in relation to a weak state.

As rebels need to finance their challenge to the state or protect themselves from state repression, they are forced to become economic operators. Criminal businesses that provide high returns, such as the trafficking of drugs, diamonds, timber, ivory, and arms, are common sources of war financing. In countries where natural resources are absent or difficult to exploit for conflict entrepreneurs, cheap labour extracted from populations may become the main asset on offer, hence the main military objective. In Mozambique, rebels made extensive use of forced labour to sustain their fighting capacity, while the government tried to expand the population it controlled as a way of weakening the insurgency and maximizing aid flows. The time-honoured tactic of “draining the pond to catch the fish” has been recently applied in Darfur.

The centrality of people in sustaining the war economy through labour may explain to a certain extent the high profile enjoyed by healthcare provision in the Mozambican conflict: people become an asset requiring investment, including health service provision. A totally opposite rationale shaped the Angolan conflict, where the population was not needed by either contender to support the war effort (ensured by abundant oil and diamonds). Hence, violent pressure on people to flee across the frontline, in this way encumbering the enemy and reducing its fighting capacity, became a widely-used tactic.

The country’s overall economic performance is usually badly hurt by civil war. Funding to the military expands, to the detriment of social sectors. Infrastructure and productive assets are shattered. Private wealth is shifted abroad (Collier et al., 2003). Social capital is destroyed. The resource pool fought over by contenders tends to shrink. Exhaustion, such as in Mozambique, may pave the way to a settlement. Conversely, with huge resources shielded from military operations, as in the case of the Angolan offshore oil, war financing was guaranteed despite general economic collapse. The party in control of such an asset could indefinitely sustain the conflict.

When the country becomes the recipient of large aid flows, the economy is heavily transformed, and may suffer from the “Dutch disease”, by which aid ends up slowing down labour-intensive export activities, with an overall depressive impact on the country’s economy (Collier, 2007). The labour, service and housing markets restructure themselves to tap these new aid-related opportunities. While some domestic production is depressed by price distortion and unfair competition, other activities, e.g. brick-making, may flourish. New career paths outside the state system open up to skilled health staff in particular. The economy splits into a wealthy segment taking full advantage of aid flows, and a poor one only marginally benefiting from it, while new opportunities arise in the aid industry for educated individuals. Globalized markets thrive alongside subsistence ones. Diaspora remittances may grow until they represent a large portion of the economy, as seen in Somalia (Savage and Harvey, 2007), or conversely shrink, as has been observed in Darfur. Aid, mainly food, risks being manipulated, appropriated and traded by the elite – emerging anew or firmly entrenched – economic entrepreneurs and violent actors.

Aid may play a key role in suppressing local dynamics of opposition forces challenging regimes. Englebert (2003) found in Zaire/Democratic Republic of the Congo an extremely strong correlation between low levels of foreign aid and lack of rebellious activities. A time series starting in 1960 shows that “... aid disbursements have been significantly lower on average in years preceding separatist or rebellious activity than in years preceding instances of social peace, suggesting that Congolese elites adjust their behaviour to the economic returns of sovereignty.”

Contemporary conflicts tend to cross national borders, due to regional interests and the increasing need for movement of fighters, weapons, refugees, goods, money, relief

organizations, diplomats, spies, criminals, business people and ordinary citizens. In some cases, a resurgence of violence in a neighbouring country is clearly linked to a ceasefire across the border. The damage done by a conflict to neighbouring countries may be substantial, with the weakest neighbours usually being drawn into civil war. The Liberian crisis contributed to the escalating war in Sierra Leone. The Côte d'Ivoire came next. Peacemakers raised in the tradition of state-to-state diplomacy deal poorly with regional crises.

Military patterns

Most protracted conflicts are marked by long periods of low-intensity warfare, punctuated by occasional outbursts of conventional military activity. Dominance of inexpensive small arms, skirmishes, ambushes and/or irregular fighters active in small groups, are all typical features of low-intensity warfare. The heavy reliance by grassroots warring groups on child fighters has become a distinctive feature of many recent conflicts.

The relative ease and low cost of waging this sort of war encourages the emergence of multiple entrepreneurs. Low-intensity conflicts tend to fragment into confusing, self-maintaining situations, with actors entering or leaving the campaign according to opportunity and convenience. Warfare becomes privatized, following business rather than military rules. Foreign fighting forces involved in the conflict as allied to warring sides, and in some cases as peacekeepers, are left to fend for themselves, and themselves indulge in resource extraction or other lucrative businesses.

In many cases, low-intensity warfare is the sole option available to commanders of small armies of reduced capacity, thus understandably reluctant to engage in decisive confrontations with the enemy, who may face the same difficulties. Conflicts become inconclusive, with the bulk of casualties and suffering inflicted on civilians by soldiers whose main concern is survival: feeding and sheltering themselves, looting what is within reach and thoroughly avoiding decisive confrontations.

Once created, armies of this kind may endure difficult times and even prosper with relatively scarce inputs from outside. Conversely, high-intensity warfare is a high-cost option, affordable only for governments or rebel groups in control of substantial resources. Whereas the short-term damage to soldiers, civilians and infrastructure is usually large, high-intensity conflicts tend to end quickly with the emergence of a clear winner. When the victory scored by one party is not clear-cut, the intensive phase of a conflict may give place to a protracted sequel of low-intensity nature. Very asymmetric military force between contenders tends to induce this last pattern (as seen in Iraq).

The use of landmines by belligerents has far-reaching implications. Landmines kill and cripple for decades after the end of a conflict. By limiting access to land, restricting communications and killing livestock, they affect the economy. Landmines also put a heavy burden on health services, which have to provide expensive surgical and prosthetic care to the victims. Additionally, the presence of landmines limits the resettlement of displaced people once hostilities have ceased. The recovery outlook of a disrupted country may be seriously affected by this scourge.

Afghanistan, Angola, Cambodia, Iraq, and northern Somalia were considered in the 1990s to be the most contaminated countries in the world, with several million mines each. Angola had the worst known ratio of amputees per population in the world, with one per 334 inhabitants (Horwood, 2000). Despite the success registered by the worldwide campaign to ban landmines, reflected in the worldwide decrease of mine injuries, recent conflicts have seen their utilization, in some cases on a massive scale, as in the border dispute between Ethiopia and Eritrea. Global production of landmines has decreased, but existing stocks are large enough to supply future armies for some time.

Partitioned situations

Protracted conflicts without clear-cut outcomes, particularly when fought across ethnic or religious fault lines, may lead to uneasy stalemates, with portions of the territory and population controlled by armed groups, be they politically-motivated rebels, ethnic or religious armies, or just criminal gangs. The territorial and ethnic coherence of the resulting partitions is often precarious. The government may maintain its grip on the main towns, as in Mozambique and Southern Sudan, with the rebels controlling the countryside. Or the division may reflect revenue interests, like diamond fields. In other conflicts, the control of people takes precedence over that of territory. Or partition may create in effect twin states with a well-recognized, if unstable, frontline, as in Angola.

If control equates to ethnic or religious allegiance, the map of influence may resemble a leopard skin, as in the West Bank. Borders may remain fluid, or be frozen by a ceasefire (sometimes imposed from outside). Ethnic cleansing measures may be applied by certain warring parties to remove the populations living on the “wrong” side. The return of displaced people after the end of open hostilities may reshuffle the composition of the population, sometimes forcing communities into tenuous and uneasy cohabitations, such as in Kosovo.

True Story No. 3. Understanding the evolution of the Afghan health sector

The turbulent history of Afghanistan is well known. To track developments in its health sector in the 1980s, essential reading is O'Connor RW (1994) *Health care in Muslim Asia: development and disorder in wartime Afghanistan*, which describes in detail health activities supported by international NGOs based in Pakistan during the war against the Soviet occupation. The book covers many aspects of health service delivery under extremely difficult circumstances: supplying remote providers in a dangerous and rugged terrain, training and supervising volunteers, collecting information, evaluating activities, etc. The resulting picture is fascinating but grossly incomplete (hence potentially misleading), because it does not cover the health sector managed by the Soviet-supported Afghan Government (probably at the time the largest health service provider in the country). Complementing a rich but unilateral view with documents elaborated in Kabul is necessary. For instance, the *Country Profile* prepared by the Ministry of Public Health in 1985, which did not even mention that the country was at war, is instructive about important internal developments, such as the expansion of medical training and of hospital care, which to this day have serious implications for health services. The partitioned health sector developed along diverging lines chosen by warring parties, lines that have to be understood if we want to make sense of post-conflict patterns.

In most cases, the main concern of leaders, old or new, formal or informal, is to raise revenues from the population: money, food, fuel, minerals, drugs, or coerced labour. To gain legitimacy in the eyes of their subjects, military leaders may try to establish civil administrations and provide some social services. Local and international NGOs are frequently the main service providers, formally on behalf of the armed rulers. The International Committee of the Red Cross (ICRC) and international NGOs may succeed in negotiating with the belligerents over their movements across the lines of control in order to access isolated populations. Where military activities have led to stable partitions,

relief agencies and NGOs split their operations accordingly; some of them may even work with one warring side only. As a result, the separation is consolidated (see True Story No. 3).

The outcome of the disruption

Terms such as “complex political emergencies” or “protracted crises” encompass a variety of situations and outcomes:

- Continuity of state settings, despite the challenge for supremacy launched by rebel groups. The weakened state has a limited control over the country, but never totally relinquishes its functions, at least in terms of political discourse and international relations. Decades of turmoil end in appeasement (often due to the exhaustion of the warring sides), or in the unambiguous military victory of the government. Perhaps after some cosmetic changes in its inner functioning the state emerging from the crisis resembles that existing before it. The survival of the original ruling group may be achieved through the change of its political agenda. Examples: Angola and Mozambique.
- The outcome of the crisis is the creation of a new state: Eritrea and Timor-Leste are recent examples. International sensitivities may keep certain new entities in an ambiguous legal status, like Kosovo, Puntland or Somaliland. Independence is not always followed by systemic change, particularly in the public sector, which may maintain in place old settings. Many post-colonial African states upheld the language, legislation, and bureaucratic traditions of their previous rulers, opting for a continuity that some scholars consider as a key factor fuelling conflict, and at the origin of their subsequent failure. Virtually everywhere, budget systems are among the state functions most resilient to change. Health sectors are rather prone to conservatism, as well.
- The state “survives” the crisis but rulers are replaced. State functions are reshaped at fundamental levels, as witnessed in Cambodia and Uganda. New rulers anxious to affirm their legitimacy are often attracted by reforms, which may involve the health sector. New governments may enjoy or court international favour and opt for dominant, “liberal” models, usually a precondition for tapping aid resources.
- The state fails and the country implodes, as seen in Afghanistan, Liberia and Somalia. War-lordism and fragmentation ensue. Aid agencies and NGOs replace the state as service providers, usually unconstrained by absent or powerless domestic authorities, and unevenly distributed. As armies and private groups compete for resources, the conflict becomes “extractive” with exploitation of strategic commodities as the main driver. The crisis feeds itself.
- Where no warring side is strong enough to impose its conditions, protracted negotiations lead to a settlement between the parties, which split power and get rewarded with a share of state revenues, as in Sudan and the Democratic Republic of the Congo. Power- and resource-sharing and security deals present special difficulties. To ensure an effective peace, such arrangements need conspicuous levels of resources and political capital. The chances that the country relapses to war are high. The new government, usually embroiled in a web of ambiguities and trade-offs, lacks coherence, capacity, credibility and decisiveness. Conflicting messages are commonplace. The international community may be as fragmented and inconsistent as the country itself. Instead of embarking on recovery, the country may be caught in a limbo of endemic if decreased violence, poor governance and modest investment.

Very protracted crises may evolve through different phases, reflecting some of the outcomes sketched above, which sometimes coexist, as in the case of partitioned countries, where no decisive result able to trigger a settlement of the conflict

materializes. Periods of high international visibility of the crisis may be followed by periods of neglect. International attention may turn away from or never focus on certain crises, regardless of their humanitarian impact.

The messy unfolding of many contemporary conflicts is commonly portrayed by the media as chaos, madness or barbarity. Field workers and analysts may align themselves with these perceptions, and draw the conclusion that no sense can be made of such violent events. Conflict becomes an operational inconvenience, whose effects on relief interventions have to be minimized. Too often, no attempts are made to understand events perceived as inherently impenetrable. Conversely, analytical efforts may succeed in unveiling surprising levels of meaning in conflicts as confused as those of Liberia and Somalia. *“Part of the problem is that we tend to regard conflicts as, simply, a breakdown in a particular system, rather than the emergence of another, alternative system of profit and power”* (Keen, 1996). Some conflicts see the re-emergence of traditional pre-colonial systems, as in northern Somalia.

“Trends in contemporary Somalia are a reflection not of irrational impulses of warlords or the ‘madness’ of teen-age warriors in an environment of state collapse, but rather of the calculations of local actors as they try to survive and profit in a context of great uncertainty and insecurity. Militiamen demobilizing and taking up farming in the Lower Shabelle do so because the risks attached to fighting and looting have become greater than the value of potential war booty. Businessmen who finance sharia courts do so because they have come to have an interest in safe commercial corridors and secure market areas, not in the spoils of war. Warlords who incite tensions between rival clans do so because their political standing in peacetime quickly plummets. These actors may miscalculate – in fact, evidence points to an enormous amount of miscalculation in Somalia – but they are calculating, attempting to manage and reduce risk and advance their interests.”

(Menkhaus, 2003)

Lessons learnt during a crisis are rarely transferred to another one, or alternatively, the experience is transferred to a context where it does not apply. An important reason is the wide range of conflicts that affect the world, associated to rather uniform responses on the part of foreign politicians and military, and to a lesser degree by aid agencies, think-tanks and news organizations. Thus, concepts and approaches found useful in some contexts may be mechanically replicated somewhere else, despite the striking differences a careful review might find between crises. Puzzled by the variety of contexts, some players tend to lean to the opposite side, considering every crisis unique and calling for original responses. A sensible approach is likely to lie in between these extremes. It pays attention to both similarities and differences, in this way adopting previous experiences only when they are considered really relevant to the new context (which has been adequately scrutinized and understood).

The following chart tries to sketch a summary typology of conflicts, by looking at the distribution of several important features along the respective spectra. Other features can be added to refine the analysis. Such a typology is obviously a simplification, aimed at promoting the understanding of the composite nature of contemporary conflicts. Any rigid application of it would produce misleading results.

A basic typology of conflicts

Duration	Short	◀ ▶	Protracted
Intensity	High	◀ ▶	Low
Nature and settlement	Political	◀ ▶	Economic, extractive, "predatory"
Political consequences	New political settings	◀ ▶	State implosion; disintegration of the wider social fabric
Involvement of foreign actors	Important	◀ ▶	Negligible
Excess mortality of civilians, poverty and destruction	Limited	◀ ▶	Enormous
Roles of aid organizations	Acute relief to avoid excess deaths and suffering	◀ ▶	Replacing state functions; the sustainability of external support becomes an issue
Support required	Mainly financial resources and policy directions	◀ ▶	Resources and skills
Implications for outside agencies	Short-term support to alleviate the effects of the crisis	◀ ▶	Long-term, sustained interventions needed
Exit	Strategy needed	◀ ▶	No conditions for exit likely in foreseeable future

Conflicts of short duration and high intensity, with a political nature, such as Timor-Leste and Kosovo, would cluster towards the left side of the table. In relation to this group, the implications for external aid agencies are rather obvious. The main concerns are captured in the “do no harm” slogan (Anderson, 1999). Sustainability, equity, political reconciliation, ownership, respect for the local economy and labour market are among the central issues to be considered when planning aid interventions. In light of this, the massive reliance on foreign NGOs that has marked these crises, as well as the initial phase of the Iraqi conflict, may be criticized as insensitive and to some extent inappropriate.

Protracted, low-intensity, resource-motivated conflicts, marked by state implosion and catastrophic consequences in terms of deaths, destruction, and human suffering lie on the right side of the spectrum. Afghanistan in the 1990s, the Democratic Republic of the Congo, Liberia and Somalia are classic examples. The reluctance of some donors to engage in countries of modest strategic interest, despite the gravity of their humanitarian predicament, is a constant feature of this group of crises. This is disturbing, because in situations of total collapse, the international community represents the only available alternative to the state as service provider and in some cases as a guarantor of security. The timeframe of interventions expands to encompass decades. The concerns mentioned above and related to the long-term implications of aid interventions pale against the magnitude of the crisis. As little is left of previous settings and institutions to be rescued, one could conclude that little “harm” can be done to what remains. An engagement implies a protracted, uninterrupted presence, adapted to the political and military vagaries that mark these contexts, and calls for programming practices appropriate to them. Short donor funding cycles appear distinctively disruptive of service delivery in these crises.

Several other crises can be distributed between the two “pure” extremes of this continuum. Some conflicts presenting mixed features would lie towards the centre

of the distribution. Angola shows many of the features of the right-hand group, with the important difference that state functions, although severely weakened, did not collapse while in contrast the state apparatus thrived. Mozambique would lie to the left, because of the strong political connotations of its crisis. Sudan and Cambodia would lie somewhere in between.

When using this way of characterizing conflicts, their dynamic nature must be kept clearly in mind. Conflicts change over time. Political conflicts, when left unresolved over protracted periods, tend to move towards the right end of the spectrum, as the extraction of resources ends up taking precedence over the original grievances among the concerns of warring parties. Angola was a case in point of this evolution. Misjudged attempts at negotiating a premature or flawed peace settlement may give respite to the losing side, in this way perpetuating hostilities.

If this summary approach to understanding conflicts holds, some lessons learned in the past in Afghanistan might become relevant, with appropriate readjustments, to the Democratic Republic of the Congo or Southern Sudan. On the other end, Kosovo might represent too distant a model to be really useful in African conflict-affected countries. Conversely, an intensely political emergency in a middle-income setting such as Kosovo looks as a potential source of relevant experience for those working in the Caucasus, or in Iraq.

Violence-induced population displacements

The mass movements of people affected by violence have become a familiar feature of the new “world disorder”. By end of 2006, there were 9.9 million refugees¹, an increase of 14% over the previous year. This increase that reversed the declining trend since 2002 was caused mainly by Iraqis searching refuge in neighbouring Jordan and the Syrian Arab Republic (UNHCR, 2007). 2006 also saw an increase in the number of IDPs, who were estimated at 24.5 million at the end of the year (Norwegian Refugee Council, 2007). The second figure is far less accurate than the first one, because of the lack of a legal definition and status for IDPs, which leads to serious shortcomings in the way national statistics are compiled. Colombia, Iraq and Sudan were the countries with the largest displaced populations.

Population movements may be induced by fighting in their home areas; in these cases, they appear as unintended side-effects of military operations. But violence on civilians is often deliberately inflicted, on ethnic, religious, economic, military or political grounds. Displacing enemy populations away from certain areas of particular interest, and resettling them in areas where it is easy to control them, like in camps, may even become the main goal of a military campaign, as seen in Colombia, Kosovo the occupied Palestinian territories and Sudan.

Given the long duration of many conflicts, displacement may become a chronic, semi-permanent condition. The longer displacement lasts, the more likely the confinement of IDPs to marginal areas, where living conditions are harsh and poverty is structural. The reluctance of both host governments and international agencies to encourage the legal, economic and cultural assimilation of displaced people into local communities may only strengthen their exclusion and foster negative coping strategies.

The clustering of weak or failed states succumbing to widespread violence means that refugees may swap insecurity at home for insecurity abroad. Too often the political and/or economic predicament of host countries and communities prevent the provision of adequate assistance to their refugee populations. Sometimes, the flow of displaced people becomes two-way.

Large-scale violence, and the induced deaths and mass displacements may change the cultural, economic and demographic patterns of one or more countries. The

¹ People displaced from the area of previous residence, who have crossed international borders. See *Glossary* in *Module 14. Resources*, for the full official definition.

Rwandan genocide targeted young males of fighting age, leaving two thirds of the population composed of females. Additionally, they may have a large and lasting impact on neighbouring countries. Once the conflict is settled, displaced people returning home may bring habits, allegiances, coping strategies and diseases with them, in turn affecting the country of origin.

Displaced populations raise a host of political, legal, ethical, security and economic issues that have proved difficult for host countries to address, as well as for the international community. Refugees enjoy a clear legal status, codified by international law. Their protection is mandated to a specialized UN body, Office of the United Nations High Commissioner for Refugees (UNHCR). Internally-displaced people, on the other hand, remain under the jurisdiction of their government, which is often part of the conflict, and in some cases the perpetrator (directly or by proxy) of the violence that caused the displacement. Decades of international debate have failed to generate a body of adequate legal provisions aimed at protecting these groups. And no international agency has been established to that effect, even if in some circumstances the UNHCR or another agency encompasses the protection of IDPs in its mandate. Meanwhile, extensive evidence has been collected worldwide about the extreme vulnerability of internally-displaced people, particularly of those living outside camps (Salama et al., 2004). On the other hand, there are examples of IDP communities in camps – e.g. in Darfur – that have better access to relief, including health care, than the host population.

In some conflicts, fighters intermingle with displaced people to gain sanctuary from their enemies, secure resources and stage military operations. Camps may be militarized by warring groups, which take advantage of humanitarian aid. To avoid the possibility of supporting political or military parties, some agencies opt to close down their programmes. Other humanitarian actors feel compelled to ensure they help displaced people, even if in this way they benefit fighters and sometimes violators of human rights. In these conditions, neat distinctions among civilians, fighters, political players and criminals are impossible to draw.

The relationship between refugees and host populations is often tense. The latter may resent the privileged assistance offered to the former by international agencies as, for instance, in Chad. Sometimes the unlawful behaviour of refugees causes problems: the Nairobi police, for instance, unofficially considers some areas of the city inhabited by Somali immigrants as *de facto* off-limits. Matters are compounded by the objective difficulty of distinguishing people who have fled genuine threats at home from economic migrants or criminals.

Host governments may put pressure on refugees to return home, even in situations of great fragility and uncertainty. Forced return and resettlement may be “encouraged” by home governments, together with “villagization” policies to show that the crisis is over. Large migrations have taken place under considerable hardship, creating serious problems in countries recovering from protracted turmoil, usually ill-equipped to cope with such inflows of destitute people. Starting activities in support of resettlement without assured security may be a dangerous pull factor, triggering the movement of communities back to their villages in the absence of secure conditions. On the other side, providing relief assistance to camps implies that humanitarian organizations are – or are perceived as – “*colluding in a policy of de facto ghetto-making*” (Slim, 2007).

Sometimes, repatriation has been largely spontaneous, triggered by improving conditions at home or by the deterioration of the hosting environment. Specialized agencies are sometimes caught unprepared by these mass movements, as seen in Mozambique in 1993–1994.

Resettlement in the home country after decades spent abroad may pose daunting challenges. The areas of origin may be impoverished by drought and erosion, while their infrastructure has been destroyed. Landmines may bar access to valuable

land, or hinder the reopening of roads. Land tenure rights may remain indefensible, because of the population movements associated with the hostilities. Identity cards and birth certificates may have become lost or destroyed.

Given the challenges it entails, the resettlement of large masses should be thoroughly prepared and adequately resourced by collaborating agencies and country authorities. This has not always been the case. Governments have often taken passive stances, leaving returnees to their own devices. In other cases, they have handled the issue assertively, as in post-genocide Rwanda.

International agencies and NGOs have often betrayed a surprising inability to understand the forces that drive refugees, and their return strategies. Donors have sometimes been slow to disburse the necessary funds, resulting in fatal delays. With the increasing specialization of aid agencies, there is the risk that the issue of displaced people is carved out from the broad policy debate about post-conflict transition and recovery. In this way, one of the most important components of a peace process may be dealt with in isolation, as a stand-alone issue.

Giving adequate priority to the reintegration of refugees and IDPs in a transitional recovery strategy is critical. Decision-makers should keep in mind that mass returns are political, security and health emergencies, which must be tackled in advance, and with adequate models, skills and resources. “... [T]he challenge of return, reintegration and reconciliation requires much more than short-term interventions and assistance from the UN and other international actors” (Crisp, 2006). The return of displaced people offers precious opportunities to address problems while they are still manageable. Disease-control activities, for instance, may be carried out on a grand scale, efficiently and effectively, by taking advantage of population movements and concentration sites, where registration has occurred and where it is possible to conduct immunization campaigns, to provide health information and screen as well as treat chronic diseases.

Politics and information management

In the politically-charged crisis environment, information is always bent (when not altogether forged) to accommodate the interests of involved parties. **Information is inherently contentious.**

For example:

- Population data may be inflated to increase food and non-food aid, or deflated to decrease them in enemy areas. See *Module 4* for a discussion of population estimates.
- Morbidity/mortality data may be used to justify, or to deny responsibility for, political/military actions, as seen in Darfur and Iraq.
- Health needs may be inflated for fund-raising purposes. Some relief agencies have developed strong fund-raising skills, whose deployment may create the way a crisis is perceived by decision-makers and the public at large.
- Studies may be carried out to postpone action, or to justify decisions already taken. Only occasionally have hesitant decision-makers been galvanized into action by the results of studies commissioned to advise them. Given the difficulties of collecting solid data in such environments, studies rarely if ever provide clear-cut findings. Furthermore, the risks entailed in taking certain decisions may lead to dismissing of the studies, regardless of the collected evidence.
- Health service performance is praised or criticized according to political allegiance. In Angola, some international NGOs went out of their way to praise National Union for the Total Independence of Angola (UNITA) health services at a time when access to areas controlled by the rebel movement was severely restricted. Later, the performance of UNITA health services was found to be much poorer than previously claimed.

- Embarrassing findings are withheld from circulation, or messed up to obstruct external scrutiny, or challenged on spurious technical grounds. The publication in 2005 of a mortality study documenting the severity of the situation in IDP camps in northern Uganda provoked a strong reaction from the government, which had regularly tried to downplay the magnitude of this crisis. The Ugandan MoH, which had participated in the survey, had to retract its original findings, which were, however, substantially confirmed by an additional round of data analysis (Rowley, Altaras and Huff, 2006).
- Countries in political and economic crisis, but with authoritarian governments firmly in control, may go a long way to deny serious issues by manipulating health statistics and discouraging the unbiased analysis of health status and health services. Before the collapse of the Soviet Union, little was known of the severe health and demographic crisis that already plagued it. Now, the health sectors of Myanmar, the People's Republic of Korea and Zimbabwe are all inadequately studied. The scarcity of good-quality studies is in itself a symptom of an underlying problem, often of a political nature.

Given the interests and the agendas of the parties producing the information that circulates in troubled environments, multiple sources must be consulted and respective data compared. Conclusions should always be scrutinized, and frequently revisited. See *Module 2. Making (rough) sense of (shaky) data* and *True Story No. 4* for a discussion of this issue.

The role of the international media

The intensity of media coverage depends on a combination of factors. Easy access for foreign journalists, quick transmission of video reports, sharp characterization (real or fabricated) between belligerents, rapid unfolding of events, involvement of Western nationals, dramatic footage, and/or attention-catching and exotic features are among the ingredients needed to make a crisis “noisy”. Protracted, chaotic conflicts fought in areas of difficult access and complex to convey to Western audiences, do not obtain the visibility they would otherwise deserve. Despite the availability of reliable data showing the shocking gravity of its crisis, the conflict in the Democratic Republic of the Congo never reached centre stage. The aid allocated to this country remained vastly below the levels that an objective assessment of needs would imply. Amid this media neglect, the eruption of the Nyiragongo volcano in 2002, which caused fewer than 100 deaths, achieved exceptional coverage.

Political, security and economic interests affecting the rich world increase media coverage, which in turn may strengthen the attentions of rich governments. Additionally, certain crises may receive extensive coverage not because of the human suffering involved, but because of strongly-felt concerns among Western audiences, such as environmental damage or the terrorist menace. On the other hand, potential crises usually fail to attract media attention. Crisis prevention work is unlikely to be turned into stories of interest to the public of rich countries. The most successful relief work may go unnoticed in this way.

Empiric research has suggested that the so-called *CNN effect* plays a decisive role in influencing donor decisions only in certain cases, usually in the absence of clear donor policies or in relation to countries of negligible strategic interest (Olsen, Carstensen and Høyen, 2003). The ill-fated American intervention in Somalia in 1992, encouraged by the media coverage of the underlying famine, seems the archetypal example of a misconceived operation, quickly closed down in the face of mounting difficulties. The effective rule in most cases is that the response of governments to humanitarian crises follows political, security and economic rationales, with the media reacting to the decisions of politicians. The extraordinary visibility of Iraq, caused by the interests of the rich world and by the controversy that preceded that war, exemplifies this link.

Pressure from the public may induce governments unwilling to deploy political, military and economic instruments to fall back on relief measures. By their manner of presentation, the media may influence the response to a complex emergency. Framing a political crisis as a food security issue will encourage governments to opt for “soft” measures, like pure relief operations. Conversely, the 1999 air campaign against Serbia over Kosovo, clearly motivated by strong security interests, was presented by the Western media as a humanitarian intervention (Olsen, Carstensen and Hoyer, 2003). Once a certain framing of facts has gained wider acceptance, it may stick even in the presence of evidence challenging it. Often the media first create, then consolidate, particular constructs that are usually over-simplifications of reality. Pitting the Muslim north against the Christian south to explain the protracted war that ravaged Sudan is an example of such misleading interpretations.

The relationship between aid agencies and the media is awkward. On the one hand, the media coverage of conflicts is rarely satisfactory and often is plainly distorted, in the eyes of field workers with an intimate knowledge of the crisis and of its subtleties. Whatever evidence is provided to journalists, it is likely to be processed to become a story palatable to the particular audience of the involved medium. In particularly controversial settings, like the Balkans or the Middle East, the manipulation of facts may be pervasive. Stereotypes abound, also in relation to emergency operations: *“Relief is either heroic or failed – there is nothing in between”* (quoted in IFRC, 2005).

On the other hand, aid agencies and NGOs court media attention in their information and advocacy efforts as well as in their pursuit of support and visibility. They are increasingly hiring communication experts, in order to interact with the media on a professional basis. Agencies have set instructions and procedures for their staff on how to deal with journalists. In this way, they acknowledge the impact the media have on humanitarian operations. In fact, media coverage affects funding levels and the distribution of UN agencies and NGOs across a troubled country or region, irrespective of true needs. Major agencies and NGOs, especially those relying heavily on private contributions, are usually very media-conscious.

The lobbying capacity of humanitarian actors, their presence in a crisis, and the intensity of media coverage are interdependent, and conditional on pre-existing donor interests. The Darfur crisis offers a telling example of the intermingling of political agendas, economic interests, relief concerns and media power.

The politics of humanitarian aid

At first sight, the recent statistics on complex emergencies are comforting. Over the past years, but especially since 2002, the number of armed conflicts has declined remarkably, mainly in sub-Saharan Africa, so have battle-deaths (by almost 40%), and successful or attempted military coups (from 10 in 2004 to just 3 in 2005)². Worldwide, 31 state-based armed conflicts were registered in 2005, affecting 23 countries (Human Security Centre, 2007).

With the end of the cold war, the way in which wars are fought and end has changed dramatically: the new wars occur within – rather than between – countries, and negotiated settlements are now more common than military victories. The overall positive trend is offset, however, by downsides: wars ending in negotiated settlements last three times longer on average and are twice as likely to restart within five years as those concluded by military victories (Human Security Centre, 2007). Additionally, “indirect” deaths among civilians, who are increasingly being targeted by violence,

² Data on battle deaths and number of armed conflicts are cited in *Human Security Brief 2006* (Human Security Centre, 2007); on refugees are from www.unhcr.org; on IDPs data come from the Internal Displacement Monitoring Centre www.internal-displacement.org; on military coups are from the Heidelberg Institute for International Conflict Research.

are on the rise. According to the IRC study in the Democratic Republic of the Congo (2003), for every violent, combat-related death there were 50 indirect deaths.

Contrary to the declining trend of complex emergencies, the number of natural disasters³ shows a progressive increase, with 689 disasters reported in 2003, 727 in 2004 and 744 in 2005. More people were reported affected or killed by disasters in the decade 1996–2005: 2.5 billion and 935,000 respectively, as compared to 1.9 billion and 505,000 in the preceding decade (IFRC, 2006).

In both absolute and relative figures, humanitarian aid shows a constant and steady increase in the past years: in 2005 it accounted for US\$ 8.7 billion⁴, which represent around 8% of total official development assistance (ODA) from the members of the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD), composed mainly of rich Western countries (OECD, 2006). The contribution of non-DAC countries – mainly from Central Europe, Asia and the Gulf States – to humanitarian funding is more difficult to track, but according to Harmer and Cotterrell (2005), it may now represent up to 12% of global official humanitarian aid, which would add US\$ one billion to the total.

More resources, easier travel and transport of goods, and longer experience of agencies and individuals in dealing with emergencies would imply a stronger overall capacity of the humanitarian system to respond to crises. New challenges and tensions have, however, arisen globally. The humanitarian system suffers from chronic weaknesses and distortions. For example, the allocation of greater resources to humanitarian assistance is, overall, distorted by stronger biases towards situations that are at the centre of Western political interests. This is not new: aid has always been politicized.

Impartiality, which implies *proportionality* – i.e. the requirement that aid should be allocated according to needs – is the first and possibly the most fundamental principle of humanitarianism: the *humanitarian imperative*. In practice, however, aid has never been blind to the interests of the giver, be it to secure influence, favourable trade conditions or strategic resources. Recent studies suggest that the humanitarian system as a whole is increasingly divorcing the humanitarian imperative from its response to global needs (Vaux, 2006; Cosgrave, 2004; Christian Aid, 2004). The tsunami, the earthquake in Kashmir and hurricane Katrina in the USA are clear examples of how the world's attention and donor funding are largely – and often *disproportionately* – attracted by dramatic rapid-onset natural disasters. The amount of aid for the tsunami was so large that some agencies, unable to absorb it, had to stop accepting funds. Largesse in highly visible emergencies is always at the expense of other crises. For instance, complex emergencies like the one in the Democratic Republic of the Congo, disasters like the crop failure in Niger and the Sahel in the first half of 2005, and the recent drought in the Greater Horn of Africa have received much less funding, despite having claimed many more lives and having seen the livelihood of larger populations destroyed. In war-torn countries, high levels of aid are common, but by no means universal, nor uniformly attributed.

There is no easy way of monitoring humanitarian aid flows. The UN's Consolidated Appeal Process (CAP) does not capture all the needs and funding, since some agencies do not participate in this process and donors often channel part of their funds outside the CAP framework. Smillie and Minear (2003) estimate that CAP plans are worth on average only 60–70% of donor funding. However, given the lack of consolidated information, CAPs are still used as a proxy for monitoring the global level of humanitarian financing. For 2007, US\$ 3.9 billion – around half of total estimated humanitarian funding – came from appeals for thirteen crises, affecting 27 million people in 29 countries (OCHA, 2007). Two countries sought a substantial

3 According to the IFRC report, disasters refer to those with a natural or technological trigger only and do not include wars, conflict-related famines, diseases or epidemics.

4 This increase can be partly explained by the boost of the large tsunami relief.

share of this funding: Sudan sought 30% of total requirements and the Democratic Republic of the Congo 22%.

In addition to the CAP, a stand-by facility for quick disbursement in sudden crises and for financing chronic under-funded emergencies, the new Central Emergency Response Fund (CERF), has been established. In 2006, CAP funding (including both consolidated and flash appeals) covered 63% of overall requirements, a substantial increase in relation to the previous two years, when the coverage was 55%. However, sector funding continues to show major imbalances, with nearly 90% of food requirements being covered, against a meagre 26% of health needs.

For some definitions of aid management mechanisms, see related table in *Module 14. Resources*.

Some crises may receive extraordinary attention by donors during a short period and be neglected afterwards, as competing poles of attraction emerge. In comparison to conflict-affected areas with high aid intensity, such as Kosovo or the occupied Palestinian territories, others have received far less attention, as in the case of Somalia and Sudan (excluding Darfur). Wild oscillations in aid flows are common. The Great Lakes region in Africa in 1994–1995, Kosovo in 1999–2000, Afghanistan in 2002 and Iraq in 2003 mark the peaks of donor largesse. In a globalized world, crises are interconnected. Some emergencies become *noisy* at the expense of others remaining *silent*. The gap between *noisy* and *silent* emergencies is widening.

Given the political rationale guiding aid allocation, this unevenness is hardly surprising. Security concerns, access to strategic resources and the pursuit of political alliances, together with humanitarian presence in the field are key drivers of aid around the world. Equally, the public mood waxes and wanes, democratic governments come and go with varying degrees of donor fatigue, and interests realign. Over the last decade, a new security framework, which interprets underdevelopment, political instability, conflict, terrorism, criminal activity, illegal trade and population displacement as threats to global governance, has emerged (Duffield, 2001). The crises in the Balkans, in Afghanistan and in Iraq are the most obvious examples of the merging of politics, military interventions and humanitarian assistance to pursue foreign policy goals, with the ensuing large resources infused by the aid industry. Humanitarian assistance has become, by omission or commission, another weapon in the arsenal of Western governments.

Afghanistan is a case in point of the politicization of humanitarian aid, and of the cyclical shifting between the status of *silent* and *noisy* emergency. During the cold war, Afghanistan received substantial aid, targeting mainly the resistance-controlled areas of the country, even if humanitarian needs were equally high in the government areas (see *True Story No. 3*). When the Soviet Union withdrew in 1989, the country disappeared from the agenda of Western countries, and humanitarian budgets were dramatically reduced (Atmar, 2001). During the Taliban regime, tight aid conditions were imposed, without producing the desired political changes. After the military intervention in 2001, the country was flooded with aid. Later, signs of donor fatigue emerged.

Iraq has brought the dilemmas posed by Afghanistan to the extreme (Donini, Minear and Walker, 2004). Humanitarian agencies have asked themselves whether they should remain and provide relief in a contested environment, where aid is provided by an occupying military force affecting the perception of their neutrality, and with severe security challenges. The need to preserve the core humanitarian principles of neutrality, independence and impartiality has been at odds with the need for engaging and interacting with Coalition forces that are not considered legitimate by large parts of the population. The relationships of humanitarian agencies with the military and for-profit contractors have been often uneasy. Receiving humanitarian funding from governments pursuing an aggressive foreign policy, and sometimes violating humanitarian law, has also been a reason for concern.

The Democratic Republic of the Congo crisis is “*the world’s deadliest crisis since World War II*”. A series of mortality studies estimated that between 1998 and 2007 about 5.4 million deaths occurred in excess of what would normally be expected (Coghlan et al., 2008). In spite of the evidence collected on the impact of this devastating crisis, scant attention has been paid by donors. In 2005, only US\$ 2–3 of external assistance per head were allocated to health services in this country.

When the imbalance of aid flows is scrutinized, the pretence of rationality of donor aid decisions is fully exposed. “*The international community is several steps away from developing appropriate responses to failed states, as there is insufficient knowledge of what causes states to collapse or conflict systems to perpetuate themselves. Donors (and the international community in general) have a surprising lack of understanding of the incentive systems and structures of non-state military actors*” (Goodhand and Atkinson, 2001).

Donor mishandling of genuinely political crises may reach startling proportions. International aid was poured generously onto Rwandan refugees, while needy communities within Rwanda were neglected. By mechanically applying humanitarian criteria to a monstrous context, donor agencies provided relief to the perpetrators of the genocide, hidden among the refugees. The survivors of the mass killing who remained at home received only the crumbs of donor resources. Humanitarian neutrality was invoked to justify a massive injustice.

Rich countries facing a conflict of marginal interest that they understand poorly, prefer in many cases to fall back to the “default” policy instrument available to them: that is aid, which is given at arm’s length through intermediaries to disguise effective disengagement. Unsurprisingly, this risk-averse, context-insensitive approach has a poor record in terms of conflict resolution, or even alleviation. In some cases, it might have even prolonged the complex political emergency donors pretended to address. Alternatively, the bad conscience of donors unwilling to tackle a conflict of genuine political character, such as the one in the occupied Palestinian territories, may lead to the sustained profusion of funds.

Shifts in the popularity of countries within donor circles may be remarkable, as witnessed in Mozambique in the 1980s, when the government embraced free-market models and embarked on a structural adjustment process greatly praised by the West. Aid flows duly expanded, and continue copious to this day.

As a rule of thumb, donors tend to be relatively more generous towards countries with small populations. In other words, allocations to countries tend to converge in absolute terms, and to show striking differences when adjusted per head (see Radelet, 2006).

The humanitarian field has witnessed an increasing earmarking of donor funds, inscribed within an overall decline of donor contributions to multilateral agencies. Donor governments want in this way to ensure that their strategic/policy objectives are met. By linking funds to projects, countries, sectors or specific population groups, earmarking reduces flexibility in allocation of resources to urgent and/or new needs. In addition, with the relative increase of extra-budgetary in relation to regular funding, a donor can exert more control on implementing agencies. As a result of these trends, the inequity of aid allocation may worsen (Randel, German and Ewing, 2002).

Aid patterns

External aid plays an important role in many severe crises. Levels and features of donor support vary remarkably across violence-affected countries, calling for a thorough study in each context. Supporters and detractors of aid tend to exaggerate its effects. Before drawing precipitate conclusions about the influence of aid on domestic processes, aid levels should be considered in

relation to the size and nature of the economy. Unsurprisingly, according to the Aid/GNI ratio per head, donors have been prominent in Mozambique and the West Bank and Gaza Strip, but rather marginal in Angola and Sudan.

Gross national income (GNI) and aid per capita in war-torn areas (US\$)

Country	GNI per capita	Year	Aid per capita	Year	Aid/GNI
Angola	500	2001	23.3	2000	5%
Cambodia	280	1997	29.8	2000	11%
Mozambique	180	1997	57.0	1997	33%
(Northern) Sudan	330	2001	7.2	2000	2%
Rwanda	220	1997	29.1	1997	15%
West Bank and Gaza Strip	1,217	2001	275	2001	25%

Sources: www.worldbank.org and www.eiu.com.

The distribution of aid across a troubled country and the involved parties is obviously another key dimension. Whereas aid might look of marginal importance in the country aggregate, it may dominate the agendas of local players, or of particular groups. In Darfur, for instance, aid plays a bigger role than in the rest of northern Sudan.

Aid patterns to be studied include the following:

- **aggregated volumes;** sources, bilateral and multilateral; evolution over time. Given the oscillations characterizing aid flows, figures referring to single years may be misleading. Averages computed by considering several years are far more instructive.
- **policy conditions** and restrictions.
- **grants or loans.**
- **time frame.**
- **aid nature:**
 - a. *humanitarian*, often conceded in kind, such as food in response to famine, usually channelled through multilateral agencies to NGOs.
 - b. *“development”* aid, a large and composite category, encompassing large investment loans as well as smaller, grass-roots interventions aimed at service delivery and capacity building.
 - c. *macro-financial support* (often linked to a structural adjustment programme), provided to the recipient government by donors or lending institutions.
- **target: general or sector.** The composition of the aid allocated to sectors needs to be studied: support to the military, to the social sectors, to productive sectors (agriculture, manufacturing etc.), to infrastructure development (roads, railroads, harbours etc.), to services and utilities. In many countries, health receives a fairly large share of total aid, between 5–15%.
- **channels of aid flows:** via the country treasury, aid agencies, NGOs etc. Aid may be channelled through state structures when governments are internationally accepted and considered as trustworthy. Otherwise, donors perceiving a government as illegitimate (like the Taliban in Afghanistan), or lacking in financial accountability or capacity, prefer to rely on NGOs or multilateral bodies as the main aid vehicle.

- **aid management bodies:** in some cases, interim trust funds, managed by multilateral agencies, may be in charge of channelling aid flows. Trust funds are commonplace in situations marked by severe financial management disarray, as well as where a new public administration has to be established. In these cases, trust funds substitute for the absent or crippled state budget. Some recipient countries have established oversight or managerial inter-ministerial bodies. Other aid flows are negotiated directly between the financier (donor agency, bank, NGO) and the recipient ministry.

In many countries, the UN system compiles statistics of aid flows, including those covered by CAP. The United Nations Development Programme (UNDP) produces annual country reports. These and equivalent documents are often difficult to interpret, due to a host of problems; overcoming them is always challenging:

- pledges, commitments and disbursements are difficult to disentangle and often evolve quickly as donors adjust or change their contributions.
- funding provided by donors is often compiled alongside funds managed by implementing bodies. Double counting is a constant risk.
- coverage is always incomplete.
- different programming cycles, budget formats and activities jeopardize the consistency of datasets, making inferences hazardous.
- classification may be due to political or procedural decisions: aid is recorded as “humanitarian” or “development” according to convenience, rather than content. Aid may be presented as “relief” (regardless of its technical nature) by donors reluctant to confer political legitimacy to recipient countries or parties. In particularly contested settings, such as the West Bank and Gaza Strip, the way aid is classified may change over time, according to political sensitivities.

The Afghan Assistance Coordination Authority of the Islamic Transitional State of Afghanistan established, with UNDP support, a Donor Assistance Database, which was regarded as a major improvement in terms of accuracy, completeness and timeliness, in comparison with previous attempts in other troubled countries. See *Module 6* for a full discussion of financial issues. In *Annex 6a*, the intricacies of studying aid flows to the health sector are dealt with in some detail.

The mounting awareness of the fragmentation produced by aid flows in poor countries has promoted the development of several integrated approaches. *Consolidated Humanitarian Assistance Programmes*, *Consolidated Appeal Processes*, *Post-Conflict Needs Assessments*, *Results-Focused Transitional Matrixes*, *Common Country Assessments*, *Human Development Reports*, *Poverty Reduction Strategy Papers* are well-known examples. They may be carried out in the same country in a tight sequence or even overlap. Failure to transfer the work done in one given process to the others is commonplace. Capacity and resources are in this way regularly squandered. Each analytical/programming process becomes an end in itself, employing hosts of consultants and diverting attention from implementing the actions proposed by the previous exercise.

Decentralization in a disrupted country

Decentralization is vigorously advocated as a key component of the package of measures devoted to improve the functioning of public sectors. Devolution of power and resources may stand out as a central component of a power-sharing settlement, aimed at ending a conflict. In this way the predicament faced by most unstable countries is downplayed. Conflict may have partitioned them along control lines, or weakened the central state to the point it controls only the capital city. Peripheral areas may have violently gained total autonomy; some of them may strive to attain nationhood.

“Decentralization”, “devolution”, “deconcentration” are rather meaningless concepts in the absence of a strong central state. Hence, it seems odd that they are so earnestly advocated by incoming advisers. Battered governments, whose main concern is survival and later recovery of basic state functions, are genuinely indifferent to the allure of decentralization. Central governments are generally wary of transferring substantial resources and capacity to peripheral authorities that may fall under the control of previous foes.

In some cases, such as in Angola and Sudan, moves to decentralize public functions have been interpreted as strategies by the central state to relieve themselves of responsibilities, rather than to devolve power and resources. In other cases, lip service is paid to decentralization to appease donor requests. The World Bank in Sudan concluded that *“under the government’s decentralization strategy (1992), the delivery of key services such as in education, health, sanitation, local roads, and agriculture were delegated to the states and local communities, which had neither the revenues nor the administrative capacity for these tasks”* (2003).

On the other hand, where partition is a *fait accompli*, a federal structure may appear as the only effective solution short of full independence for regions that already enjoy total autonomy. The negotiators of a federal settlement need to entice splinter parties by offering genuine advantages, in order to keep them under a shared state structure. At the same time, the reciprocal mandates of the federal government and of the federated states, as well as their interfaces, needs to be spelled out clearly, to minimize abuses and misunderstandings. Unsurprisingly, few conflicts have been settled by functioning federal arrangements.

Successful decentralization implies a strong central state, a functioning public sector, clear administrative provisions, adequate resources to ensure the functions of local bodies, a vibrant civil society, respect of the law, and the capacity to peacefully manage conflicting interests: all conditions conspicuously absent in a protracted crisis. During a transitional period, the main priority in most cases seems the revamping of basic central state functions. The power-sharing provisions of certain peace agreements in fact hamper the emergence of strong governance systems.

Advocates of decentralization retort that grievances may be addressed only by devolving adequate power to the victims of injustice. Thus, decentralization is seen as a central component of peace-building. This argument may hold in those conflicts whose origins are firmly rooted in the oppression (actual or perceived) by a group in control of the state machinery over others. In these cases (Timor-Leste, Eritrea), instead of autonomy within the previous state framework, the crisis outcome has been outright independence. In many resource conflicts, true decentralization would only provide recognition to local violent power holders, crippling the unitary state and ruling out redistributive policies.

Key events in a protracted crisis

The development of a chronology of the country environment and of the health sector is usually helpful, both to the analyst and to readers of the analysis. It can be outlined at the beginning of the analysis and be progressively strengthened as new insights are gained and the crisis is better understood. The example below is updated from Pavignani and Colombo (2001).

A simplified chronology of the health sector in Angola

Year	General	Health-related
1961–1975	First (anti-colonial) War	
1975	Independence	Nationalization of the health services

Year	General	Health-related
1975–1991	Second War (with the involvement of South Africa and Cuba). Central planning. Economic decline.	PHC is formally endorsed, but fragments early along vertical lines. Progress is slow. Stated policies are only partially implemented. Service uptake remains low. Huge inefficiencies hamper sector development.
1991	Bicesse Accords. Political and economic reforms are slowly introduced (from 1987) but never consolidated.	Aid agencies and NGOs expand the volume and scope of their activities.
1992	General elections.	Private medical practice is allowed. Elements of deregulation emerge.
1992–1994	Third War. Humanitarian emergency affecting millions of civilians. The economic crisis deepens. Hyperinflation.	Massive human losses and vast material destruction. Health services shrink to government-controlled cities.
1994	Lusaka Protocol.	
1994–1998	<i>No-war, no-peace.</i> Attempts to stabilize the economy abort. The informal economy expands.	Modest expansion of health services, mainly donor- and NGO-driven. Some progress in UNITA-controlled areas, where partial integration of services takes place. Rampant deregulation and privatization (formal and informal). <i>Laissez-faire</i> by MoH is predominant. Provinces and districts become progressively more autonomous.
1998–2000	Fourth War. The government gains a substantial military advantage.	Return to emergency operations in war-affected but still accessible areas. Large inflow of IDPs into significantly expanded, government-controlled areas. UNITA faction assume national health portfolio.
2002	Jonas Savimbi, UNITA leader, is killed. A ceasefire is agreed afterwards.	Mass resettlements follow the ceasefire. Previously inaccessible populations are found in dire nutritional and health conditions.
2003–2006	Progressive normalization. Economic growth, largely fuelled by booming oil revenues.	Slow recovery of the health sector, supported by dramatically expanded state financing. Absorption of UNITA health personnel.

The future country context. Implications for the health sector

The choices made towards the end of a protracted period of turbulence by national rulers and by their international backers or opponents have a paramount influence on health sector development. The dominant neo-liberal model means that all countries emerging from crisis are expected by Western donors to adopt a familiar package of measures, composed of representative democracy, a free market, a trimmed but agile state, decentralized administration, expanded role for private actors and civil society, increased integration in the world economy and culture. Federalism is an option frequently recommended for large, multi-ethnic countries.

The implicit instruction to recovering countries is that the dominant model has shown its superiority over alternative ones, and has to be imported without hesitation, to be applied to a variety of countries, which diverge in every possible aspect, bar their dependence on foreign support. Experimentation may be needed, but only to find the best way to apply the model. Advisers fail to recognize that the standard model is poorly suited to the conditions prevailing in most countries emerging from

protracted conflict: crippling levels of poverty and disease, a pervasive shortage of skills, an atrophic fiscal capacity, shocking inequalities, poor or absent institutions, a tradition of human rights abuse, ethnic or sectarian fissures, a torn social fabric.

Additionally, reform packages are usually long on technicalities and short on political content, which is sometimes surprisingly downplayed. In intensely political environments, focusing mainly or only on technical issues like efficiency or financial sustainability means largely missing the point. Technical improvements will fall fatally short of addressing the core issues at stake. For a discussion of this crucial aspect in the Palestinian context, see Giacaman, Abdul-Rahim and Wick (2003).

A review of mature “post-conflict” countries like Afghanistan, Angola, Cambodia, Mozambique, Timor-Leste and Uganda, is instructive. Despite their stated endorsement of the Western blueprint and the repeated praise of their progress by donor governments, none of them has succeeded in materializing the proposed full set of features. Recovering countries fall short on democratic credentials, or opening the economy, or tackling corruption, or imposing the rule of law, or improving the lot of their poor majority, or on a mix of the above aspects. Some countries look as if they have never seriously tried to apply the standard model, in spite of stated policies, poverty reduction strategies, Millennium Development Goals, etc.

Whatever is said by national rulers and their Western supporters, a realistic forecast of the conditions likely to prevail in the mid- and long-term is needed to formulate sensible proposals for health sector development. As discussed at length in the remaining modules of this manual, some of the following observations hold for most recovering countries:

- Long after the formal end of the war, the policies of most states are conditioned by financial constraints and are dependent on donor support. The multiplication of funding sources and intermediaries affects policy coherence. Supranational policies, via the funding conceded to support them, enjoy precedence over national ones.
- Weak governments with limited legitimacy and struggling for survival are unable to launch successful ambitious reform packages. Indeed, only in Kosovo has this step been taken in the health sector, with mixed results. See *True Story No. 7*.
- Nepotism, exigencies of job creation and of ensuring popular support have led to the expansion of most civil services.
- Rationalist planning has regularly succumbed to political pressures and vested interests.
- Most countries have suffered from localized unrest and occasional recrudescence of generalized violence. This has plagued recovery and distorted decision-making, while offering excuses to politicians unwilling or unable to honour their commitments.
- Corruption has persisted – or even flourished – in the transitional environment.
- Archaic administrative traditions have shown remarkable resilience against attempts to reform them.
- Deregulation has prevailed. Commoditization of healthcare provision has ensued.
- Decentralization has failed to thrive and take root.
- The civil society of most countries, intimidated or co-opted by governments, and in any case under-skilled and under-resourced, has fallen short of expectations.

This is a forbidding environment in which to build an effective and equitable health sector. National and international health policy-makers should be aware of the main features of their operating environment and of the limits of their effective space for manoeuvre. Donors, keen to promote over-ambitious goals in the face of crippling resource and capacity constraints, score badly on this count.

Realistic health policy-makers would benefit from turning away from the orthodoxies praised by the aid industry and by looking instead at the fundamentals: the resource envelope, the skill pool, the political space for decision-making, the management systems shaping the health sector, and the way the services are provided. By investing in improving the long-term fundamentals, without indulging in promises of quick and easy gains (through vertical campaigns, for example), they would equip the health sector with the essential assets to ensure its sustained development. The first of such assets is the understanding of events taking place in the sector, long-term sector trends and the broader context shaping and influencing the provision of health services.

For a valuable discussion of the search for alternative and more meaningful approaches to healthcare development, see chapter B1 of *Global Health Watch 2005–2006*.

Recommended Reading

African Rights (1995). ***Imposing empowerment? Aid and civil institutions in southern Sudan.*** London (Discussion Paper No. 7).

A refreshingly frank and at times caustic discussion of the relief environment of southern Sudan, and of its structural distortions. The specific context of this very protracted crisis is explored in detail, drawing conclusions relevant to other comparable settings. A cautionary tale about the inherent flaws and limitations of relief, to be kept in mind when discussing worn-out concepts such as empowerment, civil society, neutrality, capacity building and humanitarianism in a forbidding context like southern Sudan. Refraining from ambitious plans of social engineering and sticking to modest goals is the sensible message, apparently left unheard in humanitarian circles.

Collier P (2007). ***The bottom billion: why the poorest countries are failing and what can be done about it.*** Oxford, Oxford University Press.

A non-technical book, based on years of research on the relationship between development, poverty, conflict and aid, whose reading is recommended to aid policy-makers and practitioners, including health analysts. The core argument is that the main development challenge is represented by the 20% of the world's poor – the bottom billion – who live in around fifty countries that “*are falling behind and often falling apart*”. These countries are affected by four often intertwined development traps: 1) conflict, 2) the abundance of natural resources, 3) being landlocked with bad neighbour relations and 4) small size of the country associated with bad governance.

Conflict is probably the main trap. Some 73% of the bottom billion live in a country that has been recently affected by a civil war. Low income and dependence on primary commodity exports are strongly associated to the risk of civil war. Only half of the countries where a civil war has ended manage to remain in peace. Civil war is “*development in reverse*”, with an estimated cost of 2.3% of reduced domestic economic growth, or US\$ 64 billion for the average conflict. But turmoil enriches some groups, who manoeuvre to prolong the conflict.

Collier argues with the MDG approach of “*quick wins*” and the “*big push*” of massive aid. Aid has substantial limitations, exhibiting diminishing returns, and may even do harm, mainly in contexts of bad governance, causing severe macroeconomic problems. For post-conflict countries, aid comes “*too little and too soon*”, and is therefore ineffective. Aid should be given incrementally, in tune with the improvement of institutions, and be sustained during the first post-conflict decade, to minimize the risk of recurrence of the conflict. When reconstruction starts with a very small indigenous pool of capable cadres, importing high-level technical assistance should take precedence over developing local capacity. In a difficult environment where risks are high, supervision and administrative costs cannot be low.

Duffield M (1998). ***Aid policy and post-modern conflict: a critical policy review.*** Birmingham, UK, University of Birmingham (School of Public Policy Occasional Paper 19).

Perceptive, ground-breaking exploration of the conceptual tenets of aid policy in relation to the turmoil affecting a growing portion of the world. Duffield argues that the basic assumption on which much aid policy has been based since the

end of the cold war is flawed. According to the dominant view, the new wars are seen as “*stemming from a combination of poverty, resource competition and weak institutions. In other words, as originating in underdevelopment. At the same time, violence is thought to spread on the basis of local breakdowns in communication, misunderstandings and mutual fear*”. Thus, “*stability can be promoted through growth and sustainable development while political violence can be eradicated with co-operative integration and education*”.

Rejecting this view and the aid policy prescriptions directly generated by its adoption, Duffield discusses how political violence in the South of the world can be understood as consistent with alternative forms of political economy, peripheral manifestations of globalizing pressures. “*Parallel economies, warlords, post-adjustment states, trans-national commercial companies and private corporate protection*” are all interrelated components of the emerging new world. Non-state actors, networks and transactions are the key elements of post-modernity. Rather than being aberrant, transient deviations from the development path, post-modern wars are likely to endure and multiply. Politicians, analysts and aid workers would gain from accepting this sombre perspective, from working hard to understand this durable disorder, and from forging appropriate aid policies and instruments.

Goodhand J, Atkinson P (2001). ***Conflict and aid: enhancing the peacebuilding impact of international engagement: a synthesis of findings from Afghanistan, Liberia and Sri Lanka***. London, International Alert. Available online at: www.conflictsensitivity.org/files/publib/Conflict_and_Aid.pdf, accessed 16 September 2008.

Thoughtful discussion of the relationship between aid and conflict, and of the potential role of humanitarian assistance in supporting conflict prevention and peace-building. The main findings relate to three war-torn countries, but apply to a wide range of situations. The debate between humanitarian *maximalists*, who argue for broadening humanitarian mandates to include developmental and peace-building elements, and *minimalists*, anxious to keep relief activities close to their original principles of impartiality, neutrality and independence, is discarded as unhelpful. Instead, a better understanding of the conflict should allow actors to identify effective approaches, which will often occupy the middle ground between political engagement and disengagement. Crucial among the principles to be kept in mind by participants is that aid may complement, but not substitute for political, military and economic measures, whose influence on peace-making is much bigger.

Klein N (2007). ***The shock doctrine: the rise of disaster capitalism***. New York, Henry Holt.

An exploration of the relationship between free-market policies and disasters. The tenets of the free-market programme were threefold: reducing social spending and the responsibility of the state, while expanding the role of the private sector and eliminating barriers for corporations and foreign capital. These policies prepared the ground for structural adjustment programmes that international financial institutions would impose on impoverished countries, desperately in need of financial assistance.

Moving the free-market programme from theory to practice proved, however, more difficult than expected. Dismantling welfare programmes and laying off thousands of civil servants faced increasing resistance from governments, trade unions and organized groups of citizens. To overcome this resistance and

introduce the new policies, a *shock therapy* was needed. To illustrate her thesis, Klein reviews the recent history of violent political repression, financial crisis and natural disasters, arguing that the “*economic freedom*” envisioned by free marketers has been “*midwifed by the most brutal forms of coercion*”.

Recovery after natural disasters and conflicts offers even better opportunities than ongoing crises: not only huge contracts for private firms, as in Iraq, but the possibility to start anew, when political resistance and control are low. In fact, shattered countries emerging from a crisis are not only in need of aid, they are often ruled by governments of poor legitimacy and limited sovereignty. If the crisis has been long, the human resource base is depleted. These countries lack the capacity to manage large amounts of aid. New aid mechanisms are therefore established, such as the Trust Funds in Timor-Leste, Afghanistan and Sudan. Post-conflict countries receive now 20–55% of the total lending of the World Bank, up from 16% in 1998.

By connecting coups, financial crises, military interventions and disasters, this book shows how similar policies were applied to different contexts. The evidence-free health policies based on global blueprints and imposed by powerful actors on fragile post-conflict countries are part of this landscape, follow-up of the health sector reforms previously imposed on most poor countries with the same confidence, and with predictably poor results, only reluctantly admitted by the apostles of “*private is always better*”.

Menkhaus K (2004). A “sudden outbreak of tranquility”: assessing the new peace in Africa. *The Fletcher Forum of World Affairs*, 28:73–90.

Excellent short introduction to the ongoing research on the political, military and economic determinants of the African “new wars”. The paper argues that both Afro-optimists and Afro-pessimists have consistently misread the crises plaguing the continent. The failure of most peacemaking initiatives confirms the need for alternative reading of these conflicts. The political economy interpretation of Africa’s wars, as “*waged not to win, but rather to create conditions of ‘durable disorder’ from which key actors benefit economically or politically*”, is receiving increasing attention by analysts. It “*appears best able to deliver a reasonably persuasive, parsimonious, and cross-national explanation for why Africa’s wars persist*”.

Commenting on the comparative reduction in violence recorded in 2002–2004, Menkhaus concludes that many international factors discourage the return to the kind of open conflict that ravaged the continent in the 1990s. But he suggests that the “new wars” might be followed by “*peace without reconciliation, governments of national unity that are neither unified nor provide governance, and communal violence and armed criminality that replace open warfare but have comparable effects on human security*”. The notes closing the paper provide a helpful guide to literature related to the hot conflicts that followed the cold war.

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Post-Conflict Needs Assessments

Annex 3

Recovery from conflict is a fragile process entailing a high risk of relapse, and calling for predictable, long-term international engagement. A solid recovery is determined by the progressive re-establishment of security and rule of law, reactivation of political processes and restoration of the livelihood of affected communities.

Most countries need financial support to restore shattered infrastructures, revive and fund the state administration, provide basic services, support restoration of livelihood of affected communities and encourage economic recovery. Additionally, many states need technical assistance to reactivate crippled or absent functions. In all likelihood, political, financial and peacekeeping support is needed to re-establish security, restore the rule of law, resuscitate justice institutions and to keep the peace process on track. Transition periods are characterized by the simultaneous presence of humanitarian and of recovery needs, each of which must be addressed by agencies with related mandates and capacity, adopting different but complementary approaches. Increasingly, agencies are equipping themselves with both capacities.

In most cases, recipient countries lack legitimacy. Their weak management systems are inadequately equipped to absorb expanded financial flows. To address the high fiduciary risk inherent to these processes, donors increasingly opt for channelling funding through new aid management tools administered by international agencies. Complex conflict settlements may require special financing arrangements encompassing different funding lines, to facilitate the establishment of a civil administration, or the transformation of previous belligerents into political parties, or to make governments legal recipients of aid.

Awareness of the fragmentation – and ensuing inefficiency and ineffectiveness – of the aid industry has stimulated the international community to pursue more integrated approaches. A needs-assessment process with a standardized methodology has emerged, and is now regularly applied by the World Bank and the UN system at the start of post-conflict recovery processes. The Post-Conflict Needs Assessment (PCNA) has been configured as a comprehensive exercise, whereby both the priority needs of key sectors of a transitional country and the interventions and resources to address those needs are identified by a multidisciplinary team, often including the signatories of the peace agreement. It provides an overview of financial requirements and lays the foundations for disbursement, financial management and accounting mechanisms. Its results are submitted to a donor conference, a decisive event with high international visibility, where estimates of reconstruction costs are considered by donor agencies, which then make their financing pledges. For the PCNA detailed methodology, see Kiewelitz et al. (2004).

The PCNAs are not intended to assess all the needs objectively and comprehensively, but rather to focus on those priority needs that can be realistically addressed, given the amount of external aid (and when relevant the level of internal financing) likely to be available to help a country through the transition, and the existing absorption and implementation capacity. PCNAs subsequently try to allocate the forecasted funding in a balanced way across sectors. In the politically-charged environment of transition processes, PCNAs should introduce a measure of technical appraisal. For instance, against the massaged population figures submitted by disputing parties, the least flawed population data have to be identified and agreed upon, so that interventions can be designed and resources allocated with some fairness.

PCNAs are constituted of some broad elements:

- *a short-/medium-term timeframe*, based on the identification of detailed priority outcomes, requirements and costs for the immediate post-conflict period (usually two years), which usually coincides with the mandate of the provisional government prior to elections. This may be complemented by elements of a longer-term timeframe (around 5 years) for activities whose implementation

extends beyond the initial period. The format used is called *Transition Results Matrix* (in certain settings labelled *Results-Focused Transitional Framework*).

- *comprehensiveness of requirements*, with a view towards getting a balance between spending on investment and recurrent costs.
- *a division of tasks* between the agencies involved, with the WB and the International Monetary Fund (IMF) mainly concerned with the macroeconomic framework, large infrastructure, productive sectors and longer-term development, whereas UN agencies focus on most immediate recovery needs: support to reintegration of returning IDPs and refugees, restoration of livelihood of affected populations, support to re-establishment of rule of law and provision of basic social services.

PCNAs should be tailored to the national context, taking into account the political processes which underpin the transition, and reflecting a solid understanding of national realities. To address this requirement, conflict analysis has become an integral component of the assessment.

In most cases, however, needs assessments have to be undertaken within unrealistically imposed timelines, given security, logistical, political access and information constraints. Consultation may suffer, as happened in the Darfur PCNA, where the involvement of groups that were not signatories of the peace agreement was limited. The main challenge for the assessment team is to strike the right balance between the priority needs of the affected communities, the ability of agencies and governing structures to respond, the country's capacity to absorb and manage external resources, the interests of formerly-disputing groups and the political agendas of the main donors.

Despite their name, PCNAs remain dominated by political concerns, as shown by the large differentials in estimated requirements existing across different crises. Political agendas influence the outcome of a PCNA, including those of the former belligerents, eager to ensure funding to their parties and to benefit their constituencies, and of the main donors and implementing agencies, driven by their strategic interests to expand their role in the recovery process. Formally, the PCNAs are collaborative ventures between the World Bank and UN agencies. In practice, tensions about leadership, positions, strategic options and the control of future funds are common. Even if the PCNA is not an appeal launched by agencies, competition for prominence and political space is often perceived a prerequisite for future expansion of funding and operational opportunities. To accommodate so many forces and pressures under a common umbrella requires substantive power within the international aid system, and strong diplomatic skills by the authority (usually the UN Humanitarian and Resident Coordinator) leading the process.

The PCNA is a labour-intensive process. Agencies need to consider the resource implications of their involvement for the entire duration of the exercise, as well as the demands imposed by it on the fragile structures of the recipient country and on all stakeholders, whose attentions and capacity are likely to be drained. The opportunity costs of participating (directly or not) in lengthy needs assessments may be high, in the sense of paralysing any other competing, and possibly vital, activity.

To channel part of the funds allocated by donors to sustain transitional processes, multi-donor trust funds (MDTFs) have been established in Afghanistan, Iraq, Sudan and Timor-Leste (see *Module 8* for a discussion). The linkage between PCNAs and MDTFs has induced participants and observers to infer that the latter are the implementing arm of the former. In fact, a PCNA aims at being comprehensive, i.e. at encompassing the whole set of actions deemed necessary to ensure a successful transition, regardless of the funding mechanisms to be put in place to ensure its implementation. Nowhere among the countries studied have MDTFs become the sole instrument channelling donor funds. A plurality of mechanisms covering different expenses and functioning according to different modalities is the most

common arrangement. Diversifying risk seems a sensible option in uncertain and capacity-constrained environments.

Country experiences

Important differences across processes stand out. The *Afghanistan Preliminary Needs Assessment*, carried out in December 2001 in preparation for the Tokyo reconstruction conference, was a precursor. The experience gathered in that instance, and by previous work on Timor-Leste in 1999, helped to develop the approach and the methodology later used in full-fledged PCNAs. The Afghanistan assessment suffered from severe limitations, understandable given the particular context in which the assessment took place. It could not involve, apart from at the latest stage and only nominally, the transitional government of Afghanistan, which was sworn into office only late in the process. It overlapped with other national, security and humanitarian planning processes. Given the prevailing security constraints, a large part of the work was done in Pakistan, where most of the aid agencies had their headquarters (HQs). The participation of many UN agencies was limited, and the adopted methodology was only tentative. Finally, the Needs Assessment was quickly superseded by the National Development Framework released by the Afghan Government in 2002, which incorporated some of the findings of the former.

The PCNA for *Iraq* (July-September 2003) represented the first UN/WB formal joint exercise. It was also marked by serious constraints. The political transition was difficult, the UN's position in relation to both Iraqi counterparts and the occupying powers was unclear, and the legitimacy of the provisional government was questioned. High levels of insecurity restricted access to primary data sources. Consultations at local level were equally constrained, while the timeframe was short. Additionally, the crisis unfolded along lines largely unexpected by international agencies, which were caught unprepared by events. The main emphasis was on repairing the damaged infrastructure. Recurrent expenditure was included to cover the incremental costs incurred as a result of investment, which was mainly shouldered by the provisional authority. The Madrid donor conference on Iraq pledged some US\$ 36 billion for the period 2003-7, the largest amount of aid ever promised after the Marshall Plan in 1946.

The *Liberia* PCNA represented a further evolution (National Transitional Government of Liberia, UN and World Bank, 2004). Careful coordination, negotiation and goodwill were required to accommodate the views of the different stakeholders on the priority needs to be addressed. The broad consultations and tools of the Liberia PCNA, combined with the short timeframe allocated for its finalization, required a large number of UN/WB staff (estimated at 300) and working hours (estimated at 20,000). The direct and indirect costs incurred by the agencies involved in the PCNA were substantial.

The level of political commitment and generosity of donors registered in Iraq could not be expected for Liberia, because of its peripheral importance. To a certain extent, Iraq also depleted the resource stock of the donor community. Realism was promoted both by the information supplied by donors and by the obvious absorption and implementation limits of Liberia. The PCNA thus focused on priority needs that could be realistically addressed within the next two years. This required the striking of a fine balance between technical and political considerations. Even after discounting the different level of services to be restored in the two countries and the different damage to infrastructure, the more than four-fold difference in estimated needs per capita is remarkable. Nonetheless, the figure eventually agreed for Liberia represented a high funding level, when compared to other documented crises.

The overlap between the CAP 2004 and the PCNA, undertaken within weeks of each other, was substantial in Liberia. Identifying activities and costs included in the CAP that relate to priorities and expected results in the PCNA was an unexpected

challenge. This forced the assessment teams to reduce the artificial distinctions between humanitarian assistance and reconstruction, and recurrent and capital expenditures.

At the end of 2006, less than two years after its completion, any memory of the PCNA had vanished in Liberia. With a new government in place, new rounds of policy and planning work were under way, which ignore the findings of the PCNA. This points out one of the problems of PCNA: the investment in data collection, policy discussion, planning and fundraising may fail to translate into commensurate implementing steps, or knowledge and institutional memory, due to inadequate follow up.

The first-generation of PCNAs was marked by tight deadlines. Within months or even weeks a credible document had to be submitted to donors. Speed was demanded to finance operations and activities deemed essential to the transition process.

With *Sudan*, the changed context, with a lingering peace process, allowed for the design of an exercise of expanded scope and depth. This PCNA was prepared in detail, generously staffed and financed, and spanned 16 months from launch to completion, due to the prolonged peace negotiations and the complexity of the country. When donors eventually gathered in Oslo in April 2005, US\$ 4.5 billion were pledged (Sudan Joint Assessment Mission, 2005).

The assessment had to be split into two separated exercises, covering Northern and Southern Sudan; a separate assessment targeted three “transitional” areas, which were granted a special status in the negotiation and eventually in the peace agreement. Only at the end were the three products brought together, to give an appearance of unity, which was in itself a political imperative. The outputs of the assessment were considered by several observers overambitious in relation to the absorption capacity and implementation challenges at field level.

One year after Oslo, 38% of the original pledges had been paid by donors. Once humanitarian activities are discounted from this figure, only US\$ 323 million, or 20% of the disbursed amount, were allocated to activities foreseen by the PCNA (as per March 2006). The main concern was represented by the MDTFs, whose disbursements were minimal one and a half years after the donor conference.

The *Somali* PCNA started in May 2005 and was still under way in September 2006, for a hefty bill of US\$ 4.2 million (UN/WB, 2007). Considerable scepticism about the convenience of starting a needs assessment in the political and security environment of the time was manifest among actors familiar with the Somali scene. Suggestions geared at opting for a modest, lean approach went unheard, and under pressure from the UN the PCNA was launched, with ambitious goals and abundant resources. The desire to support the struggling Transitional Federal Government (TFG) played an important role in inducing donors, UN and the WB to take such an obvious gamble. The political and military events that followed, with the TFG facing increasing difficulties in gaining legitimacy and asserting itself within Somalia, have eroded the relevance of the PCNA. Nonetheless, the pretence nurtured in donor circles of maintaining politics at arm’s length from a supposedly technical recovery exercise has been fully exposed.

One of the most difficult PCNAs is that carried out in the troubled region of *Darfur, Sudan*. The Darfur Joint Assessment Mission (DJAM) was designed after the Darfur peace agreement (DPA) was signed by the Government of Sudan and one rebel group in May 2006. The fact that two of the then-remaining rebel groups refused to sign resulted in the intensification of the conflict in the region, when the needs assessment had already been officially launched and the teams were already in the field. Two out of the three states of Darfur were experiencing very poor security, and the possibility of consulting with rebel groups and populations outside of capital towns was extremely limited. Because of the intensified hostility of many groups and Darfuri population towards the DPA, and the association of the DJAM with the DPA,

the humanitarian actors on the ground kept their distance from the DJAM in fear of compromising their independence and impartiality in an increasing volatile and dangerous context. In recognition of these conditions, the DJAM team maintained a low profile and cautious approach in its geographic movements and discussions. No strong dedicated logistical support was organized, requiring the DJAM missions to piggyback on other assessments or be hurriedly arranged. One year on, despite the ongoing conflict in Darfur, the DJAM outputs have helped inform and lend focus to “preparedness” activities necessary to lay the foundations for early recovery once the required conditions are in place, and to prepare for a finalization of the DJAM. A second phase of the DJAM is required to complete the process, filling gaps and ensuring inclusive consultation and validation of the interim findings. Given that a satisfactory political solution had still to be reached by 2009, it is still unclear if the DJAM will resume and a donor conference will take place.

The following table summarizes basic data related to some of the PCNAs carried out so far. Most figures are provisional and subject to revision. Additionally, different criteria adopted in classifying funding figures would substantially change the pledges presented. For instance, at the Oslo Conference for Sudan, donors pledged US\$ 4.5 billion. The figure presented in the table represents the portion of the total pledges directed to support activities included in the PCNA. Disentangling donor funds is often a matter of subjective judgment. No strict criteria have so far been agreed upon.

Comparing post-conflict needs assessments

Country in transition	Needs Assessment	Donor Conference	Estimated Requirements	Initial Donor Pledges
Afghanistan	December 2001 - January 2002	Tokyo (January 2002)	US\$ 4.9 billion x 2.5 years	US\$ 4.5 billion x 2.5 years
Iraq	May - September 2003	Madrid (October 2003)	US\$ 36 billion	US\$ 33 billion
Liberia	December 2003 - January 2004	New York (February 2004)	US\$ 488 million	US\$ 500 million
Sudan	December 2003 - March 2005	Oslo (April 2005)	US\$ 2.6 billion x 2 years	US\$ 2 billion x 2 years

Lessons learnt so far

A major review of PCNAs was completed at the beginning of 2007. It identified a number of weaknesses in PCNAs carried out so far, and put forward some suggestions to enhance the effectiveness of future assessments. It was felt that detected shortcomings can be surmounted by better preparation and high-level execution of the exercise. Thus, future PCNAs are expected to grow in ambition and complexity. Whether this evolution is realistic remains to be seen. The drawbacks recognized in real-life PCNAs may be caused by structural constraints that cannot be overcome, at least by a self-contained exercise like the PCNA. Significantly scaling down the scope of PCNAs might therefore be more sensible.

Some preliminary insights, gained by participation in several PCNAs, may be put forward for consideration:

- The PCNA represents an ambitious change in approach, endowed with a huge potential for overhauling the support provided by the donor community to transitional processes. The pursuit of a comprehensive programming framework where piecemeal appeals, projects and programmes used to prevail; the dialogue between different parties promoted by the exercise; the separation between planning and implementing responsibilities; and the imposition of some discipline on recipient governments and aid agencies alike, stand out among its strengths. Also, a PCNA offers indigenous cadres and institutions precious learning opportunities about planning, programming and budgeting – in other words, about making hard choices among competing

demands, which is in the end the essence of governing. Whether transitional environments, beneficiary authorities and aid agencies will allow PCNAs to fulfil their promise remains to be seen. Key conditions for success are technical excellence and full political backing by the main stakeholders. Political support to the PCNA may, however, entail the risk of “partisan” interests undermining the independence and quality of the assessment.

- Those involved in the peace process must be informed of the technical requirements for carrying out a PCNA. Peace negotiators, including the UN, should not impose unrealistic parameters such as timeframes and inclusive consultation processes, or raise excessive expectations of outcomes.
- PCNA should be considered a process, in which the initial phase is carried out by technical experts tasked to assess what the priority needs are. Only in a subsequent phase, the PCNA should pursue a more inclusive process, including political actors and factoring in other, not purely technical, criteria for setting the final recovery priorities.
- Combining the outputs of sectoral work into a coherent, balanced package is the key challenge of a PCNA, and one it is extremely difficult to address. Furthermore, this cannot be achieved on purely technical grounds. Once the technical assessment is carried out, the relative weight to be given to education, health, roads, agriculture, security, and to certain regions in relation to others, depends mainly on strategic and political decisions. It is misleading to present the PCNA final proposal as the product of a rational, unbiased, consensual process, sincerely aimed at benefiting the recovering country and its population. In transitional environments marked by weak governments ridden with internal tensions and contradictions, bold political decisions are unlikely to be taken. In the absence of indigenous decision-making, international agencies and experts are free to push their favourite recipes, wrapped in objective clothes. There is always a tension between comprehensively studying the recovering country and selectively identifying the measures with substantial impact on the livelihood of population and stabilization of the country. The main requirements for reaching a reasonable compromise between ambitions and feasibility of the reconstruction programme are a strong political leadership by the UN and the WB, well informed of field realities, and a balanced strategy for consulting key stakeholders.
- In the vacuum left by failed states, or when working in non-state environments, the pursuit of national ownership, considered by some actors as a key condition of the PCNA, is fraught with practical as well as institutional difficulties. Needs assessments must involve non-UN bodies, such as major humanitarian and development NGOs, and whenever possible representatives of civil society, parties and groups, including rebels. Additionally, development banks, the IMF and key private sector interests, likely to be key stakeholders, must participate from the start of the recovery process. This is not easy, as international institutions are usually barred by their own rules from engaging in “non-state” situations. Other players may also be reluctant to take full commitments in contexts where the future outcome remains unclear. On the other hand, donors may decide to launch a PCNA to signal their support to a struggling transitional government, or to show their commitment to a peace process, without getting seriously engaged with political and military matters.
- The effort of including as many stakeholders as possible in the exercise, and of incorporating their suggestions and requests, bears a substantive cost in terms of efficiency of work, time and coherence of outputs. A measure of realism is needed when the goals of the PCNA are set. Clarifying with stakeholders that the exercise aims at identifying a coherent set of key activities to be carried out during the transition, and to promote their funding, may help. Unrealistic expectations for

long-term goals, such as conflict resolution, state building, environmental protection or gender mainstreaming, should be scaled back from the start; nurturing such thoughts will distract participants from crucial tasks, and will regularly end up in frustration. These and other issues are central, but have to be dealt with in proper contexts, i.e. at the heart of the political space. PCNAs cannot become the vehicles for addressing everything that is important in a recovering country. Modesty of aims and awareness of the intrinsic limitations of such an exercise are essential.

- Unreliable and incomplete information is always a major challenge. PCNAs carried out under pressure rely mainly on secondary data and cannot substitute for the work required in improving the information base. Given the influence of the PCNA on donor resource allocation decisions, and through them on the recovery and development of the different sectors/systems, the risk of inappropriate decisions due to incomplete information is a constant concern. This central weakness can be addressed only by collecting information in advance, in a pre-assessment/watching phase, as recommended in the recent PCNA review. Prolonged military and political stalemates offer opportunities to study baseline situations. Sector profiles should be prepared before the PCNA intensive exercise, so that technical issues are studied and clarified in detail and political discussions are held on an informed basis. With these instruments available, the PCNA exercise would become leaner and less demanding, as well as more likely to produce sound results. Simple tasks, such as assembling relevant information for easy retrieval, outlining a recovery strategy frame in advance, building a local network of researchers and key informants, if started early in a protracted crisis, would benefit the formal assessment process a great deal, saving precious time for interpretation, consultation of stakeholders, political negotiation etc.
- Technical excellence is hard to achieve in the context of a PCNA. Those in charge of the exercise commonly face pressing deadlines, information shortcomings, political pressures and sensitivities, uncertainty about future settings, travel and security limitations, cultural and language barriers, and limited access to informants. Matters are further complicated by the limited familiarity with the specific country context of many experts called in for the needs assessment; sector analysts of post-conflict recovery are not abundant in number. The imperative to produce a comprehensive assessment in a short time and under multiple constraints may induce participants to downgrade technical standards by, for instance, using flawed figures to buttress the assessment. Due to these constraints, the PCNA team should include an adequate mix of international and national experts.

Finally, good-quality sector work may get diluted, distorted or discarded in the editing phase, when sector pieces are merged into cluster chapters, and then condensed and collated into the final report. Also, over-detailed matrixes and cost estimates have been criticized as unhelpful. Over-reliance on technical instruments that regularly fail to capture the complexity of the environment and of the work to be done remains a constant feature of the aid system.

- Every PCNA takes place in a moving environment, in which other important processes unfold. Humanitarian programming including the CAP, peace-keeping operations, bilateral missions, political negotiations, national planning, transitional authorities all have aspects and components overlapping or impacting on a given PCNA. For instance, the budget of a recovering state may have important implications for the resource envelope proposed by the PCNA. The full understanding of the concomitant processes would enable the PCNA team to adjust their findings and proposals to fit the overall picture. Unfortunately, much information is not available – or not easily accessible to technical staff – and some crucial decisions may still be pending. In addition to inconsistencies, overlapping of interventions and double-counting of requirements, there is also the risk that the output of the PCNA exercise becomes quickly obsolete and irrelevant. In order to

mitigate this risk, the results of the assessment should be better linked with, and integrated into, humanitarian planning and response, as has been attempted in the Darfur JAM.

- The acid test of the value of a PCNA – as of other strategic and planning processes – is represented by the events taking place after its completion. The very comprehensiveness of PCNAs makes implementation difficult. In fact, complaints are common about the lack of prioritization and sequencing of the many activities foreseen by PCNAs.

As experienced to date, most PCNAs have been short-lived, and sidelined by unforeseen developments or by other planning processes. In some cases, serious delays in setting up the management tools needed to implement the activities proposed by the PCNA have hindered progress. Often, the transition has moved on, or back, with new forces in play and new goals. Indeed, none of the countries studied by PCNAs has so far achieved total stability. Some, like Iraq and Somalia, have plunged into deeper troubles. The intrinsic limitations in dealing with protracted turbulence and the over-optimistic assumptions subsumed in the launching of a one-off exercise like the PCNA in its present format, are fully apparent.

- The PCNA is first and foremost a strategic document outlining priority interventions and a fund-raising device, and should be judged against these yardsticks. In most cases, donor conferences have pledged the funds requested by the assessments, in some cases even surpassing them. In this sense, most PCNAs have adequately scanned the aid community and proposed funding levels likely to be shouldered by donors. Less clear is whether pledge portfolios and subsequent disbursements have been consistent with the proposals tabled by PCNAs: in other words, whether PCNAs have been able to shape the funding intentions of donor agencies. It is premature to draw conclusions on this crucial point.

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Annex 3

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Notes:

Module 4

Studying health status and health needs

Contents

This module concentrates on the health status and health needs of the population of countries in crisis. Attention is paid to the way population, mortality, nutrition and morbidity data are generated, their meaning and their limitations. Common flaws undermining the usefulness of available datasets are highlighted. Inferences that can be drawn from the figures produced in violent contexts are discussed, alongside the value these estimates bear for decision-makers. Controversial findings are analysed as revealing examples. Additionally, the module reviews conceptual aspects related to rapid health assessments and surveillance mechanisms in crisis environments. The reader is given advice on how to explore the documentation on health status and needs of a given crisis country, to recognize and discard flawed data, and to assemble a reliable country-wide picture.

Annex 4 discusses the knowledge gleaned to date about the complex relationships between conflict, HIV/AIDS and health systems.

Closely-related modules:

No. 2. Making (rough) sense of (shaky) data

No. 3. Understanding the broader country context: past, present and future

No. 7. Analysing patterns of healthcare provision

Introduction. What is “health status”?

Assessing the health status of populations affected by a crisis is difficult, and often elusive, due to the limitations that influence the estimation of health status in general, which are amplified in emergencies. “... [M]easuring ‘health status’ remains heavily contested technically, methodologically fraught, very expensive and very hard to operationalize even in ideal research sites” (Hensher, 2001). This module explores only those key issues related to the assessment of the health status in emergencies that interface with the analysis of health systems. Manuals and guidelines on the clinical and public health aspects of diseases and conditions (communicable diseases, mental health, nutrition, etc.) impacting on health status in emergencies are suggested in the *References*.

In emergencies, more than in normal circumstances, the determinants of ill-health and survival impact on the health status through complex interactions, related to livelihood, education, health care, security, social relationships, etc. – all domains which are difficult to disentangle and understand. The IRC mortality study in eastern Democratic Republic of the Congo (Roberts et al., 2003) showed that deaths due to violence represented only 8% of the total. Estimates from other contemporary conflicts show large variations, but confirm that battle-deaths usually constitute less than 20% of total deaths and are decreasing (Human Security Centre, 2006). “*Most people die from war rather than in battle*” (Slim, 2007). The strong associations between violence, infectious diseases and malnutrition suggests that “*people in those areas with the most violence suffer the most displacement*” and therefore have a higher probability of dying from such indirect causes (Roberts et al., 2003). Further, in a conflict, civilians suffer and die from *direct* causes – i.e. violence-related – because minimum human rights are not guaranteed. In these situations, the state is weak or absent and cannot protect its citizens, or the state itself is the main perpetrator of human rights violations.

In a complex emergency, government expenditure for social sectors is redirected towards defence; health services collapse, access to food decreases, populations migrate, and households are forced to use their limited resources for pressing needs other than health care. People affected by a complex emergency are, therefore, more exposed to health threats and/or are granted less access to health care: they are more vulnerable. It would be impossible, therefore, to analyse the determinants without looking at how the healthcare delivery system is affected by the crisis and how in turn it affects the health status.

The difficulties faced by epidemiologists in measuring health status in war environments are daunting. Objections to data collected are constantly raised, not always on technically sound grounds (see *True Story No. 4*). When data are abundant, as happens in some crises, inconsistencies and ambiguity compound the interpretation of findings. For example, 24 mortality surveys were carried out in Darfur between 2003 and 2005, with grossly diverging results, easy to explain considering the different contexts in which these studies were carried out, their differing objectives and methods and their technical weaknesses: the *Washington Post* appropriately referred to these mortality data as “*statistical anarchy*”. This inconsistency plays directly into the hands of belligerents, who may be keen to emphasize or conversely to minimize the consequences of war. The few robust studies incur the risk of being neglected, diluted among many other surveys.

To tackle these difficulties, the following general principles apply:

- Surveys unsupported by adequate technical expertise should be discouraged as wasteful and potentially misleading. Additionally, the risk incurred by the surveyors is not justified by the flawed data obtained.
- Surveys should be carried out only when strictly needed to inform difficult choices. The non-partisan nature of the survey team should be ensured and made explicit to concerned parties.
- Stakeholders should be thoroughly prepared to receive the results of the survey, knowing in advance what kind of data will be produced and what will not. The limitations of the study have to be clarified in advance.
- The political backing of international agencies, host governments, rebel forces and the media for the results of the survey should be actively sought before the release of the findings, and irrespective of their actual meaning.
- Publication and communication strategies must be agreed upon by involved parties before the completion of the survey. For sensitive findings, the media are vastly more important than scientific journals. For instance, an embarrassing result may be rejected by a government on spurious grounds, easily recognized as such by epidemiologists. The public, however, without access to scientific journals and unable to penetrate academic conventions, might remain barred from a correct reading of the findings. To convey them to the media and the public alike in an accessible way constitutes an essential step in the dissemination process.

Characterizing the area/community to which the results refer is a critical step in any assessment of health status and in the interpretation of the results by an external reader. The type of emergency, the vulnerability of the community, its coping mechanisms, and the security situation are important features. The area/community may be chosen because it is safe enough for health workers to be able to undertake the survey, which may imply that the health status is better than in other areas (in terms of access to food, services, etc). Sometimes an area is chosen because more information is available, but information is often associated with better overall conditions. On the contrary, the area may be chosen because it is affected by a severe emergency, and the health status will be in this case worse than in areas less severely stricken.

Aware of the difficulties faced by individual agencies to adhere to these principles and by decision-makers to obtain good data to inform their choices, an inter-agency initiative – The Health and Nutrition Tracking Service (HNTS), co-chaired by the Inter-Agency Standing Committee’s Health and Nutrition Clusters – was initiated in 2007. The goal of the HNTS is “to support humanitarian decision-making by offering the best possible evidence on health, nutrition and performance of key health services, to inform policy formulation and enhance proper funding decisions and also to improve humanitarian accountability to both the aid beneficiaries and

the donors."¹

Grappling with population figures

Population data are difficult to obtain in a crisis: population movements are frequent and inadequately recorded, access is constrained and security is poor. Despite these difficulties, population estimates are continuously generated by the parties involved in protracted crises: state authorities or agencies, rebels, foreign powers, relief agencies, affected communities, journalists and field workers. As population figures impact on many important political, military, aid-related financial and operational decisions, they are inherently controversial. Most stakeholders have interests in the estimates they put forward, interests that must be considered when the reliability of the data is assessed.

In some cases, population figures have been negotiated between parties, and certain datasets have been recommended for general use. Often, no consensus is reached, and available data must be scrutinized: first for internal consistency, and then patiently compared to each other to identify flaws and to progress towards improved figures. Even when stronger estimates are developed, certain political bodies may reject them, preferring obviously flawed data instead. Persistent advocacy is needed to attain wider acceptance of comparatively better population estimates.

New methods have been developed and used, mainly by NGOs, for rapid assessments of population size: the Quadrat method and the T-Square method. In recent crises, Global Positioning Systems (GPS) and remotely sensed images were used to select geographical areas for sampling. A new, promising method based on “*interpolation*” is being developed. For an introduction to the subject, see Brown et al. (2001) and Grais et al. (2006).

Population figures may relate to national, regional and district totals, to directly-affected people, to vulnerable groups, to refugees and IDPs, and to groups targeted by health services.

War-affected populations change their composition, sometimes dramatically. Conflict-affected populations tend to move, inducing frequent and wide oscillations in their true numbers. These changes may not be adequately reflected in available population estimates.

When appraising population datasets, the changes most likely to occur should be kept in mind:

- *Deaths* are rarely distributed uniformly within a population. In some wars, like during the Rwandan genocide, the group of males of fighting age is heavily affected. However, the finding of a deficit within this group should not be precipitously taken as evidence of violent deaths. Recruitment in the army, hiding to escape the draft, migration to find jobs and flee violence rank among alternative explanations. In Darfur, the deficit among 15–49 year-old males pre-existed the ongoing conflict (WHO and FMOH Sudan, 2005).

In low-intensity conflicts, the elderly, the disabled, women and children succumb to hunger and disease in great numbers, largely surpassing the deaths occurring among combatants. Where the conflict develops along ethnic, religious or sectarian lines, the relative weight of the groups originally composing a population may change remarkably, not only because of deaths, but also due to violence-induced migration.

- *Births* frequently contract during hostilities, to rebound after their cessation. Among famine-affected communities, fertility rates may drop to very low levels.
- *Migration* may be very uneven too, with privileged groups able to reach safe

1 www.who.int/hac/techguidance/hnts/framework/en/index.html, accessed 6 April 2009.

havens within the affected country, or taking advantage of the turmoil to settle abroad for good. Certain diasporas reach large proportions, and retain some political and economic influence on the events taking place in the country of origin. Migration abroad is rarely a homogeneous phenomenon: populations living close to borders are more likely to cross them when endangered. Also, refugees come mainly from the most violence-affected areas.

Certain *flaws* are frequently recognized when inspecting population datasets:

- Population projections, often based on censuses carried out decades before, usually apply growth rates estimated before the start of the conflict, which do not take into account the changes induced by it. The obvious inconsistency of maintaining high growth rates in the projections, while stating that the war killed millions of people, goes unnoticed in many quarters. For instance, in the table presented below, the growth rate for Angola clearly fails to incorporate war-induced deaths. Conversely, the growth rate proposed for Mozambique tried to adjust for them. Interestingly, this sensible adjustment failed to enter into mainstream use. Thus, official population figures remained grossly inflated.
- Population estimates may be split into regional or district figures maintaining the relative shares existing in peaceful times. In this way, large population movements are ignored.
- Large concentrations of people in secure areas are considered, without subtracting these figures from the regions abandoned by refugees and IDPs. In this way, the country total population may remain the same in official statistics, despite the recognition of millions of refugees living abroad. See *True Story No. 2*.
- Estimates of existing refugees may be based mainly or only on people officially recognized as such by host governments and aid agencies. In this way, large populations (particularly those not settled in dedicated camps) may be missed. As a consequence, the population remaining in country may be seriously over-estimated.
- Some portions of the population may be deliberately ignored, because controlled by the enemy. Districts, towns or regions are dropped from datasets. Their population may be included in the totals, without specifying it according to its political status. Where health services are split along control lines, the resulting coverages are obviously misleading. Military and intelligence authorities may be wary of releasing population data regarded by them as sensitive, and may deliberately meddle with the figures to blur the picture.
- Population estimates based on immunization activities have been used in several disrupted countries. As they fluctuate widely over the years, the resulting estimates should be cross-checked with figures obtained by using other methods. Polio-based extrapolations are very sensitive to the proportion of under-five children adopted to project the whole population. This would be very different across countries, according to their population structure.

Spotting flaws in population datasets helps to reject the most unreliable ones. Triangulating the comparatively better figures permits the building of estimates that can be used with some confidence. The patient effort can succeed only with the collaboration of multiple parties, each knowledgeable of bits of the whole picture.

The following table presents some demographic indicators for violence-affected countries.

Demographic indicators for selected countries in crisis

Country	Estimated population	Annual population growth	Proportion of urban population	Number of refugees	Number of IDPs	Year
Afghanistan	20.2 million			3.8 million	1.2 million	2001
Angola	13.4 million	3%	60%	460,000	1.46 million	2001
DR Congo	52.4 million		43%	390,000		2001
East Timor	850,000	3.9%	15%			2002
Mozambique	14.4 million	1.6%	21%	4.0 million	1.8 million	1991
Rwanda	7.8 million					1993
Sudan	31.7 million			4.3 million	490,000	2001
Uganda	25 million	3%			1.5 million	2003

Assessing the health status of the population of a war-torn country

In every health sector affected by protracted violence, indicators related to health status are compiled and disseminated. The standard set includes the average life expectancy at birth, infant and under-five mortality rates, the maternal mortality ratio, the prevalence of malnutrition, of micronutrient deficiency conditions and of selected communicable diseases, and access to safe drinking water and to sanitation. Few if any of these figures withstand thorough scrutiny. Some were collected in old surveys, while others relate to unrepresentative populations. Certain values are projections, often based on audacious assumptions. Tracing the sources of most indicators is usually difficult.

In most cases, the same figures circulate through available documents, unchallenged. The most sensible way of handling flawed figures is to discard them, or to clarify their limitations. They could be replaced by qualitative statements, carefully worded to convey both the severity of the underlying condition and our ignorance about its true value. For instance, affirming that *“the maternal mortality ratio is likely to be very high”* would be an informative, if vague statement, whereas setting maternal mortality at a precise level (while the unreliability of the reported figure is known) would be plainly misleading. The point is to avoid flawed data being adopted as reliable benchmarks for future comparisons, from which erroneous inferences are then drawn.

When proposing to drop deficient figures from documents and monitoring tools, the rigorous analyst is likely to face certain reluctance. The inclination of professionals trained in a scientific discipline to build their arguments on quantitative considerations has been reinforced by donor demands for measurable results. The MDGs have strengthened this reliance on precise indicators. Whereas the pursuit of objective measurements is conceptually commendable, once followed blindly in a disrupted environment it leads to the maintenance in place of flawed and sometimes forged data. Once fossilized by repeated usage, these figures risk to be taken as reliable by interested parties. One of the best services a scrupulous analyst may render to the community of data users is therefore to identify the flaws affecting available indicators, and to discourage their usage.

Most reliable estimates are partial. “National” figures refer in most cases to accessible, secure areas, while field surveys are likely to focus on violence-stricken populations. Refugees abroad represent a third special case. Crude health statistics may need adjustment, like modelling or correcting for known biases, including reviewing all

available data and reconciling those coming from different sources.

Compiling the findings of different studies, like DHS, MICS, mortality and nutrition surveys, while clarifying their strengths, meaning and limitations, provides a composite overview of the national health status, and on the vulnerability of the whole population. In most cases, no aggregation of these figures is possible, nor would it be desirable, as it would hide the large variability of findings. Figures about epidemics and endemic diseases, if available, complete this summary picture.

Drawing conclusions about the health status of a whole country is obviously challenging. Existing global indicators derived from surveys may mask substantial inequalities. Some level of disaggregation is necessary to understand patterns and differences at sub-national or sub-regional levels. Often, agencies use predicted statistics, based on statistical models, to monitor their programmes. The UN also report on the overall progress towards health MDGs using predicted statistics (Boerma and Stansfield, 2007). Some indicators are generated at HQs level, far away from where data are collected, without sufficient knowledge of data limitations and of the context that should guide their interpretation. When the underlying data that are used for statistical modelling and extrapolations are weak, the validity of the resulting indicators suffers, but this may be ignored by policy-makers. This is what happened to the initial estimates of the global burden of diseases of the WHO health system performance indices (WHO, 2000). Unfortunately, the effects of weak or flawed data on policy-makers and donor decisions are difficult to assess.

Assessing the health status of a population affected by an acute crisis

The crude mortality rate (CMR), under-five mortality rate (U5MR) and acute malnutrition (wasting) are used to assess the severity of an emergency and to monitor the effectiveness of the overall humanitarian response. The widespread use of mortality and malnutrition indicators is explained by their advantages: they provide a concise picture of the health status of a community, methods for collecting mortality and nutrition data have been developed, surveys are relatively quick and cheap to be carried out, data analysis is made easier by standard software packages. For mortality findings, internationally-accepted threshold levels assist in their interpretation.

Communicating the results of health status assessments is fraught with difficulties: decision-makers, the media and the public are often unfamiliar with the meaning of health indicators, the way they are collected and their limitations. Partisan interests inevitably lead to magnifying the importance of these data if convenient, or otherwise to discard them, if necessary by raising methodological objections. The epidemiologic jargon is impenetrable to most participants. Conversely, eager to present the public with clear “facts” and straightforward interpretations, journalists seek to strip the available information of most or all nuances and caveats. In many cases, the gross misinterpretation of the truth ensues. On their part, politicians and the military take by definition a side in a conflict. Aid agencies are sensitive to fund-raising concerns, and defensive of their turf. And many action-oriented humanitarian workers are deeply unconcerned with hard data, particularly with those at odds with what they are doing in the field. See Checchi (2006) for an example of the politics of “evidence”. The emotions naturally inspired by violence, death and famine as circulated in real time by the media world-wide compound the picture, and make rational arguments more difficult.

Mortality

Retrospective mortality surveys are used in countries lacking routine vital statistics and/or where censuses are not carried out periodically or are of uncertain coverage and quality, as is the norm in chronic emergencies. *Indirect methods based on the*

True Story No. 4. Interpreting mortality data in Iraq

In conflict environments, mortality data are difficult to obtain, and source of controversy. Roberts et al. (2004) carried out a mortality survey in Iraq after the allied invasion, and computed from their data the excess deaths associated with it.

Main findings of the study. The crude mortality rate (CMR) during the war was estimated at 12.3 per 1,000 per year, with a 95% confidence interval (CI) of 1.4–23.2. Two-thirds of post-invasion deaths were reported in one cluster (Falluja), an extreme statistical outlier. Including the Falluja cluster, the relative risk (RR) of death after the invasion, in relation to before it, was 2.5 (95% CI 1.6–4.2); without Falluja, the RR was 1.5 (95% CI 1.1–2.3). The estimated CMR (excluding Falluja) during the war translates into 98,000 extra deaths (95% CI: 8,000–194,000). The authors concluded that *"... this survey indicates that the death toll associated with the invasion and occupation of Iraq is probably about 100,000 people, and may be much higher (including the Falluja cluster). ... [I]n this case, the lack of precision does not hinder the clear identification of the major public-health problem in Iraq - violence"*.

This study provoked comments from different quarters:

- *"... it is important to treat the figures with caution because there are a number of concerns and doubts about the methodology. Firstly, the survey appeared to be based on an extrapolation technique, rather than a detailed body count. Our worries centred on the fact that the technique in question appeared to treat Iraq as if every area was one and the same. The survey appeared to assume that bombing had taken place throughout Iraq. Again, that was not true. It had been focussed primarily on areas such as Fallujah. Consequently, we did not believe that extrapolation was an appropriate technique to use"* (UK Prime Minister's Official Spokesperson).
- In response to the UK Government criticism of the study: *"... to confuse imprecision with bias is unjustified"* (K. McPherson, British Medical Journal, 2005).
- *"... to have included more clusters would have improved the precision of their findings, but at an enormous and unacceptable risk to the team of interviewers who have gathered the primary data"* (R. Horton, editor, *The Lancet*).
- *"... wide uncertainty qualifies the central estimate of 98,000 excess deaths ... the sample data are, however, more comfortably consistent with realities closer to the centre than outer limits of the associated confidence interval."* (S.M. Bird, *British Medical Journal*).
- *"... the key public-health findings of this study are robust despite the imprecision ... whether the true death toll is 90,000 or 150,000, these three findings give ample guidance towards understanding what must happen to reduce civilian deaths"* (the authors of the study, in *The Lancet*).
- *"... finally, Roberts and colleagues highlight how their results were achieved with modest funding and lots of nerve and commitment, making a brilliant case against those who (clearly avoiding accountability) hide behind claims that valid mortality data cannot be obtained in war environments"* (F. Abad-Franch, *The Lancet*).

In 2006, another survey with a larger sampling frame was carried out. Its findings corroborated the results of the 2004 survey. Excess deaths for the same period were estimated at 112,000 (CI 69,000–155,000), figure remarkably close to that provided by the previous survey. The 2006 findings showed a dramatic increase in violent deaths in every year after the invasion, reaching a high of 19.8 per 1,000 people in the last studied year. Cumulative excess deaths since the invasion in 2003 were computed at 655,000 (CI 393,000–943,000), figure that greatly surpasses any other previous estimate (Burnham et al., 2006). Predictably, the coalition governments dismissed these worrisome new results with lame remarks, which echoed those made in relation to the 2004 survey.

Several methodological criticisms have been raised in relation to the 2006 survey, which show how difficult it is to conduct such a study in the extreme circumstances of Iraq. Because of these criticisms, the authors decided to share the raw data of the survey with expert epidemiologists. A new study with a very large sample of 1,086 clusters and 10,860 households was conducted in 2006–2007 (Iraq Family Health Survey Study Group, 2008). Due to insecurity, 115 clusters were not surveyed. The CMR was estimated at 1.09 (CI 0.81–1.50) per 1,000 people per year. After accounting for sampling errors and missing clusters, the rate was projected to 1.67 (CI 1.24–2.30), without large annual variations over the period. The survey estimated that from March 2003 through June 2006 there were 151,000 violent deaths (CI 104,000–223,000). Although these mortality figures are much lower than those estimated by Burnham et al., they point nonetheless to massive death toll. The different sampling and estimation methods adopted by these studies may limit the comparability of their findings. A useful review of the various Iraq surveys can be found in Tapp et al. (2008).

survival of close relatives have been developed by demographers and are commonly used in Demographic and Health Surveys (see *Module 2*). They are, however, unsuitable in emergency situations, since they refer to a relatively distant past, whereas in a crisis context mortality levels may change dramatically and quickly.

In acute emergencies, or in large geographical areas (where populations move in and out) the requirements for an effective surveillance system are infrequently met, and *retrospective* methods often remain the only feasible approach. Retrospective methods are based on cross-sectional surveys (more commonly they are nested in a nutritional survey). Mortality experience of the members of sampled households is collected through interviews of adult respondents. Sampling is commonly based on the classic methodology used by the Expanded Programme on Immunization², but recently new methods have been proposed.

The generally-accepted CMR threshold is of 1 death per 10,000 per day. Above it, a situation is considered critical, and relief operations should be implemented or intensified (Toole and Waldman, 1990). This cut-off level might be inadequate in middle-income or developed countries, where the baseline CMR is much lower. In fact, relief operations in the Balkans started before the one-death threshold was crossed. To adapt the proposed criterion to different contexts, a doubling of the local pre-crisis CMR has been proposed by the Sphere project. Unfortunately, baseline CMRs are often unknown, particularly in relation to specific regions or populations. Furthermore, this approach would lead to starting relief operations much earlier in relatively advantaged communities than in already distressed ones.

Crude mortality rates in selected acute emergencies

Context (year)	CMR (deaths per 10,000 per day)
Famine-affected communities in Baidoa, Somalia (1992)	16.8
Malnutrition and diarrhoeal disease epidemics among Rwandan Hutu refugees in Goma area, Zaire (1994)	34.1 to 54.5
Population under armed siege in Tubmanburg, Liberia (1996)	14.3
Famine and conflict-affected populations in Bahr el Ghazal, Southern Sudan (1998)	9.2 to 26.1
Famine in Gode, Ethiopia (2000)	3.2
Famine and repeated displacement, Angolan IDPs in UNITA areas (2002)	2.3 to 3.6
Armed attacks against civilians in West Darfur, Sudan (2003–2004)	5.9 to 9.5

From: Checchi and Roberts, 2005.

Conducting mortality surveys in extremely difficult/dangerous situations makes them prone to limitations (then to biases and imprecision):

- Access to the studied population is limited by security and logistic constraints. A whole cluster must be often studied in a few daylight hours.
- Numerators and denominators have to capture deaths and exposure in “unstable” populations. There is no a priori knowledge of the spatial distribution of the population. Changing security conditions may impose the replacement of some of the clusters originally selected. The sampling frame may become quickly outdated, hence invalid.
- Clustering of deaths due to localized, severe violence and/or disease outbreaks may affect the precision of estimates.

² Based on two-stage cluster sampling, resulting in 30 clusters of 7 children each.

- Politically-motivated information biases may distort results. The risk of manipulation by an aid-savvy population or regime is high. An overestimation of deaths may result.
- Experienced epidemiologists willing to work in insecure areas are scarce. Also, security considerations may restrict access to turbulent areas to certain study team members. The delegation of responsibility that ensues makes verifying results difficult, with unsatisfactory results.
- The information to be collected is based on interviews, and spans a period of time. Trauma, fear, local calendar, language barriers may make recollection difficult. The concern of losing entitlement to aid (e.g. food aid) may encourage respondents to hide deaths of relatives. Death in some cultures is a sensitive subject, which may lead to underestimation.

The findings of the mortality survey cannot be generalized to other communities or the whole country, because of the unique conditions affecting the studied population.

In emergencies, mortality surveillance systems are the gold standard, mainly in closed areas (e.g. refugee camps) where it is possible to reach a good coverage of both deaths registration and population (numerator and denominator). Their main advantage is that they allow for immediate responses once the set mortality threshold has been reached. Guardians of burial places, community leaders and volunteers are the main sources of mortality data.

Mortality surveys are susceptible to certain biases: *sampling bias*, *survival bias*, *recall bias* and *misclassification bias* (described in the *Glossary* included in *Module 14. Resources*). A further limitation is that mortality rates refer to a past risk, which may not reflect the present situation: the outcome may have since then either improved, remained stable or worsened. The reference/recall period is usually between 6–18 months before the interview, and in an acute emergency changes in the mortality experience can be quick. From the response point of view, once the results of the survey become available, it may be too late for implementing effective interventions. Finally, mortality represents the extreme end of the health status spectrum; therefore, it says nothing about other health conditions that cause suffering but do not lead to death. For all these limitations, the user of mortality data should pay special attention to the methods used to derive the rates and to the use that can be made of them. For a review of the field of mortality surveys, see Checchi and Roberts (2005) and *Emerging Themes in Epidemiology*, an online journal, available at: www.ete-online.com (accessed 25 September 2008).

From mortality data, *excess deaths* are often computed. They give a direct estimate of the absolute magnitude of a crisis. However, they must be considered with caution. Excess mortality is a composite indicator, resulting from the difference in mortality between levels measured during the crisis, minus the levels measured before it. To be computed, excess mortality requires interpolating the rates obtained from the sample, to the population from which the sample was selected. Additionally, an acceptable pre-crisis or baseline mortality rate must be known. Given the dynamics of mortality in a crisis, with quick changes over time and in sub-groups of the population, estimating the excess mortality for large populations and a long period of time is risky.

Malnutrition

The nutritional status of under-five children is considered as a sensitive and objective crisis indicator. In emergency contexts, nutritional information is usually collected in order to:

- determine the severity of a crisis and advocate for a response
- detect early changes in food security, and
- plan, monitor and evaluate interventions (Young and Jaspars, 2006).

Anthropometric data are a static prevalence measure of the present nutritional situation. Weight for height (wasting) is used to assess and monitor nutritional status (acute malnutrition) in emergencies, whereas weight for age and height for age (stunting) are used to assess the long-term nutritional status of children. Individual weight-for-height measurements are compared to those of a reference population and cut-off points (2 Standard Deviations, or 80% of the median value) are used to estimate the prevalence of malnutrition in the studied community. Acute malnutrition is often accompanied by micronutrient deficiency diseases, particularly of vitamin A, iodine and iron. In protracted emergencies, the prevalence of chronic malnutrition, measured as stunting, may also be very high.

Standard methods, based on two-stage 30-cluster surveys, are available for collecting and analysing the anthropometric data of children aged between 6 months and 5 years, in order to estimate the prevalence of acute malnutrition. The mid-upper-arm circumference is used for screening or for rapid surveys and has been shown to be a good predictor of mortality; it is recommended that it is adjusted to reference values for height or age. No such consensus exists on indices, nor on cut-off criteria for assessment of malnutrition among adults.

The interpretation of survey findings requires the careful scrutiny of how surveys were carried out. The technical capacity for conducting surveys based on these methods is far from satisfactory. In a review of nutrition surveys carried out in Ethiopia in 1999–2000, only 9% of studies met validity and precision criteria (Spiegel et al., 2004). Nutrition surveys are subject to measurement errors and to sampling biases. Additionally, anthropometric data need to be analysed in a food security context, looking at the household economy, the market, etc.

Nutritional data on their own have limited use and should always be interpreted together with morbidity and mortality rates, taking into account the underlying causes of malnutrition, seasonality, pre-emergency levels of malnutrition and coping strategies. The relationships between malnutrition and mortality vary, and this has implications both for monitoring food insecurity and for diagnosing different types of crisis. For example, the severe food insecurity crisis that affected Southern Africa in 2002 was not accompanied by widespread malnutrition and mortality (Young and Jaspars, 2006). Decision-making frameworks to guide nutritional interventions on the basis of the prevalence of malnutrition and presence of aggravating factors are available; however, different thresholds of prevalence of malnutrition are used by different agencies.

In an acute food crisis, mortality can be higher in the younger age groups (neonatal mortality), before they reach the age for being eligible for the survey. In this case, mortality data are especially useful for the interpretation of results from nutrition surveys. In many famines, however, it has been observed that diseases, more than starvation, kill people (de Waal, 2004) and that it is the impoverishment caused by the loss of assets and livelihoods that causes famine and disease. For this reason, in prolonged famines it has been recommended to include the assessment of adult nutritional status. There is, however, a lack of consensus on methodological issues to measure adult malnutrition, such as the choice of indicator (like the body mass index) and their cut-off points, as well as the comparability of such indicators across different ethnic groups (hence the need for adjusting the anthropometric indices).

Malnutrition levels are not very informative, nor useful to guide aid responses, if they remain unexplained. Nutrition surveys are often silent about the chain of events leading to a worrisome prevalence of malnutrition. Interventions to tackle malnutrition should vary, according to the factors underlying the crisis. Unfortunately, the free distribution of food remains the preferred response of aid agencies, even if other measures might be more effective.

The usage of cut-off or threshold points is criticized as inadequate. Instead, the study of seasonal trends is recommended. For communities prone to crises, thus repeatedly studied over protracted periods, trends are clearly preferable. In areas where a major

crisis strikes occasionally, however, the baseline levels of malnutrition may be unknown. Also, hostilities may have changed population and economic patterns in such a way as to make comparisons with pre-emergency benchmarks meaningless.

In any case, assessing the severity of a crisis by comparing the present prevalence of malnutrition with previous levels is arguable in areas regularly affected by severe malnutrition. A small change may in these cases be constructed as normality, when the crisis is permanent and severe. In many areas of the Sahel and the Horn of Africa chronically affected by poverty and violence, malnutrition prevalence is regularly found above the threshold suggesting a critical situation. Aid agencies are scared by the long-term implications of engaging in such desperate environments. Such true emergencies remain silent, undeclared and ignored by the media.

For reviews on the subject, see Young et al. (2004) and Young and Jaspars (2006).

True Story No. 5

Rapid needs assessment in the Iraqi health sector in 2003

"Assessments of emergent institutional needs began as the first battles ended. WHO has 32 three-person teams doing assessments. As of June 30, they had visited 569 of the country's 3,061 health facilities, including all 35 of Baghdad hospitals. A further 1,000 of 1,553 primary health facilities and 100 of the 203 hospitals were assessed by one or more of 18 other organizations (WHO and RHCO). Some facilities have been visited on more than a dozen occasions, while few visits have been made to seven remote directorates. WHO and the Coalition Provisional Authority are attempting to collect and standardize the summarization of information from these various assessments, an exercise not unlike herding cats."

From: Diaz and Garfield, 2003

Rapid health assessments

Carrying out mortality and nutrition surveys is not always possible, mainly in the acute phase of an emergency, when speed in collecting data and decision-making is critical for saving lives. Rapid health assessments (RHA) are often the only available alternative. Different methodologies of RHA are used by different agencies in different contexts. A comparative review of 8 instruments (Bradt, 2001) for RHA highlighted their variability, according to the scope of data collection (system or site), the difference in data structure, the competing needs for comprehensiveness and brevity. The choice of the appropriate RHA protocol seldom depends on strict technical considerations: personal preferences, familiarity with an instrument, or organizational inertia play often a role.

RHA protocols are more flexible and less structured than formal surveys. However, since sampling is not probabilistic, RHA may produce biased and/or imprecise results, which can inform wrong, even catastrophic decisions, like a delayed donor response to the famine in Southern Sudan in 2001, due to a flawed rapid needs assessment (Collins, 2001). RHA demand local knowledge and technical skills in selecting the relevant information to be collected and the sites to be visited. The interpretation of the information gathered through RHA is not as straightforward as for formal surveys, and triangulation of data is crucial.

Originally, rapid assessment methods relied on a mix of stripped-down quantitative data-gathering methods, and interviews and group discussions. Qualitative information was meant to compensate for the limitations of the quantitative data to be collected.

The rationale of rapid assessments, i.e. to obtain quick information for decision-making, appealed to epidemiologists involved in disaster management and aware of the limitations of standard epidemiological methods, once applied to difficult field conditions (Guha-Sapir, 1991). Over time, scopes, methods and templates of health needs assessments proliferated.

A shift in the scope of RHAs, unparalleled by the emergence of new methods, has recently occurred. The original focus of RHAs – to evaluate the health impact of natural disasters or of population displacements – has broadened to cover systemic determinants of ill-health and survival, including the capacity of the health sector to address humanitarian needs.

Most of the early assessments were area-based, undertaken in refugee camps or in small geographical areas, to guide local relief responses. But complex emergencies and natural disasters often affect the social and economic fabric of entire countries or regions. Therefore, the traditional, area-based approach of RHA, aimed at studying health status, becomes inadequate.

What becomes critical is exploring the underlying determinants that affect the capacity of systems to address health needs, in this way moving beyond the well-known immediate causes of morbidity and mortality. Data and observations need to be analysed, interpreted and contextualised: in emergency settings, even hard figures are subject to flaws. Subjective judgement plays an important role. Moreover, interpreting data and putting them into a sensible context requires that local knowledge be valued. *“A good rapid assessment is one that accesses as broad a cross-section of local knowledge as possible”* (Collins, 2001). The right mix of appropriate skills, knowledge and attitudes is needed.

Jok (1996) described the practice of rapid needs assessments in the context of Southern Sudan, showing how fundamental misunderstandings between relief workers and recipients distorted the perceptions of participants, in this way undermining the usefulness of the gathered information. Boss, Toole and Yip (1994) reviewed 23 population studies carried out in Somalia, finding that extensive methodological differences impeded the aggregation of their results into a meaningful picture of morbidity, mortality and nutritional status.

Rapid assessment techniques are often adopted because of their apparent simplicity or ease of application. This misplaced perception betrays the rationale behind rapid assessments. Whereas structured statistical methods force a measure of discipline among their users, no equivalent demands seem to emerge from the less structured format of rapid assessments. Naïve field workers may adopt rapid assessments, without fully realizing their methodological limitations and conceptual requirements.

Complex emergencies require complex understanding and complex responses: security constraints, political perspectives, technical considerations, need for rationing limited funding and policy options have to be factored in. Humanitarian actors are confronted by competing priorities and alternative courses of action. Complexity must be studied without sacrificing any of its crucial aspects. But to capture complexity, rapid assessments *must* be conceptually (if not methodologically) complex.

Work has been conducted within the IASC Global Health and Nutrition Clusters, in collaboration with other sectors, to define a common template for the initial, multi-agency rapid assessment. For general guidance on health information management in emergencies, refer to *Module 2*. For a discussion of the links between needs and humanitarian interventions, see Darcy and Hoffman (2003).

Communicable diseases

Outbreaks of communicable diseases are common within war-affected populations, as recognized since Thucydides described the plague of Athens (which began in

430 BC). Losses due to disease surpassed combat-related casualties within armies until World War II (Garfield and Neugut, 1991). As recently as during the Soviet-Afghan war in the 1980s, only 11% of the hospitalized Soviet soldiers were wounded or injured (Grau and Jorgensen, 1997). Among civilians, the dominance of communicable diseases over direct violence as cause of morbidity and mortality is recognizable in most low-intensity wars.

Important communicable diseases – such as malaria, respiratory infections, meningitis, tuberculosis and HIV/AIDS – are endemic to war-affected areas. Most diseases modify their epidemiological patterns. Human groups move, change their composition, are exposed to new risks and react differently. Some diseases, like diarrhoea and measles, show a spontaneous recrudescence in most complex emergencies. As control services break down, transmission is enhanced and individual and group susceptibility increases; outbreaks of endemic diseases become frequent. For instance, from 1984 to 1994 a devastating epidemic of visceral leishmaniasis took place in Southern Sudan among hitherto unaffected populations, with around 100,000 deaths (Seaman et al., 1996).

Information about communicable diseases is produced by control programmes, by healthcare providers, and by surveillance systems (where they function). Data are regularly incomplete and often inconsistent, but provide elements that help to gauge the overall situation. To study the severity of the most important communicable diseases, the number of people affected (expressed as prevalence or incidence, according to the characteristics of the disease), the number of new cases identified by the health services, the number of cases submitted to treatment, and the case-fatality rate are the most useful indicators. Most control programmes produce these figures. They should be checked for coverage, reliability, timeliness and consistency. The strength of control programmes vary considerably within the same country, so that some selective judgement is required when deciding whether to retain or reject their reports.

The scrutiny of past responses to epidemics is instructive of the capacity of control programmes (where they are in place) or of the overall healthcare system to react to a crisis, and of its spare resources. Delays in identifying an outbreak and in mounting a response are frequent, as are uncoordinated measures. Technical mistakes can be discerned in many cases.

Reviewing historic records may also reveal the recurrence of the same disease outbreaks, often with seasonal patterns. The inability to tackle the expected recrudescence in advance, or at least to prepare an adequate response once the disease strikes, is revealing of the fundamental disarray affecting many disrupted health sectors.

The geographical distribution of the reported cases must be studied. It is often strongly related to the coverage of health services, rather than to true disease patterns. Secure areas, like established refugee camps endowed with good health services and reporting systems, are usually the source of most reports. Conversely, the disruption affecting healthcare provision in many overcrowded urban slums explains the under- and misreporting frequently found when studying disease patterns in these settings. Partitioned health sectors are prone to report disease occurrence separately. The data produced by these secluded reporting systems are rarely consolidated into national ones, or individually analysed.

The analysis of case-fatality rates for well-known diseases provides important clues about the response of health services to outbreaks. For instance, a cholera case-fatality rate clearly above 1% points to an unsatisfactory performance. High case-fatality rates may, however, be caused also by the increased vulnerability to disease of a distressed population, induced by famine and hardships, as well as by delayed access to health care. These factors are frequently associated in war-torn settings.

Whereas public alarm and media coverage may be stronger in response to outbreaks of rare or previously absent or even unknown diseases, like Ebola or Marburg, mortality is

usually more severe from increased transmission of common diseases already present in the environment.

Diseases requiring prolonged and continuous treatment, like tuberculosis, thrive in unstable settings marked by intermittent violence. Refugee camps or previously secure areas, where control schemes have been successfully set up, may come under attack, with induced population movements and discontinuation of treatment.

For a synthetic review of this field, see Connolly et al. (2004).

Surveillance

Indigenous surveillance systems collapse in most protracted crises. They may have been ineffective even before the start of the hostilities. Data generated by the remnants of established systems may become virtually useless, because of their incompleteness and unreliability. In many contexts, the task of establishing surveillance mechanisms, or of resuscitating disrupted ones, is taken up by international agencies, like WHO, which may be able to work across frontlines.

Successful surveillance systems in wartime are likely to be cooperative efforts, with field workers, NGOs, local institutions and aid agencies reporting changes in disease patterns to a central body, in charge of tallying figures, checking them, screening rumours of outbreaks, identifying the involved diseases, and coordinating appropriate responses.

Loose networks of collaborating organizations are more capable of adapting to changing conditions and of reacting promptly to threats than structured, routine, dedicated surveillance mechanisms. Sentinel sites look particularly unsuitable to war-torn environments (Weinberg and Simmonds, 1995).

Performing surveillance mechanisms serve a variety of purposes. They document the effects of war on disease transmission, help channel existing capacity and resources to tackle confirmed health problems, reassure the public by checking rumours of outbreaks (frequent in conflict-affected settings), and often constitute the most effective coordination mechanism existing in a distressed health sector.

The figures generated by surveillance mechanisms must be considered with caution. For instance, oscillations in the frequency of disease might be due to changes in the performance of reporting mechanisms, rather than to a true recrudescence of disease transmission. Checking whether reports of diseases not expected to be affected by violent disruption have increased as well, helps to distinguish true changes from artefacts.

Surveillance mechanisms must be designed to adapt to conflict-affected environments. In most cases, this involves simplifying the system by focusing on fewer diseases of critical public-health importance, likely to spread because of the war. Forms and reports must frequently be multilingual, to be acceptable to warring sides and usable by aid workers. Sometimes, local disease definitions must be clarified to avoid misunderstandings. A redundant network of reporting bodies, so that when one is unable to report, another can fill the gap, is desirable. Reporting requirements must be kept to a minimum, to ensure the collaboration of hard-pressed partners.

A surveillance system is likely to evolve over time, by trial and error, and because of the exit of old participants and the entry of new ones. Efforts should be spent to ensure that the precious experience won in war-time is conveyed to the structured and permanent surveillance mechanisms to be established once the conflict is over. This cannot be taken for granted, as pressures to establish cumbersome, rigid, resource-intensive surveillance systems are not uncommon during recovery processes. Powerful disease-control programmes, for instance, are often lobbying for the establishment of fairly sophisticated dedicated surveillance systems.

Recommended Reading

Checchi F, Roberts L (2005). ***Interpreting and using mortality data in humanitarian emergencies: a primer for non-epidemiologists***. London, ODI (Humanitarian Practice Network Paper No. 52). Available online at: www.odihpn.org, accessed 16 September 2008.

Excellent introduction to a field marred by flawed approaches to data collection, distorted interpretations and partisan utilization of survey findings. Precisely because mortality data are controversial, and the decision-makers called to act upon them are frequently not conversant with the concepts and tools of epidemiology, this clear and readable primer, if studied by its intended audience, is extremely valuable.

The primer reviews all the aspects that a reader inspecting mortality data collected in a humanitarian emergency must consider, in order to interpret the findings correctly and to put them in an appropriate context. Additionally, attention is drawn to the potential pitfalls affecting this sort of surveys, and on ways to recognize flawed ones. A brief discussion of the politics of mortality completes the review. Figures and examples drawn from surveys carried out in several conflicts, such as Angola, the Democratic Republic of the Congo, Iraq, and Sudan, clarify concepts and enliven the text.

New Sudan Centre for Statistics and Evaluation, in association with UNICEF (2004). ***Towards a baseline: best estimates of social indicators for Southern Sudan***. Available online at: www.reliefweb.int/library/documents/2004/splm-sud-31may.pdf, accessed 16 September 2008.

A brilliant example of assembling a set of key figures from a variety of sources, producing in this way information vastly more reliable and useful than the original data. The steps and the criteria used to reject or conversely to accept competing indicators are discussed in a clear, explicit way. The reader is guided through the options available, the drawbacks of existing datasets, and the choices eventually made. Rather than launching new rounds of data collection, the author made strenuous efforts to use available figures, and to discuss the results achieved along the way with users and producers of information. A dataset negotiated with the key stakeholders, hence more likely to be used across their spectrum, was the natural outcome of this exercise.

Summerfield D (1999). ***A critique of seven assumptions behind psychological trauma programmes in war-affected areas***. *Social Science and Medicine*, 48:1449–1462.

Thought-provoking paper, which raises fundamental questions about the worth of trauma programmes in conflict-affected populations. Summerfield makes a convincing argument about the nature of war-inflicted distress. “*Human responses to war are not analogous to physical trauma: people do not passively register the impact of external forces (unlike, say, a leg hit by a bullet) but engage with them in an active and problem-solving way. Suffering arises from, and is resolved in, a social context, shaped by the meanings and understandings applied to events.*” If this interpretation of distress holds, trauma programmes that medicalize distress and manage it individually, as a technical problem with consequent short-term technical solutions, are essentially misconceived. “*There has been little independent evaluation of the benefit of trauma programmes but*

their attractiveness for donors may be because they offer a fashionable, time limited and apparently politically neutral form of intervention that avoids the controversial questions wars throw up. Both Bosnia and Rwanda showed how Western governments could hide their mixed motives over confronting causes and aggressors behind a 'bread and counselling' model of aid which did not include physical protection or reparative justice." The closing words of the paper resonate far beyond the trauma programmes discussed by it: *"Social healing and the remaking of worlds cannot be managed by outsiders."*

Young H, Jaspars S (2006). ***The meaning and measurement of acute malnutrition in emergencies: a primer for decision-makers***. London, ODI (Humanitarian Practice Network Paper No. 56). Available online at: www.odihpn.org, accessed 16 September 2008.

Nutritional surveys are carried out in a variety of settings, to gauge the severity of humanitarian crises and to guide aid responses. Despite their popularity and the availability of standard techniques of proven value, many surveys suffer from serious methodological drawbacks and produce data of questionable worth. For their part, decision-makers and journalists often struggle to grasp the meaning of available malnutrition data. The misuse of nutritional information is therefore commonplace.

This clear and concise primer succeeds in presenting in non-technical language the purposes of nutritional surveys, the methods followed to collect data, and the indicators they produce. The meaning of such indicators, their limitations and their value for choosing appropriate interventions are all discussed. The need to explore the factors underlying absolute prevalence values, as well as to combine nutritional data with mortality figures, in order to draw the right inferences, is duly stressed. In sum, this primer offers to the newcomer a quick and painless starting point.

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Annex 4 HIV/AIDS and conflict

In a high-prevalence country, or in a country heading towards high prevalence, the impact of HIV/AIDS on life expectancy, health status and the society as a whole (economic production, institutions, civil service, livelihood, family structure, gender and demographic structure³ etc.) cannot be overemphasized. By affecting the overstretched coping strategies of poor communities, AIDS favours the emergence of a new category of vulnerable households through several mechanisms. It changes dependency patterns, causes the loss of assets and skills and impacts on health status by interacting with malnutrition and communicable diseases. Once widespread, HIV/AIDS exerts dire economic consequences, affecting the internal financing of healthcare provision, both public and private.

The long incubation of the infection before the disease arises means that countries emerging from a protracted crisis may confront an additional challenge, which vastly surpasses their response capacity. The lasting effects of the conflict may be even more serious than anticipated during its unfolding. The serious macroeconomic impact of AIDS must be added to the destruction of infrastructure and collapse of the systems, when forecasts of future financing levels are formulated. The long time lag separating contagion from its manifest effects is visible in the population at large as well as in individuals. Complacency is a constant risk, as repeatedly seen in the past. Policy-makers may downplay a young epidemic, just because few people present AIDS symptoms. When the seriousness of the epidemic becomes fully patent, the health sector and the country at large may find themselves unprepared to cope. This sorry lesson has been repeatedly drawn in Southern Africa. Countries at the beginning of the HIV/AIDS long wave should take notice and act resolutely before it is too late.

Despite its devastating impact, HIV/AIDS may fall “off-radar” from the health policy discussion, usually monopolized by the violent disruption and by the humanitarian response to it. The compartmentalization of the aid industry facilitates this oversight.

The possibility that AIDS offers breeding conditions for political upheavals has been insistently raised in security circles (CBACI/CSIS, 2000; Elbe, 2002). The logic of the argument is compelling: a state weakened in its revenue base and distracted by caring for the sick, burying the dead and replacing the losses, with the ranks of its security forces decimated, may become vulnerable to violence entrepreneurs, whose emergence is encouraged by societal distress.

However, “... the additional death rate because of the epidemic is of a similar magnitude to the experience of France during the First World War; an experience that traumatized the French ... yet East and Southern Africa are not traumatized ... life goes on in a surprisingly normal way. There is no paranoia and little in the way of new religious or death cult” (Caldwell, quoted in de Waal, 2006). The resilience of African social and political systems is amazing: despite the severity of the crisis and its widespread impact, no serious political consequences have so far occurred. The crisis has been politically absorbed. Whether this capacity to absorb shocks of such a magnitude is due to resilience or conversely to protracted failure, so that these systems are already unable to discharge their basic governance functions, is matter of debate (see de Waal, 2006).

The relationships between HIV/AIDS and conflict have been documented in several settings. Evidence from Uganda suggests the military as important channel for spreading the infection (Smallman-Raynor and Cliff, 1991). In Guinea-Bissau, during the independence war, the diffusion of HIV-2 increased dramatically among Portuguese soldiers and the local population. In Mozambique, returning refugees having contracted the infection in neighbouring countries fuelled a dramatic post-war prevalence surge.

3 In sub-Saharan Africa, more women are infected than men, and at an earlier age. Consequently, the AIDS death toll is higher for women than men.

However, equating conflict with HIV spreading would be wrong. A critical review of available data has questioned the previously accepted link between violence and enhanced HIV transmission. Spiegel et al. (2007) “*found insufficient data to support the assertions that conflict, forced displacement, and wide-scale rape increase prevalence or that refugees spread HIV infection in host communities*”. Strand et al. (2007) plotted HIV prevalence rates in sub-Saharan Africa during the decade 1991–2000, against levels of armed conflict (estimated through an index combining severity and duration of each conflict) and found a fairly strong inverse relationship. Thus, *violence might reduce HIV transmission*.

In fact, after protracted and ferocious wars, Angola, Democratic Republic of the Congo, Sierra Leone and Southern Sudan show lower than expected prevalence rates. By isolating communities and reducing trans-border movements, war might have slowed down the diffusion of the virus (Spiegel, 2004). In Cambodia, the epidemic started when the country emerged from its isolation at the beginning of the 1990s, with the arrival of a massive UN peacekeeping operation. No causal relationship has been established, but the time association is clear.

Clearly, sweeping generalizations are not supported by evidence. The net effect of protracted violence on HIV transmission is highly context-specific, and depends on several factors, including the following:

- the pre-conflict HIV prevalence in the affected community
- the induced stress and degree of displacement
- the HIV prevalence in the host community
- the disruption of the social fabric induced by conflict
- the interaction between war victims and other populations
- the level of violence attained
- the practices of belligerents
- the humanitarian response to each crisis
- the coping strategies adopted by individuals and communities under stress.

Given that all the involved factors differ across conflicts, the eventual impact of violence on the HIV/AIDS epidemic is hard to predict. When the virus is already present, the concentration of displaced people in urban areas or camps may increase its transmission. Post-conflict economic booms may also increase viral diffusion. The intervention in a conflict of foreign armies, as warring parties or peacekeepers, may be instrumental in spreading the infection in two directions: from the country of origin to the disrupted one, or the other way round, when soldiers return home.

In particularly vicious conflicts with extensive raping of women (which increases the risk of transmission), the infection might be disseminated beyond the usual association between soldiers and commercial sex workers. However, “*there are no data to show that rape increased prevalence of HIV infection at the population level*” (Spiegel et al., 2007).

Transitions from war to peace, by combining enhanced exposure opportunities with increased vulnerability due to cumulative stress, may accelerate transmission to a great extent. Therefore, resolute control interventions should be launched at the end of a conflict, or even earlier if opportunities arise. So far, most opportunities offered by peace processes have been missed. For a comprehensive review of the relationships between conflict and HIV, see Mock et al. (2004).

The true disease prevalence is not known in most disrupted countries. Available data may relate to few studies carried out in high-risk settings, such as urban areas, transport corridors or secure areas (hence with a significant military presence). In these cases, they may grossly misrepresent the overall picture. Thus, the disaggregated

location of the prevalence estimates should be thoroughly scrutinized. Only if the rough proportion of the total population living in high-risk environments is known and some estimates are drawn from low-risk settings, a total national educated guess can be proposed for cautious consideration. In severely disrupted countries, these conditions rarely apply. Hence, local prevalence figures should be presented as such and not be generalized for the total population, as is de facto often the case. In regional conflicts characterized by large trans-border and internal population movements, the disease occurrence may change quickly and significantly. The very concept of national prevalence rate becomes questionable in these settings.

Meanwhile, a clear pattern is becoming recognisable. Countries emerging from protracted conflict, which managed to carry out a large, population-based random survey, found strikingly lower HIV prevalence levels than previously measured (relying on estimates from pregnant women attending ante-natal services).

Country	HIV prevalence	
	as measured by DHS	according to previous estimates
Cambodia	0.6% (2005)	3.7%
DR Congo	1.3% (2007)	4-5%
Haiti	2.2% (2005-6)	> 5%
Liberia	1.5% (2007)	5.7%
Rwanda	3.0% (2005)	5.1%

Source of the Demographic and Health Surveys (DHS): www.measuredhs.com.

In HIV high-prevalence situations, the disease impacts on the health sector in several ways:

- by increasing the demand for health services, in volume as well as in technical content. In-patient workloads may expand significantly. The cost of treating a patient increases substantially. AIDS patients may crowd out other conditions, in this way denying them treatment. The gap between the increased potential demand for health care and the fixed or shrinking response capacity of disrupted health sectors may widen, undocumented. Where primary data allow for it, the study of this gap may provide precious indications to policy-makers.
- by increasing drug consumption, in volume as well as by imposing the prescription of more expensive drugs. The deregulation of the drug market, commonplace in troubled settings, implies the free circulation of antibiotics and antiretroviral medicines, with predictable effects on their effectiveness.
- by attracting the most-qualified cadres, well-resourced HIV/AIDS interventions starve other services of scarce capacity.
- by increasing the diffusion of tuberculosis, thus creating additional patients to be taken care of. In HIV high-prevalence settings, tuberculosis may be two–three times more common than in the absence of HIV.
- by increasing losses among health workers and reducing their productivity when they are still active. Additional losses of 0.5–1% of the health workforce can be expected in a country where prevalence is stable at 5%. In very high-prevalence situations, excess attrition may range between 3% and 7% (World Bank, 1999).
- by increasing demand for home care, which many health sectors are not equipped to provide.
- by increasing demand for new skilled health workers, to be trained to handle conditions of higher complexity and to replace excess losses in the workforce. Expanded training implies additional costs.

All factors converge towards a substantial increase of both running costs and capital requirements of the health sector. This cost explosion takes place in association with

an overall economic contraction, which undermines public sector financing, with a dramatic increase in the proportion of dependent people, and with an impoverishment of the affected population, who cannot shoulder full treatment costs. The country might enter a trap without return, that is a downward spiral of economic crisis, exhaustion of coping mechanisms, demographic contraction, further impoverishment and reduced capacity to control the disease.

The alarm induced by the disease is generating a stunning increase in the resources devoted to fighting it. Large funds, disbursed through a variety of channels, have been made available by donor agencies and charity foundations. In many situations, projects seem the dominant vehicle. As not all the funds allocated to fighting HIV are additional ones, the reduction of resources aimed at sustaining other important health interventions is a concrete risk. Rebuilding a disrupted health sector on a sounder base in the presence of massive inflows of AIDS funds, largely disbursed through a multitude of foreign NGOs (given the absorption constraints likely to affect indigenous institutions) may be a hopeless challenge.

Concerns have been expressed on the “*AIDS exceptionalism*”: too much money channelled to HIV/AIDS relative to other diseases, and used inefficiently and sometimes counterproductively (England, 2007). In war-torn settings, where other basic health services are already in very scarce supply, the high opportunity cost of opting for AIDS control measures is fully patent. The feasibility of providing permanent AIDS-related care in environments where violence-avoiding population movements are frequent and unpredictable is also matter of concern.

HIV/AIDS explodes the old PHC concept of simple and cheap health care. Nonetheless, in high-prevalence settings, the provision of health care to these patients must become part of the basic package of services. How to achieve the needed upgrading of health care in resource-strapped contexts is unclear. A paradigm shift in healthcare provision models, although bound to happen, has not yet emerged in the literature. The price to pay if this shift is postponed is the progressive decrease in the coverage of basic health services. In countries starved of resources and capacity (and disrupted health sectors are prone to show these features), the pursuit of operationally demanding and cost-ineffective responses can only lead to shrinking access to health care, both general and AIDS-related, and to mounting inequalities. Despite the increase in the availability of material resources recently registered, due to aid flows and drug donations, the capacity bottleneck that affects so many war-affected health sectors is likely to hamper the provision of basic health care for a considerable time.

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Module 5

Understanding health policy processes

Contents

This module explores the foggy field of policy-making, non-making and unmaking in troubled health sectors, drawing from documented situations as diverse as Afghanistan, Angola, the Democratic Republic of the Congo, Kosovo, Mozambique, Sudan and Uganda. Analysing existing policies and the process of their formulation says much about the sector and the forces that shape it. The analysis can provide clues on the directions taken by the sector and on the constraints that have affected decision-making and implementation. It can help avoid old traps and mistakes and identify fields and avenues that have proved encouraging. The module discusses common patterns and suggests approaches to policy analysis. The main features of the most influential actors interacting in the policy arena are briefly described. The coordination of external resources, usually a key issue in protracted crises, concludes the module.

Annex 5 discusses the value of a Policy Intelligence Unit in a troubled environment, and suggests the features it may have, the products it may deliver, and the institutional position it should take to function effectively.

Closely-related modules:

No 3. Understanding the broader country context: past, present and future

No 6. Analysing health financing and expenditure

No 7. Analysing patterns of healthcare provision

No 8. Studying management systems

No 12. Formulating strategies for the recovery of a disrupted health sector

Introduction

Disrupted health sectors often confront actors with the dilemma of deciding whether

- a. to struggle to maintain the system's basic functions, mending cracks as they emerge and, if feasible, cautiously introducing novelties at the margin and at a pace that the system can absorb, or *conversely*
- b. to declare the system irreparably wrecked, abandon it to its fate and design a new system from scratch.

At all levels of decision-making, policy discussion during and after the crisis is permeated by this dilemma, even if it is not explicitly recognized.

A thorough appraisal of the system's strengths and weaknesses should provide precious clues to decision-makers. Such an appraisal is by definition difficult for both insiders and outsiders. The former, grown within established settings and taking most of them for granted, have problems in conceiving alternative organizational features. Thus, they tend to favour conservative approaches. The latter, lacking in most cases an intimate knowledge of the health sector, may react to the shambles that they observe by concluding that nothing valuable has survived the crisis and therefore that aggressive restructuring is the only sensible available option.

In this respect, disrupted countries present a wide range of situations. At one end of the spectrum, the preservation of basic functions (and the ability of the MoH to present the situation under a favourable light to outsiders) of the Mozambican health sector explains the prevailing conservative approach adopted by most actors during and after the war. There, the occasional call for radical change, usually unsupported by convincing arguments, was largely ignored. At the other end of the spectrum, the total disarray of Afghanistan or Somalia, or the birth of new political entities, such as Kosovo or Timor-Leste, encourage innovative, start-from-the-basics approaches. Whether aggressive strategies pay off in certain forbidding environments remains to be seen. See *True Story No. 7* and *Exercise 6* in *Module 15* for a short discussion of the Kosovo experience.

Conservative approaches incur the risk of missing valuable opportunities for change and of wasting efforts and resources in maintaining a system already beyond recovery. Conversely, radical change may dismantle surviving functions and hurt fragile capacity, adding damage to that brought by conflict. In this way, the health sector hastily *considered* beyond repair *will become* beyond repair, to fulfil the original (and wrong) diagnosis.

The term “policy” encompasses a broad range of laws, approaches, prescriptions, guidelines, regulations and habits. Some “macro”-policies have implications across most or all areas, including the health sector, whose actors have limited influence over them. Fiscal or civil-service policies fall in this category. Within the health sector, policies can be of broad or narrow scope. Macro-policies with far-reaching implications tend to have a robust political character, even when they are advocated for their supposed technical merits. Examples of such policies are Primary Health Care, decentralization, Health Sector Reform, and new financing mechanisms, which affect (or should affect) most aspects of health service delivery. Other policies, of strictly technical nature, address narrower issues, such as the control of a communicable disease or drug quality control. This module focuses mainly on macro- and sector policies, whose implications affect the whole health sector or substantive aspects of it.

Health policies are (or better: should be) recognizable even in the absence (or despite the content) of written statements. The ways services are delivered, allocative decisions are made, information is produced and used, actors interact, old practices are followed and new ones are introduced: all these elements sum up into the “policies” governing a health sector during a given period of time. Therefore, countless, dispersed decisions shape a specific way of running operations.

Policies evolve over time, under multiple pressures. In unstable situations, this evolution may accelerate. Due to sudden turnarounds, policy processes may be reverted. As the crisis deepens, the policy frame that previously governed a battered health sector may melt down. Unwritten working methods, usually passed on by senior colleagues to junior ones, are particularly exposed to oblivion. Newcomers ignorant of practices enforced before the crisis may accelerate this trend. Against this disrupted backdrop, policy documents become the sole reference available to actors, who may vocally complain about their absence or advocate for their development.

The policy-making environment

During protracted crises, virtually all factors conspire against effective policy-making. The state authority is contested, top managers are removed from their posts or move to other jobs, the public sector is crippled, instability and uncertainty discourage long-term initiatives, the information base is poor, actors multiply and are replaced, memory is weak, the policy discussion easily takes political overtones, and accountability and transparency are difficult to enforce. Unsurprisingly, documented examples of successful policy-making practice are scarce.

The health sector is part of a broader picture, which affects the choices made within it. For instance, free market, new public management, and decentralization are all part of worldwide processes that impact on the sector according to political and economic rationales not necessarily desirable from the health sector’s exclusive point of view (Reich, 2002). In the political deals between governments, rebels, UN agencies, donors, development banks, private companies and providers, foreign armies, and peacekeepers, important decisions that affect the health sector and shape the decision space of its actors are taken. As in a true theatre, the actors on the crisis stage must conform to a certain extent to pre-written scripts, obey the instructions of directors and producers, and take into consideration the reaction of critics and audience.

“The idealised ‘strong state’, with its functioning Ministry of Health firmly in control of policy-making, resource allocation and regulation of the sector, is increasingly absent

in many parts of the Third World. Instead, many developing countries, particularly in Africa, are characterised by states which lack the capacity, and in some cases the political will, to function as sovereign states.... The weakness of public policy in these countries, together with the current preference of officials aid organisations for policy-based lending ... means that the locus of health-policy making is increasingly internationalised – with decisions regarding major elements of the content of health policy in recipient countries frequently being made in Washington, Copenhagen and London, rather than in national capitals ... ” (Lanjouw, Macrae and Zwi, 1999).

The health sector itself is often the object of political bargaining, as in Angola, where the minister’s post was given to the rebels, as part of the negotiated settlement of that conflict. Health, often perceived as a technical field of limited political significance, may count among the areas where weakened governments are more amenable to concede grounds. Further, the health sector may offer to former rebels the first experience of formal governance. And at the end of a liberation struggle, healthcare delivery may be used to demonstrate the commitment of the new rulers to social welfare and to win “hearts and minds”.

The policy discussion is often kept within a narrow circle of health professionals, who may be remarkably unaware of the influence of political, economic, legal and administrative determinants on health developments. Health officials from the MoH, health international agencies and NGOs are joined by health authorities from academia, business or professional bodies to debate the shape the health sector should assume. The broader country context, and the decisions being taken that strongly impact on the health arena, are reluctantly if at all considered, and only as constraints to be overcome or bypassed. Health policies resulting from this inward-looking process are unlikely to be enforced.

Common examples are formulating human resource policies at odds with civil-service provisions, conceiving investment plans without adequate financial backing, and adopting decentralizing measures in isolation from state administration settings. Calls aimed at involving key decision-makers external to the health field in the health policy discussion, and negotiating with them mutual commitments towards the policies under discussion, are likely to fall on deaf ears. Breaking the self-imposed isolation of health professionals is nonetheless necessary, in order to conceive realistic and enforceable health policies.

The health policy formulation process is often fractured within the same country, mimicking the cracks that shape the aid industry. In Liberia in 2006, many health policy streams were recognizable. While the MoH was busy formulating its own health policy with the support of USAID, the European Commission (EC) and WHO, the Poverty Reduction Strategy process produced a paper whose health chapter presented no identifiable linkages to the work done by the MoH. Furthermore, the UN Common Country Assessment, finalized in the same year, included a health section apparently unrelated to the two products mentioned above. And none of these documents took adequate stock of the health component of the Joint Needs Assessment formulated only two years before.

Reviewing stated policies

Whereas troubled health sectors are usually starved of resources and capacity, they may be crowded with policy advisers and flooded with policy documents.

“Both economists and health policy analysts tend to provide detailed prescriptions on what should be done, but without clear instructions on how to do it and without good explanations of why things go wrong” (Reich, 1996).

The vacuum generated by the governance crisis motivates new players to enter the policy formulation arena. Countries in transition undergo changes in institutions, leadership and public expectations. Windows of political opportunity may open and

policies previously discarded as undesirable or unfeasible may become again worthy of consideration.

Given the political nature of policy-making and the uncertainty affecting all actors – but particularly domestic ones – during a crisis, the overcrowding of the field induces in many cases the non-implementation of competing policy proposals, or the implementation of some disconnected components backed by strong parties. Once these discrete components have reached completion, understanding the original rationale behind certain decisions may be impossible.

The review of the health policies formally guiding disrupted health sectors may identify several – not mutually exclusive – patterns:

- Policies may be old, their formulation dating to before the crisis. Their enforcement may have ceased a long time ago. In very protracted crises, punctuated by periods of respite and deterioration, policy documents may cyclically appear and disappear, as well. They are shelved during an outbreak of hostilities, to be retrieved, sometimes with minor changes, years later, with the opening of another window of hope. Old policies in new clothes, but already irrelevant to the country's changed conditions, may be vigorously advocated and even be formally adopted.
- Official policies may be patchworks of sub-sector components, often formulated by vertical programmes, poorly integrated into a consistent framework and neglecting important areas. In these cases, most actions are dubbed as “priorities”. No clear system direction is recognizable and crucial flaws affecting the sector are neither recognized nor addressed.
- Policies may have been sketched under pressure, because of the sudden opening of unforeseen opportunities and with the aim of reducing the damage done by the chaotic activities of international actors, as in Kosovo (Shuey et al., 2003) and Timor-Leste (Tulloch et al., 2003). In both cases, aid agencies played a dominant role in policy formulation.
- A new health policy may be formulated by new rulers eager to affirm themselves, therefore as a political gesture and a break with the past. The new health policies are not necessarily more realistic, nor more adapted to country conditions, than the old ones. Frequently, the new policies are formulated in line with international expectations, in order to project abroad a positive image of the health sector, and to gain external support.
- Policies alternative to the national ones may have been formulated by groups aspiring to self-rule or to nationhood, such as in Southern Sudan in 2002. In these cases, their political significance usually outweighs their technical contents. Due to this feature, holding a frank and lucid debate about their merits is usually hard.
- In some instances, policies have been blueprinted from international models by outside experts brought in by aid agencies. Their lack of contextualization is usually patent at first sight. Alternatively, uncontroversial policies are formulated in vague terms, in such a way that they become useless as guides for action. In contested settings, technical issues, less prone to spur controversy, tend to prevail over sensitive ones, despite the higher relevance the latter may have for sector development.
- Policies may have been imposed on the recipient state by the aid community, sometimes as part of a broader package of external assistance. Some agencies, such as the World Bank, are often willing to take the initiative of spearheading the introduction of new policies, usually following the prevailing free-market orthodoxy.
- Idealized constructions detached from reality are sometimes formulated by prominent insiders. Given the reputation enjoyed by their authors, these policies

may be kept in high esteem by local officials, despite their overambitious goals and patent technical drawbacks.

- Policies have been indigenously developed, sometimes with external support, over a long time, as in Mozambique in 1990–1992 (Noormahomed and Segall, 1994) and in South Africa before the accession to power of the democratically elected government in 1994.

Some policies are the result of a mix of external advocacy and funding pressures and of emerging domestic interest groups, such as the introduction of legislation on abortion and the supply of antiretroviral drugs for HIV/AIDS. Power is the fulcrum around which policies are conceived and introduced or, conversely, withheld.

- Some policies are mere instruments of *realpolitik*. For example, the devolution of responsibilities for resources and decision-making (including the collection of revenues for financing public services) to local authorities may be a way of shielding the central government from political pressures and criticism and relieving its budget of some burden.
- In some cases, no clear policies are recognizable, as in Uganda in the 1970s and 1980s. “... *for years policy was established by decree, no one knew what health policy really was, over the years it had become an ad hoc collection of declarations, rather than an integrated, legal framework for government action. ... Policy in this period might be described as being in a state of free fall*” (Macrae, Zwi and Birungi 1994).

In many situations, several of these patterns (sometimes backed by competing donors) coexist. The more the government is insecure and hesitant about the direction to take, the more likely there will be a proliferation of policy proposals. Many of them may even be endorsed, without being enforced. Unstable, “mosaic” policy-making is often the prevailing feature, with alliances of actors converging on specific policy issues possessing special appeal at a given point in time, to dissolve quickly as their attention is captured by other concerns. The quick turnover of actors and the fast-evolving environment make this process of clustering and dispersion of efforts erratic and turbulent. In the long run, cyclical patterns may become recognizable, with crucial issues gaining centre stage for a while, then losing favour (perhaps because of their intractability), to resurface again years later. Ignoring the work already done, newcomers regard these debates as exciting novelty. Weak memory encourages new rounds of trial and error. Forgotten lessons learnt are rediscovered afresh. Old mistakes are made in new ways.

Sometimes, the competition among alternative policy proposals looks futile. Given the dysfunctional environment, the policy eventually chosen stands little chance of getting implemented, anyway. Participants would gain by concentrating on the structural flaws that cripple the sector, rather than arguing in favour or against policies destined to remain on paper. “... *bad policies are only symptoms of longer-term institutional factors, and correcting the policies without correcting the institutions will bring little long-term benefits*” (Easterly and Levine, 2002).

Scared by the possible implications of tackling sensitive issues with resolute policies and made insecure by blurred and unstable contexts, actors are prone to postpone hard decisions. This understandable choice is, however, a decision in itself: that of denying guidance to the health sector, which will move forward in any case. A stunning example of this “hands-off decision-making” is visible in virtually all disrupted health sectors: the reluctance to introduce formal charges for health services, coupled with the inability to find alternative funding sources, has led to the widespread unregulated charging of impoverished users, in the absence of any safety net for the poorest ones.

Policies are sometimes conceived with the genuine motivation of correcting flaws

and improving the situation. However, the motives behind the formulation of health policies and plans are not necessarily related to their stated desired effects. A policy may also be regarded as a negotiating tool in relation to aid agencies, as a way to gain political recognition, as a device to postpone decisions (during its lengthy formulation), as a way to disguise the powerless status of health authorities, as a tactic to appease powerful lobbies, as an obligation towards far-away bosses within international agencies, or as a way to justify a job position. Lip-service health policies may have important consequences (such as access to debt forgiveness), although these may be unrelated to health service delivery.

True Story No. 6

Policy studies in Angola in the 1990s

Over the 1990s, the dearth of reliable information and the stalling of the policy process that affected the Angolan health sector motivated the commissioning of several important analytical studies, backed by three special implementing units: the *Health Transition Project*, financed by DFID and managed by WHO; the *Health Sector Project*, financed by a World Bank loan and the *Post-Emergency Health Project*, financed by the European Commission. These units were endowed with substantial resources, run under special management arrangements, and headed by highly-qualified and experienced Angolan cadres, who had previously held top-level positions within the MoH. The three units were all linked to the MoH (Planning Department), under different settings. Their mutual relationships depended on the goodwill and common sense (which luckily abounded) of their managers. Informal collaboration prevailed over structured links.

The mentioned studies provided the basis for the formulation of important policy proposals, regularly considered, sometimes discussed, but never implemented. Lack of political clout by successive Ministers of Health, uncertainty about the conflict's eventual settlement, internal disarray within the MoH, the intimidating size of the problems to be addressed, a shortage of technical skills to implement the proposed measures – all these factors may explain this policy paralysis.

The absorption of this rather impressive policy work improved when two special implementing units closed down, because of the expiring of their funding lines, and the surviving one remained the unchallenged focal point for policy analysis and formulation. The favourable evolution of the Angolan crisis inspired a more proactive attitude within the MoH, and some of the measures suggested by the studies carried out in the 1990s, officially endorsed, started being implemented. Despite peace and stability since 2002, and a dramatic improvement of public financing, progress was mixed. For a discussion of one of these initiatives, an ambitious Human Resource Development Plan, see *True Story No. 17*.

Policies may be under way without the backing of corresponding documents, because they respond to vested interests, better served by quiet, low-profile moves. The supporting lobby, aware of the resistance that might be induced by explicitly presenting certain measures to the broad audience of policy actors, may prefer to act quietly in the background. This is the preferred approach of the drug industry, of the hospital lobby, and of the professional associations.

Matching stated policies to field realities

Given the multiplicity of stated policies, usually supported by different parties, which is found in protracted crises, a review of their enforcement is needed. Attention must move away from policies on paper and concentrate on those policies that are actually shaping the health sector. The crucial step in policy analysis is to verify whether a given formal policy is actually being implemented and by which actors. This implies:

- a. *The identification of the problem/situation that has triggered the formulation of a new policy.*
- b. *The identification of relevant baseline indicators that offer a measure of the situation the policy is supposed to address.* Admittedly, finding hard quantitative indicators for some policies is difficult and carefully chosen proxies must be used instead. Unintended effects may emerge too and need to be assessed. The presence – or, conversely, the lack of – proposed indicators in policy documents offers clues about the depth of the scrutiny to which the contents of the policy and its implications have been submitted during its formulation.
- c. *The identification of the concrete actions under way or in the pipeline, intended to implement the policy under study.* Additionally, the adequacy and practical feasibility of the chosen measures must be assessed.
- d. *The comparison between the size of the problem to be addressed by the policy and the resources allocated to the actions intended to implement the policy* gives a rough measure of the level of commitment existing in relation to a policy and of the robustness of the analysis behind it. Policies are often adopted without seriously attempting to estimate their resource implications. The full cost of enforcing a policy is often neglected, or given only cursory attention. Even when adequate resources are made available (usually by donors), capacity constraints or inadequate political clout may doom a policy sincerely endorsed by actors.

Unsurprisingly, few policies withstand the summary test described above (not only in troubled health sectors). In a fragmented situation, policy analysis often gives fragmented results. For instance, a given policy may emerge from the aggressive lobbying of a certain international agency. A MoH department may endorse the policy in order to access the agency's resources. Other actors may be utterly disinterested in – or oppose – the policy. "Commitment" is likely to be of uneven quality. Policy analysis in this situation changes in nature, becoming the study of the systemic effects of the multiple and disconnected policies, some stated as such, some quietly operating underground, that are shaping the health sector. The study of long-term patterns, recognizable trends and driving forces may provide precious insights about the evolution of the health sector over time and the direction the sector is likely to follow, if no action is taken.

The study of the main flaws affecting the sector offers indications to assess whether existing policies address those flaws, i.e. whether the policies are appropriate to a given situation – present and forecasted. For instance, in a situation of very limited access to health services, to give precedence to better quality of care over its expansion seems questionable. Along the same lines, in a very inefficient sector, the dramatic increase of funding levels through a massive loan, not associated to measures to correct inefficiencies, would leave the main problem unaddressed and possibly worsen the situation.

Policies may look sound but leave unaddressed crucial shortcomings, due to their sensitive nature, to inadequate information, or to limited capacity. This has been the case in post-conflict Mozambique, where key issues such as cost-sharing and regulation remained at the margin of the policy agenda. Assessing relevance and appropriateness of existing policies means going beyond their merits, to check whether the policies absorbing the bulk of efforts and attention really address the

most important problems. In the absence of a thorough and comprehensive sector analysis, this is very unlikely. Given the time lag passing between the endorsement of a policy and its materialization, its appropriateness to future sector and country developments is equally important. In fact, the end of a crisis may usher fundamental political, economic and institutional changes, which will condition the life and the impact of the chosen health policies.

Policy contents and resource allocation patterns

Policy-making is tightly linked to planning, thus to priority setting, and priority setting in health sectors starved of resources consists mainly of renouncing activities whose implementation is beyond existing capacity. The most common pattern recognizable in weak (not necessarily “disrupted”) health sectors is the proliferation of priorities, progressively endorsed to appease and co-opt old and new actors and to tap additional resources. The existence of too many priorities implies no true prioritization, which may result in the spreading of scarce resources and capacity across multiple activities, and in the inadequate implementation of all of them. Alternatively, decision-makers may decide to pay lip service to policy documents and make allocations according to their true, not stated, priorities. A clear consistent direction is rarely recognizable as the result of this fragmented, escapist decision-making.

To study broad resource allocation patterns is therefore much more instructive about the true priorities upheld by managers than to review policy papers. But to throw light on true priorities may be impossible, due to inadequate information. Questionable policy statements may go on unchallenged for a long time. For instance, estimating the proportion of resources attributed to the central MoH may be very difficult, given the shortcomings of certain information systems. Thus, whether a decentralization policy is truly supported by reallocation measures may remain an unanswered question.

Lack of policy implementation does not necessarily mean lack of commitment. In some cases, failure is better explained by the disproportion between the ambition of the policy and the resources and capacity available to implement it. In a disrupted health sector, to assess the feasibility of competing policy options is always difficult. Experience from abroad, by helping local actors to gauge whether a given policy stands a chance of success in their specific situation, would be invaluable. Too often, instead of conveying unbiased assessments of the results attained worldwide by following a given policy, outsiders play the apostles of fashionable approaches, while hiding the difficulties met elsewhere in their implementation.

Features of strong policy proposals

When well thought-through policies, particularly those that help to make sense of chaotic environments, emerge, they may be warmly welcomed by some players, who form a critical mass of supporters committed to their implementation. This has been the case in Mozambique during the first half of the 1990s, and later in Kosovo. Strong, convincing policies may find supporters along the road, even when they lack the backing of the most powerful players. Allies may emerge from unexpected quarters. An appealing policy, able to attract genuine support, has some of the following main features:

- It is inspired by an intimate knowledge of the context and a systemic, long-term, realistic approach;
- There is evidence from other contexts that it has produced the results that are expected in the present environment;
- It frankly admits the weaknesses and the distortions that plague the sector, proposing sensible ways of overcoming them;

- It is explicit about preconditions and risks, the measures to be introduced, the obstacles likely to be encountered, and the relative prioritization of the proposed actions;
- It tries to anticipate processes and events, rather than trying to mend those that already took place or are under way;
- Its design is technically sound and recognizes the resource and capacity implications of successful implementation;
- It is formulated in terms understandable to different actors and is widely disseminated;
- It tackles issues perceived as central to concerned actors;
- It recognizes the power games going on at the country and sector level, tries to strike workable trade-offs and look for political alliances.

Sustainability of chosen policies

Sustainability, a key concern in the development arena, acquires special connotations in protracted crises, which are by definition unstable. As most troubled countries depend heavily on external support, they are unsustainable in political, economic, and even social terms. Hence, assessing the sustainability of a chosen health policy or considering alternative policy options in this respect means taking a long-term perspective and forecasting whether, after many years of healing and recovery, the policy until then implemented with external support will still be valued by internal decision-makers to the point of shouldering it in full.

Too often, sustainability is regarded as depending only on the availability of adequate internal resources (predicated on economic and fiscal recovery), which is reductive. Political stability, domestic implementing capacity, competing priorities for capacity and resources, cultural preferences, and external influence on domestic events all play a role in determining whether a policy will be sustained in the long run.

Countries endowed with substantial mineral wealth, such as Angola or Iraq, might become financially sustainable in a shorter time-span than Afghanistan or Somalia. However, the negative repercussions of external shocks, political disarray, mismanagement and corruption, could all undermine their financial advantage. As it is difficult to build capacity at home and even more so to import it, well-financed policies may fail to translate into tangible results for a protracted period after their introduction.

On the meaning of sustainability in a crisis environment, see also *Module 6. Analysing health financing and expenditure*.

Formulating a new health policy at the start of a transition from war to peace

In a variety of health sectors commencing transition, health authorities have felt compelled to formulate comprehensive health policy documents in order to guide the decisions of concerned actors. While investing in formulating a new health policy is understandable, several considerations militate against it. In fact, policy-makers are absorbed by pressing management tasks. The information available to them is frequently inadequate. Policy debate is fragmented across institutions, venues and processes, with many decision-makers lacking a deep knowledge of the health systems supposed to be governed or reformed by the policies that they are formulating. Furthermore, a large investment in policy-making at a time when capacity is characteristically scarce carries a high opportunity cost. There are simply too many awkward dilemmas to be considered by policy-makers at the start of a transition process, to allow for the formulation of a health policy able to address most of them in a coherent and straightforward way. Policy-making is first and foremost *muddling through*.

Objections notwithstanding, many health sectors in transition have formulated new health policies by relying on outside consultants hired by aid agencies. This approach betrays a fundamental misunderstanding of the nature of the policy process, which is inherently political. No expert technical support can relieve health authorities of the political implications of the policies that they endorse. Conversely, no glossy policy document will give health officials the political clout to enforce the chosen policies. Unsurprisingly, these policies hastily written by outside experts, despite the ritual reference made to them in the prevailing discourse, have in most cases remained solely constructs on paper. Or, due to the vagueness of their formulation, they have allowed participants to proceed unrestrained with their own specific agendas, while claiming they were enforcing the official health policy.

Should a health sector in transition forfeit the formulation of a new health policy, in light of the considerations sketched above? Perhaps the wisest line of conduct is to avoid a large investment in policy discussions, particularly of poorly-understood issues, where mistakes could be made with serious consequences. Interim policy guidelines addressing key issues (considered as such according to the limited knowledge available) may help officials in their decisions, and evolve as experience is gained and new elements are clarified, within and outside the health field.

To be truly helpful, interim policy guidelines must be clear about the proposed measures and their limitations. Furthermore, they must spell out the implications of the issued policy, the problems likely to arise and the courses of action to be considered in order to tackle those problems. Interim policy guidelines should be frequently revisited and updated in light of the lessons learnt in enforcing them, in an incremental strengthening of policy contents and expansion of their scope. Staying the course in such a process is challenging, particularly for health officials continuously distracted by pressing concerns, and by new policy proposals tabled by development partners. The insights provided by policy analysts may greatly help policy-makers, as long as the latter are given the time to consider them in depth and in a fairly unbiased way.

For examples of health policies formulated during transition processes, see the following:

- Kosovo UN Civil Administration. Health and Social Services (1999). Interim health policy guidelines for Kosovo and Six month action plan. Available online at: www.who.int/disasters/rep0/5635.doc, accessed 22 November 2008 (referred to in *True Story No. 7* and studied in *Exercise 5* in *Module 15*).
- Government of South Sudan. Federal Ministry of Health (2007). Health Policy for the Government of Southern Sudan, 2006-2011. Available online at: http://ghiqc.usaid.gov/tasc3/docs/650-09-313/annex_a.pdf, accessed 9 October 2009.
- Government of Liberia. Ministry of Health and Social Welfare (2007). National health policy. Available online at: www.liberiamohsw.org/Reports_and_Publications.html, accessed 22 November 2008.

Actors: roles, perceptions, agendas

Documented experience in different war-affected countries shows a recurrent pattern, as development partners change roles over time. During the emergency period, UN agencies play expanded and visible roles, interfacing between donors, who avoid a direct engagement with a war-torn country, and healthcare providers, such as NGOs. As the situation gradually stabilizes, the new government establishes itself, assumes responsibility and sets up recurrent budgets. During reconstruction, major donors and development banks provide sources of investment capital. Later, bilateral donors may move to the direct financing of state budgets.

The perceptions of actors tend to aggregate around two extreme patterns. To insiders, the crisis is unique and emotionally charged. It is “their” crisis. Damage control is

True Story No. 7

“Big-bang” health sector reform in Kosovo, 2001–2006

The 1999 conflict, by ending Serbian rule and placing Kosovo under a UN interim administration, ushered a period of rapid change in the former Yugoslavian province. The sudden inflow of outsiders and external resources, the expected transition to a market economy integrated into Western Europe, and the dire inheritance of years of neglect and civil strife created a propitious environment for radical initiatives.

The health sector was in severe disarray, with its public arm derelict, and the parallel services developed by the Albanian-speaking opposition badly damaged by violence. Most qualified ethnic Serbian health workers had left. The disparate actions of well-funded newcomers acting in isolation were laying the seeds of an incoherent, inequitable and unsustainable health sector. A health policy put in place early in the transition and endorsed by key actors was seen as an instrument to counteract this trend.

In the absence of a Ministry of Health, WHO took the lead of the policy formulation process. Within few months after the end of the war, Interim Health Policy Guidelines were introduced. The cornerstone of the new health sector had to be a family medicine network supported by strong referral capacity, within a decentralized management framework. The redundant healthcare network had to be trimmed down. The expansion of services had to be contained within affordable levels. Private practice had to be properly regulated. An essential drugs programme had to be introduced. The reformed health system would be equitable, non-discriminatory and sustainable.

The rationale for such an ambitious reform package was compelling. The old health system was considered beyond repair, and in any case outdated, inefficient and unsustainable. Pushing reforms consistent with Western European models was seen as a logical step forward. Donor assistance had expanded the resources available to implement the proposed reforms. And the political transition would weaken the resistance of interest groups to change. In the view of reform enthusiasts, such a unique opportunity could not be missed.

Moving ahead with such speed had its own drawbacks. The information base was inadequate, the reform package was scarcely innovative, and local participation was limited. The unclear political, legislative and financial prospects of the province compounded matters. Furthermore, indigenous capacity to manage the reform process was insufficient. Critics feared that the reform package was too much, too early for Kosovo.

A reviewed Health Policy, incorporating local inputs, was issued in 2001. In the same year, an elected government inherited the health reforms launched by the UN two years before. The results of the reform process are so far mixed. Key reform elements effectively introduced include the establishment of family medicine capacity, the formulation of new job descriptions and training programmes, the respect of budget constraints in recurrent expenditure, and the restoration of many health facilities (Shuey et al., 2003; Campbell, Percival and Zwi, 2003).

Other elements of the reform package have lagged behind. The unregulated privatization of health care has progressed. Private out-of-pocket financing is prevalent. Hospitals remain prominent providers of care. The bloated workforce has not been downsized. Support staff remains in excess. The devolution of the responsibility for primary care delivery to municipalities has lagged behind. The appeal of a family medicine career on doctors remains feeble. The health system is inequitable and inefficient. Abundant donor funds have been released slowly and through intermediaries. Health services have become more ethnically separated. The reform process has been defined as an organizational success, as well as an attitudinal failure. The commitment of health authorities to health reforms is unclear. The feasibility of the reforms against the political and cultural landscape of Kosovo remains to be proved (Ministry of Health, 2004).

often the dominant concern. Solutions have to be found domestically, by patient experimentation. Lessons learnt abroad tend to be ignored or even rejected outright. Conversely, newcomers belonging to international networks tend to approach a crisis from the other end of the spectrum. They may arrive from other disrupted countries, bringing in, with the experience gained elsewhere, associated prejudices. What has worked in the previous crisis is aggressively replicated in the new settings. When contexts are radically different (an assessment which is by definition difficult to make for both insiders and outsiders), serious mistakes follow. In their pure form, both perceptions are likely to be fallacious. As crises tend to show recurrent as well as original patterns, successful approaches arise from a balance of sensitivity to context and international experience. To recognize variety as a common pattern of chronically disrupted contexts is a precondition to understanding.

Some indigenous actors may have developed a particular state of mind, shaped by the vision of an idealized pre-crisis past, when the health sector was supposedly performing well and proceeding firmly in its development. In this view, any possible problem presently affecting the sector is unquestionably a result of the disruption. Some of these individuals may have occupied important positions and lost them. Sometimes, they have lived abroad during long periods. Detached from the developments taking place in the country and the sector, they may have elaborated visions and plans based on that idealized past, which the crisis “stole” from them. These plans may be tabled during a transitional period, when the future of the sector is under discussion, and may become very popular among local cadres, because they respond in some way to the need, felt by every victim, of minimizing the pain inflicted by the crisis. The product of these elaborations may be rather elegant, due to the way they have been built, i.e. unimpeded by real-life hurdles. A capacity constraint, for instance, is rarely referred to, nor is the meagre financing basis likely to condition sector recovery. In the Democratic Republic of the Congo, the policy debate looked tainted by this perception (Ministère de la Santé, 2006).

Government (central and peripheral)

“Government” is a set of many agencies, institutions and individuals, moved by a variety of motivations. In troubled and contested situations, as new spaces open to actors, the multiplicity of interests is usually evident. Diverging perceptions and interests shape the action of different central government bodies, such as the ministry of finance, the civil service authority, the ministry of local government, and the ministry of health, all of whom have a say on events taking place in the health sector. Local authorities, such as provincial and district governments, play an important role, particularly in a situation where the conflict has severely undermined the power of the central government.

Despite the nominal power held by the legislature and the executive, the civil service, made up of the bureaucrats in various ministries, may have greater control over how (and whether) policies get implemented. Especially in contested political environments, politicians may change before the policies they adopt ever have a chance to be implemented, while civil servants generally stay in their posts, or move around the state administration. Due to their technical knowledge and expertise, civil servants may have a great deal of influence over the policies adopted by various ministers.

The MoH often falls low in the hierarchy of ministries, well below those of finance, defence, foreign affairs, industry, etc. As a result, it may be limited in its ability to lobby for a larger share of the limited government budget or to influence the agendas of other agencies with an impact on health (such as planning, agriculture, education, etc.). In addition, MoHs tend to host multiple interests, pushed by competing departments and lobbies. Within the MoH, some branches, such as the planning unit, may seek the horizontal integration of activities, whereas those in charge of service delivery, usually moved by narrow concerns, tend to act in isolation. MoHs are better

understood by considering them as communities of agencies pursuing different agendas, rather than as agencies moving in a clear direction.

During transitions marked by the cohabitation in government of previous enemies, the incoherence of the MoH may be patent. A minister coming from a rebel group, supposed to lead hostile top officials, who belong to the ruling elite in control of the state apparatus, faces unique difficulties.

Rebel groups

This area, difficult to study due to its political nature, has so far received little attention from both scholars and practitioners. The features of the health services provided in areas under the control of an opposition group depend on the territory and resources the group controls, the support it receives, its ideological posture, the priority it gives to social sectors, and the grip it exerts on the population.

In Mozambique, for example, RENAMO had only rudimentary health services, while its military elite reportedly received care from the South African army medical services. For political and ideological reasons, the international community decided not to intervene in RENAMO-controlled areas, barring limited activities carried out by the ICRC and a few other agencies. Conversely, in Angola, UNITA, more endowed with financial resources and relying on stronger internal and international support, managed to organize better health services, which received external assistance from different agencies. The same external support and international recognition applied to the Northern Alliance fighting against the Taliban in northern Afghanistan.

In Southern Sudan, where scores of NGOs and many UN agencies were active, the SPLM formulated health policies that reflected the overall political manifesto of the group. Their implementation has been limited. Reportedly, Eritrea stands out for having developed in wartime fairly structured health services, inspired by the political programme of the nationalist group.

Rebel groups of predatory nature are utterly disinterested in healthcare issues. They may take advantage of health assets when the opportunity or the needs arise, and exploit the security concerns of humanitarian agencies, as seen in Somalia.

Transitional (UN) authorities

Transitional authorities (TA) have played a high-profile role in certain post-conflict situations, functioning as an arm of the United Nations, as well as a government during the transition period. Two examples include the UN Transitional Administration in East Timor (UNTAET) and the UN Mission in Kosovo (UNMIK). In both cases, transitional authorities faced health systems that had been devastated by years of neglect, the targeted destruction of health facilities, and the rapid exodus of a significant portion of the health workforce. TAs managed to bring together insiders and outsiders to develop a coherent health policy, such as in the Interim Health Administration under UNTAET or the Joint Civil Commissions under UNMIK, composed of local and international professionals. Finally, TAs may enjoy a great deal of legitimacy, both among the local population and within the humanitarian aid community. Through the influence of major donors, both UNTAET and UNMIK were able to get most international NGOs to work within the framework of the approved health policy strategy.

TAs have many notable weaknesses when it comes to health policy formulation and health system rehabilitation. Firstly, the peacekeeping mission of the TA may conflict with the humanitarian and development mission of the health sector. TAs may also be hesitant to engage local actors, especially those affiliated with specific parties, for fear of appearing to endorse a single political group before the holding of national elections. Lastly, TAs, justifiably worried about the long-term accountability of their short-term staff, may centralize decision-making to the point where it becomes difficult to respond in a timely fashion to evolving field realities.

UN agencies

The *United Nations High Commissioner for Refugees* (UNHCR) is mandated to ensure international protection for refugees, and to find durable solutions to ease their plight. With almost 7,000 staff working in 116 countries, which host around 20 million refugees and other persons of concern (asylum-seekers, returnees, stateless persons, internally-displaced people and others), the agency is, together with WFP and UNICEF, a major humanitarian player. By providing food aid, health and nutrition care, shelter, water and sanitary facilities, education, clothing and essential community services to refugees, it plays a prominent role in the relief system. Much of this assistance is channelled through UNHCR's implementing partners, i.e. the government of the asylum country and NGOs.

Over the last years, the agency had to readjust its strategy and approaches to the changing context. Firstly, the generalization of crises, which often affect entire regions or countries, has led humanitarian actors, including UNHCR, to abandon the refugee camp paradigm, upon which much of assistance was previously planned and delivered. Secondly, the changed nature of complex emergencies has also forced agencies, including the UNHCR, to engage national authorities and quasi-state entities, at the expense of the operational principle of independence in refugee camp settings. This change has introduced a further challenge to agencies like the UNHCR and ICRC that have mandates for both assistance and protection, and need to balance activities in the two domains.

Given UNHCR expertise with mass movements of people in crisis situations, and the fact that IDPs are often in a "refugee-like situation", UNHCR has often provided protection and assistance, including return and reintegration when possible, to certain groups of IDPs. Following the 2005 review of the UN humanitarian response, UNHCR is assuming responsibility for protection (including return), camp coordination and emergency shelter under a UN system-wide response mechanism. This has been met by resistance from different agencies that fear the further growth of the role and resources of UNHCR.

The *United Nation's Children's Fund* (UNICEF). Supported by its fund-raising capacity, the autonomy enjoyed by each country office, its action-orientation and strong logistic support, UNICEF plays a prominent role in many protracted crises. Its supply arm, UNIPAC, which delivers generic essential drugs worldwide at fairly low prices, is in many crises one of the most important sources of medical supplies. The agency has been able to work in contested situations, such as Cambodia and Southern Sudan, where other agencies preferred to abstain, because of the uncertain legitimacy of recipient authorities. UNICEF's culture makes its interventions more devoted to field activities than to systemic analysis. Its programmes tend to be shaped by its strong corporate agenda and, sometimes, may be pursued apart from those implemented by aid partners. Collaboration with the recipient government is usually sought. Rarely interested in macro-policy issues, the agency is usually very active in spearheading programmes related to its mother-and-child-health mandate, such as EPI, nutrition, and health education. In emergencies, UNICEF has promoted special immunization campaigns, such as those launched against measles in Afghanistan and Iraq. The agency supports the realization of standard surveys (MICS, see *Module 2. Making (rough) sense of (shaky) data*) in most countries where it is active. Some UNICEF country offices maintain a rich resource centre, not always known or exploited by analysts or researchers.

The *World Health Organization* (WHO) has pursued a high-profile role in Afghanistan, Kosovo, Somalia, Sudan and Timor-Leste, with mixed results. Whereas the agency has been praised in Kosovo and Timor-Leste, in Afghanistan WHO has been vocally criticized by the government, and has seen its initially leading role taken over by other agencies. In past crises, such as in Mozambique and Angola, the agency was less visible, preferring or having to occupy operational

niches. Because of WHO's slow responses to changing field conditions, precious opportunities have been missed in several occasions. For example, in Mozambique, Angola and Afghanistan, the value of the analytical work produced by WHO experts went unrecognized by the agency, and useful contributions were not disseminated, nor used to inform WHO country action.

The agency is active in policy formulation of worldwide scope at HQ level. Its work at country level is preponderantly related to technical, disease-oriented issues, where WHO is traditionally strong. Its ability is more limited to field quickly and effectively experts in macro-areas such as policy, planning and financing.

Complex organizational settings, with a dispersion of power and responsibilities between headquarters, regional and country offices, partially explain the difficulties met by WHO, difficulties compounded by its over-extension to encompass systemic, programmatic and project areas. This has meant a lack of focus and an inability to prioritize interventions and efforts. In protracted crises, WHO's main comparative advantage is its reputation for technical competence, less affected by political considerations than other agencies. WHO may successfully play a central analytical and policy-making role, provided it detaches itself from implementing tasks, as suggested by Shuey et al. (2003) in their study of Kosovo.

The World Bank

The World Bank is a very active player in health policy formulation, showing a strong ideological thrust towards the promotion of standard health sector reforms, also in countries emerging from a crisis. The Bank has been active in past complex emergencies, such as in Mozambique and Angola, although not in a leading position. Its role may expand during a period of transition from war to peace, as witnessed in Afghanistan, the Democratic Republic of the Congo and Iraq. Indeed, the Bank's full engagement in a transitional country is a powerful signal of the expectations nurtured by the international community about the imminence of a settlement among hostile parties. It is also a way of legitimizing a previously contested government or an interim authority. The agency enjoys a legitimate reputation for technical excellence. Keen to remain and to be considered at the cutting edge of the development industry, the World Bank has gone through many organizational restructurings. However, its centralized, top-down and procedure-heavy nature seems very resilient to internal reforms.

The agency's strict reliance on cumbersome procedures, enforced from HQs, looks out of place in troubled environments, as experienced in Timor-Leste (Tulloch et al., 2003). The Bank's procedures, developed over the years to finance large investments, seem poorly adapted to unstable situations, where plans need to be continuously changed and the borrower's capacity to fulfil loan requirements is very limited. Country offices are usually slim, with limited autonomy, mainly devoted to liaison functions. The Bank's staff, aware of the agency's financial firepower and technical prominence, may be distinctively insensitive to context and indifferent to the work of less visible but better-informed aid partners.

Given the agency's working practices, its less than stellar performance in unstable environments is hardly surprising. Labour-intensive, extenuating loan negotiations, over-detailed programming quickly made outdated by changing conditions, implementation delays, rescheduling of activities, and loan extensions are commonplace. Similar drawbacks tend to emerge in relation to multi-donor trust funds, whose implantation may take years of strenuous efforts. See *Module 8. Studying management systems*.

The Red Cross Movement

The Red Cross Movement is composed of three components: the National Red Cross or Red Crescent Societies; the International Federation of the Red Cross and Red Crescent Societies (IFRC) and the International Committee of the Red Cross (ICRC).

The ICRC is the founding body of the Red Cross Movement, an independent and private institution, custodian of international humanitarian law (IHL). The ICRC, the oldest humanitarian agency, established in 1863, acts as a neutral intermediary in armed conflicts to ensure that the Geneva Conventions are observed by parties to the conflict; provide protection, medical care and material relief assistance to victims of the conflict, including civilians, and organize tracing services to identify and re-establish communication between family members who have become separated, as well as tracing and visiting prisoners. The ICRC cooperates with national societies but exercises its particular functions and usually organizes its own operations separately, through its own offices. The ICRC, which has usually a strong operational and logistic structure at country level, raises funds by issuing international appeals.

The ICRC has always and strongly advocated for a neutral and politically, ideologically and religiously impartial mandate and role, even when this approach has been challenged by abuses of human rights and violation of IHL. In order to safeguard its humanitarian principles, the ICRC has kept a secretive attitude. “... *that the ICRC remains poorly known attests to the past secrecy and poor communication policy of this important agency*” (Forsythe, 2005). Signs of change are recently emerging, with the agency progressively opening up to collaboration and information-sharing with other humanitarian actors.

The organization and the work of the Red Cross/Crescent Societies vary from country to country, but all those that have been officially recognized (by the ICRC) are bound by the founding principles of the Red Cross, in particular that of neutrality. Societies act as auxiliaries to national authorities, and concentrate on activities concerned with public health – including first aid and primary health care – and relief. They are required to act without discrimination on racial, religious or political grounds. In some countries the national society is assigned a pivotal role in the organization of relief operations. Many national societies maintain stocks of relief supplies.

The IFRC is the worldwide federation of the national societies, promoting and supporting humanitarian activities. When disasters occur, the IFRC can assist the concerned national society in assessing needs, mobilizing resources, providing training and organizing relief activities. The IFRC frequently issues international appeals for specific emergency programmes agreed with the concerned national society. Aid donated through the Federation is always transferred to the national society of the affected country. The IFRC may advance funds at the start of an operation, pending the receipt of donations.

Humanitarian donors

In the early 2000s, mounting awareness of the shortcomings of the humanitarian enterprise (fragmentation, unpredictability, inefficiency, disconnect between funding and actual needs) triggered a sequence of reforms, which are slowly modifying its functioning. In 2003, many Western donors endorsed the *Good Humanitarian Donorship* initiative. New financing instruments were created, like the *UN Central Emergency Response Fund* (CERF) and the *Common Humanitarian Funds* (see *Module 6* for details). In view of streamlining humanitarian activities and improving their effectiveness, the *Cluster Approach* was rolled out by the UN system. Some trends are becoming recognizable, even if humanitarian financial flows remain inherently erratic.

Overall, emergency-related funding substantially increased, both in real terms and as a share of total official development assistance (ODA). Since 2004, the growth of humanitarian funding has, however, slowed down. UN agencies have benefited the most from increased humanitarian funding. Globally, no significant improvement in predictability and needs-orientation of donor funding has been registered. Whether the reform package proves successful remains to be seen (Stoddard, Haver and Harmer, 2007).

The activities of the traditional Western official donor governments belonging to the

Development Assistance Committee (DAC) are fairly well documented. A variety of private and informal aid givers, fragmented and inadequately studied, coexists alongside DAC donors. In some contexts, like Somalia, these informal contributions are considered as substantial. Furthermore, new countries, like China, India and Saudi Arabia, are entering the arena of humanitarian donorship. The contributions of the donors acting outside DAC, which is composed by traditional donor governments, may account for up to 12% of annual official humanitarian assistance. Importantly, the behaviour of these emerging donors sets them apart from consolidated donor practice (Harmer and Cotterell, 2005).

Donor policies vary substantially according to domestic and/or international strategic objectives: only country-level analysis can shed light on donor roles. Personal leadership characteristics sometimes are more influential than the size of the agency, or its stated policy: in Mozambique, the Swiss Development Cooperation became the lead agency in the health sector and the engine of policy innovations during the transition from war to peace, partly because of its dynamic and risk-taking coordinator. See *Module 3* for a discussion of aid and its politics.

Donor archives and memories can be a valuable source of information and analysis. The sensitivity of some information (mainly that regarding financial issues) may, however, be an obstacle to their openness. Despite the difficulty, engaging the main donors in the analysis of sector policies is a crucial step that requires some preparation. A letter of accreditation or a simple telephone call by the head of a collaborative agency may open doors, files and mouths. See *Module 13. Producing a health sector profile* for additional details on obtaining information from donor agencies.

The European Commission's Humanitarian Office (ECHO)

ECHO, with an annual budget exceeding Euros 671 million in 2006, is the largest humanitarian donor (Harnmeijer and Meeus, 2007). The office channels European humanitarian assistance through many implementing organizations (68 in 2006). Short funding cycles, with an upper limit of 12 months for supported projects, constrain field operations, discourage long-term interventions, and – given the long duration of many crises – lead to frequent renewals, with added administrative costs. In countries where EU government members maintain a difficult relationship with recipient authorities and feel uncomfortable about providing direct support, ECHO has been used as a convenient alternative channel for aid. Towards the end of the long Angolan civil war, EU state members opted for scaling down their direct exposure and for relying to a larger extent on ECHO.

In the past, ECHO was criticized for its heavy and complex procedures, long delays in disbursements, and loose control on the implementing agencies it financed. ECHO was also seen as biased in favour of European crises, while paying marginal attention to the many “forgotten emergencies”. In 1999, 55 per cent of ECHO's budget was absorbed by the Balkans. “... *ECHO is still seen, even by many of its friends, as an organism that has yet to match potential fully with performance*” (International Crisis Group, 2001).

An evaluation of ECHO-financed health activities, carried out in 2007 by Harnmeijer and Meeus, found progress on several accounts. Africa received the largest share of European humanitarian assistance. Forgotten crises have gained weight in the ECHO portfolio. Health expertise has been acquired, while in-country presence has improved. The same evaluation, however, stressed that DG (Directorate General) ECHO was not exploiting in full its strengths. “... *ECHO is neither seen nor acts as a reference donor, and loses opportunities to influence developments in the humanitarian community and to increase its visibility.*” Brussels HQs were regarded as disconnected from field operations, and absorbed by administrative matters

(Harmmeijer and Meeus, 2007).

Thus, despite the registered improvements, the assessment issued by the International Crisis Group (ICG) in 2001 seemed still to hold. Learning from experience seems as difficult for ECHO as for partner aid and humanitarian agencies: *“Lessons are there, but they float, in different forms and at different levels, as their potential niche of application is ill-defined or goes unrecognised, or is simply not sought”* (Harmmeijer and Meeus, 2007).

Non-governmental organizations (NGOs)

The variety of NGOs makes any generalization about them insufficient and misleading. International NGOs, often of large dimensions, specialized in relief operations and operating in many countries, are prominent in protracted crises. Some NGOs, such as Oxfam and the Save the Children Fund, play an important advocacy role in formulating standards, such as the Sphere book and the Code of Conduct in emergencies. NGOs relying on substantive private funding may take outspoken and autonomous positions in political and health policy debates. NGOs largely dependent on government funding are quieter implementers of field operations; hence they are widely perceived as the humanitarian arms of the government(s) backing them.

Some complex political emergencies have generated dedicated NGOs, such as the Swedish Committee for Afghanistan, which owns and runs a huge network of health facilities and has accumulated a wealth of local knowledge and expertise.

True Story No. 8

Making an inventory of NGO projects in the Sudanese health sector

In Sudan, all NGOs were required to register with and report their activities to the Humanitarian Aid Commission (HAC), the highest governmental authority in the field. During a meeting about coordination and reconstruction held in Khartoum in February 2003, HAC requested NGO representatives to update the project portfolio maintained by it. After a few hours of work, the number of listed projects had trebled. Given that only NGOs with an office in Khartoum had attended the meeting, and that even their participation had not been universal, the true number of projects under way in the health sector had to be even higher than the one computed at the meeting.

Many international and virtually all local NGOs are smaller in size and often of a volunteer, amateurish nature, sometimes born out of the initiative of a single individual, with whom they may be identified. Informal working practices dominate. Horizontal links are also informal and uneven, with some NGOs working in isolation from the others. The activities carried out by many NGOs may remain totally undocumented.

NGOs may respond quickly and en masse to the availability of donor funds. Areas heavily sponsored by rich donors, such as child survival or HIV/AIDS control, may see true outbreaks of NGO projects, often encroaching on each other. Many NGOs have concentrated their attentions in specific areas, such as health promotion or physical rehabilitation of limb amputees, sometimes attaining high levels of technical expertise. This specialization may be country-specific, due to some unique local circumstances that oriented a particular NGO towards that activity. To assume for a given NGO permanent expertise in a specific area would be wrong in many cases, as key cadres leave and are replaced, and the NGO reorients itself accordingly. Mapping NGO presence and activities is a very demanding task, particularly in

overcrowded settings, such as Kosovo or Afghanistan. Beyond their sheer number, they may be spread over large territories where communication is difficult, adopt different working practices in areas such as budgeting and reporting, communicate in different languages, etc. Some of them are not used to interacting with partners or government and may be reluctant to disclose information about their activities. As many NGOs work in multiple fields, to obtain information exclusively related to their health activities may be labour-intensive and difficult.

Many recipient governments try to monitor, coordinate or control NGO activities, introducing a variety of mechanisms, such as accreditation, coordinating units, reporting requirements, periodic inventories, etc. The huge amount of disparate information generated by NGOs upon request of these schemes may prevent any sensible analysis, particularly at the aggregate level. NGOs themselves may feel the need to improve information and strengthen coordination among themselves, such as in Somalia, where the NGO Consortium publishes a rich annual handbook.

Overall, these worthy efforts seem in most cases short-lived and of dubious efficacy. The NGO world is intrinsically difficult to explore, orient, manage or regulate. Incomplete knowledge is the rule. Before launching another initiative to study the NGOs active in the health sector, the promoters (be they within government, UN agencies, donors or belonging themselves to NGOs) would gain precious insights by considering the large efforts expended and dubious returns achieved by previous studies.

Without solid information about NGOs or a willingness to launch a dedicated survey, only the broad patterns of NGO activity can be investigated. They include:

- *spatial distribution* across country, which is usually extremely uneven, with areas of concentration determined by security, operational convenience, political motivation. Spotting neglected areas may encourage newcomers to move to their support.
- *preferred areas of work*, which may be as diverse as disease control, CHWs, nutrition, health promotion, service delivery, emergency care, etc. In situations where NGOs channel a large part of the inputs used by the sector and deliver the bulk of health services, it is of the utmost interest to identify what areas have been neglected by them and whether other partners (the government, aid agencies) are in charge of these areas.
- *relationships with the public sector*. In many situations, NGOs prefer to support public health services with expertise, funds, staff, logistics or other inputs, whereas in contexts of state collapse they may autonomously run health facilities and deliver services.
- *nature, origin and affiliation*. In some countries, religious charities are very important providers of (mainly curative) health care. Local NGOs may thrive during a crisis. Many international NGOs belong to structured federations or alliances. Links with political players – such as rebels or foreign states involved in local politics – may sometimes be recognized, particularly with NGOs operating in contested areas or no-man's land. Governments acting as peace brokers may rely heavily on home-country NGOs, which may multiply in some situations.
- *main sources of funding*. Often, a variety of NGOs are backed by a few donors particularly interested in a country or a specific field, such as population control. The NGO composite (and in some cases informal) sources of funding are difficult to study.
- *presence in country*. In prolonged crises, such as in Angola or Afghanistan, some NGOs have developed long-term commitments. Conversely, in Kosovo or Timor-Leste, most of them were newcomers to the country and sector at the time the crisis began.

A matrix of NGOs, exploring their features along the lines sketched above, may contribute to a better understanding of the situation. For a discussion of humanitarian NGOs, see Stoddard (2003).

Professional associations

Given that human resources comprise such an important part of a health system, often making up the majority of annual recurrent expenditures, professional associations have a significant impact on most health policy processes. Until recently, health professionals, and especially physicians, have played a dominant role in health policy-making in most countries, with considerable control over the training and regulation of their own members, the types of services they provide, and, to a certain extent, the charges for those services. Whereas this situation began to change in the developed world, the medical profession remains very powerful in poor countries. The nursing professional association may also be very influential, due to its large constituency.

The role of health professional associations in post-conflict policy-making varies greatly depending on the context. In certain countries, entrance into a given health profession may have remained unregulated for many years, producing an oversupply of those health professionals and eroding their bargaining power with government. See *Module 10. Analysing human resources for health* for further details.

New actors in the humanitarian field

Humanitarian workers in Afghanistan and Iraq had to confront, and often to engage, new actors: the military and paramilitary involved in relief. The military had previously provided relief in other complex emergencies (e.g. Zaire in 1994, Macedonia in 1999), and in other situations had provided assets (e.g. transport) and protection to humanitarian workers. But in Afghanistan and Iraq, the role of the military and their civilian arms expanded. They have been active in defining humanitarian space (thus controlling the access to populations in need), in delivering stop-gap services (water, food, medicines), in repairing critical infrastructure (bridges, electricity, etc.), and in providing security and intelligence. Their superior security and logistic means have often allowed them to react to events in a quicker way than humanitarian agencies.

The new military activism has exposed the lack of clarity regarding the respective roles and responsibilities of the military and humanitarian workers. As soldiers take part in the war or in keeping a peace, civilian actors perceive the involvement of armed forces in relief activities as a violation of neutrality, one of the guiding principles of humanitarian assistance. Around the military, a new constellation of paramilitary bodies has emerged: they are fundamentally unarmed soldiers tasked to liaise and collaborate with the UN, NGOs and civilian authorities and to deliver direct assistance. They are not always easily recognizable as militarily-affiliated by the civilian population and humanitarian workers, and the resulting confusion adds to the uncomfortable relationship. Not only political and ideological variances are at stake: there is the concern that military relief operations are not economically efficient and can contribute to siphoning precious resources away from the traditional humanitarian field.

The reconstruction of countries emerging from a conflict opens huge market opportunities to for-profit organizations/private companies, or in Duffield's words (2001) for the *privatisation and marketisation of humanitarian aid*. This was particularly evident in post-invasion Iraq, where American commercial contractors received large sums for the rehabilitation of infrastructures and communications, often in competition with UN agencies and NGOs. In the health sector, civil works may involve substantial money. Also the policy shift towards outsourcing services can be exploited by private companies. Private, for-profit companies may have an important impact on policy-making, mainly when they are active in key areas and are commissioned to conduct studies whose results will be used for decision-making.

Understanding coordination

Because of the costs incurred by partners in pursuing coordination, the damage done by disconnected activities and the potential huge returns which coordinated action offer, understanding the interaction of players is a central component of a sector analysis. In fact, “coordination” is regularly invoked by every actor as a crucial condition to progress, and its absence considered as a major stumbling block. Nonetheless, the vivid portrait of the situation in the Afghan health sector sketched by Bower (2002) will sound immediately familiar to many seasoned practitioners:

“... the co-ordination ‘scene’ has been a familiar chaos of multiple, often ad hoc, meetings with poor agendas, inadequate constituency representatives, no feedback mechanisms, late or non-existent minutes, and disregarded action points – provoking equally familiar levels of paranoia.”

In disrupted settings, scarce resources are likely to be wasted, no player alone holds adequate information to make sensible decisions, overlaps are as common as gaps, and priority needs cannot be effectively addressed (and often cannot even be recognized). No party can control the crowd of autonomous players. As no consistent development direction can emerge from disconnected activities, *coordination is as essential as it is elusive*.

Unsurprisingly, participants perceive coordination in diverging ways. To some, it is an absolute waste of time, to be thoroughly avoided. Other players see it as a frustrating, expensive necessity, to be sensibly managed. Others perceive it as an opportunity to discuss business with partners, to be fully exploited. Finally, to many actors, coordination is a gratifying social activity, and a great excuse to stay away from the field – particularly when venues are located in capital cities and events take place in posh tourist resorts.

To achieve effective coordination is difficult, labour-intensive and expensive. Success greatly depends on context and actors. The variety of players makes the achieving of consensus demanding, results materialize slowly, communications are difficult, institutional memory is fragile and trade-offs are frequently required. Coordination carries high opportunity costs, as suggested by *True Story No 9*. Beyond a certain level (difficult to ascertain), by absorbing players to such a degree that implementation suffers, the pursuit of coordination may become counter-productive.

There is no blueprint for effective coordination. As a rule of thumb, when there are many forums and mechanisms, it is likely that none of them is very valuable. And often, informal approaches are more successful than formal ones. To increase the chances of success, partners should allocate adequate resources to coordination, diversify approaches, experiment with different mechanisms, build incrementally on the promising ones, and document successes and failures, as both teach useful lessons. The Somalia Aid Coordination Body (see *True Story No. 12* in *Module 8*), one example of effective coordination in a forbidding context, satisfies to a large extent the conditions sketched above. Nonetheless, its success materialized at a high cost, in terms of effort, incurred risks and related controversy.

Coordination is a term used in a loose way, taking different meanings according to perceptions, expectations and circumstances. Coordination can be pursued in several ways:

- by *Information/Inspiration*: coordination meetings, information resource centres, analysis and dissemination of relevant information, informal networking, development of realistic policies, strategies and plans. Often, in disrupted settings, where leadership is absent or contested, this sort of coordination is the best that can be achieved. Information sharing is often criticized as a weak form of coordination. In Afghanistan, it was observed that *“rather than information ‘sharing’, there has been much information ‘airing’ in which news of projects, problems or opinions are spoken but nothing is systematically done with the*

information, either in terms of collection, analysis, dissemination or action” (Bower, 2002). The effectiveness of information sharing is a function of the relevance and reliability of the information being shared. If this offers to players clues useful to inform their actions, to assess their roles and to programme activities, coordination may improve dramatically. Participants may become motivated to improve the information they generate and to disseminate it more effectively.

- by *Simplification/Rationalization*: reducing the number of players in a given area/field, concentrating the interventions of agencies on specific areas, by geographical zoning, adopting common standards, criteria and guidelines. In this way, meetings become of manageable dimensions, participants develop special interests and expertise in a given area, consensus is more likely to be achieved. The accurate mapping of the parties active in the health sector may lead to spontaneous redistribution, according to recognized overlaps and gaps. Rationalization implies also that coordination forums focus on appropriate levels of discussion, in a way that provincial issues are not addressed at central level, or the other way round. Simplification is not always welcomed by recipient authorities, who may prefer to diversify their dependency across multiple partners, instead of being bound to a few, or just to one.
- by *Effective/Efficient aid management tools*: pooling external resources, sector budget support, integrated programming, trust funds. See *Module 8* for a discussion of aid management tools and their respective merits. Also, see Pavignani and Durão (1999) for an analysis of the emergence of these instruments in post-conflict Mozambique.
- by *Monitoring and control*: establishing a coordination unit (inside the ministry of health, where this exists), formulating a code of conduct and a memorandum of understanding, elaborating operational guidelines for development partners, all classic tools widely used in the pursuit of coordination. Most MoHs are attracted by this approach, which gives formal leadership to them. In most cases, the true control of partners escapes the ambitions of government authorities. Actors may pay lip service to these arrangements and then proceed in their own way. In any case, as formal control mechanisms tend to absorb huge resources and energies, the incurred costs of establishing them may exceed the provided benefits. And formal controls, particularly when applied by weak state bodies, thwart innovation and initiative, and slow down the response to emergencies and unforeseen events.

The intricacies of aid coordination are better penetrated by going beyond the prevailing rhetoric of partnership, according to which donors, UN agencies, banks and NGOs, all share the same goals. *The diversity of these actors guarantees that their goals are diverse, often further diverging and changing over time as well.* This helps to explain alliances and conflicts. Disbursement, fund-raising, ideology, fashions, personal rivalries and relationships with headquarters are powerful pressures shaping the decisions of aid agencies, and encouraging them to move in very different directions. Unfortunately, these forces, often kept underground and not directly acknowledged by actors, may become understandable only in the long run, when the damage has already been done.

True Story No. 9

The transaction costs of coordination: negotiating a standard salary policy in Afghanistan, 2002–2003

A large proportion of health services was provided by NGOs, which directly hired their staff under different salary arrangements. A common salary policy was particularly appealing in the perspective of introducing contracting-out schemes in ten underserved provinces, with a budget of about US\$ 60 million for three years, funded by the World Bank. NGOs started discussing the standardization of salaries in March 2002, producing a Memorandum of Understanding (MoU), drafted by a small task force (TF) consisting of four NGOs. The MoU was presented to a national NGO health platform in August/September 2002, and accepted as the starting point of a transparent, consensual, and predictably long process.

The chosen approach consisted of: 1st) to have NGOs agree on a six-month process to design such a salary policy and to adhere in principle to the end product, 2nd) to draft the policy document, 3rd) to get the MoH, the UN authority and the donors to endorse it, and 4th) to obtain the adherence of most NGOs and to start implementing the scheme. It was assumed that peer pressure would progressively induce most of the remaining NGOs to adhere to a national policy supported by all other major stakeholders.

In September, the MoH endorsed such a process, in a high-level coordination venue that included MoH, donors, UN and NGOs. However, this decision was neither recorded in the minutes, nor put on the agenda for a next meeting. By that time, a new donor-MoH coordination mechanism had been put over and above the pre-existing one, in which no NGOs were seated, possibly because the new scheme was supposed to be replaced by a third MoH-donor-UN-NGO coordination forum. The preparation of the salary policy proposal was discussed in the new coordination mechanism, without being minuted or put on the agenda and without receiving a formal approval from the MoH. Poor administrative support, other competing urgent matters and frequent travels abroad of senior MoH staff caused the stalling of the process. The issue remained pending for months, despite the lobbying of expatriate advisers inside the MoH.

By January 2003, three donors were contacted for support. USAID refused, stating that free market forces ought not to be restrained, SIDA promised assistance, and the EC promised to look into it, later deciding to condition their support upon the MoH decision. During a Joint Donor Meeting with all major stakeholders, convened to discuss contracting-out agreements, the issue was raised again by the World Bank, which foresaw cost inflation if salaries were not regulated, essentially the same reasons that the NGOs had put forward in September 2002. The MoH acknowledged having been late to move on the subject "as they had not seen the importance of it", and urgently requested a prominent NGO to lead the drawing of such a national salary policy. A TF was appointed, with a one-month deadline requested by the WB and the MoH, under the agreement that the MoH would send a letter to all stakeholders, detailing their policy decision on this issue, the timeframe, the TF formal mandate and its leading person. Also, a donor health adviser had to join the TF.

The MoH agreed to all that, the issue was not minuted in the proceedings, and the letter was not written. In February the leading NGO wrote to the MoH reminding them of their promise. Meanwhile, the head of the MoH Planning Department had been asking if the TF had started working on the issue. The letter was eventually written in March 2003, i.e. one year after the beginning of the process, allowing the TF (which included a USAID health adviser) to start working on the policy.

Recommended Reading

Buse K, Mays N, Walt G (2005). ***Making health policy***. Maidenhead, UK, Open University Press.

An updated development of the classic Walt G (1994). *Health policy: an introduction to process and power*. London, Zed Books. This book, drawing on different disciplines and theories, helps the reader to understand the role of actors, as well as of political, economic and contextual factors in shaping policies and strategies that directly affect how a particular health system performs. The importance of understanding the processes through which policies are developed and implemented is discussed. Real-life examples illustrate the difficulties and intricacies of analysing the health policy process, at the same time pointing to issues that are relevant in an emergency context, such as the role and influence of international agencies and institutions in the policy arena. Activities, intended to stimulate the participation of the reader and to encourage the exploration of well-chosen topics, punctuate the text.

Harmer A, Macrae J, eds. (2004). ***Beyond the continuum; the changing role of aid policy in protracted crises***. London, ODI (HPG Report 18). Available online at www.odi.org.uk, accessed 3 September 2008.

Valuable review of trends in aid policy in protracted crises, which discusses the challenges posed to governments and international agencies by fuzzy environments, and the approaches and instruments emerging in response. UN agencies, IFIs and the US are discussed in detail. Essential reading for anyone involved in tracking and/or coordinating aid flows to a conflict-affected country.

Pavignani E, Durão J (1999). **Managing external resources in Mozambique: building new aid relationships on shifting sands?** *Health Policy and Planning*, 14:243–253.

Reduced version of the original research report, titled “*Aid, change and second thoughts: managing external resources to the health sector in Mozambique*” (1997). The evolution of emergency-oriented aid management tools and the emergence of new ones as the sector moved from a war to peace context, the obstacles met, the enabling factors and the results achieved are covered by the report.

Pfeiffer J (2003). **International NGOs and primary health care in Mozambique: the need for a new model of collaboration.** *Social Science and Medicine*, 56:725–738.

A vivid portrait of a Mozambican province immediately after the war, flooded with external resources and overcrowded with NGOs. The experienced reader will easily recognize “aid cowboys”, “aid mercenaries”, “seminaritis” and other familiar by-products of a doped situation, consistently found elsewhere, such as in Kosovo and Afghanistan, when a war-torn environment becomes a favourite intervention field for the international aid industry.

Stoddard A (2003). **Humanitarian NGOs: challenges and trends.** In: Macrae J, Harmer A, eds. *Humanitarian action and the “global war on terror”: a review of trends and issues*.

London, ODI (HPG Report 14). Available online at: www.odi.org.uk, accessed 3 September 2008.

Excellent review of the many natures of humanitarian NGOs, their evolution over time and the dilemmas they face as the humanitarian space is affected by remarkable changes.

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Annex 5 Establishing a Policy Intelligence Unit

Policy analysis is a long-term endeavour, built on the patient search for clues and insights, their collation into incomplete pictures, the validation of provisional conclusions by checking them against new pieces of evidence, and the detection of changes of direction as new events unfold. Usually figures, reports and inputs from knowledgeable informants are not scarce in troubled health sectors, but they are dispersed, heterogeneous, available at different points in time, and difficult to combine into sensible constructions – i.e. *facts*. The constant review, selection, adaptation and incorporation of these inputs into summary documents are very labour-intensive. Furthermore, the bulk of the information generated by discrete working units, such as MoH departments, local authorities, special programmes, aid agencies, and NGOs, is very detailed and narrow in scope, hence unhelpful to decision-makers with a countrywide perspective. To assist them, bits and pieces need to be assembled into summary pictures relevant to the making of aggregate decisions.

The under-use, both for analysis and policy-making purposes, of figures and specific information produced by the players active in the health sector is a pointer to systemic inefficiencies. *A permanent small team of senior analysts (a Policy Intelligence Unit, or Policy Studies Unit – PIU or PSU), combining expertise in public health, health management and economics, is more likely to succeed in bringing together the most important pieces of the information that are “floating around” than periodic intensive rounds of data collection and analysis* (likely to be carried out by outsiders). Furthermore, continuous cross-checking of the gathered data vastly enhances their reliability. Consistent and reliable historical series can be built in this way.

Given the high costs, the limited practical feasibility and questionable usefulness (because of the time-lag needed to complete them) of dedicated studies, the main source of the situation analysis elaborated by the PIU is the existing information, both generated by routine systems and collected for specific purposes. For instance, to monitor and assess their activities, NGOs collect an impressive amount of data, which may remain trapped inside their offices, and which if properly manipulated contribute to systemic analyses.

Establishing a scheme producing reliable aggregated information and offering to all stakeholders free access to it is invaluable during a crisis, and even more so in transitional contexts, when emergency-oriented organizations leave the country and are replaced by development agencies not familiar with the environment. A robust technical reputation (which can be gained only after years of good-quality work), no political, financial or partisan affiliation, a constant presence at central and field level, and the capacity to respond to the demands of different actors are the features needed to play a knowledge and resource role in full. Clearly, no bilateral agency, religious organization or lending body is well suited for this role.

Autonomy is a crucial feature of the PIU, which should be perceived by stakeholders and perspective users as a fairly unbiased observer, able to report its findings unconstrained by organizational discipline. Without this autonomy, it will be difficult for the PIU to win a reputation for technical authority. This aspect is always controversial and should be clarified before the PIU starts working. Another crucial feature is *stability*. This is needed to guarantee the uninterrupted monitoring of the health sector's evolution over a significant period, in order to identify long-term trends.

During a protracted crisis, the PIU may be sponsored by an aid agency, or by a group of them, provided that the supporting organizations are not too involved in operational and political issues, which might raise doubts about PIU autonomy and fairness. At the beginning, the functions of a PIU can be informally assumed by a few experienced analysts, who may work with different agencies (inside or outside the government). This would allow for experimentation, give the incipient PIU time to establish its reputation and make stakeholders aware of the benefits of such work.

Later, a formal arrangement can be introduced. An autonomous public body – such as a central statistics agency, a research institution or a university – may host the PIU. A multi-sectoral arrangement, with experts from different fields joining their forces, offers obvious advantages. As already discussed in other parts of this manual, a balanced mix of national and international experts is the ideal solution.

Contrary to commonly held belief, the MoH is not the ideal venue for a PIU expected to be unbiased, outspoken and fairly free from interference, particularly in contested situations, where the opposition mistrusts the government. The MoH must equip itself with its own analytical capacity, not only to support the formulation of its policies and plans, but also to react to results obtained by independent analyses. A productive policy dialogue needs to be fed by healthy evidence, which is unlikely to be released when it is unpalatable to the very institution that controls it. Even in the case of total transparency, outsiders will doubt the fairness of the conclusions reached by analysts belonging to an institution with the level of political and operational involvement of the MoH. The political opposition will challenge the government's policies and actions in any case. An analysis perceived as unbiased may be invaluable, not only to address technical issues within the health sector, but also to encourage open political dialogue and reconciliation.

The dissemination of solid information is as important as its gathering. The PIU's work must be easily accessible to all the concerned parties at any time. A resource centre is obviously needed, open every working day, with staff available to help the users and with reproduction facilities. A website represents a useful complement. The PIU should not only gather information, but also filter it, reducing the high level of noise – i.e. the useless, unreliable, misleading data that usually abound in troubled settings. Both resource centre and website should be very selective when choosing the documents to be retained and disseminated. Too many useless or flawed documents make the few valid ones inaccessible and absorb the scarce attention time of busy officials.

Once the reputation of the resource centre (physical and virtual) is established, it will feed itself with new materials, as users share with it the documents they possess, produce and wish to disseminate, and inform about their activities. A wealth of information can be collected at fairly low cost. The PIU's analytical capacity would be greatly enhanced by this spontaneous data sharing.

Possible outputs of the PIU:

Yearly:

- summary statistical information, relevant to countrywide decision-makers, paying special attention to resource allocation patterns, efficiency and equity.
- policy analysis reports, studying links between policies and resources, assessing policy outcomes, etc.
- a health sector performance report, condensing selected information and highlighting major trends. It should cover the health sector's global evolution.

Quarterly:

- Short studies of specific areas or issues (selected regional profiles, health network, human resources, drugs, financing, quality of care, etc.)

Upon Request:

Tailored information to address specific needs. Case studies. Detailed analysis of neglected areas. Evaluations.

Notes:

Analysing health financing and expenditure

Module 6

Contents

This module explores the crucial but intricate field of health financing and expenditure, first discussing ways to study the main sources of internal and external financing, the aggregate resource envelope the health sector relies on, the composition of health expenditure, and how to assess prevailing allocative patterns. Then, the many variables to be taken into consideration when forecasting the future resource envelope, and the practical ways to proceed in the formulation of sensible projections are reviewed. The module also includes a discussion of sustainability in war-ravaged health sectors and its policy implications. Throughout the module, particular emphasis is given to the many information traps that must be negotiated to reach meaningful conclusions about health sector financing and expenditure.

Annex 6a provides practical advice about carrying out a survey of external resources, usually a necessary if challenging exercise in every aid-dependent situation.

Annex 6b reviews concepts, terms and applications of cost analysis, another often-neglected but essential area for policy formulation, planning and management of healthcare activities, particularly in view of a recovery process.

Closely-related modules:

No 5. Understanding health policy processes

No 7. Analysing patterns of healthcare provision

No 8. Studying management systems

No 12. Formulating strategies for the recovery of a disrupted health sector

Introduction

Estimating the resources allocated to healthcare delivery is central to any serious analysis of the health sector, because they condition present patterns as well as policy choices (even when this is not explicitly acknowledged). Given its centrality to any debate, an estimate of the total resource envelope should be formulated as soon as possible in the development of a sector study.

“Resources” are conveniently expressed in financial terms, but vary in nature. A large portion of the resources consumed by the health sector are frozen – e.g. investment in physical infrastructure and human resources, or largely predetermined – e.g. salaries. The room for manoeuvre of decision-makers is narrower than commonly thought. Thus, the internal composition of health expenditure is as important as its total value. Looking at health expenditure implies the scrutiny of the health sector in all its components. *Modules 9, 10 and 11* look in more detail at the healthcare network, at the workforce and at the pharmaceutical area.

The analysis of health sector financing and expenditure implies the study of a variety of inputs, encompassing those expressed in the local currency, those in hard currencies from many countries, and those in kind. Official exchange rates are frequently distorted to such an extent that their utilization must be ruled out. The economy of a protracted crisis may have become “dollarized”, so that certain prices are already expressed in this currency. The salaries of the cadres employed by the public sector, however, are usually expressed in the local currency, which generates considerable difficulties when different classes of expenditure are brought together or compared. Whereas in-kind inputs can be priced and the value of other subsidized resources estimated using *shadow prices* (see definition below), no equivalent conversion is likely to be available for expressing salary costs, which are often left in nominal terms. Once converted into a common monetary unit, personnel costs may be dwarfed by other expenditures, such as investment or drugs. An additional difficulty is posed by inflation, which is often rampant in such situations. See *Annex 6b* for further discussion of these problems and of ways of dealing with them.

Definitions of selected concepts used in the module

Term	Definition
<i>Allocative efficiency</i>	The capacity of a system to distribute resources among competing activities, in a way that no alternative reallocation offers improvements in returns.
<i>Budget support</i>	A method of financing a partner country's budget through a transfer of resources from an external financing agency to the partner government's national treasury. The funds thus transferred are managed in accordance with the recipient's budgetary procedures.
<i>Capital expenditure</i>	The cost for resources that last more than one year, such as building, vehicles, computers, pre-service training.
<i>Commitment</i>	In accounting usage, commitments refer to a stage in the expenditure process at which contracts or other forms of agreement are entered into, generally for future delivery of goods or services.
<i>Commodity</i>	An economic good; one that is subject to ready exchange or exploitation within a market.
<i>Cost-sharing (or recovery)</i>	Receipt, by a health provider, of income from individuals or the community in exchange for health services.
<i>Deflation</i>	Removal of the effect of price inflation from expenditure amounts. This is achieved by typically dividing the expenditure amount by a price index, or deflator.
<i>Depreciation</i>	The reduction in value of a capital asset through wear and tear.
<i>Disbursement</i>	The release of funds to – or the purchase of goods or services for – a recipient; by extension, the amount thus spent. Disbursements record the actual international transfer of financial resources, or of goods or services valued at the cost to the donor.
<i>Discounting</i>	Adjusting for people's time preference, i.e. the fact that people generally want to have benefits today and defer costs to tomorrow.
<i>Elasticity</i>	A measure of the responsiveness of the quantity demanded of a good to a change in its price.
<i>Fiduciary risk</i>	The risk that funds are not used for the intended purpose, do not achieve value for money, or are not properly accounted for.
<i>Fiscal space</i>	The capacity of government to provide additional budgetary resources for a desired purpose without any prejudice to the sustainability of its financial position.
<i>Foreign aid (or foreign assistance)</i>	Financial flows, technical assistance, and commodities that are (1) designed to promote economic development and welfare as their main objective (thus excluding aid for military or other non-development purposes); and (2) are provided as either grants or subsidized loans.
<i>Fungibility</i>	The exchangeability of funds across competing expenditures.
<i>Health sector reform</i>	A movement aimed at reconfiguring health services, dominant in the 1990s, including the separation of the financing and provision roles, the development of alternative financing mechanisms, particularly user charges and health insurance, decentralization, limiting the public sector and encouraging a greater role for the private sector, and prioritizing the use of cost-effectiveness techniques.
<i>Inflation</i>	The process whereby the general price level is rising and money is losing value.
<i>Marginal cost</i>	The change in total cost that results from a unit increase in output.
<i>Market failure</i>	The failure of an unregulated market to achieve an efficient allocation of resources or to reach social goals.
<i>New Public Management</i>	The dominant paradigm to reforming public sectors across the world. Usually includes "deregulation of line management; conversion of civil service departments into free-standing agencies or enterprises; performance-based accountability, particularly through contracts; ... competitive mechanisms such as contracting-out and internal markets ... privatisation and downsizing".

Term	Definition
<i>On-/Off-budget funding</i>	Term denoting the capture (or lack of it) of some funds by the budget process, usually of the recipient government.
<i>Opportunity cost</i>	The value of the next best alternative forgone as a result of the decision made.
<i>Pledge</i>	A binding promise or agreement to do or forbear.
<i>Programme aid</i>	An umbrella term covering a range of interventions including budget support, debt relief and balance of payments support.
<i>Project aid</i>	Project aid is understood as earmarking of expenditures to specific activities or a discrete set of activities for which coherent objectives and outputs, and the inputs required to achieve them, are defined.
<i>Purchasing power parity (PPP)</i>	Technique aimed at reflecting equivalent purchasing power across countries. The converted economic figures are expressed in International Dollars, which inside each country should have the same purchasing power of one US\$ in the United States.
<i>Recurrent expenditure</i>	Costs that refer to inputs which last less than one year and are regularly purchased (e.g. salaries, medicines, fuel, electricity, in-service training, etc).
<i>Shadow prices</i>	Prices that have been adjusted for various reasons – including donations, distorted exchange rates, or subsidies – to yield an economic cost that better reflects the value of a given good.
<i>Structural adjustment</i>	Policies adopted by the IFIs since the 1980s, to enhance the external viability of the adjusting countries and the stability of the international financial system, consistently with the overarching liberal ideology that drives globalization processes. Macroeconomic objectives involve devaluation, public spending reduction, tax increases, and tighter monetary policy.
<i>Technical efficiency</i>	Maximizing output for a given set of physical inputs, or minimizing the physical inputs required to produce a given output.
<i>Transaction costs</i>	Any use of resources required to negotiate and enforce agreements, including the cost of information needed to facilitate a bargaining strategy, the time spent haggling, and the costs of preventing cheating by the parties to the bargain.

Note: Additional terms, extended definitions, as well as related sources and recommended readings are presented in the *Glossary* included in *Module 14. Resources*.

Sources of financing

The resources consumed by the health sector are provided by the government (central and peripheral), by state donors, by employers (directly or through insurance schemes), by charities, by private donors and by users of health services. In the case of rebel groups committed to healthcare provision, an additional source of “public” resources may be considered.

Public financing

Available data about government contributions are in most cases unsatisfactory. Upon preliminary exploration, budgets may be found incomplete, flawed, unreadable, or just missing. Striking contradictions between budget documents issued by different government agencies are commonplace. In certain cases, some of the main inconsistencies can be corrected through the patient triangulation of available sources, and a rough estimate of the government budget can be formulated.

Such information gleaned from official documents, although valuable, is misleading when a sizeable portion of government financing and expenditures is not captured by the budget process. This common flaw in public expenditure management (PEM) tends to worsen during protracted crises. Public funds prone to remain *off-budget* include: special funding controlled by government heavyweights (sometimes under charity guises); tax-free expenditures; project funding associated to external aid;

soft loans provided by development banks; security-related expenditures; murky transactions. Peripheral revenues retained by local authorities, such as user fees, rents and service sales, are often excluded from budgets published by central authorities. This drawback tends to be more accentuated in federal or decentralized settings.

Accounting disarray, commonplace in protracted crises, may explain the detected problems to a large degree. Technical weaknesses of administrative systems notwithstanding, the deliberate messing up of the books by managers wishing to avoid careful scrutiny of their operations cannot be ruled out in many cases. This tactic is not necessarily motivated by the pursuit of personal advantage. Sometimes, opaque accounting procedures are motivated by security concerns, as in the case of the procurement of weapons.

Even in the best budget documents, allocations may be misleading. Before they are accepted as meaningful, budgeted figures must be checked against actual expenditure, compiled after the end of the fiscal year. In fact, *escapist budgeting* is a strategy popular within cash-strapped ministries of finance (Schick, 1998). It consists of formulating a budget according to political imperatives, with the aim of showing to constituencies the government commitment to popular causes, regardless of expected revenues, or knowing in advance that a portion of the budgeted expenditure is unfunded. In this way, allocations to neglected regions or social sectors are inflated, often to appease donor demands (and to access debt relief). When actual revenues are insufficient to honour budget commitments, the treasury quietly proceeds to ration available funds over the fiscal year, according to its unstated priorities or erratic decision-making.

Public finances under *structural adjustment* are usually managed under a tight expenditure constraint, forbidding discretionary borrowing to supplement revenues. Given that the latter flow to the treasury with large fluctuations, periods of severe liquidity shortages, and consequently of interrupted payments, are common. The system, known as *cash budgeting*, makes respecting priority expenditures impossible, in this way further reducing the meaning of budgeted allocations.

When the budgeting process is affected by some or all of these distortions, only true health expenditure figures provide reliable clues about resource levels and allocative decisions. As expenditure figures become available with considerable delay, this assessment is necessarily retrospective. In this case too, a degree of opaqueness may be deliberately added to the budget documents by a ministry of finance anxious to disguise its cavalier budgeting practices.

Some PEM systems have decayed to such a degree that nobody, even within the inner core of the state machinery, controls the information needed to make sensible decisions, or knows for sure the actual transactions taking place in the public sector. When this is the case, not much reward can be expected from a careful study of the budget documentation. The analysis must fall back on rough aggregated estimates, generally the only information that can realistically be obtained or produced.

Cash-strapped public sectors are sometimes boosted by *budget support* provided by donors, under several funding mechanisms. A large portion of state funding may in fact be financed by donors. Attention to the different forms of donor support is needed to avoid double-counting, as well as the underreporting of actual contributions.

External assistance

Donor contributions to health vary dramatically across countries, according to political rationales not always transparent to the outside observer. In some cases, present funding levels are conditioned by past decisions. In fact, the aid industry, dominated by large domestic bureaucracies, may show severe degrees of inertia. Thus, an earlier favourable blend of factors may be the main explanation for the present largesse, otherwise difficult to understand.

To estimate donor contributions, *pledges*, *commitments* and *disbursements* must be studied. Donor pledges are just indications of willingness to provide support and

may help to assess the intentions of specific donor agencies, as well as the overall posture of the donor community. Sometimes, they are not disaggregated by sector, which limits their usefulness. When forecasting future resource levels, pledges may be the only available information. Commitments are tabled in more detailed terms, usually specifying sector, area, timeframe and implementing agency and are usually lower than pledges. If a common format is adopted across all donor contributions, the study of commitments offers indications about the external resources that a health sector can potentially tap.

Disbursements are, in turn, usually lower than commitments, and refer to the funds paid by donors to implementing agencies. Thus, they should not be taken as expenditures. The information related to the expenditure actually made by implementing agencies is usually dispersed to such a degree that its study becomes impracticable, at least in large sectors with many players. A rough retrospective estimate of expenditure may be obtained by reviewing the consolidated expenditures of donor agencies, referring to previous years. For some donors, this information becomes available only years after actual expenditures took place.

Donor pledges and commitments remaining as such without translating into actual disbursements are commonplace. Disbursing delays severely affect the implementation of agreed plans. Implementation difficulties often translate into delayed expenses, and the ensuing reprogramming of disbursed funds. The reprogramming of expenditures according to donor domestic decisions, or to events taking place outside the country or the sector, may jeopardize health activities.

Checking disbursements against commitments and (when possible) expenditures offers indications of the absorption capacity of the system, in relation to external funding. Finding very low levels of absorption is very common. Caution is needed when comparing these figures, due to erratic funding flows and frequent funding lumpiness. Thus, most of the allocated money may become available only during the following year. Absorption generally suffers, even if it cannot be adequately described by annual execution rates, due to these distorted funding flows.

During severe crises that undermine fundamental state functions, most aid is provided as **project funding**. This modality encompasses a broad array of situations, characterized by special management arrangements, definite timeframes, specific goals, and explicit allocations. Within this group, management responsibilities may belong to government bodies, special implementing units, aid agencies, NGOs, or a mix of the above. Under project funding, financing lines not explicitly configured as such, but earmarked for a defined purpose, are usually inscribed. Donor support to drug purchasing, for instance, is usually included under this heading, even if not presented in project format. Loans provided by development banks and sharing many of the project attributes listed above, fall in most cases into this category, even when labelled as *programmes*.

In countries where basic PEM systems survive and the government enjoys the support of the donor community, a large part of aid may be provided as **programme support**. Under this umbrella, debt relief, commodity import support, other counterpart funds, foreign currency donations, and other forms of macro-financial assistance that end up financing the state budget, are grouped. The main feature of programme support is that the specific destination of the provided funds is left to the discretion of the recipient government. When programme support is substantial, donors signal their trust in the policy and management capacity of the beneficiary institution. Thus, the relative weight of project and programme support is instructive of the reputation (legitimate or not) enjoyed by recipient bodies.

Beyond the rhetoric of recipient ownership, programme support is usually conceded only to countries adhering, at least in terms of discourse, to policies favoured by the donor community. The usual set of conditions includes macroeconomic structural adjustment, market liberalization and preferential allocations to the social sectors.

In practice, donors find it difficult to check whether these commitments are truly honoured by recipient governments, because of the already-described PEM shortcomings.

Project and programme funding, as well as the related concept of on- and off-budget funding, are loosely-defined terms, assuming different meanings according to practitioners and analysts. Hybrid forms abound, new terms (not always corresponding to new concepts) supplant old ones, and field practice evolves. Considerable attention and frequent adjustments are needed in order to coalesce recorded funds into aggregate figures. For instance, funding vehicles sharing multiple features have to be classified according to their prevalent one. Concessionary loans with a sizeable grant component call for computing it apart from the totals.

Monitoring aid flows is critical during transitions from conflict to peace, when humanitarian aid flows dry up. Development aid, by its nature slower to reach beneficiaries and bound to multiple political and policy conditions, may arrive with a serious delay and in inadequate amounts to offset the decrease in humanitarian funding, giving way to a transition funding gap. Alertness, the compilation of reliable data, and aggressive lobbying are key to avert a transition gap. In 2006, within the Liberian Ministry of Health, concern grew that many NGOs, on which health service delivery heavily depended, might have to close down operations due to the end of their humanitarian funding. Additional data were collected to confirm this trend, and an open discussion, energetically chaired by the Minister, started. Many donors reacted to this alarm message by extending their humanitarian funding lines accordingly, in this way averting a serious disruption in health service delivery (Canavan et al., 2008). This success story is instructive of what updated information on a critical issue, if backed by strong and credible local leadership and an effective communication technique, can achieve.

Short funding cycles prevail in disrupted health sectors, in this way conditioning management decisions and programming approaches. Interruptions of funding flows and the ensuing reprogramming of activities to respond to funding crises are commonplace. Areas needing long-term, uninterrupted support – such as human resource development, management strengthening and capacity building – suffer the most from this situation.

In many cases, recipient governments blame donors for failing to honour their commitments. The record of many recipient ministries of finance is at least similarly lacklustre. The resolution of this sorry state of affairs may come only from the radical and simultaneous restructuring of recipient PEM systems and donor practices. Change must be pursued at three levels:

- By improving the financial information made available to participants, so that they can make informed decisions. This measure is labour-intensive, but usually feasible in disrupted environments, provided an adequate investment is made and sustained over time. *Annex 6a* offers some suggestions in this sense.
- By establishing innovative financial management instruments, through which government and donor funds can be channelled. This approach can be pursued in disrupted sectors, provided a measure of stability of decision-makers and of trust among partners is granted. For a discussion of aid management instruments, see *Module 8. Studying management systems*.
- By pursuing the introduction of a sector programme, or as interim measures, of selected sub-sector programmes. This ambitious goal seems beyond reach in many disrupted sectors, but can be considered when favourable conditions materialize. See *Annex 8* for a brief discussion of the SWAp concept.

Annex 6a discusses the practical steps to be taken in carrying out a detailed survey of donor contributions. In turbulent contexts, with donors conditioning their funding decisions to ongoing political and military developments, such an exercise could be

premature. The formulation of alternative scenarios, assuming different degrees of donor generosity, offers a sensible interim way of estimating donor inputs without masking the underlying uncertainty. If the scenarios are linked to the outputs to be expected according to different levels of donor funding, more informed decisions can be made by donor agencies, as well as by recipient authorities.

For additional details about foreign aid, see *Module 3. Understanding the broader country context: past, present and future*.

Private financing

User contributions are usually poorly documented. When related studies, like household surveys, are available, they refer to special situations, like secure areas, not suitable for generalization. In most cases, private financing is overlooked, because of the lack of related data, or underestimated, on the assumption that a population impoverished by the crisis cannot shoulder sizeable health expenses. Nonetheless, available evidence suggests that conflict-affected populations spend conspicuous amounts of money in buying certain curative health services, mainly from private providers (formal or informal). The growing importance of user contributions is confirmed by the proliferation of private health outlets, a common sight in many conflict-affected countries, at least in urban settings. Thus, the decline of subsidized service provision induces a compensatory surge in private spending. This readjustment cannot be sustained forever. When private resources are exhausted and competing expenses (such as for food) take absolute precedence, private spending to access health services must decline.

The duration and the severity of the crisis, as well as baseline poverty levels, play an influential role in shaping private decisions about the purchasing of health services. Having said that, keeping in mind that in most situations private spending will be considerable, at least until the crisis reaches extreme degrees of severity, seems sensible. This pattern may be considered when educated guesses about this source of health financing are put forward.

Significant private spending does not automatically translate into increased cost-sharing for publicly-provided health services. In fact, the experience gained in stable countries points to an average of 5% of total recurrent health system expenditure generated by cost-sharing schemes. Taking administration costs into account, such a fraction becomes even smaller (Poletti, 2003).

In war-torn environments, the revenue potential of cost-sharing is likely to shrink further, because of the decline of quality standards and drug shortages affecting public health services, which depress demand. Additionally, poor people become poorer and the new poor join them to inflate the portion of the population that is both unable and unwilling to pay for publicly-provided health services. Those poor people who pay for health care, by selling productive assets or foregoing the education of their children, are increasingly likely to suffer heavy consequences, with an associated increased risk of further ill-health. Waivers for the poor have a dubious record and are prone to abuses, in addition to the high administrative costs they imply. In unstable situations, identifying those users deserving exemption can be even more difficult.

A serious shortcoming of cost-sharing schemes in troubled contexts is the high opportunity cost of establishing and maintaining them. Capacity and resources may be diverted from other competing and arguably more pressing issues, such as expanding access to health care, improving the quality of it, strengthening referral capacity, and fighting HIV/AIDS. This often neglected aspect was clearly recognizable in Southern Sudan (Erasmus and Nkoroi, 2002).

Debates about cost-sharing tend to take strong ideological colours. Beyond the obvious equity concerns raised by this issue, the intrinsic inefficiency of many cost-sharing schemes established in protracted crises is usually overlooked. First, the cost

of operating them may partially or totally offset their meagre returns. Second, they may depress demand for health care, resulting in higher unit costs (against largely fixed inputs, like infrastructures and personnel). To compensate for decreased service uptake and hence revenues, providers may increase fees, further depressing demand. This vicious circle is patent in contexts where user fees are the main or the sole source of revenues for providers struggling to stay afloat.

In the Democratic Republic of the Congo, the cost-sharing debate has been for years at the top of the policy agenda, without producing workable solutions. That well-argued discussion largely missed the point. The crushing under-financing (with total health expenditure of US\$ 2–3 per head per year) affecting health care in that country until a few years ago forced providers to fall back on raising user fees, whatever their side effects. This structural constraint had to be addressed before alternative approaches to health financing could be realistically considered.

Unsatisfied with the quality of the care provided by distressed public services, wealthy users opt increasingly for private for-profit providers (formal and informal). High private expenditure, therefore, may result from the consumption of fairly small volumes of urban, curative health care, which represents in fact a separate market. This may help in understanding the difficulties the public sector meets when trying to capture this financing source.

Insurance schemes

In many of the countries of concern, large social-insurance programmes were of marginal significance even before the crisis. Where they exist, social-insurance schemes are likely to suffer severely. In Sudan, the National Health Insurance programme covers 8% of the population (mainly government employees), with an annual financial expenditure of around US\$ 90 million. The difficulties met by the system (large administrative costs and inadequate premium collection) are commonplace in deteriorated environments (Decaillet, Mullen and Guen, 2003).

Small-scale initiatives of community financing, based on rudimentary insurance models, have been introduced, usually by NGOs, in many settings. Expanding voluntary, community-based schemes is usually slow, difficult and of uncertain outcome. Community financing schemes are subject to the general problems of cost escalation that affect insurance in general, if the right modalities of provider payment are not applied. The results of these schemes in disrupted countries are poorly documented, with the important exception of the Democratic Republic of the Congo, where a body of experience has consolidated over decades of experimentation. In this country, the depleted financing capacity of the majority of the population has constrained insurance coverage, which has remained negligible. Public subsidies are clearly needed if this approach has to be expanded. Thus, in an impoverished environment, community health insurance schemes, rather than a resource-tapping device, should be regarded as a healthcare delivery management strategy, and pursued in consideration of their societal benefits.

Studying the present resource envelope

Estimates produced by international agencies, such as the IFIs, may be more accurate than those provided by the government. In some cases, the figures provided by the former are the only ones available. Caution is in order with every estimate. No quoted figure of this importance should be retained without checking in the original source the robustness of its estimation. IFIs are subjected to political pressures as much as ministries of finance, and may embellish financial figures to make them consistent with the prevailing political discourse.

Inconsistencies between estimates are commonplace. Provided the order of magnitude of the available figures is the same, differences should not be a source of concern. When estimates produced by different sources disagree by less than 10% of the total

value, they can be considered as broadly consistent. Careful scrutiny is needed to verify whether the agreement found points towards reliable values, or conversely is due to the same flaw, repeated across estimates, or drawn explicitly or not from the same source, which may itself have been flawed. For instance, many estimates may fail to incorporate revenues from user charges into the health expenditure total. In this case, consistency should not be taken as a pointer to accuracy.

In the common situation where no meaningful figures about health expenditure are obtained, educated guesses must replace them. *True Story No. 11* presents the approach followed in 2003 in the case of Iraq, i.e. in an extremely unstable situation, where the available information was severely inadequate. Boundaries within which future financing levels were reckoned to fall are preferred to point estimates, in order to convey to the reader the serious uncertainty that affected the computations.

The table included below offers some clues about the values to be expected. Absolute health expenditure (public and private) varies markedly across countries, but once expressed as a proportion of GDP, the range narrows. For those countries approaching the upper level, private spending is substantial, equalling or surpassing public expenditure. A contracting economy, a declining revenue base, and increased defence spending explain to a large extent the low levels of public financing found in most conflict-stricken health sectors. Considering that estimates of private spending are often the result of educated guesses, true differences across countries could be narrower than what is suggested by the table.

Health expenditure for selected war-torn countries

Country	Health expenditure as % of GDP		Health aid per capita (US\$)	Total health expenditure per capita (US\$)	Year
	Public	Private			
Angola				16	2000
Cambodia	1.4	7.8	2	22	1994
Colombia	5.2	4.2		227	1995-99
DR Congo			6	12	2004-6
Iraq			67		2004-6
Kosovo	2.5	4.0	60		2001
Liberia				6	2000
Mozambique	2.8	0.7	4.6	8.8	1995-99
Rwanda	2.0	2.1		10	"
(North) Sudan	0.6	3.3	4	26	2006
Uganda	1.7	1.8	2.1	6	1990
West Bank and Gaza	7	5	54	135	2005

The size of the resource envelope eventually computed must be assessed against the health sector supposed to work within that constraint. Size, composition, content and quality of care, quantitative outputs, and operational efficiency, all give a measure of the resource requirements of the system, which provides a rough check of the validity of the estimate obtained. *True Stories No. 10* and *11* offer examples of this line of reasoning. If a large discrepancy is found between resource levels and features of the health sector, as in the case of Sudan, a revisiting of source data and computations is in order. Absolute financing levels, if inadequately contextualized, may be very misleading indeed. For instance, in Southern Sudan, annual donor funding to health was estimated at US\$ 55 million, a sizeable figure for a population of about 8 million. Taking into account that logistics, security and transport might constitute up to 70% of costs radically alters the significance of this funding value. As a matter of fact, healthcare outputs and coverages were reportedly very low (Decaillet, Mullen and Guen, 2003).

Appraising the resource level

Whereas the value of health expenditure usually escapes precise computation, its order of magnitude lies at the core of policy-making, due to the weight resources have in shaping the sector. Despite the large differences existing in operational costs across health sectors, some considerations, holding in most situations, are in order.

The available literature has gradually accepted that providing health services is more expensive than expected when the primary health care (PHC) concept was launched (Chabot and Waddington, 1987). The WB estimate of US\$ 12 per head per year as an adequate resourcing level for a basic package of health services (1993) looks, after a decade of field practice, rather optimistic, even after adjusting for inflation, which would give for 2008 around US\$ 20. The Commission on Macroeconomics and Health (2001) has revised the funding required for the provision of health services of acceptable quality upward, to a more robust US\$ 34 (equivalent to about US\$ 42 in 2008). Hay (2003) has taken a pragmatic stance, stressing that countries succeeding in providing universal health services of acceptable quality incur higher expenditures. Given the inefficiencies that regularly affect unstable health sectors, healthcare provision in these settings is likely to incur higher costs than in normal situations, to which the mentioned estimates mainly refer. For a valuable review of this issue, see Doherty and Govender (2004).

For the sake of simplicity, the continuum of health expenditures is here divided into three bands, using arbitrary cut-offs.

Total (public and private) annual health expenditure below US\$ 10 per head

These health sectors are affected by *severe under-financing*, which virtually excludes universal provision of basic health services of acceptable quality, even in the presence of optimal management and high operational efficiency (which are usually difficult to obtain within this crushing resource constraint). Many war-torn health sectors fall into this resource band. Ruthless prioritization of selected health services with large public-health returns, such as some but not all preventive activities, seems the only sensible option on technical grounds. Alternatively, poor vulnerable groups should be privileged. Both strategies present technical and political difficulties.

In many cases, downsizing the workforce is the single most important measure to be pursued, in view of controlling future recurrent expenditure and offering decision-makers room for true priority setting. See *Module 10. Analyzing human resources for health*, for a discussion of this policy option. Major building programmes, even if paid for by donors, should be resisted. Politically, it can be impossible to enforce such a policy.

As most of the countries in this resourcing group are desperately poor, the tapping of additional internal resources (particularly private ones, as expounded by cost-sharing advocates) may improve funding only at the margins, without really overcoming the absolute financing gap. In most cases, cost-sharing succeeds in capturing that part of private spending previously absorbed by informal transactions, without affecting total funding levels.

External dependency is severe in many of these situations. No equitable or effective health care is realistically within the reach of the health sector, even after the introduction of major management reforms, without a major increase of external financing. Disrupted health sectors included in this group: *Mozambique* and *Afghanistan* (in the 1990s); *Ethiopia*.

Total (public and private) annual health expenditure between US\$ 10 and US\$ 50 per head

Universal healthcare provision can be pursued in the long term, provided major allocative inefficiencies are addressed, sound delivery models are adopted and management

capacity improves. If most resources are absorbed by tertiary hospitals, brand drugs, administrative costs, corrupt practices, private-for-profit care, or international NGOs with high overheads, no progress is to be expected. To make the best use of a funding level that does not allow much room for waste, the health sector must be firmly managed by strong, equity-oriented and efficiency-aware public authorities. Internal funding may be sufficient to guarantee baseline operations, whereas donor contributions may finance recovery and service expansion. External dependency may look alarming at the onset of reconstruction, but should fade away over time, as internal financing takes off. Examples of health sectors belonging to this financing cluster: *Angola* and (*Northern Sudan*). Both show unimpressive levels of service consumption and poor quality of care, due to crippling allocative and technical inefficiencies.

True Story No. 10 Summary indicators, Sudan 2002

A study of the Sudanese health sector under government control (WHO, 2003) computed from many sources the following summary indicators:

Population:	30 million
PHC facilities:	6,000
Hospitals:	300
Beds:	23,000
Health workers:	45,000
Doctors:	5,000
Health expenditure:	3.3% of GDP, corresponding to 40 international (PPP) dollars, or 10 US dollars per head.
Private contribution to health expenditure:	60–70%
Access to health services:	40–60%
EPI fully-immunized children:	27%
Deliveries attended within health facilities:	12%
Outpatient contacts per head:	0.8 per year

This set of indicators suggested a very large healthcare network staffed by a considerable workforce, including a significant proportion of doctors. Taking health expenditure expressed in international dollars (PPP, see *Definitions*), the health sector looked well funded too, at least by African standards. However, figures related to access to health services, coverages and service consumption fell short of the levels to be expected for a health sector reportedly endowed with substantial resources. This mismatch needed to be clarified. If the PPP adjustment led to overestimating financing levels (a concrete possibility in a disrupted, partitioned country) and the actual funding level was better appraised if computed in US\$, then the gap between inputs and outputs becomes understandable. Indeed, such a large health sector, with a substantial hospital component, operating in a war environment, would meet serious difficulties in providing universal service coverage at a financing level of US\$ 10 per head.

True Story No. 11**Estimating the health expenditure of the Iraqi health sector in 2004**

Despite the attentions focused on Iraq during the run up to the war in 2003, the available information about the health sector was incomplete, tentative and plagued by serious flaws. A secretive state administration, internal disarray, economic crisis, disenchantment of civil servants about the future of the public sector, and widespread looting of health premises (with ensuing losses of files and records), all help to explain the precarious understanding of the situation. Basic information related to the years before the latest war, such as financial and human resources, was irremediably lost or perhaps never produced.

Information gaps notwithstanding, measures aimed at maintaining basic service delivery and at laying the foundations for reconstruction had to be taken. A rough estimate of the health expenditure to be incurred by the health sector in the near future was a key precondition to the introduction of such measures. A first tentative round of computations was carried out in July 2003, in preparation for the joint UN-WB reconstruction conference, scheduled by October 2003.

The starting point of this back-of-the-envelope financial projection was the GDP per capita, estimated to be as low as US\$ 1,000 in 2003 and expected to increase quickly as the oil industry recovered. Pre-war health expenditure was tentatively put by various reports at about US\$ 110 per capita, of which 40% was paid for by private contributions. Investment was considered negligible. As this financing level was broadly in line with those of neighbouring countries and with the expected cost of operating a fairly large and sophisticated, hospital-centred health sector, it was accepted as a sensible guess.

Two higher and lower boundaries for internal financing of 8% and 4% of GDP were chosen to represent a best-case (high-priority given to health) and worst-case (low-priority) funding level. These boundaries represented a (hopefully sensible) guess of the range where actual funding was likely to fall in 2004. For health, these GDP shares of internal financing (public and private) translated into US\$ 77 and \$ 39 per capita respectively, expected to be mainly allocated to shoulder recurrent expenditure, as had happened in the previous years.

For external aid to health, no special donor generosity of the kind witnessed for Kosovo was anticipated in relation to Iraq. Hence, a conservative range of US\$ 10 to \$ 20 per capita was chosen, which is broadly in line with available estimates of previous post-conflict reconstructions (Nordhaus, 2002).

Combining the two ranges, the overall financing bottom level was of US\$ 49, with the upper level at US\$ 97 per capita. The resulting estimated total financing level of the health sector fell therefore below the pre-war figure of US\$ 110, but without diverging too much from it. Considering that the pre-war health services were marked by serious inefficiencies and that the post-war health services would not run at full capacity for years, the financing level computed in this way might be adequate, provided it was sensibly allocated. Of course, before these guess-estimates were retained as plausible, big questions had to be answered. Solid information was needed to clarify a) size and composition of the workforce and the salary scale adopted to pay for it; b) size and composition of the health network and c) distribution across country of health service provision.

Waiting for the missing information, the main tentative conclusion on offer to decision-makers was that with the financing level near the lower boundary, no post-war expansion of the health sector was to be realistically expected. In this scenario, most resources would be absorbed in maintaining the functioning of surviving health services. As financing levels approached the higher boundary, an increasing proportion of overall resources might be allocated to investment in physical reconstruction, human resource development and organizational restructuring. The recovery of the health sector would become a concrete possibility.

Total (public and private) annual health expenditure above US\$ 50 per head

Universal access to basic services of acceptable quality (including referral care) becomes a concrete possibility, within a reasonably short time-span. If capacity and security conditions allow, the panoply of reforms favoured in international circles can be introduced with reasonable chances of success. As the temptation of adapting Western technical models is usually strong, self-control in setting standards of care is required. External funding may be essential to guarantee basic services during the conflict and spearhead reconstruction. Dependency, however, should not represent a long-term concern. Examples: Kosovo and Iraq.

When considering the values discussed above, an important caveat, related to all indicators expressed “per head”, must be kept in mind. In fact, no war-torn health sector serves the whole population of a country. Many people may live abroad as refugees; others may find their access to health care severed by frontlines, while others are blocked by mined or impassable roads. The resource envelope per head must therefore be adjusted according to the population actually served. Typically, these true potential users may represent between a fourth and half the total population, which in some cases is drastically reduced by the deaths induced by the conflict. See *True Story No. 2* for the eloquent example of war-torn Mozambique. The absolute financing level, once adjusted according to the population truly served, looks rather better than the one originally computed. Health expenditure, once related to the volume and quality of the services provided, helps to gauge the capacity of the health sector to perform under difficult conditions. This assessment may offer clues in relation to the likely reaction of a health sector when called to respond to the expanded post-war demands. In a way, the impressive service expansion registered in Mozambique during the years following the conflict settlement in 1992, could be anticipated looking at the relatively good performance of health services in secure areas during the war. No pattern of this kind has been observed in Angola, during or after the war (Pavignani and Colombo, 2001).

Composition of health expenditure in severely underfunded public sectors

Resource levels condition the internal composition of health expenditure. The more serious the resource gap, the more distorted health expenditure is likely to become. Facing a dwindling funding base, most battered public sectors adapt first by cutting capital expenditure, then by saving on the maintenance of existing assets. Drug purchasing, for which poor countries pay abroad in hard currency, is another area to suffer severely. The proportion of available public domestic financing allocated to salaries increases, in some cases surpassing 80% of the total. As the crisis deepens, wages are frozen in nominal terms and contract in purchasing power. The expenditure neglected by domestic financing is frequently taken up by donors, who become the sole supporters of investment, maintenance, equipment, training, drug purchasing, disease-control programmes and PHC (usually via NGOs).

When the crisis is protracted, the familiar result of these adjustments is a dilapidated and underused network (even in the absence of war damage), staffed by an unmotivated and unproductive workforce, who lack the basic tools to deliver health services. Scarce resources are concentrated in secure areas (often in large cities) and in high-profile facilities, such as tertiary hospitals. Inefficiencies and inequities grow exponentially.

Studying the composition of health expenditure makes sense only when reasonably comprehensive estimates are available. For instance, to analyse in isolation the composition of the government budget would be meaningless in the case of substantial off-budget expenditures, or in every situation where donor contributions and user payments account for a large share of the total.

In the privileged cases in which the proportion of the total expenditure absorbed by the main spending lines can be assessed, central clues emerge about the nature of the health sector, its main distortions, and the measures needed to redress them. Beyond the customary main spending lines of salaries, drugs, other recurrent expenditure and investment, the relative share absorbed by administration in relation to service delivery, and by hospitals in relation to primary health care, might be considered. Equally important is the geographic distribution of funds. Military considerations, ethnic tensions, the distribution of health infrastructures, communications, level of economic development, regional lobbying capacity, all influence the way funding is distributed across country. Unfortunately, these spending shares are frequently not available, or their computation involves the carrying out of dedicated studies.

The spotting of gross inequities in health expenditure, usually possible even in the presence of serious information shortcomings, should shape policy-making, as well as planning and management decisions. Inequities can be corrected only in the long run, through the constant introduction of (mainly investment) measures biased in favour of neglected areas and populations. For instance, in many settings NGOs tend to cluster in areas offering better security and operational conditions. Funding skewed towards underserved areas may contribute to redirecting newcomers away from over-served areas, in this way redressing existing imbalances.

Patterns of allocative decision-making

All decision-makers act on a stage deeply conditioned by uncertainty, and ignorance about the actions of the other participants, adjusting their allocations according to the grossly inadequate information they rely upon. Perceptions are therefore much more influential than facts, which are sometimes unknown, sometimes overlooked, and sometimes dismissed as unpalatable by participants. Rumours, once frequently repeated, become entrenched and gain a reputation unsupported by any evidence.

Resource contraction, combined with insecure political tenure, generate in most cases conservative reactions within government agencies. Where the imperative would be aggressive prioritization, conflict-shaken ministries of health opt for maintaining the health services spared by violence (whatever their comparative merits are), and avoid the political controversy inherent in reallocating shrinking resources. Planning resource contraction is an art rarely practiced (Cumper, 1993). Allocative efficiency in the public sector drops to dismal levels.

Other actors, whose roles have expanded during the crisis, may be better endowed with resources, but face some of the same constraints to priority-setting that burden government agencies: instability, political pressures and inadequate information. Nobody is in the position of making sound allocative decisions, and systemic efficiency declines even further, with the proliferation of participants and initiatives. Even painfully slow negotiations aimed at sewing together separate patches of funding, so as to finance adequately the health sector in its main spending areas, may lose value once a given financing agency withdraws from the originally agreed commitment. In some cases, a chain reaction of reallocative measures follows. Otherwise, no adjustment takes place and important chunks of health expenditure remain unfunded.

Spending decisions, be they allocations or expenditures, are always taken while considering, explicitly or not, what is paid for by other financing sources. Thus, the government may be less generous towards health and prefer to finance other sectors, because health spending is perceived as already guaranteed by donors. A certain donor may decide to support an area perceived as neglected by other donors. Or the performance of a single service, perceived as comparatively strong, may attract numerous sources of funding.

When studying the composition of health expenditure, analysts should keep in mind the limitations faced by decision-makers. The imbalances found in the expenditure

profile result in many cases from pressures the health sector cannot withstand. Expenditures easy to cut suffer first and foremost, while the proportion of fixed costs increases. Exhortations from outside to change spending patterns are in many instances ignored by necessity, even when they are in principle accepted.

Too often, the constraints posed by previous investment decisions are not realized in full by critics. For instance, rather than pressing for a dramatic shift in the present recurrent expenditure towards PHC (a favourite prescription of donors), in situations where the PHC infrastructure is not in place and a PHC culture has not taken root, PHC advocates would attain better results by encouraging investment in the training of PHC-oriented cadres and in the building of PHC facilities, which in turn would tie the hands of future decision-makers in favour of this approach. Along the same lines, the proliferation of medical doctors in many crises, such as in Afghanistan, Angola and Sudan, ensures the future predominance of curative, hospital-based care, even if policy-makers would prefer otherwise.

Low allocative efficiency may be suspected when some or all of these patterns are recognizable:

- small aggregate service outputs against large inputs.
- proliferating priorities of various – even conflicting – natures, so that no clear direction in sector operations and development is discernible.
- overcrowding and over-resourcing of certain areas, alongside the neglect of others. Comparing the value (in terms of potential health returns) of privileged activities with that of underprivileged ones helps gauge the severity of systemic inefficiencies.
- imbalances between classes of basic inputs, as in the case of abundant personnel under-supplied with drugs, or numerous doctors against few nurses.
- imbalances between levels of care. Typically, disrupted sectors show a buoyant community health layer (supported by NGOs and aid agencies) and resource-rich tertiary-level hospitals. Intermediate levels of care tend to be the most neglected.

Forecasting the future resource envelope, in a recovery perspective

Future financing levels depend on many factors, none of which are easy to predict. Economic and fiscal performance, political constraints, military spending or conversely the “peace dividend”, competing social expenditures, government commitments (such as debt servicing), donor generosity, and external shocks are certainly aspects to be considered when formulating projections. Other factors may play a special role in certain circumstances.

Despite the daunting difficulties, resource forecasts are so central to meaningful strategy-setting that they have to be attempted, even in extremely uncertain situations, where analysts would prefer to refrain from this task. Without credible resource forecasts, policy discussions (however erudite, articulated and well-intentioned) are devoid of content.

The best approach to the maze of uncertainties that mark these forecasting efforts is to spell out the assumptions retained for each step of the reasoning on which the projections are based. In this way, forecasts can easily be updated as soon as events unfold and new information becomes available. Additionally, the readers are put in the position of assessing how sensible the assumptions sound to them, and changing them according to their judgement and to the information they hold. The soundness of the forecasting exercise depends to a large extent on the robustness of its assumptions and of the reasoning followed to reach eventual conclusions. A transparent presentation of the steps followed in the forecasting computation greatly enhances the credibility of the results, hence their influence on the decision-making process.

The best-known model of the analytical work needed to develop a realistic vision of a future, recovered health sector is Noormahomed and Segall (1994), which provided the map for post-conflict Mozambique. WHO published it as an example of “best practice”. Its rational underpinnings are clearly described in Segall (1991). Increasingly, discussions about the recovery of countries emerging from a crisis (and the donor conferences convened to finance it) are organized around a comprehensive review of capital and recurrent expenditures likely to be shouldered. The UN, WB and a core group of donors are usually involved in coordinating a review of key sectors, setting their priorities and estimating the additional costs of reconstruction. *Module 12. Formulating strategies for the recovery of a disrupted health sector* introduces the practical steps to be taken to formulate realistic reconstruction scenarios, as well as the obstacles likely to be met and the common mistakes to be avoided. See also *Annex 3. Post-conflict needs assessments*.

In contexts marked by the abrupt opening of opportunities for recovery, as has been the case in Kosovo, Timor-Leste, Afghanistan and recently in Iraq, no detailed analysis, along the lines followed in Mozambique, has been possible. In the frantic initial phase of the transition, when very broad allocative decisions must be taken, aggregate and rough estimates had to act as surrogate figures built on a more precise analysis. To help decision-makers, imprecise (but unbiased) estimates are usually adequate. Despite their inherent weaknesses, even rushed forecasts, when available and enjoying a measure of credibility among participants, may play a powerful role in shaping key decisions. Provided they are not too wide of the mark (admittedly a condition that can be verified only later), a health sector in transition will fare better with resource projections than without them.

Projecting the resource envelope of the health sector for the next few years is not an academic exercise. If properly formulated, projections offer to decision-makers a useful reference frame, against which the policy options they face must be considered. Again, the order of magnitude of projected financing levels is the key to the argument. For instance, all conceivable scenarios about Somalia converge towards the same conclusion, that the health sector has to function within severe funding constraints, and that considerable restraint and ruthless prioritization in policy choices is mandatory. At the other end of the spectrum, forecasts for Iraq in 2003 pointed to the fact that capacity constraints, security and governance factors were likely to carry more weight than absolute funding levels in shaping the future health sector.

Resource availability gains full significance only in the presence of service cost estimates, so that sensible inferences of the outputs to be expected from a given resource level can be constructed. Service delivery costs are often neglected or underestimated, in this way undermining the whole forecasting exercise. In the enthusiasm of a transitional phase, wishful thinking about both resource levels and service costs is a constant temptation, to be strongly resisted. Examples of planners and decision-makers deluded by subsequent events abound. To err on the safe side, by producing cautious estimates, seems a wiser option.

Formulating sensible hypotheses about future developments in an unstable context is obviously built on subjective judgement and arbitrary choices. Hence, the exercise should not be carried out in isolation from knowledgeable people and from decision-making circles. Both sides can contribute valuable feedback, in this way helping to strengthen the forecasts. Conceptually, the goals pursued in consulting players are different and change over time.

At the beginning, the main concern is to improve the soundness of the projections, by eliciting a range of informed opinions as broad as possible, opinions that will not automatically be given equal weight. The analysts must incorporate into the projections compelling advice, while dropping unconvincing arguments or misinformed suggestions. Once the first round of consultations is over and forecasts

are considered acceptably robust, given the available information, stakeholders must be approached. They must be informed about the rationale behind the projections, and about their validity and limitations. Once forecasts have gained acceptance (at least on technical grounds), the exploration of their practical consequences for different parties may start. This last phase is risky. Stakeholders who recognize unwanted implications of accepted forecasts may react negatively. This backlash must be expected and managed with political acumen. Only if this last phase is successful, will the forecasting exercise be incorporated into truly-adopted policies.

The next table offers a way of mapping the many factors to be considered when forecasting future resources. In any given situation, not all the presented factors will apply. Most factors relate to qualitative assessments, i.e. they do not directly translate into a variable, but help to choose higher or lower values for key variables.

See also *Module 2. Making (rough) sense of (shaky) data*, section on *Using available information to develop projections*.

Forecasting future resource patterns, in a recovery perspective

Field	Issues to be considered/ Questions to be asked	Remarks	Tips and examples
Political and military	Are peace negotiations under way? What is the expected timeframe for their conclusion?	Expectations about the “peace dividend” may be high and influence budget projections. The outcome of previous attempts at a peace settlement offers clues about the odds of success enjoyed by the negotiations under way.	The “peace dividend” has often proved a chimera. Peace processes are more expensive than normally expected. Periods of political and military stalemate offer to participants room to appraise the baseline situation and to discuss plans for future recovery.
	Is continuity of the old government/state, or radical change the most likely outcome of the crisis?	When radical change is expected, financial forecasts become extremely sensitive to underlying assumptions. Alternative scenarios should convey to decision-makers the consequences of different assumptions. For instance, the potential fiscal basis of a breakaway region may be totally unknown.	Countries attaining independence or freedom from internal oppression have often conceived bold plans of social dispensation. These aspirations have mostly been frustrated by ensuing developments. Outsiders may provide local decision-makers with relevant insights from previous <i>comparable</i> processes.
	State failure may leave behind stateless formations, even after the cessation of large-scale military operations.	The political economy of failed states is poorly understood.	The (inadequate) documentation available about healthcare provision in stateless environments suggests high operational costs. To draw firmer conclusions, more exploration of the issue is needed.
	International or foreign governing bodies in place.	The timeframe for the handover of the functions held by the transitional authority to a national government must be considered.	In some cases, like Bosnia, transitional arrangements have remained in place for longer than expected periods.
	Expected relationship of the future government with the international community.	The main dimensions of the conflict (geopolitical, economic, criminal, and humanitarian) condition the degree and the patterns of involvement of the international community.	Firm political and military allegiance to Western countries is usually associated with donor largesse and debt forgiveness.
	Is the conflict part of a regional crisis?	When the regional crisis is expected to last, little reduction in military spending is to be anticipated.	
	Weight of the military in deciding the future of the country.	The top-brass soldiers are unwilling to lose the large share of public funding that they enjoyed in wartime. The military may be encouraged to move into civilian roles, usually at very high cost.	Personal armies are often maintained by warlords after the formal end of hostilities, with consequent taxation of the local population.
	Number of combatants from all sides to be demobilized.	Demobilization is expensive. It will markedly condition public expenditure and/or absorb large donor funds.	<i>Example:</i> in Mozambique (1993–1997), in one of the most successful operations recorded to date, the cost per demobilized combatant was conservatively estimated at US\$ 1,000.
	Cabinet coherence and stability.	Cohabitation cabinets may be unable to govern. Also, frequent cabinet reshufflings make honouring policy commitments less likely.	

Field	Issues to be considered/ Questions to be asked	Remarks	Tips and examples
Economy	Baseline economic situation and recent trends. Forecasted economic performance.	Do macroeconomic variables suggest future continuity with previous years or dramatic departures from those levels?	Updated and well-researched macroeconomic data are provided by the <i>Economist Intelligence Unit</i> . The WB and the IMF are also useful sources (see <i>Module 14. Resources</i> for details).
	Main factors conditioning the economy. Vulnerability to external shocks.	The revenues of oil-dependent economies experience dramatic fluctuations.	Treasuries heavily dependent for their revenues on single commodities find it difficult to maintain long-term commitments.
	Events/conditions capable of inducing fundamental changes in the economic performance.	Factors militating in favour or against substantial foreign private investments must be considered.	<i>Example:</i> while the Democratic Republic of the Congo is regarded as potentially rich (if properly managed), Somalia is considered as structurally poor. Economic forecasts must take this factor into account.
	Poverty levels.	The speed and the intensity of post-conflict recovery are affected by baseline wealth levels, and their distribution.	
	Economic infrastructure.	Banking and communication networks may be absent or rudimentary, as in Afghanistan in 2002.	
	International economic outlook: expansive or contractive?	The perceived world economic environment heavily conditions policy choices.	Special conditions may screen a certain country from world economic events.
	Expected relationship of the future government with the IFIs.	If perceived as a keen adjuster/reformer, the future government is likely to receive substantial external support.	WB gestures are instructive of the intentions of the international donor community at large.

Field	Issues to be considered/ Questions to be asked	Remarks	Tips and examples
Public Expenditure Management (PEM)	Government fiscal capacity.	In many poor countries, even in the absence of conflict, the ability of the state to levy taxes is minimal. Most government revenues come from customs or licences. Are state revenues expected to increase significantly once the conflict is settled?	In war-torn countries, government revenues are likely to fall below 10% of GDP. Additionally, <i>"The recovery from fiscal collapse is slow. Expanding the share of the economy being taxed by 0.5 per cent per annum is thought to represent an excellent fiscal effort"</i> (Hay, 2003).
	Donor financing management mechanisms, in place (like a multi-donor trust fund) or under discussion.	Financing levels may become more predictable in the short- and mid-term in the presence of such arrangements.	Aid management instruments need time and hard work to become operational, and are slow to react to unforeseen events. They may be inappropriate during fast-moving transition processes, particularly in their early phases.
	Consistency of policy decisions. Is the government bound to a structural adjustment/poverty reduction programme? What is the government's past record in implementing these programmes?	Sometimes, the MoF commits to protect certain sectors from financing crises, by stating a minimum funding share to be attributed to them. Declarations of commitment to health are common, but health is rarely a genuine priority for embattled governments.	Whether these commitments are genuinely borne by local decision-makers or conversely are outside impositions, to be just ritually referred to, can be inferred by the MoF behaviour when a crisis strikes. <i>Example:</i> In Angola, attempts by the MoF to pursue fiscal discipline have been regularly overruled by the President.
	Soundness of PEM systems.	Transparency, respect of rules and roles, fiscal discipline, respect of commitments, and high execution of budgeted allocations are among the aspects to be considered.	The proportion of donor assistance directly channelled through government agencies gives an indication of the perceived soundness of existing PEM systems.
	Debt position, present and projected. Position of the main creditors towards the country.	The size of the outstanding debt and of the debt service, as well as of their projected evolution, gives a measure of the financial discretion enjoyed by the government. Countries perceived as rich, such as Angola or Iraq, may have accumulated crippling levels of indebtedness. Debt service in turn affects public financing to health services.	The significance of the existing debt is better understood as a proportion of the economy, rather than in absolute terms. Also, the debt profile is to be considered. Short-term commercial debt is heavier to bear than long-term concessional debt. <i>"Health's share of the discretionary budget may be a better indicator of a government's commitment to publicly financed health services than its share of total government expenditure"</i> (Hay, 2003).
	Competing demands on the budget from other sectors.	The formal commitments of the government in relation to sectors competing with health for resources must be taken into account.	When official documents dub health as a priority among many others, no preferential allocations are to be expected.
	Off-budget expenditure. Is an estimate of the proportion of public spending not captured by the budget process available?	On- and off-budget expenditures are poorly-defined concepts, loosely used by participants. Hybrid arrangements are common. See <i>Glossary</i> in <i>Module 14</i> .	Budgeted allocations are sometimes paid and accounted for outside regular PEM channels. For example, soft loans may be inscribed in the budget but be spent under special arrangements, in this way generating big discrepancies between planned and executed expenditure.

Field	Issues to be considered/ Questions to be asked	Remarks	Tips and examples
Aid (general)	Level of aid dependency. Recent aid trends.	Are signs of donor fatigue (common in very protracted crises) surfacing? Is a transition gap likely to materialize? A fall in humanitarian funding at the end of a protracted crisis – against a slow increase of development aid – is a potential occurrence in every transition process.	Bilateral programme support and large concessional loans suggest long-term donor engagement. Conversely, donor preference for UN agencies and NGOs as main funding channels implies reluctance to assume firm commitments. A transition gap should be forecasted and addressed by actively lobbying donors, before its consequences on health service delivery are fully felt.
	Present and expected posture of the donor community towards the country, the government, the rebels and the health sector.	The country's geo-political value plays an important role in shaping donor decisions. Also, an approach adopted in a country may be supported by donors for demonstrational purposes, ensuring in this way its success.	Sometimes, the international community has invested impressive amounts of political capital and huge sums to make a success of a peace/recovery process, to the point that signs of “reverse dependency” emerge. Donor largesse, even if not justified by events, is thus ensured.
	Policy conditionality. What do donors expect from the country, in order to maintain or increase aid levels? Are these conditions likely to be fulfilled?	Generous government allocations to health and education are frequently included among the conditions posed by donors to support a country. Nordic donors are usually among the strongest advocates in this sense.	Are donor demands realistic? Could donor disappointment induce a backlash in the support they provide?
	Is a dramatic donor turnaround towards the country foreseeable?	The way international media handle a complex emergency influences aid levels. Which portion of present aid may vanish once media attentions turn to other troubled spots?	<i>Example:</i> Afghanistan passed from pariah to large recipient of aid with the change of government and political allegiance in 2002.
	Competition from other countries/emergencies for donor funding.	A high-profile, politically-relevant crisis may absorb donor attentions and funds. Conversely, the fall from donor grace of other countries may induce reactive donor largesse towards a country perceived as a comparatively good performer.	The way a recipient country presents itself to donors may be more influential in shaping their decisions than its actual behaviour and performance.

Field	Issues to be considered/ Questions to be asked	Remarks	Tips and examples
Health financing	Absorption capacity of the health sector, in relation to internal and external funding. Is absorption likely to improve in the short- or mid-term?	A direct estimate of absorption capacity is rarely available. Indirect signs of problems related to this aspect can be spotted in some cases. Delays and extensions in scheduled programmes suggest poor absorption.	Major bottlenecks may lie outside the health sector. In Southern Sudan, the lack of banks, communications, roads and contractors heavily conditions the patterns, cost and pace of recovery.
	Formal commitments of the government towards health financing.	May be part of overarching commitments, like the Poverty Reduction Strategy.	Examples of poor countries able to allocate more than 10% of internal public resources to the health sector over a prolonged period are extremely rare.
	Donor policy conditionality in the health sector. What do donors expect from the sector to maintain or increase aid levels? Are these conditions likely to be fulfilled?	Donors may finance only selected areas, in this way neglecting important components of health service delivery.	Are donor demands adjusted to available (internal and external) resources and capacity? Frequently, global goals are adopted without a serious analysis of the resources likely to be allocated to the health sector. Gross mismatches between ambitions and resources are common.
	Available estimates of aid to the health sector, present and future.	Given the fragmentation and the poor recording of aid flows, related figures tend to underestimate true levels.	<i>Example:</i> In Somalia, the aid allocated to health was guesstimated in 2005 at US\$ 5–7 per head per year. In 2006, a thorough survey found aid flows twice higher than previously thought (Capobianco and Naidu, 2008).
	Multi-year financing programmes under way or being negotiated in the health sector.	These financing instruments may stabilize health expenditure during their years of existence.	Total spending rarely increases by the amount ensured by an additional fund, like a soft loan. Financing authorities may profit from this funding line by diverting other funds to cover other previously neglected spending areas outside the health sector. Funds are <i>fungible</i> (see definition).
	Likely contributions of global health initiatives (GHIs) to health spending	Are GHIs already established in country?	<i>Example:</i> Funding for vertical projects in Liberia quadrupled between 2005 and 2008, leading to a doubling of per capita spending on health services (Canavan et al., 2008).
	Proportion of earmarked health funding	Large aggregate health spending may mask internal imbalances and rigidities.	<i>Example:</i> Donor HIV/AIDS commitments for 2005 surpassed 2003 national budgeted allocation in Ethiopia, Rwanda and Uganda, three countries with low to moderate HIV prevalence levels (Shiffman, 2008).
	Aid management instruments, such as pools, in place or under discussion in the health sector.	Sustained negotiations among influential donors, aimed at establishing such instruments, suggest long-term commitment to the health sector.	Given the limitations of multi-donor trust funds, one or several health-specific aid pools might be more effective during a transition from war to peace.
	Comparative standing of the health sector in relation to other areas of expenditure.	The reputation of the health sector and the political relevance of healthcare provision shape financing decisions of government, donors and users.	The promise of giving the health portfolio to rebels, as part of the peace negotiations, suggests a low ranking of this sector, with ensuing future low funding levels and negligible political weight.
	Untapped internal financing sources.	The degree to which internal financing can realistically be expanded over time must be assessed. GDP (baseline and projected) and poverty levels provide clues about the private contributions to health expenditure that can be realistically expected.	In poor countries, cost-sharing arrangements have consistently fallen short of expectations. Years of robust post-conflict economic recovery are needed before the yield of formal cost-sharing schemes becomes significant.

Contextualizing sustainability

Sustainability is continuously invoked as a key criterion to assess any aid-induced activity or initiative. Sometimes, the concept is given the weight of a decisive argument. Thus, to declare something “unsustainable” may sound as equivalent to “worthless” or even “harmful”, in this way overruling any other consideration. A shift in the meaning assigned to sustainability is imposed in the context of failed states, severe poverty and increased health needs, such as in the Democratic Republic of the Congo and Afghanistan. For protracted periods (most likely decades), these countries will be unable to survive by relying only on their own means. A “sustainable” health service must therefore be intended as an activity guaranteed on an uninterrupted basis, even if financed by external resources. Rather than downplaying performing health services provided to a population in need of them, on the sole basis of their external sources of funding, the scrutiny should shift from this dimension to the predictability of such funding and to the possible strings attached. Such a change of perspective would be sufficient to correct the prevailing approach.

Donors are reluctant to accept the dire fact that a country ravaged by a long-lasting conflict and lacking basic resources and capacity is unsustainable and will remain so for a long time, even after the customary set of “remedies” has been applied. Donors face a hard choice that they usually prefer to elude: either to disengage totally and irreversibly (and accept the increased mortality, morbidity and poverty related to that decision), or to commit themselves to guaranteeing that key health services are provided over time without interruptions or quality slumps. If the chosen approach is the latter, no new health activities should be started without ensuring their funding over a long period of time.

Unfortunately, donors frequently prefer to opt for the middle ground: short funding cycles, repeated assessments of the benefits of continuing such funding, frequent change of activities to be supported and of programming approaches, and repeated interruptions of aid flows are commonplace. In this way, disparate initiatives repeatedly take off, without having a chance of taking root. An example of over-emphasis on a sustainability concern was given by donor insistence towards introducing cost-sharing schemes even in severely-ravaged contexts (Poletti, 2003). This misconceived stance fostered further inefficiency and inequity in a situation already marked by distress, crippling poverty and serious operational constraints. The ensuing outcry seems to have dissuaded donors from persisting in their pursuit of sustainability at any cost.

Sustainability tends to be employed as an all-encompassing term, but it seems useful to distinguish between *technical* sustainability, which relates to the capacity to carry out certain functions, and *financial* sustainability, which results from resource availability, fiscal capacity and the relative priority of healthcare provision. In fact, a government might have the absolute means to sustain health services, but prefer to allocate its resources to some other area. A third dimension to be considered relates to *political* sustainability. For instance, a needed but unpopular policy may be abandoned by a government unsure of its tenure. The same holds for donors, whose frequent and drastic policy shifts are well known.

Whereas the various aspects of sustainability are equally important in determining the future of a health activity implanted with external support, the discussion about it tends to overemphasize the financial side of the problem. This unfortunate bias, usually strong in donor circles, may only perpetuate the assumption that adequate financing removes most or all obstacles. By neglecting capacity constraints and political concerns, wasteful initiatives are encouraged. This bias in favour of financial sustainability overlooks the harm done to technical capacity by a protracted crisis. The longer and more severe the disruption, the longer the recovery is likely to take. And capacity could have been abysmally low even before the crisis.

For an interesting study of the duration of the dependency of post-conflict countries on donor financing, see Chand and Coffman (2008).

Recommended Reading

Evans RG (2000). **Health for all or wealth for some? Conflicting goals in health care reform.** In Mills A, ed. *Reforming health sectors*. London, Kegan Paul International.

Caustic discussion of premises, discourse and goals (stated as well as unstated) of the health sector reform movement, whose shaky conceptual foundations are mercilessly laid bare. Any reform, it is argued, has redistributive aims (explicitly stated or not), either progressive or regressive. Health sector reform, as energetically advocated in the 1990s, emphasized efficiency and effectiveness, in this way diverting attention from its central goal, i.e. the shift of healthcare costs, previously borne (through the tax system) to a larger degree by the healthy and wealthy, to the unhealthy and unwealthy. Reforms, thus, were “*the policies not of Robin Hood but of the Sheriff of Nottingham*”. HSR, according to this interpretation, was deliberately pursued to offset the equity goals set by PHC and the modest gains registered in that direction.

Over the past decade, HSR has lost much of its appeal. A growing body of research suggests that rarely if ever, has it brought the promised benefits. Whereas its advocates justify these setbacks on grounds of poor execution and political resistance, Evans is blunter. HSR, in his view, failed because of its inherent flaws, visible from the start to whoever bothered to scrutinize the proposed package. “*Old ideas have found their way back onto the agenda, at least for discussion, in complete disregard not only of the evolving evidence on the determinants of health, but of the working experience of health care systems over the last fifty years. That history, and accompanying progress in research, have provided a number of important lessons on the implications and consequences of different ways of organising and funding care. A number of ‘reformers’ appear, however, to have missed those classes (or dropped the course entirely)*”.

Gottret P, Schieber G (2006). **Health financing revisited: a practitioner’s guide.** Washington, DC, World Bank. Available online at: www.worldbank.org, accessed on 14 September 2008.

Concise, comprehensive and informative overview of the field, which reappraises the experience gained in implementing health sector reforms across a broad spectrum of countries. Sensibly, the book stresses that countries with different income levels must approach issues and options in different ways. “*Low-income countries face difficult choices and trade-offs, and there are no one-size-fits-all solutions or magic bullets.*” This book offers a valuable starting point for the reader needing basic information about health financing facts and trends, as well as a discussion of key concepts. Financing approaches are fairly discussed and contextualized, recognizing their strengths and weaknesses, away from “*buzzwords, slogans, and magic bullets*”.

Hay R (2003). **The ‘fiscal space’ for publicly-financed health care.** Oxford, Oxford Policy Institute (Policy Brief No. 4).

A realistic, razor-sharp short description of the tough financing constraints faced by decision-makers in poor countries. Such large gaps cannot be filled by marginal improvements. For many health sectors, heavy, protracted aid dependency is the inevitable predicament. The way out implies radically different strategic alternatives to sector goals and priorities, sector financing, and service delivery.

To be complemented by:

Williams G (2006). **Fiscal Space and Sustainability from the Perspective of the Health Sector.** Chapter 4 in: *High Level Forum on the Health Millennium Development Goals Selected Papers 2003–2005*. WHO and World Bank. Available online at: <http://www.who.int/mdg/publications/en/>.

In this accessible study, aid flows and government allocations for a group of thirty low-income countries are projected according to alternative scenarios. The conclusions are not rosy. Expanded aid flows will not be sufficient to boost health expenditure to the levels required to meet the health MDGs. Structural changes in the way donors and recipients finance health expenditure in poor countries are needed.

McPake B, Kumaranayake L, Normand C (2002). **Health economics: an international perspective.** London, Routledge.

Health economics helps analysts and planners understand the available options and the implications of the choices made. In contexts where the gap between resources and needs / demands is particularly wide, such as in countries affected or emerging from a chronic crisis, economic analysis is particularly helpful. The economics-illiteracy of most humanitarians facilitates the transfer between high- and low-income countries of policy approaches that are accepted or imposed, frequently through international organizations, without considering their implications or limitations.

In this book, basic economic concepts are applied to health through comparisons, short case studies and examples. The authors believe that economic principles are universal. The examples provided from different countries reinforce this belief, which, however, needs to be taken with a pinch of salt in a crisis context.

Poletti T (2003). **Healthcare financing in complex emergencies: a background issues paper on cost-sharing.** London, London School of Health and Tropical Medicine. Available online at: www.lshtm.ac.uk/hpu/conflict/publications/CostSharinginComplexEmergencies.pdf?section=news&wwwID=1704, accessed 27 September 2008.

A thoughtful, frank review of a controversial issue. Almost two decades of experimenting with a variety of cost-sharing schemes in poor countries have produced lacklustre results. Despite the inadequate experience acquired in conflict-affected contexts, some donors conditioned their funding to NGO healthcare projects to the inclusion of a cost-sharing component in their design. The paper presents some cost-sharing mechanisms, put in place in the Democratic Republic of the Congo and Liberia, finding them uniformly disappointing in terms of revenue raising, efficiency and equity. The impact of cost-sharing in complex emergencies must be studied in depth, while controlling the ideological biases that usually colour the scrutiny of this issue and make discussions meaningless. Alternative ways to finance the financing conundrum crippling healthcare provision in many protracted crises must be found.

Additionally, the paper offers a clear summary of the main sources of healthcare financing, of provider payment mechanisms, and of cost-sharing schemes.

Schick A (1998). ***A contemporary approach to public expenditure management***. Washington, DC, The World Bank Institute. Available online at: www.worldbank.org, accessed 14 September 2008.

A superb, eminently readable and clear introduction to the field, strongly recommended to beginners. Seasoned practitioners will find the report rewarding, too. The author succeeds in making dry topics – like the main features of public financial management systems, their shortcomings, and the structural constraints that undermine these systems – attractive and lively. A chapter addresses the crucial issue of the inadequacy of PEM systems of developed countries, when applied to poor, weak public sectors. Allen Schick is also the main author of ***Public expenditure management handbook***, Washington, DC, The World Bank, 1998. This excellent book covers many of the same themes from a slightly more practical point of view.

Segall M (1991). **Health sector planning led by management of recurrent expenditure: an agenda for action-research**. *International Journal of Health Planning and Management*, 6:37–75.

Clear, insightful overview, firmly grounded in direct experience, of what health planning is all about: the making of informed choices between alternative allocative options, within political, financial and managerial constraints. The logical steps to be taken and the frequent hurdles to be overcome for a progressive, redistributive policy such as PHC to materialize, are discussed. Both the poor reputation health planning has suffered from in recent times and the mediocre results registered in implementing PHC in many health sectors may be ascribed to a certain degree to the prevailing neglect of the rational, realistic approach presented in this classic paper. No reference is made to the additional, specific constraints affecting war-torn health sectors. However, most if not all of the considerations offered by the author hold in these settings as well, at least at the conceptual level.

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Why and how to carry out a survey of external resources

Annex 6a

In a protracted crisis, reliable, updated and complete information about resources provided by international aid is usually very difficult to obtain. Given that in these situations external resources often represent the largest share of the total funding allocated to health, any serious analysis of the sector cannot overlook them. Both donors and recipients try to collect data about inflows of external resources, usually amassing impressive amounts of figures, unfortunately in disparate formats. Gathering from these data real *intelligence* about the field situation on an ongoing, routine basis is therefore impossible.

In many protracted crises, the UN tries to study aid flows, as discussed in *Module 3. Understanding the broader country context: past, present and future*. However, the aggregate standardized format used by most databases might be insufficient for the information demands of a specific sector, such as health. When a tracking system of the Afghan type is already implanted, ways of complementing it with additional health-related information should be explored.

The difficulties mentioned below help to explain the reasons behind the inadequacy of most routine data. To gain serious insights about external resources, a dedicated standardized survey is required in most cases. It should be replicated annually, or every other year, following the same standard approach.

Goals of the survey of external resources:

- To get a reliable picture about the resource envelope available to the health sector in the recent past.
- To study funding trends and to draw conclusions about likely funding levels in the near future.
- To learn about the nature of the external resources made available to the health sector (investment, salaries, drugs, etc.) and about their distribution across the country and levels of care.
- To learn about the management responsibilities of the various actors present in the health sector, in relation to external resources.

Collecting data about external assistance, a big share of total financing to the sector in many cases, without complementing them with information related to public and private internal expenditure would obviously provide an incomplete picture.

The proposed survey is necessary, but labour-intensive and fraught with difficulties:

- *Fragmentation and ambiguities of roles*: many donors, development agencies, banks, foundations, and NGOs. Most resources originate from bilateral donors (i.e. governments of rich countries), flowing through implementing agencies. Thus, a specific agency can appear as a donor to the field recipient, while it is in fact an intermediary in the aid transaction. *Double- or triple-counting of funds is therefore a constant concern.*
- *Fragmentation inside the same donor country*, with funds managed by a certain department (say, the emergency one) following different rules and disbursement channels from those controlled by another department, such as the development section. The European Union has one of the most complex set-ups in this regard. Certain countries, such as France, have several specialized agencies, each autonomous from the others. Also, for some donors certain funds are controlled by HQs, but others by the country office, which can be unaware of HQ funding lines. Further, decentralized bodies, like regions and municipalities, may provide additional funds. Finally, private funding may come from the same country, partially or totally unknown to its state authorities.

- *Informal donations* by private sources may be substantial, for example, for countries with a large diaspora. Also, donor countries outside the traditional Western circle of the Development Assistance Committee (DAC) may constitute an important source of aid, difficult to study because of their modalities.
- *Variety of planning cycles and budget formats.* To develop a survey instrument suiting all the players – who use very different planning, budgeting and accounting tools – is prohibitively difficult. The surveyors need to agree with each agency on the best way to adjust the respective information to the standard collection tool. In some cases, the conversion of source data, so that they can be integrated into the survey database, calls for substantive and creative manipulation. A standard timeframe for the financial information to be collected needs to be chosen, since financial years and reporting/accounting systems vary across agencies. For most agencies, financial years correspond to the calendar year, which can be used as a standard. The data from the agencies whose financial cycles span over parts of two calendar years need to be correspondingly adjusted.
- *Languages* can hinder the access to information, as some agencies are not used to translating their programme documents into an international medium. In these cases, the surveyors have to decide whether to ignore these contributions (perhaps because they are of marginal significance) or conversely to incur the additional cost of overcoming the language barrier.
- *Concerns about the use of the collected information.* Some agencies feel uneasy about this sort of survey, particularly in contested environments. Special care is needed to reassure participants that the collected figures will not be used against them, and that controversial statements given during the interviews will be quoted as from anonymous sources. Particularly sensitive information concerns salaries of international staff, programme support costs or overheads of implementing agencies and procurement of certain items (when aid is tied).
- *Respondent fatigue.* aid officials are continuously asked (by multiple bodies in the recipient government, by coordinating units, by HQs, by auditors, by donors, etc.) to provide figures (always in different formats) about their activities, figures that in most cases flow only in one direction, without returning, translated into information, to their source. Therefore, the spontaneous reaction of some informants may be to dismiss, as just another nuisance, the request for new data.
- *Incompleteness of the information available to respondents.* For instance, most agencies disburse funds to NGOs without keeping detailed track of the funded projects until they are complete. Thus, to estimate annual implementation rates for the agency's whole project portfolio would call for a detailed study of each project, by obtaining respective data from each NGO. Given their large number, this could be better done using a sample of NGOs rather than to study all projects. Also, some funding lines are devoted to integrated programmes (i.e. covering other sectors, such as education, agriculture, etc.), making it difficult or impossible to obtain precise figures related to the health component. Programmes aimed at HIV/AIDS control are often multi-sectoral, hence difficult to study. Further, many projects cover several administrative areas or levels of care, in this way jeopardizing the analytical study of the respective allocations.
- Given the *uncertain political context*, some agencies could be hesitant at providing figures about their expected future funding, or they can be just uninformed about big decisions to be taken at HQ level, according to the unfolding of the political and military situation. Despite this serious constraint, information about present and past years (so as to study funding trends) should be available for most agencies. Caution is needed when interpreting future trends, because they tend to present declining funding levels, starting one or two years after the survey.

This is frequently an artefact, due to the propensity of donor officials to report conservative figures related only to commitments or firm pledges.

- *In fast-moving environments*, the rapid turnover of donor officials limits the information they control and the collaboration they provide.

Methods and practical arrangements

- To overcome diffidence, the study team should be perceived as autonomous from institutions with a specific interest (beyond knowledge) in the survey results. A research institution, functioning as an umbrella, could address the problem. Alternatively, a mixed team, drawn from different parties, could offer a valid solution. In order to motivate informants to participate, the team members should enjoy a solid technical reputation. It is important to clarify the goal of the survey and the benefits that each agency can receive from getting a reliable picture of the external assistance targeting the sector. A letter signed by key players willing to promote the survey, could help encourage other agencies to participate.
- The survey team should be kept small (2–3 people), to ensure consistency of approaches. The first agencies should be studied by the whole team, to ensure agreement on the applied methods and the adjustments to be adopted.
- To ensure participation, all parties should agree (and be reassured) that the collected information will become public domain, to be widely circulated and to remain easily accessible to all stakeholders.
- The survey instrument and the criteria of data collection must be tested on a small sample of agencies, chosen because of their diversity. For instance, a bilateral agency working only/mainly through NGOs, a UN agency managing directly most of its activities, and a development bank could offer a suitable testing ground. The test agencies should be encouraged to provide their feedback about the problems encountered preparing the required data, the amount of internal work needed, etc., so as to improve the survey tools.
- The survey instrument must include as many instructions and definitions as needed, to standardize the answers to the maximum extent. In a multilingual environment, misunderstandings are particularly frequent. As many sources of misunderstandings as possible should be spotted and addressed during the test phase.
- The survey has to be introduced to the interviewed agency during a formal meeting, during which the instrument is jointly explored and definitions, issues and doubts are clarified. Usually, a second working session is needed to address the doubts arising from the compilation of data and to decide the most sensible approaches to be adopted to overcome the main difficulties. For some agencies with a particularly complex set-up, a third meeting may be needed. Many agencies do not keep the requested information routinely updated and need to assemble it for the survey purpose. This can take time and might need technical advice from the surveyors.
- Many external contributions are provided in-kind, which could be reported by the informant agency in monetary terms. When this is not the case, these inputs have to be converted using a standard local cost, used across sources. A special difficulty (frequent in the case of tied aid and brand drugs) is incurred when in-kind inputs have been bought by the donor agencies at prices that vastly surpass average international prices. Studying these discrepancies would provide precious information about existing inefficiencies and offer a powerful argument for their correction. However, applying the same criteria across all informants could be very difficult and labour-intensive. Tied aid should be handled apart in any case.

- Most donor agencies will provide figures in their home currency, which need to be converted into a common currency, such as the US\$. If the local currency is used, time series need conversion to constant prices to control for high inflation. To standardize exchange rates, a website such as <http://www.oanda.com/convert/fxhistory>, which provides average annual exchange rates for most currencies, is particularly useful. The drop in the exchange rate of the US dollar in relation to most donor currencies, which occurred midway through the first decade of the 2000s, risks suggesting funding increases where none took place, or over-estimating true increases. Converting all figures into Euros might be a way to track trends in a more meaningful way.
- Once compiled by the surveyors, the instrument should be returned to the respective agency for an accuracy check.
- It is convenient to start with actual financing agencies, based at the national level. This will cover a large proportion of total financing, provide precious experience, build confidence in the team and its capacity and not entail travel costs. Once the national picture is consolidated, a survey of NGOs can be considered. However, this second phase implies different instruments and higher costs. Also, many NGOs do not keep a formal budget, presenting additional difficulties. Before embarking on a NGO survey, a check of the consistency between the information obtained from financing agencies and that provided by a sample of NGOs should be considered. If the discrepancy is large, the causes behind them should be understood and a survey of NGO contributions designed.
- Given the multiplicity of funding sources and the prevailing fragmentation, reaching total coverage for the survey is out of the question, even after strenuous efforts by the surveyors. They have to decide when to stop looking for missing data (from unknown or unapproachable sources or non-collaborating agencies), according to the costs likely to be incurred for any additional piece of information. A survey covering more than 80% of all possible funding sources should be considered as a success. All known missing sources should be clearly mentioned in the final report.
- Steps should be taken to preserve the experience gained in carrying out the first survey, and preparing the following one. Ideally, permanent capacity should be acquired, along the lines sketched in *Annex 5. Establishing a policy intelligence unit*. If this development is premature, measures to consolidate survey tools into materials usable by future surveyors are recommended.

For an excellent application of the approach proposed in this annex, see Capobianco and Naidu (2008).

Costs and cost analysis

Annex 6b

Awareness of the cost implications of health decisions and understanding of cost behaviour are critical at all levels of health care, and even more so in the resource-scarce context that invariably characterizes crisis-affected health sectors. Collection and analysis of data on healthcare costs should be a key concern of health managers: without cost analysis, the planning, monitoring and evaluating of health activities become fruitless exercises.

Unfortunately, many health managers are by training and professional experience unacquainted with cost analysis and the discipline that arises with its use. The scarcity of adequate information and the objective difficulty of carrying out economic appraisals, which characterize protracted crises, further encourage subjective decision-making. Nonetheless, even rudimentary cost analysis, or at least the awareness of the concepts on which it is based, are essential elements of sensible management decisions.

This short annex is intended to guide health professionals through the maze of concepts and terms related to the different types of costs, and their use for different purposes. To find a detailed discussion, accessible to non-economists, of the issues mentioned below, refer to the papers mentioned in the *References*.

Cost is intended as the value of resources used to produce something. A first useful distinction has to be made between **financial** and **economic** costs. The former are “*measures of loss of monetary value when a resource is acquired or consumed*” (Perrin, 1988) in order to carry out an activity. They represent, therefore, how much money was paid for the inputs used to provide a service. **Economic** costs instead express the full cost borne by society, and are based on the opportunity cost, or the cost of the next best alternative forgone. For example, a community health worker who provides health services for free places an opportunity cost on society: his/her time could have been devoted to an alternative activity, such as cultivating the land (the return of this activity representing a measure of the opportunity cost of delivering health services). But if the community health worker becomes a refugee and no other productive activity is available for him/her, the opportunity cost of his/her time drops significantly.

Economic costs must include, and price, goods/services that are provided for free by donors or volunteers and also those that are subsidized (i.e. whose cost does not reflect the market rate). To value these costs, it is common practice to use local *market prices*, or *adjusted market prices* where there are market imperfections (e.g. for subsidies) or *imputed market prices*, where no such prices exist and it is necessary to use proxy valuations. For instance, the average wage of domestic labour can be used for valuing the *indirect cost* - see below - of a housekeeper seeking medical treatment.

To adjust prices to obtain estimates of the actual economic cost is particularly important in disrupted contexts, where donations abound, many inputs are imported and prices are heavily distorted by subsidies. As social sectors, such as health, benefit from these factors to a large extent, in most cases the use of *shadow prices* (as these adjusted prices are called) is mandatory. For instance, donated drugs may inflate healthcare costs, if computed at the price they were purchased by a Western charity from a rich-country retailer. The use of local prices would correct this distortion. Conversely, where domestic exchange rates are grossly inflated, the use of international prices may be preferable. Economic costs need also to take into account the opportunity cost of investing now for the service rather than delaying the payment and using the money in a productive way.

The above factors explain why financial costs are lower than economic ones. It is the perspective of the user of costs and his/her purpose that determines when to use financial or economic costs. The former are mainly used for accounting and

management purposes, whereas the latter are preferred for economic evaluations, planning and resource allocation.

The above definition of financial costs underlines the values of resources as acquired or consumed and not to the actual cost of a good. The value of resources changes over time and there is often a difference in the value between the *purchase* and the *consumption* of a resource: costs, which refer to the value of resources at the time the purchasing was made. To reflect this difference, **replacement** (current) cost, which is the price of the resources consumed if they were purchased today, is preferable instead. The use of replacement costs is particularly relevant in relation to health facilities, which may have been built several decades before the analysis. Historical building costs would be rather useless in the context of planning the recovery of a dilapidated network, its restructuring or its expansion. **Purchase** cost is the price paid for buying a service outside of the organization (see *Annex 7 on Contracting*), as opposed to the cost of providing this service with internal resources.

Some costs change in relation to the volume of activity, some remain fixed, and others are intermediate:

- **Fixed** costs: they remain constant, irrespective of output produced, at least in the short run. Examples: purchase of equipment, rent of a building, salary of an administrative official. *Sunk costs* are a special type of fixed costs, representing those that have been irrevocably committed and cannot be recovered: for example the costs of training a health professional who later emigrates. Healthcare delivery tends to incur high fixed costs, such as those related to facilities, equipment and personnel.
- **Variable** costs: changes proportionally with the volume of activity. Examples: drugs, consumables, food, fuel.
- **Semi-variable** costs. They have a fixed and a variable component. For example, the salary bill may be composed of a fixed part, related to civil servants who have to be paid irrespective of the case load handled, and by a variable part, related to staff hired on short-term contracts, such as vaccinators during a campaign.
- **Stepped** costs: they have the same behaviour as the fixed costs until the level of activity reaches a threshold, when they step to a higher level. Example: a doctor can treat a certain number of patients, if this number is exceeded another doctor has to be hired, the cost of labour jumps when the threshold has been surpassed.
- **Total** cost: it is the sum of fixed, variable, semi-variable and stepped costs for a certain volume of activity.

By dividing the total cost by the output (number of produced units) we obtain the unit cost (or cost per item), such as the cost for treating a patient.

Cost centre refers to the unit of the organization – department of a hospital, health centre, etc. – for which one wants to identify and analyse the costs. It is important to define precisely the structure and functions of the cost centres we want to analyse and compare, and identify a typical, averaged unit, so to avoid drawing wrong conclusions.

Another useful classification is in relation to the working life of the inputs required for carrying out an activity: **capital** costs are defined as those for resources that last more than one year (e.g. buildings, vehicles, pre-service training, computers, other equipment), whereas recurrent costs refer to inputs which last less than one year and are regularly purchased (salaries, drugs, fuel, electricity, heating, etc.). Equipment that lasts more than one year but is very cheap can be considered recurrent, provided that a price ceiling is defined and consistently utilized (usually US\$ 100). The distinction between capital and recurrent costs is important also because most budgets are structured in this “dual” way.

Capital inputs are purchased at a point in time, but are used for a period; therefore their costs need to be spread over that period. Since they can involve substantial amounts of money (e.g. for a building), which is tied up and cannot produce return, it is important to consider the value of alternative opportunities for investing the capital. In this case, *annualization* techniques are used, which take into account both the depreciation of the asset and time preference (i.e. discounting). If, instead, our analysis is limited to accounting for the cost of capital, we can limit ourselves to estimating the *depreciation* of the capital item. The simplest approach is the *straight-line depreciation*, where the replacement cost of the capital item is divided by the years of its expected working life.

A typical classification of costs by inputs is shown below:

Capital costs	Recurrent costs
• Buildings	• Salaries for staff
• Vehicles	• Drugs, supplies, vaccines
• Equipment	• Fuel & maintenance for vehicles
• Etc.	• In-service training
• Pre-service training	• Maintenance and operating costs of buildings
	• Etc

Costs can also be classified according to function and activity (management, supervision, training, etc.), by level of use and by source.

The financial costs of a service can be classified as direct, indirect and overheads. **Direct** costs refer to resources *directly* consumed in the service production: drugs, staff, etc. **Indirect** costs refer to shared resources used for providing services by support units (e.g. radiology, laboratory) that centrally supply other departments. **Overhead** costs are those referring to shared resources used to support the organization overall, without providing direct care: management, security, etc. Indirect and overhead costs cannot be directly allocated, because their shared resources serve different customers. Different techniques are available for apportioning these sorts of costs, based on the distribution of resource use across different cost centres. In the context of economic (rather than financial) evaluation, this classification is used differently: *direct* costs are those related to the direct provision and use of health services, *indirect* costs refer to loss of productivity of patients and caretakers due to medical treatment, and **intangible** costs cannot be valued, they refer to pain, suffering, social stigma, etc.

In cost comparisons, **marginal** costs, being defined as the additional costs of the production of an additional service unit, are used. For instance, to admit an additional patient to a hospital ward with only 60% of bed occupancy entails a modest cost increase. Conversely, once the ward capacity is exhausted, to admit an additional patient would imply the ward expansion, the hiring of additional staff, etc. Marginal costs would increase substantially. Marginal costing is often preferred to average costing, particularly for micro-decisions in the short run (e.g. for a hospital manager who needs to assess various options). At a macro-level and in the long-run, average costs reflect well the true variable costs.

Comparing costs and prices over time in a disrupted environment is tricky, because of the dramatic changes of the currency purchasing power common in these situations. Drawing meaningful conclusions, **current** or **nominal** amounts have to be translated into **constant** or **fixed** terms. To achieve this, inflation has to be taken into account. Common practice is to designate the first year of a time series as the base year, to which all following values refer. The prices of the following years are then deflated, i.e. adjusted according to the inflation rate that took place during the corresponding year, to become comparable to those of the base year. Deflators are usually computed by central authorities, such as the ministry of finance, the national institute of statistics or the central bank. In disrupted countries, official deflators are often missing or contested, which makes the building of meaningful time comparisons difficult or

impossible. Command economies present particular difficulties, given that the access to resources is not strictly dependent on money. Thus, funding trends in a country in transition from a command to a market economy can be grossly misleading.

Financial data are usually produced by the different departments of health organizations for accounting purposes. It is not frequent, however, to find a consolidated overview and analysis of the costs incurred by the sector. This partly has to do with the functional separation between health managers and administrative personnel, and with the fragmentation of these data across different departments. Different sources of financing and parallel accounting procedures also do not help to compose a reliable picture. Additionally, many financial information systems are designed to control, rather than to optimize expenditure, and provide data of limited value for cost analysis, which demands dedicated studies. Technical difficulties related to the identification, valuing, interpretation and comparison of costs also discourage managers. However, given the resource scarcity and the wastage that affect many crippled health sectors, cost analysis can provide the basis for the pursuit of dramatic efficiency gains.

Annex 6b References

Creese A, Parker D, eds. (1994). *Cost analysis in primary health care: a training manual for programme managers*. Geneva, World Health Organization. Available online at www.who.int, accessed 14 September 2008.

An excellent short introduction to concepts, terms and methods, accessible to non-economists, eminently readable, rich in relevant examples and complete with exercises. A recommended starting point for the health professional needing to take the first steps in health economics, cost analysis, evaluation, planning and management.

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Analysing patterns of healthcare provision

Module 7

Contents

The key aspects of healthcare provision to be considered for a country in crisis are discussed. Coverage of the most important health services, service loads of healthcare facilities, efficiency, effectiveness and quality of the provided care stand out as basic elements to be studied. To assist in the analysis of the ways a health sector functions, and in the discussion related to its recovery and reform, a review of healthcare delivery models is provided. The value of essential health service packages is then appraised. The second part of the module deals with specific aspects of healthcare provision, such as prescription patterns, vertical programmes, urban health care, mobile health services, and relief health care.

Annex 7 discusses rationale, modalities, benefits and limitations of contracting for health services, an approach already adopted in some health sectors emerging from conflict and being considered for adoption in many others.

Closely-related modules:

- No 2. Making (rough) sense of (shaky) data*
- No 5. Understanding health policy processes*
- No 9. Studying the healthcare network*
- No 11. Studying the pharmaceutical area*

Coverage of health services

Violence-induced resettlements group people away from the most dangerous areas. This leopard-skin distribution of the affected population reduces the usefulness of measures of physical *coverage*. The true *access* of people to health care would be much more instructive, but is difficult to measure, particularly in unstable contexts. *Utilization* is therefore frequently adopted as a proxy measure of access. The access of potential users to health care may be permanent in areas unaffected by the turmoil, or temporary, because of gaps in service provision due to security or logistic constraints, and population movements. Whereas the nature of some services (like immunizations) allows for their intermittent delivery, others suffer badly from interruptions and unpredictable provision.

By concentrating dispersed or nomadic communities in the proximity of health services, violence may improve physical access. Violence within communities may induce deep changes in the distribution of people, impacting on their access to health services. Whereas before the crisis health facilities were used by different ethnic or religious groups, afterwards the healthcare network may split into mutually inaccessible portions, controlled by hostile sides and used by people affiliated with them. The coverage of services assumes a rather different meaning. Partitioned health services become part of the ongoing political conflict, and part of the eventual settlement.

Comprehensive coverage figures are missing in virtually all disrupted health sectors. Service coverages computed using units of outputs, like assisted deliveries or measles immunizations, suffer from the unreliability of population estimates. Standard surveys, such as DHS and MICS, have been carried out in many complex emergencies, but their results may be affected by sampling shortcomings related to insecurity and inaccessibility. Their estimates have to be considered in light of the population they have studied. It may be preponderantly urban, or limited to some privileged regions, or may exclude a large portion of the target living in areas controlled by rebel groups. Coverage surveys, carried out by special programmes like EPI, provide useful additions to general assessments. As is always the case with special programmes, findings related to them are unrepresentative of general service performance.

Healthcare utilization estimates, like annual number of outpatient contacts per capita, are of great interest. Given the prevailing fragmentation of service provision,

available consumption figures are usually incomplete, prone to neglect large chunks of total outputs. Before they are used, some adjusting for missing data is usually needed. Services provided by relief agencies are often reported apart from equivalent services provided by standard health systems. The consumption of curative services is usually underestimated, particularly in urban areas, where private for-profit providers concentrate.

Data about coverage and utilization must be always cross-checked with data related to service supply. Health services conditioned by particular hardware, equipment or personnel must deliver outputs roughly proportional to these inputs. For instance, sputum exams for identifying cases of tuberculosis depend on the network of microscopes and laboratory staff. Gross mismatches between reported new cases and the needed equipment and staff raise concerns about the reliability of the data, or the use of the reported inputs.

The way in which healthcare-related information is collected shapes the approach chosen to study service consumption. In sectors where standard data collection tools are in place, attempts at aggregating figures reported by dispersed service providers have some chance of success. A comprehensive (if imprecise) picture may eventually emerge. In situations of piecemeal data collection arrangements, where multiple actors have failed to agree upon common formats, disparate data cannot be aggregated. Available figures – selected for their reliability and compiled in datasets covering different regions and contexts – must remain apart. In this way, the presented ranges may suggest the prevailing pattern of a given service, and point to existing gaps in service provision.

As the crisis deepens, service provision becomes extremely uneven. Resources concentrate in accessible, secure areas, which may benefit disproportionately from this situation and attain unprecedented levels (even in peaceful times) of service offer. Border regions are often privileged by relief agencies, on security and operational grounds. Large swaths of a troubled country, sometimes emptied by their original population, may be deprived of even rudimentary health services.

The coverage of essential or basic health services is a concept commonly referred to, but is loosely defined. Where a package of essential services has been officially formulated, it provides a starting point for the analysis. As the universal adoption of an official package is uncommon in war-torn health sectors, a variety of services regarded as “essential” by different providers in different settings is frequently recognizable. Fragmentation notwithstanding, some core services are likely to be provided in most cases. Expressing the coverage of essential services as an interval between the service with the highest coverage (in most cases, EPI) and that with the lowest coverage (almost always, deliveries attended by skilled staff) improves its meaning. The latter indicator includes in some countries deliveries attended by TBAs, which can explain certain surprisingly high figures (see the table below for an example).

To study the degree essential services are accessed by the target population, the following indicators, when reliably computed, are helpful. The use of certain services is better expressed as a coverage ranging from 0 to 100%, whereas in other cases service consumption, or number of services utilized per person per year, is more appropriate. National coverage figures usually hide enormous internal variations. As such, they should be complemented by coverage registered in privileged, as well as in underserved, areas. When population estimates are patently unreliable, no coverage figure should be computed. Absolute service outputs are preferable.

- *Coverage of DTP-3 immunization.* This indicator may be used as a proxy of the proportion of fully-immunized children, under the EPI schedule, in the frequent case that fully-immunized status is not recorded by the information system. Demanding three contacts over at least two months to be attained, high levels of DTP-3 coverage suggest fairly protracted access to immunization

services. Immunization coverages computed by using cluster surveys are more reliable than those obtained from reported shots and theoretical populations. Unfortunately, cluster surveys often refer to populations living in secure areas.

- *Coverage of immunization against measles* (relevant because of the importance of this disease, among those targeted by EPI). Dependant on a single contact that may take place outside health facilities, it ranks usually among the highest coverage figures. Immunization campaigns may lead to wide oscillations in this indicator. Figures on immunization coverage help to check the reliability of population estimates. The frequent finding of coverage largely in excess of 100% raises legitimate doubts as to the accuracy of such estimates.
- *Average annual number of outpatient contacts per head*. Some health information systems discriminate new contacts from follow-up ones. Disaggregating this indicator by level of practitioner provides additional clues about the level of provided care. Results are heavily influenced by the availability of medicines.
- *Coverage of deliveries attended by skilled health workers*, or attended within a health facility, according to the information system in place. If a large proportion of deliveries “within a health facility” is attended by unskilled staff, the interpretation of this indicator changes. Generally, this indicator has the lowest coverage among core basic services.
- *Proportion of expected new cases of tuberculosis found, and proportion of these cases successfully completing the treatment schedule*. Frequently, the number of expected new cases is estimated using truly audacious assumptions. Before interpreting this indicator, or comparing it to other contexts, an assessment of the way incidence has been estimated is recommended.
- *Proportion of expected new cases of other important communicable diseases found, and subsequently treated*. Whether these disease-control services are integrated into general health services or are provided by separate, special programmes, influences the way coverage has to be interpreted.
- Indicators related to hospital care would be of the greatest interest, but they are rarely available at national level. Occupied bed-days are preferable to admissions or discharges for gauging patient loads. Given the large oscillations they experience, these indicators should be collected over protracted periods of time.

Other coverage of basic services, like growth monitoring and antenatal care, are usually less instructive of general service performance, because of their frequently inflated levels, attained in most cases at unacceptably low technical standards.

For a discussion of indicators, see *Module 2* and *Annex 2*.

The following table provides a sample of indicators related to health service consumption, collected from many distressed health sectors. They are presented here to show the range of values most frequently found in poor disrupted contexts. The years chosen refer as much as possible to the crisis period, or to its immediate aftermath. The many blank entries are due to the unavailability of reliable estimates.

Service consumption and coverage in selected health sectors

Country	Access to basic health services	Outpatient contacts per capita per year	EPI fully-immunized children	Deliveries attended by skilled staff	Year
Afghanistan			35%	19%	2006
Angola	24%	0.3	17%		1998
Cambodia	33%		39%	34%	1998

Country	Access to basic health services	Outpatient contacts per capita per year	EPI fully-immunized children	Deliveries attended by skilled staff	Year
DR Congo		0.2	31%	74%	2007
Kosovo				72%	1999
Liberia			39%	46%	2007
Mozambique	30%	0.4	45%	26%	1993
Sudan	40-60%	0.8	27%		2001
Uganda	57%	0.7	84%	20%	2003
West Bank and Gaza	94%		>95%		2008

Note 1: For Afghanistan, Mozambique and Uganda, the coverage of the DPT-3 vaccine is used as a proxy for fully-immunized children.

Note 2: The presented figure for 'Deliveries attended by skilled staff' in the DR Congo is taken from the Demographic and Health Survey 2007. Despite the generally reliable source, the figure looks too high to be retained as trustworthy.

Service loads of healthcare facilities

Available health services are unevenly used. Tertiary hospitals in secure areas, where large populations concentrate and lacking adequate first-contact filter capacity in their proximity, tend to become overcrowded with self-referred patients suffering from common conditions. Conversely, many peripheral PHC facilities are underused, because of the poor services they provide, lack of access, and competition by alternative providers (perhaps backed by NGOs or charities). User fees have been identified as a leading cause of low utilization of health services. Informal charging by health workers also deters service consumption.

Reliable data about service outputs by facility are often unavailable or incomplete. National aggregate figures may be misleading, because of widespread underreporting. To address this shortcoming, a sample of facilities whose reports are deemed reliable may be used to obtain average workloads. In many situations, NGOs provide data related to the facilities they support. When figures related to privileged facilities are used, caution is needed in interpreting them. See *Module 2* for a discussion of common data flaws and of ways to address them.

Figures related to service loads change dramatically and erratically over time, as security conditions, supplies, and staffing evolve. Single point-in-time assessments may be misleading. When available, time series provide important indications about the direction taken by services. Considerable data cleaning and adjusting are called for during the assembling of time series, due to pervasive reporting gaps. Changes in information flows and data errors are too often taken as true changes in service outputs.

Average workloads for the main categories of facility and for broad classes of services (inpatient days, outpatient contacts, major surgery procedures etc.) are useful to assess the consumption of available services. As each category of facility will aggregate overused as well as underused health units, average figures should be complemented by highest and lowest ones.

Service utilization may reach very high levels among displaced populations, whose health status is usually poor. Easy access to healthcare delivery points, often strengthened or established by relief agencies, encourages consumption. Four outpatient contacts per head per year are regarded as standard for displaced populations (The Sphere Project, 2004), against national averages frequently falling below one contact. The latter figures often fail to include services provided to refugees and IDPs.

Overextended health sectors are particularly prone to waste scarce resources in underused facilities that offer health care of unacceptable standards, in a downward

spiral of decreasing efficiency and effectiveness. In situations of contested political rule, authorities may attach special significance to these crippled facilities, maintained open to signal government presence, rather than to provide health care.

The identification of excessive workloads for certain facilities enjoying advantages in terms of localization, assets or inputs is common. These heavy workloads may be transient, related to the presence of displaced people, or to the presence of charismatic practitioners. Also, the wartime provision of services exerting a particular appeal on patients, no matter what the objective value and convenience of providing them in a given facility, may boost transient consumption. For example, hospitals supported by charities may expand their load of tuberculosis inpatients because of the free meals they offer.

Due to the reduction of the peripheral healthcare network, to security concerns and to their limited mobility, patients may remain inside or close to a health facility during protracted periods. Inpatient care is increasingly preferred, on convenience – rather than technical – grounds. The availability of inpatient capacity induces its use even when admissions are not strictly needed. Mission hospitals tend to rely on inpatient care more than other healthcare providers.

The epidemics frequently striking violence-affected populations tend to absorb most hospital capacity. Victims of famine are often admitted, when alternative ways of dealing with them are not available, or are exhausted. Wards devoted to chronic conditions, in principle suitable for outpatient management, increase their utilization and often expand in size. Migrant populations finding hospitals on their way may transiently overcrowd them.

If these factors are not adequately considered, the expansion of hospital workloads may induce further investment in heavy infrastructure, thus creating excess capacity for the future. The availability of external financing, induced by the crisis, encourages this tendency. Before investment decisions are taken, close scrutiny of the user populations and of the conditions handled by the facilities under consideration is called for. While this information is generally lacking at central level, where many investment decisions related to hospitals are taken, it is in most cases available at facility level.

Assessing the effectiveness and efficiency of health service delivery

Many indicators provide elements to assess the effectiveness and efficiency of health service delivery. See *Annex 2* for a discussion of some of the most useful indicators, and of their limitations.

Overall levels of effectiveness and efficiency must be appraised by reviewing as many relevant indicators as possible. In unstable contexts, effectiveness and efficiency can seldom be measured, but must be assessed by assembling discrete pieces of information, partly of a qualitative nature. Some of the elements considered will provide indirect clues about effectiveness and efficiency levels. Many of the examined aspects are related to both effectiveness and efficiency.

The study of effectiveness and efficiency levels may give divergent results. Efficiency is likely to be found uneven, but poor overall. Service delivery costs escalate as the imperative to respond to the crisis and the availability of generous funding, accompanied by modest accounting requirements, make managers less sensitive to efficiency concerns. Operational standards are set at levels sustainable only for short periods and with the backing of powerful external agencies. Indigenous initiative is suffocated by the display of overwhelming resources brought in from outside. The conflict environment helps to justify inefficiencies that would appear unacceptable in its absence.

Against this dire landscape, some agencies, health facilities, or programmes

may deliver effective services. Their good performance may be recognized and considered as replicable on a grander scale or in a related field. Rarely, if ever, do these successful models withstand expansion beyond their size, or replication in the absence of the original conditions that made their good performance possible. Due to the limited available resources, there is a limit to which effectiveness and coverage can be maximized together: usually one dimension can be enhanced only at the cost of the other.

The very high costs associated with good performance in difficult environments may remain partially hidden, because incompletely captured by budgets or incurred far away from the service delivery point. Volunteer contributions or donations go often unrecorded, because they come “for free”. They may incur enormous opportunity costs, which, once properly computed, put good performance under a different light. Overlooking hidden costs in the comparative assessment of performance is a constant threat.

*Pointers to **ineffective** healthcare delivery:*

- Lack of policy direction, with proliferating priorities, programmes and initiatives;
- Imbalances among levels of care and service components;
- Poor quality standards of the care provided;
- Disregard by prescribers of sound treatment guidelines;
- Poor compliance of patients with treatment regimens;
- Proliferation of crises and emergencies, suggesting that the system is poorly equipped to react to events (some unpredictable, many ordinary);
- Disease outbreaks despite the previous application of supposedly effective control measures;
- Commoditization of health care, with diagnostic and therapeutic decisions taken mainly on commercial grounds;
- Use of inappropriate or wrong technology, perhaps because equipment and drugs were donated – or better, dumped – in response to an emergency.

*Pointers to **inefficient** healthcare delivery:*

- Duplication and overlapping of services and functions. Replication of initiatives;
- Allocative imbalances, with concentration of resources at certain levels of care or on particular services, to the disadvantage of others, equally important. Investing in community health schemes while neglecting backup services is a classic example. See *True story No. 14* for another example;
- Ambiguity of functions and duties, which are spread among several bodies and organizations;
- Disproportion between tasks and allocated resources;
- Misplacement of responsibilities, with central managers taking care of peripheral tasks;
- Low uptake of the offered health services. Sometimes, the problem is self-inflicted, as in the case of introducing cost-sharing schemes in high-cost emergency health services offered to impoverished populations;
- Light workloads;
- Under-use of available inputs, such as idle health workers;
- Long hospital staying times;

- High dropout rate of patients enrolled in treatment programmes;
- Multiplication of guidelines and schedules;
- Widespread waste and pilferage. Waste of donated inputs is usually considerable, due to their frequent inappropriateness, supplies unrelated to actual needs, improvised delivery lines, and the reduced value attached to goods not paid for and often not requested;
- Profusion of broken-down equipment, not repaired because of lack of cash, spare parts or technical skills;
- Misplacement and misuse of technical skills, equipment and drugs.

Quality of care

As healthcare delivery systems are impaired by the crisis, quality standards are severely affected, due to many interrelated reasons. The finding of heavy attendance loads for services of questionable technical content is common. If overall quality standards are usually poor, islands of excellence, often surpassing the technical levels attained in peaceful times, emerge. The capacity and the resources of aid agencies or charities are generally recognizable behind good technical performance.

Most strong performers, like hospitals or special programmes, are limited in size and scope, hence in their impact on overall health status. Their visibility and prestige may attain extraordinary dimensions. The financial cost of strong performance is usually unknown, which impedes the appraisal of alternative ways of allocating the resources absorbed by these healthcare institutions. Once established, high-quality healthcare providers may be able to maintain their privileged financing sources and thus to sustain their operations, particularly when backed by charity groups. Conflict-induced developments become permanent.

Assessing quality of care requires that certain criteria and standards are identified in order to translate the general dimensions of quality into something that can be measured and interpreted. See Donabedian (2003) for an exhaustive discussion of this complex field.

In the study of quality of care, different elements may be considered:

- *Structural aspects* refer to the inputs absorbed in the production of health services. They include the conditions of the workplace, staff qualifications, available equipment and drugs. The structural aspects of healthcare delivery are the most easily studied. Even in the most troubled environments, some indicators related to structural aspects may be found, from routine data or in evaluation and supervision reports. Checklists designed to collect indicators of this class abound.

The value of these indicators is mainly negative, in the sense that the absence of basic inputs suggests inadequate quality, whereas their presence does not ensure it. In many cases, expressing the availability of basic inputs as proportions of healthcare delivery points endowed with them is preferable to using averages. For example, the finding of 60% of PHC facilities lacking a functioning sphygmomanometer is more telling than stating that the average PHC facility is equipped with 0.8 sphygmomanometers.

- *Process aspects* refer to the way available inputs are transformed into health activities. They depend on a host of factors, including staff competence, work organization, incentives, information to the public. Whether a certain condition is correctly identified, the right treatment is prescribed, the patient complies with instructions, drugs and vaccines are properly stored, all fall within this group. Additionally, patient perceptions of care belong to this category. The majority of process indicators are collected through direct observation and interviews.

Routine information systems produce some process indicators, like case fatality rates, or the success rate of a treatment schedule. Given the shakiness of routine figures, considerable caution is needed before related process indicators are retained as reliable.

- The *outcomes* of health care are obviously the ultimate quality criterion. Unfortunately, their study is technically demanding and usually expensive. Moreover, their interpretation is fraught with difficulties. Long-term outcomes are particularly difficult to assess in unstable environments, where few or no variables can be controlled. Measures of outcomes of health care are therefore scarce in distressed health sectors.

Reliance on the assessment of structural and process aspects is commonplace, on the assumption that if all needed inputs are available and working practices are sound, the outcome of health care is likely to be satisfactory. Before embracing wholeheartedly this assumption in a troubled health environment, multiple checks are recommended. Caution is needed with single disease-control programmes, which by nature leave untouched a vast array of environmental and violence-related risk factors. The health gains expected from reducing the burden of morbidity and mortality of the targeted disease may be offset by concomitant losses in other areas, induced or magnified by the crisis.

Healthcare delivery models

The adequacy of dominant healthcare delivery models to present and future conditions and demands must be assessed. The country's political climate and the development options being chosen by (sometimes for) the government are profoundly influential on the choices being made in the health sector.

In cases of dramatic political change, as with the emergence of new states, or after the crumbling of despised regimes, policy-makers may feel compelled to introduce a radically different healthcare delivery model. This may be chosen without a careful appraisal of the problems affecting the sector, and of the available policy options. The merits of previously-dominant models may be downplayed, whereas the benefits of a radical departure from them may be inflated. Rarely if ever, do the implications and costs of changing the way health services are delivered receive adequate attention. The hurried dismantling of Soviet-inspired healthcare delivery systems in the Eastern block is an impressive example of this phenomenon.

The debate about the delivery model to be adopted may take precedence over the recognition of deep structural constraints. Extraordinary expectations nurtured about the benefits of a new delivery model may postpone the tackling of root distortions, a measure essential to enabling any delivery model to live up to its promises. Fascinated by the magic bullet of the day, decision-makers may expect that the solution of all problems comes from adopting a single measure. In Afghanistan in 2002, the policy discussion was captured by the introduction of contracting-out arrangements (see *Annex 7*), an appealing approach in a NGO-dominated health sector. Key structural distortions, like a derelict healthcare network with a large hospital component, an imbalanced workforce and a large but unregulated private for-profit sub-sector, were downplayed, on the implicit assumption that they would heal by themselves, or that the new delivery model would indirectly induce their correction.

The table below sketches most of the alternative models a policy-maker may consider. In real life, the options truly open to policy-makers are narrower than the presented ones. In fact, contentious choices are usually discarded by insecure politicians. International agendas tend to eclipse local solutions in the eyes of donor officials. Powerful lobbies may block the introduction of novel approaches. And unfamiliar delivery models may fail to attract the attention of policy-makers. Thus, changes may take place only at the margins.

Frequently, the prevailing healthcare delivery model is the product of political, military and logistic determinants, which in fact rule out alternative options. In Southern Sudan, the protracted political and military stalemate severed tertiary hospitals in garrison towns, administered by the central government, from the rest of the rural healthcare network, located in rebel-controlled areas. There, health services were provided by small-size, low-tech facilities managed by NGOs and charities, financed by international aid. Many healthcare providers relied on user fees to complement external support. High security and logistic costs, made worse by the dispersion of operations across a plethora of actors, contributed to prevent health services from evolving and expanding. The uncertainty about the eventual political outcome of the conflict discouraged large investments. Rural health services remained basic in technical content and limited in their coverage, with a diminutive referral capacity, through a long war. This delivery model was adopted in the absence of true alternatives.

In many situations, some of the described elements coexist simultaneously in various mixtures, although with different weight and influence over the whole health sector. Hybrid, ambiguous and transitional situations are very common. Among stressed decision-makers, uncertainty about the way forward to be chosen is prevalent. Political settlements leading to weak cohabitation governments tend to refrain from introducing any novel healthcare delivery model.

Alternative healthcare delivery models deserving consideration

Dimension	Possible options	Remarks
<i>Financing</i>	Public, paid for by tax and custom revenues	The dominant model (at least in terms of aspirations) in most post-colonial countries. Its goal of universal, free coverage materialized only in few fairly wealthy and well-managed health sectors.
	Public, paid for by international aid	Pattern prevailing in many transitional situations. Political considerations and media coverage may induce sudden inflows of abundant funds, with accompanying waste, such as in Kosovo and East Timor. The aid management instruments established to channel external funds influence their effectiveness.
	Public / Private, paid for through compulsory health insurance	Private contributions are often complemented by public subsidies or employer payments. Demanding fairly sophisticated management systems, this is mainly adopted in middle-income countries.
	Private, paid for by voluntary contributions in rich countries or by the diaspora, on charity, religious or solidarity grounds	Funds are channelled through international NGOs, missions, and support groups. Given the dispersion of this financing source, it is difficult to track funds, which are usually underestimated.
	Private, paid for by voluntary insurance or out-of-pocket contributions	Situation common in many countries, attained by default, because of the inability of declining public sectors to fulfil their stated role. Usually reluctantly acknowledged and underestimated in official statistics. The quality of commoditized health care may be dismal.
	Private, channelled through community pre-paid schemes	Often successful when introduced on a small scale and promoted by aid subsidies (explicit or not). Expanding promising pilots to cover large populations is usually difficult.

Dimension	Possible options	Remarks
<i>Provision</i>	Public, through a National Health Service, usually part of the civil service	Aggressively criticized during the 1990s for its inefficiency and ineffectiveness. More resilient than expected, after more than a decade of health sector reform. The model retains its appeal, on grounds of simplicity, predictability and fairness. In the eyes of many health cadres in developing countries, it remains the central delivery model, to be reinstated as soon as possible, once a crisis is overcome.
	Public autonomous providers, often part of local government, sometimes separated from the civil service	Linked to decentralization-oriented reforms. To work, it demands a robust political, administrative and regulatory setup. In failed states, local initiatives may prevent basic health service provision from collapse. May be backed by large donor support programmes.
	Private not-for-profit providers, funded by donor agencies, through grants.	The standard project arrangement for decades, shaping the way the aid industry works. The dominant provision model in failed states.
	(Public) vertical programmes, designed to control diseases or targeting special groups	Mainly aid-funded, managed by a mix of international and national officials. Supported services are delivered by public and private providers, under formal contracts or not. Naturally expanding during protracted crises, thanks to the resources they control and the operational freedom they enjoy.
	Private providers contracted by public financing bodies (usually donor agencies), under the oversight of the recipient government	In poor countries, mainly charities and NGOs. A mainstay of reforms inspired by the so-called New Public Management thinking. Despite the obvious conceptual appeal of this approach, results have been mixed. Promising findings have emerged from pilots carried out in Cambodia. Introduced on a large scale in Afghanistan. For a brief discussion of the contracting approach and a selection of key related references, see <i>Annex 7</i> .
	Private providers paid for by employers or customers	Usually poorly regulated, mainly concentrated in large towns. Private and parastatal firms may be the main contributors.
<i>Level and localization of care</i>	Hospital, providing mainly high-tech, inpatient, sometimes referral care	Often the dominant if unplanned model, usually reinforced by protracted crises. In urban settings, mainly for-profit, or public but heavily reliant on user fees. Not-for-profit large and fairly sophisticated hospitals are sometimes run by charities, missions and NGOs in rural areas.
	PHC facility, providing mainly low-tech, outpatient care, of high theoretical effectiveness	An appealing model, which has proved more difficult to implant and to expand than expected. PHC-oriented cadres have been trained in some health sectors. Otherwise, PHC is provided by mainly hospital-oriented medical doctors and nurses.
	Community/house, provided by professionals (PHC-oriented or not)	House care is often provided privately and informally by health professionals officially belonging to the public sector.
	Community / house, provided by CHWs or community members	Enjoyed enormous popularity in the 1980s, but fell progressively out of grace afterwards, as the limitations of the approach emerged. Re-emergence of home-based treatment schemes for some diseases (malaria, diarrhoeas and ARI), promoted by NGOs on a pilot basis, seems encouraging but no evidence of successful scaling-up to date.
	Mobile (in most cases providing selected services)	Usually very expensive and demanding on staff and equipment. For sparsely settled or nomadic communities, it may represent the only option realistically on offer.

Dimension	Possible options	Remarks
Content of care	Comprehensive package addressing most conditions (up to the affordable technical limits)	Usually including special programmes, often disconnected from mainstream services. Frequently, a theoretical construction, not translated into widespread practice.
	Selective package of priority interventions (disease-control, special-group programmes etc.)	Usually financed by donors. Strongly advocated by influential international institutions, it is rarely if ever implemented in its pure form. The priority-setting process is often driven by political, rather than technical, rationale. It may provide effective, but rarely efficient or equitable, health services. In resource-starved health sectors, it may represent the only realistic option.
	Emergency health care, targeting severely distressed populations	Financed by international donors, charities and private contributions, and mainly delivered by NGOs, some of them highly specialized. It has evolved over time, establishing its own methods and technical standards.
	Unplanned, demand-driven, predominantly curative health care	It tends to translate into high-tech, hospital-centred health services, mainly used by affluent urban groups. Soaring costs against poor and inequitable public health outcomes are the common result of this approach.
Regulation	In most situations, formal preserve of the public sector	In practice, neglected by many MoHs. Where the public sector is competing with private providers for resources and customers, conflicts of interest arise.
	An autonomous body, recognized by all stakeholders, regulates the health sector.	More often, the regulatory mandate is limited to discrete components of the sector (health professions, drug market etc.).
	Indirect, through regulatory provisions enforced abroad.	Examples include the certification of health professionals, or the quality checks drugs must pass to be supplied by firms based in well-regulated contexts (like the EU).

Note: The different options are not mutually exclusive, they are often adopted concurrently

Essential health service packages

Packages of essential (or basic) health services have been formulated in several health sectors, for different reasons, not always explicit. The package inspired by the PHC concept promoted by the Alma Ata Conference stressed social justice and empowerment. On the other hand, efficiency-oriented packages of low cost and modest ambition have been advocated by aid agencies of considerable clout. The concept is appealing, because of its promise of explicit, evidence-based, rational priority setting. The objective way the package formulation process is presented by its proponents raises hopes of reaching uncontroversial conclusions. However, as Tarimo (1997) has persuasively argued, the package concept is prone to misconstructions and abuses.

Given the fragmentation prevailing in troubled health sectors, the perspective of introducing a standard package tempts many players. In Afghanistan in 2003, it was hailed as a major step forward by many participants and observers alike. Thus, the formulation of a service package is one of the proposals commonly tabled at the start of a recovery process. Before embarking on it, decision-makers might take advantage of the experience gained to date:

- As in other areas of health planning, formulating an essential service package is a value-laden exercise, even when wrapped in apparently objective cloths. Negotiation plays a central role in it. The constituencies involved in the exercise exert a decisive influence on its outcome.

- The packages eventually chosen at the end of long and labour-intensive formulation processes are frequently unimaginative versions of the standard set of PHC services. Even components of debatable effectiveness, like antenatal care, growth monitoring, TBAs and CHWs, tend to be maintained (at least on paper), instead of being suppressed.
- The formulation of basic packages may incur high opportunity costs, particularly during transitions from war to peace, when many pressing priorities compete for the attention of decision-makers, and existing technical capacity is overstretched.
- The choice of launching a package formulation exercise may represent a decision-postponing tactic, rather than a priority-setting effort. Additionally, the elaboration of a package may contribute to disguising (rather than clarifying) crippling levels of under-resourcing.
- Packages may include all basic services seen as desirable by health professionals, without paying adequate attention to what might be affordable, given existing and foreseeable resource constraints. Packages without a cost attached are meaningless, whereas optimistically-costed ones are misleading. A rule of thumb worth considering is that health service packages tend to cost more to deliver in field conditions than what has been originally estimated at the drawing board. The roots of this recurrent underestimation of true costs are frequently traceable to political expedience, rather than to technical flaws.
- Essential packages rarely if ever fully translate into service delivery realities. Patient pressure forces health workers to pay attention to conditions not included in the package. Professional preferences expand the weight given to complex conditions and sophisticated treatments, regardless of their importance and effectiveness. And capacity constraints inadequately taken into account during the formulation of the package jeopardize its delivery.
- Package formulation exercises often fail to consider the variety of settings that exist within a country, particularly a large one. The single package eventually chosen may be appropriate only to a sub-set of situations. Additionally, disease patterns may vary within a country to such an extent that they suggest the formulation of multiple packages. In principle, in regions like Southern Sudan, three service packages would be needed: for densely-populated areas, for sparsely-settled ones, and for nomadic groups. To these packages, a fourth one tailored for returnees might be added. The cost of providing the same basic services in each of these different situations differs substantially. Alternatively, packages of remarkably different content have to be expected for the same financing level.
- The package formulation exercise has rarely if ever the political clout to challenge established vertical programmes. The services provided by the latter are therefore included in the package – regardless of their objective worth – while the management arrangements of vertical programmes remain in most cases separated from those of standard services. Behind the supposedly integrated package of basic services may be found a patchwork of ill-assorted production lines, with nobody truly in control of delivering the full range of services.
- The main challenge faced by health managers is not choosing the services to be delivered, but rather finding ways to materialize a predictable set of services within tough capacity and resource constraints. Problem-solving skills are likely to be more productive than detailed blueprints for health service delivery at different levels of care. This becomes even more important in unstable environments, where health managers are not in full control of information, events and resources.
- Most existing service packages fail to fully incorporate the vastly expanded financial and technical implications of handling AIDS patients in increasing

number and at multiple sites. Even without providing HAART, upgrading basic health services to cope with the mounting toll of AIDS-related conditions implies massive investments in facilities, staff, equipment, drug supply and management systems, with associated soaring recurrent costs. Cheap PHC delivery in a country stricken by HIV/AIDS is now out of the question. Instead of working out the implications of the epidemic for standard basic services and redesigning them accordingly, the frequent response has been the introduction of special programmes, implemented by dedicated agencies and NGOs. The predictable results of this approach are high delivery costs and further damage to standard basic services starved of resources and capacity.

Against the just-mentioned shortcomings, efforts to develop packages that stand true chances of thriving should focus on fostering an environment conducive to the delivery of equitable, standardized essential services of acceptable quality. Favourable structural conditions include good technical and management training for the eventual providers of essential services, adequate resource levels, consistent allocative decisions, sound professional tools made available across services (information, relevant guidelines for action, realistic targets, functioning monitoring mechanisms), and effective incentives.

When most favourable conditions are not granted (which is usually the case), a heavy investment in formulating service packages may fail to return proportional gains. Interim packages, developed quickly and at low cost, by taking advantage of expert opinion and of what is already done in the field, represent in most cases a sensible alternative.

Prescription patterns

Prescription patterns have been studied in a variety of settings. The experience accumulated over time has originated a standard assessment methodology, well-known and applied worldwide (WHO, 1993). The table below presents some indicators collected in distressed health sectors.

Some aspects of quality of prescription in selected countries in crisis

Country	Year	Average no. of drugs per prescription	% of prescriptions with antibiotics
Eritrea	1999	1.8	44%
Mozambique	1993	2.4	52%
Somalia	2001	2.3	66%
Sudan	1993	1.4	63%
Uganda	1993	1.9	56%
West Bank and Gaza	1997	1.8-3.1	35-54%

Prescription patterns depend on the professional qualifications of the prescribers, the quality of their training, in-service training and supervision activities, ingrained traditions, market incentives, patient preferences, regulatory provisions, drug supply constraints, and the availability of treatment guidelines.

These factors evolve during a protracted crisis, not all in the same direction, nor uniformly. A patchwork of findings is common. The contraction of commercial outlets outside large towns may reduce the availability of unneeded drugs. Their replacement by standard kits induces a measure of rationing. An ensuing drop in the misuse of antibiotics and injections, although negatively perceived by prescribers and patients alike, represents a tangible improvement. On the other hand, the commoditization of health care encourages the prescription of unneeded, even harmful drugs. Against the general decline of standards, health services supported or directly provided by some capable NGOs may receive a boost in terms of in-service training, supply and supervision, which translates into improved prescription practice. If due only to

external resources, capacity and pressure, such improvements may be short-lived.

Standard treatment guidelines may have been formulated and taken root in daily practice before the crisis. When this is the case, collaborative NGOs may adopt them. Other health service providers, bound to their own international standards, prefer to ignore national guidelines.

Not many battered health sectors have invested in formulating standard treatment guidelines – or in updating old ones – during a crisis. Precious opportunities to disseminate sound professional practice are wasted. Disease-control programmes and international agencies are left in charge of filling this gap. As they are unlikely to reach a measure of consensus, guidelines multiply.

Diverging views, with government officials extolling the merits of existing guidelines despite their unavailability, alongside NGO managers downplaying their value without even having examined them, are commonplace. Higher-level cadres are likely to be dismissive of guidelines perceived as constraints to their medical practice. In these futile discussions, the true users of treatment guidelines, frontline healthcare providers, may remain unheard.

Vertical programmes

Spurred by result-oriented approaches dominating the aid industry and the public-health arena in the 1980s and 1990s, vertical programmes have become global networks, with shared aims, delivery models, working habits and career perspectives. Politicians, funding bodies, lobbyists, journalists, professionals and field workers partake of these global endeavours. Many features contribute to make vertical programmes able to adapt successfully to protracted crises.

Privileged access to international resources and capacity protects vertical programmes from some of the stressors experienced by general services. Their technical content and “neutral” goals, with diluted links to contested states, help vertical programmes to operate across frontlines, and to strike deals with hostile sides. Resources and skills may be quickly mobilized and deployed in response to sudden crises. Operating by standard rules and delivering similar service packages, they are often able to overcome local capacity constraints.

These strengths explain their tendency to thrive in disrupted environments, and in some cases to assume colossal proportions. As standard systems fall into disarray, the comparative appeal of vertical programmes increases in the eyes of financing bodies. They grow in number and in scope, in some cases becoming the standard approach to health service delivery.

Studying vertical programmes as an assorted set of health service providers is difficult. Performance assessments of single programmes abound, but comparative analyses of their worth are scarce. Even scarcer are studies of the interactions of vertical programmes with standard health services. An inward-looking culture, fund-raising concerns, accountability to (often remote) funding bodies, disinterest for events not directly related to programme goals, effective separation from general management systems, all count among the factors keeping each vertical programme apart from the others, and from mainstream health services. Different programming and reporting formats are further obstacles to a comprehensive study of these service delivery instruments.

As their financial and opportunity costs are rarely known, at least in-country, comparing the relative merits of these programmes is therefore out of question. Vertical programmes may adapt their operational approaches to violent, unstable environments, but their goals, programming habits and management practice look strikingly similar to those of their counterparts in more favourable settings.

Vertical programmes present commonalities in their design, like command lines and programming practice, supply and distribution systems, in-service and sometimes pre-service training, staff management, incentives and monitoring tools. Some of

their components, like supply systems or procedures, may be the responsibility of international organizations.

Vertical programmes are not a homogenous group. They may share many conceptual approaches and organizational settings, but they encompass a variety of structures. Alongside strongly-characterized organizations with worldwide ramifications, able to assert their presence in the least propitious contexts, many empty shells are usually recognizable. Launched by international agencies or MoHs in the hope of attracting additional funds but failing to achieve that, they may be incapable of delivering anything of worth, bar the occasional workshop or the odd press release.

Some of the strengths of these programmes imply their weaknesses. The capacity to overcome local constraints leads to scarce attention paid and poor adaptation to context. World-wide goals become a holy grail, to be pursued in every environment, even where they look markedly out of place. Disinterest for alternative ways of delivering services, outside the programme-adopted model, is commonplace. Tied financing deters joint programming, and rules out the redistribution of available resources across the health system. Their control over programme staff (even those nominally on the public payroll) affects productivity.

Dedicated support systems, multiplied by the number of programmes, lead to fragmentation and waste, and to the spreading of scarce resources across too many “priority” activities. The pervasive feeling that the resources controlled by these programmes are additional to general ones discourages corrective measures, or even open criticism.

Vertical programmes have been criticized for their intrinsic inefficiency, as well as for the long-term distortions they introduce in health systems. Their appeal has, however, proved resistant to criticism, as proved by the Global Fund to fight HIV/AIDS, Tuberculosis and Malaria, which has given vertical approaches a new lease on life (Segall, 2003).

After the expansion of wartime, during a post-conflict transition vertical programmes have to downsize their operations and relinquish some of their privileges. Donors start considering financing the Treasury and/or the MoH, and channelling their support through integrated instruments. And recovering governments are eager to cut into the resources and freedom of action of vertical programmes. Integrating the operations of vertical programmes into mainstream systems, without undermining the delivery of the services they support, has proved challenging, slow and controversial.

Vertical programmes are uneasy participants in sector-wide policy discussions, even if recently there has been a shift of some public-private partnerships towards financing comprehensive health programmes at country level. Clearly, overall priority setting is meaningless in the eyes of their managers. Conversely, health authorities, often pleased by the achievements of these programmes, tend to relinquish control over them, perhaps feeling that they are too strong to be reined in. Recovery strategy formulation processes may evolve without inputs from some of the most important service providers, who go ahead undisturbed with their usual business.

The transition from war to peace may, however, offer an opportunity for rationalizing this fragmented picture. Identifying realistic ways to integrate vertical programmes calls for a thorough analysis of their inner workings, so that the components suitable to early merging are singled out. Supply and financial operations may rank among the first components to be integrated into mainstream systems, when these have attained acceptable levels of performance.

Another important step to close the gap between vertical programmes and general services is including them into a sector-wide programme budget. This measure implies the availability of reliable financial information, state authorities able to enforce its disclosure, and the technical skills to assemble the obtained data into a meaningful whole. These preconditions are usually absent at the beginning of a

recovery process, but may be fostered along the way by patient technical work and constant political pressure. A comprehensive budget profile may offer decision-makers useful insights into the cost of vertical programmes, in comparison to each other and vis-à-vis general services.

The nature of some vertical programmes, like safe motherhood, encourages their integration into general health services (with potential mutual benefits). Other programmes, like mosquito spraying, rely on approaches and techniques that keep them naturally apart from other health services. No substantive systemic gain can be anticipated from their absorption. An integration strategy should take this obvious fact into account.

Urban healthcare delivery

After protracted periods of violence, large portions of the population may end up living in towns spared by hostilities, or on their outskirts. Displaced people may settle in permanent camps, or join resident people in unhealthy slums. Huge new neighbourhoods arise. Providing health care to people dislocated by insecurity, or voluntarily moving to town, poses special challenges as well as offering interesting opportunities, which go often unrecognized.

Urban health services are deeply affected by these changes. The government may concentrate most of its resources and capacity in the towns it controls. International agencies and NGOs, attracted by better security and operational conditions, may launch complementing interventions. Projects multiply and vertical programmes concentrate their operations in urban areas. Charities may invest in new health facilities. Diaspora-supported funding encourages the opening of additional outlets. In many cases, the comparative resource advantage of urban health services fails to translate into better health care, due to allocative and operational inefficiencies.

The prevailing uncertainty about the future of war-fuelled urban settlements discourages the planning of rational health networks. Health authorities, often overwhelmed by the size and the severity of the problems they confront, find it increasingly difficult to respond in effective ways. Piecemeal measures – often induced by the availability of external support – or absolute neglect becomes the rule. The lack of an accepted standard model for the delivery of health services to destitute people concentrated in urban and peri-urban settings compounds matters further. As a result, urban health services evolve organically, lacking coherence and direction. On the other hand, the grip maintained by many governments on the main cities and the ensuing survival of most urban healthcare infrastructure mean that, at the end of a crisis, planners grapple with what they inherit. A radical redesign of urban healthcare networks is usually out of question.

Private for-profit providers are usually quick to spot the commercial opportunities offered by unhealthy urban populations without access to adequate public services. Private healthcare provision expands to a great extent, in most cases in grossly unregulated ways. Public-sector employees are usually involved in most private formal and informal transactions. Alongside some quality-care providers, health services of appalling level and often of substantive cost mushroom. As data about private healthcare provision are regularly inadequate, this important sub-sector is usually overlooked by policies and statistics. Policy-makers may extensively formulate strategies, guidelines and norms referred to public healthcare providers, while ignoring the thriving private sub-sector.

A realistic and appropriate urban service delivery model is badly needed. Probably, its development entails a radical departure from standard delivery approaches, which in most cases do not take into full account the special features of urban health care. When conceiving and assessing urban healthcare strategies in war-ravaged countries, a few considerations might be retained:

- The dramatic increase of the urban population fuelled by war is only partially reversed once violence subsides. Huge peri-urban slums tend to remain such. They should be provided with permanent health services, planned in wartime, on the safe-side assumption of their further expansion. Also, these healthcare networks should be conceived as integral parts of overall health services. The appalling status of these populations calls for well-resourced health services, able to withstand heavy patient loads. Heavy infrastructural investments are usually in order.
- While distressed governments might be willing to invest in urban health care but are short of adequate resources, donors have been very reluctant to shoulder the required large expenditures. Governments and donors should openly discuss allocative policies, recognizing that in certain urban slums health status is as bad as in rural areas. It should be made clear to decision-makers that investing in urban health care does not necessarily translate into investing in large hospitals.
- Pouring additional resources into fragmented, unbalanced and irrational urban health services is likely to result in more waste. The case for formulating long-term, comprehensive development plans, based on a thorough assessment of the situation and adequately resourced, is strong. As a successful urban healthcare programme needs decades of sustained and coherent efforts to make a demonstrable impact, it needs to be designed, resourced and evaluated in this perspective.
- Urban slums offer fertile grounds for the spreading of communicable diseases, including HIV/AIDS, particularly in wartime when newcomers settle in very unhealthy conditions. Rundown health facilities rank among the many health hazards threatening slum settlers. Overhauling their performance makes sense also on public-health grounds. Thanks to the large number of beneficiaries involved and the catastrophic events they may avert or at least control, public-health programmes may provide very big returns. These programmes should be planned as coherent and permanent components of overall health services, instead of piecemeal measures taken under pressure, as is often the case.
- Unregulated healthcare providers play too important a role to be ignored by policy-makers and health planners. Realistic and innovative ways to regulate their activities and tap their potential must be found. Understanding their business is the first step toward devising provisions aimed at inducing favourable changes in their practice.
- Urban health services must move away from standard PHC models developed for rural populations, and fully adapt to prevailing delivery conditions. For instance, in situations of abundant human resources (commonplace in large towns), many of them might be retrained and redeployed to work outside health facilities, perhaps as private non-profit healthcare providers. The informal practice of many public-sector health workers might be regulated in realistic ways, to become standard home care, accepted as part of an expanded service package.
- The capacity to pay for health care is stratified by economic level. In between destitute people and the affluent elite, a mid-level layer of petty traders, craftsmen and civil servants enjoys modest but not negligible revenues. Health financing strategies must take this diversity into account, and offer urban dwellers healthcare products suited to different socio-economic groups, and differently subsidized.
- Urban settlers enjoy a measure of choice among competing healthcare providers. Strategies are needed to improve the information available to users to aid them in making their healthcare choices. Innovative ways of using public subsidies should be found to encourage users to choose appropriate and competent providers.

- Urban health care is strongly affected by political considerations, not necessarily rational. Besieged rulers, influential institutions, religious groups, professional associations, business people, embassies and cooperation offices are among the shapers of choices that are already difficult on mere technical grounds. Rumours and distorted pieces of information circulate quickly and freely. Appeasing urban constituencies usually ranks high among the top concerns of political actors. Any proposal aimed at improving the situation must be patiently negotiated through this web of power and influence.

Mobile healthcare provision

Information about health services provided by mobile units is usually in very short supply. Many health information systems fail to discriminate between services provided within permanent health facilities and those provided outside them. Thus, the latter may be merged with the former, or altogether escape reporting.

Inadequately documented and rarely evaluated, mobile health services lack a body of best practice to be adhered to. Mobile health units are usually organized piecemeal, as field managers see fit, in the absence of standard guidelines, or follow the instructions of special programmes, issued independent of each other. Mobile health services are often dismissed as a flawed, unsustainable delivery model, without delving much into the issue or proposing realistic alternative approaches. A review of Mobile Health Units (MHU) concluded that *“the MHU strategy must remain exceptional, to be used only as a last resort with the aim of providing health services to population groups which have no access to a health care system. MHU may be considered for a short transition period, pending the reopening of fixed health facilities or resumed access to such facilities”* (Du Mortier and Coninx, 2007).

In fact, mobile health services bear considerable appeal in many distressed health sectors, in light of severe security constraints, poor communications and continuous population movements. With the peripheral healthcare network badly stricken and the unreliability of existing support systems, mobile healthcare provision may represent in certain well-chosen settings the only available alternative option. Additionally, outreach healthcare provision may provide a way of taking advantage of the overstaffing commonly found in surviving health facilities.

Strong mobile capacity offers opportunities during fighting lulls, or in areas recently opened to relief operations. Mobile health care reduces the vulnerability of health services in conflicts where they are targeted by hostile forces. Mobile healthcare provision offers genuine advantages during periods of transition from war to peace, marked by large population movements and unclear resettlement patterns. An investment in mobile capacity and temporary health facilities may better suit the demands created by such situations than permanent infrastructures.

A variety of approaches is followed in the field. Some shortcomings are frequently spotted:

- Often very narrow sets of services are provided. Combined with the small yield of many sorties, the resulting cost per provided service unit may be horrendously high.
- Vertical fragmentation is common, with teams tasked with carrying out single-disease control work, apart from what is done by mobile teams concerned with other health programmes. Missed opportunities abound.
- The benefits of certain mobile services, provided on a one-off basis without the backing of referral facilities, like antenatal care, look questionable.
- Mobile healthcare networks are difficult to sustain over time. Security problems, shifting frontlines, worn-out vehicles, tired and stressed staff, poor roads,

seasonal obstacles, uncertainty about population movements and erratic funding, all dent the performance of mobile services.

- Mobile health teams may incur high opportunity costs, taking away key staff from their usual workplace. Health services provided far in the bush may become unavailable within the facility. Also, certain mobile services, like immunizations, may thrive at the expense of other basic ones, like midwifery, if the same staff is in charge of delivering these services.
- The financial incentives usually attached by aid agencies to outreach work induce an expansion of these activities, regardless of their appropriateness and cost. The discontinuation of the same incentives leads to stopping sorties, even when they are needed and technically feasible.

All the mentioned drawbacks are serious ones. Some of them seem rooted in the way mobile work is financed and promoted, hence difficult to correct. Rarely affordable for resource-starved basic services, mobile healthcare provision depends largely on vertical programmes or supporting NGOs. Mobile health care must always be considered as a delivery option, provided its benefits overwhelm its costs, which are usually substantive.

Relief health care

Relief health care is a special case of rationing health resources. The ultimate goal of humanitarian assistance is to reduce the burden of avoidable death and illness through life-saving interventions, rather than tackling the underlying determinants of ill-health. An emergency generally results in extra morbidity and mortality in comparison to “normal” levels of ill-health. Excess morbidity, disability and mortality are due not only to the lack of essential public health and medical actions, but to the shortage of essential goods (water, food, shelter, sanitation, security etc.) for meeting vital needs, as well as to the inability to mitigate the effects of the determinants (biological, social, political, or economic).

Displacement exposes people to new health risks: food insecurity, poor quality of water and sanitation, overcrowding in temporary settlements, exposure to infectious agents and vectors for which they lack immunity etc. IDPs and refugees are also more vulnerable, having lost employment, assets and social networks and having become, in some cases, completely dependent on aid. Large numbers of resettling IDPs and refugees, at the end of a protracted crisis, may easily overwhelm local health systems. While refugees are entitled, in principle, to protection and assistance, IDPs do not enjoy special status; no special agency has the mandate of taking care of them. Among forced migrants, IDPs are the most vulnerable.

IDPs or refugees are not always concentrated in camps, where some health services are provided. In many cases, they intermingle with host populations and, as such, are not easily recognizable, nor accessible to relief. An evaluation of health programmes for Afghan refugees in Pakistan, carried out in 2005, found that over one million Afghans, not registered as refugees and deprived of any assistance, lived in urban slums. Overall, only half of the Afghan refugees in Pakistan lived in camps and were granted refugee status, with attached protection and assistance rights (Michael, Corbett and Mola, 2005).

Given the overall high vulnerability of displaced people, the urgency for assisting large numbers of them and the goal of avoiding excess mortality, health interventions are rarely efficient. Also, they are usually not integrated with the health services provided to non-displaced communities living in the same areas (which frequently receive a lower quality of services). As a result, tensions between displaced and resident populations and competition over scarce resources are frequent. At the same time, health services provided by external organizations, run at higher standards and costs, risk undermining already weak local services.

Furthermore, the relief approach may be followed by agencies and staff used to it, even in the absence of an objective emergency. The urgency of the situation may be inflated by the media, by politicians, by donors and by relief agencies eager to tap funding sources. Newcomers brought in haste by well-funded agencies are prone to misread the situation, and to ignore what is already in place. Given the lack of reliable information typical of war-torn environments, diverging perceptions are the norm. In other cases, pack behaviour is recognizable, as in the aftermath of the allied invasion of Iraq in 2003, where agencies adopted standard relief approaches of questionable appropriateness in the peculiar and largely unexpected environment within which they had to operate.

The relief industry has worked hard to establish operational standards (The Sphere Project, 2004). The rigid application of such standards, however, may generate serious problems. When displacement becomes perennial, upholding standards of health care set vastly above the hosting environment is clearly unsustainable and grossly inequitable. Furthermore, when facing a financial squeeze, humanitarian agencies may opt for reducing the number of people entitled to health care, in view of maintaining the established standards. The imbalance between the few beneficiaries of relief assistance and the rest of the population increases.

Relief agencies are designed to respond quickly and aggressively to disasters. Their operations tend therefore to be resource-intensive, with short programming timeframes. When decisions are taken, cost concerns are mainly related to available funding levels. Opportunity costs are rarely considered. This approach looks ill-suited to complex, protracted emergencies, where external health interventions last for decades. This serious drawback, although long recognized, has proved resistant to corrective efforts. The main hurdle seems deeply ingrained in the way the relief industry is financed and managed.

Assembling a comprehensive picture of ongoing health relief interventions is difficult. Some important relief agencies are used to working apart from the rest, or in coordination only with parent organizations. The relief industry is financed through particular channels, separated from the aid mainstream. Coordination venues and mechanisms established by health relief agencies tend to function in isolation from those concerned with general health services.

The short funding and programming frames of relief operations makes the study of future interventions even more difficult. In fact, donors may link decisions to political or military events of considerable uncertainty, like the outbreak of a war or the striking of a peace settlement. New NGOs successful in fund-raising may arrive in the field, while others are forced to leave, despite the good work they may have started.

As a result, the information related to relief agencies tends to escape integration into general reports of health services. Gross misrepresentations of the true field situation are the norm, and even a fairly accurate documentation becomes quickly outdated. Omitting or including certain emergency health activities may considerably alter the picture. In Southern Sudan, the surgical services operated by the ICRC were said to absorb a conspicuous portion of the total inputs allocated to health care. No quantitative validation of this important claim was found.

Military health care

Armies and rebel groups run military health services, usually with strong surgical components. Well-resourced and organized armies, like the Angolan one, invest large resources in their military health services. The best health professionals may be recruited by the army. Sometimes, certain military health services are made accessible to the general population. The significance of the civilian utilization of these services is in most cases modest. Ramshackle fighting formations, conversely, rely on civilian health services for care and medicines, often obtained in coercive ways.

Sometimes, military hospitals take advantage of their spare technical capacity and resources to become private for-profit healthcare providers, open to paying civilian customers. Once the conflict is over, military health services operated by both government army and rebels may release from their ranks large contingents of health workers, impacting heavily on the composition of the civilian health workforce and health labour market.

Foreign armies and peacekeeping forces operate health services, which may provide health care to the population at large, sometimes with the aim of improving their public standing.

Rebel health services

In countries partitioned between government control and rebel forces, two or more separated health systems with diverging features may emerge. Segregation may be absolute, as seen in Sudan, where no communication interface between central health authorities and their Southern counterparts existed until 2005. Both sides had no information related to the portion of health sector outside their control, and ignored its existence in their reports, assessments and plans.

Partitioned situations fuel suspicions of privilege conceded to the other side and induce considerable waste of resources. Aid agencies and NGOs tend to adhere to this pattern, splitting their activities according to offices collaborating with each side, and often unable to reconcile approaches, information and activities. Mutual isolation is consolidated over time.

The investment of a rebel group in health service provision depends on the political nature of the rebellion. In some cases, health care has been emphasised as a political promise of future dispensation. Rebel groups may extol the merits of their grassroots health services, sometimes backed in their claims by collaborating aid agencies. Once directly scrutinized, these health services have generally not lived up to the claims made. Health status in rebel areas has been frequently found to be appalling. When reliable information is lacking, the most sensible stance seems to be to expect the worst. Where NGOs are prominent, as in Afghanistan and Southern Sudan, health service provision is better documented than in areas of restricted access to outsiders.

In many cases, “rebel health services” are a propaganda construction. Aid agencies and NGOs are the true providers of health care, even when they acquiesce to the pretence of ownership of rebel health authorities. The relationships between local power holders and external players, built on continuous bargains and trade-offs, are often tense. In war-torn countries, governments and rebel groups genuinely interested in the health of the populations they control are rarely found.

Recommended Reading

Braveman P (1998). ***Monitoring equity in health: a policy-oriented approach in low- and middle-income countries.*** Geneva, WHO (Equity Initiative Paper No. 3). WHO/CHS/HSS/98.1.

Insightful review of the main concepts, available tools, existing sources and useful indicators related to equity studies. The strengths and limitations of existing study methods are discussed. Practical advice is given about data processing. Potential pitfalls are highlighted. Given its comprehensiveness, the analysis goes beyond narrow equity issues to embrace many aspects of interest, including socio-economic determinants of health status, ways to measure it and studying healthcare provision. A valuable background reading and reference manual for all apprentice analysts.

Chabot J, Waddington C (1987). **Primary health care is not cheap: a case study from Guinea Bissau.** *International Journal of Health Services*, 17:387–409.

A brilliant assessment of a brilliant PHC scheme, which rejected outright the blueprints for intervention of the time, opting instead for exploration, experimentation and learning. The paper threw cold water on the then-dominant assumption that PHC could be delivered at low cost. Everybody with true field experience of implementing PHC in settings similar to those under scrutiny recognized the issues discussed by the authors, and their far-reaching implications. Additionally, the paper offered a clear introduction to the way an economic evaluation of a fairly unstructured (hence difficult to study) health intervention should be carried out.

Two decades after the studied events, an article worth being revisited by everybody tempted by fashionable, standardized, “cost-effective” approaches, conceived far from the field and once again enthusiastically endorsed by the aid industry. The paper provides a healthy alternative approach to intervention: start small and slowly, put understanding first, change approach as you learn and see fit, and frankly recognize unexpected or even unpleasant results when they emerge. Not a popular message indeed.

Jenkinson C, ed. (1997). ***Assessment and evaluation of health and medical care: a methods text.*** Buckingham, Open University Press.

A comprehensive introduction to the approaches and methods available for assessing and evaluating health care. The book aims at substituting *opinion-based* decision-making with more formal processes of appraisal of health policies and interventions. The book covers traditional epidemiological studies, qualitative research methods, economic approaches in evaluation, measurement of health status and quality of life, meta-analysis, etc. Even if formal evaluations are a luxury in emergencies, the manual helps interpret the findings of research and studies undertaken in other contexts, and to appreciate the limitations of transferability of those findings to the chaotic environment of emergencies.

Tarimo E (1997). ***Essential health service packages: uses, abuse and future directions. Current concerns.*** Geneva, WHO (ARA Paper number 15) WHO/ARA/CC/97.7. Available online at: www.who.int, accessed 22 August 2008.

Frank, penetrating discussion of a misused concept, supported by a broad array of examples, drawn from rich, as well as poor countries. Tarimo argues that “... packages are often seen as a substitute for weak leadership. It is difficult to see how a mere process or a package will solve problems where there is no vision, strategy or leadership. Politicians and decision-makers often try to avoid difficult choices by calling for more data and/or decentralisation. Thus the call for packages and investment may even provide credibility for ‘business as usual’ where there is no political will or strong leadership to make essential but difficult decisions. In this respect the package can be seen as a form of ‘painless PHC’”. The paper closes with a set of recommendations that ring sound to health practitioners acquainted with real-life health services. Worth reading by anyone who is considering the launching of a package formulation exercise.

Van Damme W, Van Lerberghe W, Boelaert M (2002). **Primary health care vs. emergency medical assistance: a conceptual framework.** *Health Policy and Planning*, 17:49–60.

Clear review of the contrasting features that PHC and EMA should ideally present. Helpful to decision-makers and field practitioners, who might be unaware of the conceptual underpinnings and of the practical implications of the two approaches. In most transitional contexts, PHC and EMA coexist in various mixes, in response to changing demands and pressures, organizational preferences, availability of funds, or sheer expedience. The conceptual clarity advocated by the paper, if fully grasped by actors, should discourage many misconceived measures, and the ensuing pointless debates about sustainability, accountability, inclusiveness and the like, so often plaguing post-conflict work.

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Annex 7 Contracting for health services

Background

“Making or buying”¹ or “providing or purchasing” publicly-funded health care has become a central policy option in the debate on service delivery in countries emerging from a long crisis. Born in developed countries, this policy has been increasingly adopted in resource-poor health sectors as a way of expanding service provision. In post-conflict countries, where national authorities have been substantially weakened by the prolonged crisis, this approach has been promoted as a way to formalize and regulate the already large role of NGOs, direct service providers towards underserved areas, scale-up service delivery, and thus contribute to consolidating the fragile political situation.

This annex explores the basic aspects of contracting, analyses its theoretical and pragmatic pros and cons, reviews the available evidence from countries affected by crisis, and singles out the issues to be considered by policy- and decision-makers when appraising this option.

Contracting out is defined as “the practice of the public sector or private firms of employing and financing an outside agent to perform some specific task rather than managing it themselves” (Kinnon, Velasquez and Flori, 1995). *Contracting in* implies that a subdivision of the parent organization (such as a hospital, a number of doctors, etc.) is subcontracted for the provision of goods or services. In “internal contracting”, contracts are established between different levels of the government, thus creating competition through an internal market, also called a “quasi-market”. Different services can be purchased: clinical care, public health interventions, non-clinical services and management functions.

Contracting out, also called “service contract”, implies a competitive process, whereby the public sector *purchases* services from private providers. *Performance-based* modalities of contracting link the payment of providers to performance indicators, with the aim of improving efficiency and equity of health services, as well as of improving coordination and transparency. Financial incentives may also be used to stimulate the demand, like with the conditional cash transfers used in Nicaragua and Mexico.

Different approaches to contracting for service delivery exist (Perrot, 2006; Loevinsohn and Harding, 2005). Since the 1980s, the introduction of market mechanisms in health care has been part of the international policy thrust towards reducing the role of the state and expanding that of the private sector, considered comparatively more efficient, flexible and responsive to consumers. The “failure” of the state has been attributed to the lack of incentives in the public sector to allocate resources efficiently or to the self-interest of influential interest groups and bureaucracies. This increasing awareness of public sector deficiencies and of the cost of health care within a general context of economic and fiscal crises have forced policy-makers to use different modalities of service delivery and find additional sources of income and ways for improving their efficiency.

However, “there have been few studies to test these broad assertions” (Green, 2007). The debate on contracting is open, as this annex illustrates: a review of ten experiences of contracting for health service delivery in developing countries points to improvements in effectiveness, but also highlights that more research is needed to assess the effects on equity (Green, 2007). The “current enthusiasm” (Eldridge and Palmer, 2009) for this approach requires a careful assessment of the potential risks in the specific context where it has to be introduced. A serious concern refers to the risk of “gaming”, i.e. of manipulating service output reports in order to attain the desired targets.

1 Williamson, quoted in Palmer and Mills (2006).

As it was mentioned above, under the banner “*new public management*” (NPM), private sector solutions have been advocated to overcome public sector constraints. For example, sector reforms have been pursued to scale down public-sector bureaucracies by separating policy, regulatory and monitoring functions – to remain with ministries of health – from the delivery of health services, to be outsourced to public and private (profit and non-profit) providers. This split, previously adopted under different models in most developed countries, has been introduced later on in some developing countries and is being considered in most of the others. The extent to which the NPM has fulfilled its promises is a source of controversy; more evidence is needed before reaching a firm conclusion (Global Health Watch, 2005–2006).

The opportunity offered by disrupted health sectors of transferring policy reforms without meeting strong resistance, together with the presumption that in these settings it is possible to start from an institutional “blank slate”² have motivated advocates of the NPM to press for the off-the-shelf adoption of contracting, even in the most difficult environments, such as Afghanistan and Southern Sudan. In these countries, in fact, while the NGOs can provide effective health services, the capacity of the incipient national authorities to effectively play the role of purchaser of health services – designing contracts, and managing and monitoring service providers – is extremely limited (see below).

Considerations in favour and against contracting

According to classic economic theory:

- Contracting stimulates competition among providers. As a result, providers are forced to adopt innovative technologies and adjust prices to meet the demand and requirements of purchasers.
- Contractual relationships should induce higher cost-awareness and enhanced transparency in negotiations, both factors contributing to increased efficiency.
- Contracting would promote decentralized managerial responsibility, a shift that would translate in efficiency gains in relation to the old highly-centralized, bureaucratic structure.
- Contracting can draw the attention of managers on measurable results.
- In post-conflict settings, where expansion of health care is usually a priority, contracting is promoted as a modality that allows for better coordination of providers, and rationalization of services around a common package, which in turn should result in a rapid scaling-up of health services.

Opponents of contracting have put forward several arguments.

- *First*, the initial transaction costs in contracting may be high, since they include both the costs of writing and negotiating the agreements and those incurred in monitoring the contracts and resolving disputes; once the system is in place, costs tend to decrease³. The *asymmetry of information* between providers and purchasers explains why the latter – the government – often lack sufficient information on the cost and quality of public and private service provision, as well as legal and technical skills for drafting detailed contracts and effectively monitoring their implementation. Related to information asymmetry are the high *task complexity* of health care and the uncertainty of the workload, which make it difficult to specify the product – services – that is the object of the contract (differently from other market products, health cannot be commoditized), as well as to price contracts.

2 Critics argue that also in countries close to total state collapse, some institutions, traditional structures and residual administrative capacity are preserved.

3 According to one source, the management costs in the Ministry of Public Health in Afghanistan are low in comparison to the value of grants

- *Second*, competition between providers is often limited, particularly in remote and difficult locations, where “relational” arrangements, – i.e. non-contractual and non-competitive approaches based on trust – usually prevail. Long-term contracts (sometimes preferred, since they imply lower transaction costs) lock public funds for a specific use, limiting the flexibility for reallocating resources to address efficiency or equity problems. For instance, a NGO with a long-term presence in a certain over-resourced region would find moving to another, underserved area difficult and expensive. One risk is the opportunistic behaviour of providers, such as adverse selection of patients or diminished pressures for efficient performance: adequate monitoring and incentives linked to the performance are the mechanisms for reducing this risk. This limited competition is particularly important in developing countries and even more so in disrupted contexts, where the main funding bodies are aid agencies and most providers are NGOs, both economic agents of a peculiar sort. Before the introduction of contracting, aid agencies have financed NGO operations through grants, whose assignment does not imply open competition. Additionally, contracting foresees a much expanded decisional role for recipient health authorities.
- *Third*, the ability of an operator to enter or leave the health market is limited. The costs of assets (hospitals, equipment) necessary for health service provision (assets largely unrecoverable, hence *sunk*), the high education qualifications required of health professionals, the time to acquire reputation, and licensing regulations are all barriers that limit the entry of potential newcomers to the healthcare market and their exit afterwards.
- *Fourth*, it has been stressed that the excessive emphasis placed on efficiency may result in overlooking other, equally important issues, such as equity and quality of care. For this reason, some experiences of contracting, like that of Rwanda, have included quality of care in monitoring the performance of service providers⁴.
- *Fifth*, most emergency countries are highly dependent on external aid: donors and not the MoH are the purchaser of health services, and, because of the conditions attached to aid, they often prefer international contractors, such as NGOs, to local providers.
- *Finally*, delegating purchasing responsibility may result in increased costs. For instance, because of the huge amounts involved, centralized drug purchasing often negotiates better prices than single purchasing agents, such as NGOs.

These difficulties are exacerbated in crises, where institutional capacity – including contract writing, management, administrative and monitoring skills – is poor and health markets are usually underdeveloped. The risk of further increasing the fragmentation of the health system by expanding the number of providers cannot be overlooked. All these reasons explain why contracts in health care have been limited in the past to ancillary services (catering, cleaning etc.), where product specification is easier and the complexity of the provided services much lower; the approach has been extended to clinical services only since the 1990s.

Country experiences

Several factors explain why the evidence on the effectiveness of contracting-out health services in countries affected by a crisis is still limited, and inconsistent: the fragmented adoption of the approach, the scope of contracting (from special programmes to entire PHC services), the differing objectives of contracting in different contexts, the difficulties in assessing costs and benefits, the importance of context (the best model in one setting may be not transferable to another), the “deviant” behaviour of market incentives in a context of complex mixes of financial

4 Fritsche, personal information.

sources and providers (public, donors, private for-profit and not-for-profit), the incipient development of private providers in many health sectors. Nonetheless, after a decade of intensive experimentation, the first empiric lessons are emerging. Overall, positive effects have been registered as to improved access to health services and equity, while there is little evidence concerning the impact on quality and efficiency. It has been suggested that improvements in some dimensions of health performance can occur at the expense of others (see Liu, Hotchkiss and Bose, 2007).

Two models of contracting (“out” and “in”) were piloted in Cambodia at the end of the 1990s and evaluated against control districts. Based on pre- and post- intervention surveys, coverage of PHC increased more in contracted than in control districts, mainly due to an increased utilization of the poorest households (Bhushan, Keller and Schwartz, 2002). However, different resource flows to the studied districts might explain these differences. The virtual absence of public provision in Cambodia needs to be considered when appraising these positive results (Palmer and Mills, 2006). Diverging opinions in this respect have been put forward (Loevinsohn and Harding, 2005).

A study of several countries of the WHO Eastern Mediterranean Region (Siddiqi, Masud and Sabri, 2006) shows that contracting, provided that key pre-conditions are in place and capacities exist, can contribute to improving health system performance. The list of preconditions is, however, so long that the feasibility of contracting in difficult post-conflict settings should be questioned.

The experience from Rwanda (Soeters, Habineza and Peerenboom, 2006) shows a substantial improvement in several indicators after the implementation of the performance-based contracting scheme. Despite its success, the institutional set-up of the scheme was complex and the authors point to several outstanding issues to be solved before expanding the programme, such as the integration of contracting into the reformed health financing scheme adopted by the country. Further, the transaction costs were estimated at 25% of total contracting costs, not an insignificant amount.

The already cited review by Loevinsohn and Harding (2005), based on the contracting experience of 10 countries, shows positive results, with impressive effects in Cambodia (with Haiti the only country in the sample affected by a protracted crisis). The authors underline that key issues, which are particularly relevant in emergencies, still remain to be addressed: the effects of contracting on equity and its cost-effectiveness compared with grants to NGOs, a common modality of service delivery in those environments.

The case of Afghanistan

Among countries affected by protracted crises, where contracting of health services has been implemented, Afghanistan stands apart for many reasons. The country emerged from more than twenty years of conflict, with a totally collapsed health system. The private non-for-profit sector was prominent, with NGOs operating 80% of the existing “public” health facilities. Private for-profit providers probably accounted for the largest share of the healthcare market. The security environment in Afghanistan has been prohibitive, with vast inaccessible areas, which compounded the already weak capacity of health authorities.

In the chaotic aftermath of the Taliban regime’s demise, donors – led by the World Bank – spearheaded a policy change, centred on the use of NGOs as the main providers of a basic package of health services. The policy thrust was swift, despite some resistance from NGOs to being used as contractors and initial concerns raised by the Ministry of Public Health. No pilots along the lines of the contracting experience of Cambodia were attempted. Three different schemes and modalities of contracts have been financed by the Bank, USAID and the European Commission, in collaboration with the Ministry.

The recurrent cost of providing the basic package of health services was estimated by a study conducted by Management Sciences for Health at US\$ 4.55 per capita per year. This figure, which became the benchmark price for contracts used by the three donors, has been contested by several observers, as too low and based on a weak study (Strong, Wali and Sondorp, 2005). A conference convened to discuss the issue in 2007 concluded that *“The delivery of a minimal package, let alone a more comprehensive package, for a cost of US\$ 5–10 will likely prove to be a myth”* (Carlson, 2007).

The goal was to cover the whole of Afghanistan quickly, with contractual arrangements that progressively expanded to all 34 provinces. Based on the presence of a contracted agency in a district or province and the population therein, the coverage of the basic package was estimated in 2006 at 82%, which appears as a remarkable improvement in a short period. A country-wide rural household survey carried out in 2006, however, showed much lower coverage levels: skilled health workers attended 19% of deliveries, whereas the coverage of DPT3 was 35% (Ministry of Public Health, 2007). Trends are encouraging, even if progress is slow, and always menaced by security problems. Health authorities improved their capacity to manage and monitor contracts and NGOs' performance. On the other hand, the involvement of international experts in implementing the approach has been substantial.

A relatively short time has elapsed since contracting has been introduced, and the key issues raised from other experiences remain open, in particular those related to sustainability, equity and monitored quality of care. Additionally, when appraising the effects of introducing the contracting approach, a crucial aspect is often overlooked. The decisive event in the post-Taliban era was the dramatic increase of funding levels, which fuelled health service expansion. Aid to health increased from annual US\$ 2–3 per capita in 2002 to an average of US\$ 22 in 2004–2006 (OECD-DAC online database). Afghan users of health services added to donor funding about US\$ 14 per capita per year (Afghanistan Ministry of Public Health, 2007). Contracting may have strengthened this remarkable expansion of resource levels, and certainly it regulated post-conflict service growth. But without a major increase in the resources allocated to health service provision, not much progress could be expected.

Conclusions

Overall, the accumulating evidence is encouraging, suggesting that contracting out services may contribute to improving service provision. Some caution, however, is needed in generalizing the available evidence: no unambiguous success story is emerging from country practice. It is important, therefore, that policy- and decision-makers bear in mind the general constraints that they face when trying to resuscitate derelict health systems.

Weak health sectors appear particularly unsuitable for NPM reforms. *“A government which fails to deliver quality social services because of a lack of administrative capacity is unlikely to be able to contract either clinical or non-clinical services effectively”* (Bennett and Mills, 1998). Contracting cannot be seen, therefore, as a panacea or a shortcut to overcome government inefficiency and/or lack of administrative and management capacity. For this reason, outsourcing health services should be considered with much caution in disrupted contexts, which magnify most of the difficulties discussed above.

In war-affected health sectors, assessing whether healthcare providers have honoured the terms of a contract is often impossible, reasons for failure (such as deteriorating security) abound, and the evolving environment may quickly make the original targets irrelevant. In severely weakened public sectors, the relationship between MoH and private service providers, supposed to lie at the heart of contracting schemes, may be hollow. Donor agencies remain in charge, and impose different modalities to healthcare providers, as seen in Afghanistan. The issue of sustaining

contracting applies to non-crisis settings: “it is yet unclear what would occur if this support is withdrawn, whether governments can continue contracting on their own, and whether it is cost-effective for them to do so” (Palmer and Mills, 2006). In a protracted crisis, where dependency on external aid is often extreme, sustainability may become an irrelevant concern.

On the other hand, the unplanned and unregulated privatization of health service provision that can be seen in many disrupted health sectors might be to some extent irreversible. In war-torn health sectors where healthcare provision is dominated by NGOs, contracting exerts a strong appeal, as a logical tactic to regulate loose and opaque relationships and to empower health authorities. Contracting should be considered among the approaches aimed at restructuring these situations. Its adoption, however, implies a general restructuring of health service delivery, an essential but often overlooked aspect. Fundamental sector flaws are unlikely to be addressed by contracting alone, which should be conceived as a component of a sector-wide coherent reform package.

Decision-makers considering this option should be aware of the difficulties briefly sketched above, as elegantly put by Hsiao (1994): “*The magic of marketization often seduces governments into action without a critical understanding of the conditions required for efficient markets and with no reference to empirical evidence. The health market has serious failures and they may produce results the opposite of what was intended. Correcting market failures may be impossible or expensive*”.

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Annex 7

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Module 8

Studying management systems

Contents

This module explores the constellation of management systems in operation during a protracted crisis, the way they change under stress, as well as how they interact and occasionally collide among themselves. The need to consider informal institutions alongside formal ones is stressed. Aid management tools are reviewed in some detail. The scope for health planning, and the features that planning must assume in order to become meaningful in a disrupted environment, are discussed. The challenges of regulating healthcare provision in a crisis context are briefly explored. Empiric considerations related to the revamping of crippled management systems follow. A discussion of capacity and capacity building in a disrupted health sector closes the module.

Annex 8 examines the relevance of the SWAp concept and the feasibility of its pursuit in troubled contexts, and reviews SWAp-oriented instruments to be considered as possible ways forward.

Closely-related modules:

No 3. Understanding the broader country context: past, present and future

No 5. Understanding health policy processes

No 6. Analysing health financing and expenditure

No 9. Studying the healthcare network

Introduction

A protracted crisis transforms health sectors, in ways that rule out a wholesale return to the settings prevailing before the conflict. Indigenous health workers are exposed (at home and abroad) to multiple management approaches. The health sector opens up, within a dollarized economy that forces health managers to reconsider established civil-service models. The breakdown of previous systems encourages experimentation and innovation. Any intervention aimed at preserving existing management systems from final collapse, or at resuscitating their basic functioning, should accept that change is inescapable.

Whereas some of the distortions induced by protracted conflict may fade away spontaneously, others take firm roots in the sector. “Cultural” patterns, such as crisis management, vertical and project approaches, short-termism, dependency on external initiative and resources, may be recognizable many years after the apparent normalization of the sector. These distortions, once engrained in the prevailing practice, don’t heal spontaneously, but require deliberate action to be corrected.

Successfully managing the pervasive changes taking place during a protracted crisis requires the striking of a precarious balance between present and future concerns. The awareness of the long-term side-effects of well-meant decisions taken in wartime, such as the promotion of vertical approaches to service delivery, can reduce their negative impact. In most instances, indifference to the future implications of crisis-inspired approaches prevails. Conversely, misplaced concerns with the long-term sustainability of crisis-related interventions may induce interventions ill-suited to addressing present problems. Learning from experience does not seem to be one of the strengths of the aid industry (Berg 2000).

Studying management systems in a disrupted health sector presents peculiar difficulties, caused by their disarray, dispersion and instability. As most management functions are fulfilled by multiple (internal and external) agencies, interacting in loose and unstable ways, an understanding of existing management systems may come only from comprehensive assessments. Mapping the roles of actors in each management area helps clarifying how tasks are actually carried out, and identifying ways to improve the situation.

Assessing battered management systems

Healthcare provision entails the fulfilment of several management functions:

- Data gathering and information analysis
- Policy formulation, planning and programming
- Financial management
- Personnel management
- Asset management
- Supply
- Regulation
- Supervision and quality control
- In severely aid-dependent health sectors, aid coordination should be added as a key component of management systems, a component encompassing most of the above-mentioned functions. See chapter *Managing Aid* in this module and *Module 5* for further discussion.

In all systems, including those of stable states, each function performs to a different degree. In a crisis, the variations and extremes are more pronounced. Some are supported or taken over by aid agencies, whereas others remain, at least notionally, under the full responsibility of indigenous health authorities. If the capacity of the latter is severely undermined, the corresponding functions come to a halt. Aid agencies are highly selective in relation to the functions they are willing to support or take over. Donor avoidance of controversial areas is commonplace. And recipient authorities may resist relinquishing control of functions perceived as central to the exercise of power. Thus, supply may be generously funded or even taken over by external agencies, in the absence of regulatory means to ensure the proper use of the supplied goods. Systemic performance suffers from these functional imbalances.

When state functions collapse, as seen in Afghanistan and Iraq, health management systems suffer meltdown, leaving little or nothing to be analysed. Further, the surviving functions may be compromised to such a degree as to appear, to the external observer, as fatally flawed, thus unworthy of any attempt to revive them. Caution is demanded in drawing conclusions in this respect, because the observed disarray of health management systems might be due to an external shock and not to any intrinsic design flaw. In other words, when management functions stall, only conjectures are allowed. *To assess their soundness, management systems must be observed in motion.*

If studies about the functioning of management systems were carried out before the collapse, some insights can be gained. Additionally, light can be shed on the issue by reviewing the available documentation: rules and regulations, old reports and records, job descriptions of managers, etc. Obsolete designs or serious inconsistencies between components that are supposed to interact are sometimes identifiable. In many cases, written descriptions of management systems are not available, or are too dispersed and fragmented to provide reliable clues on the status of management systems before the crisis.

Considerable caution is needed in scrutinizing formal management structures, rules and regulations, as they may bear no resemblance with actual management practice. Theoretical constructions detached from reality are common. Informants may be biased by a strong bonding to management practices followed before the crisis. Their assessment must be carefully interpreted.

Management systems are the product of decades of evolution, occasionally marked by abrupt change. This may fail to take root, with previous habits progressively recovering ground. Trade-offs, resulting from power struggles among stakeholders,

are pervasive. Some traditions are firmly entrenched, in a way that precludes insiders from considering alternative approaches. *“Basic administrative practices continue in the minds of current or ex-civil servants even where structures have ceased to function and paper records have been lost”* (Cliffe, 2005).

Administrative traditions may emerge reinforced at the end of a long crisis, if the distressed state (and the ruling group that controls it) survives. If resilience to severe stress is interpreted as organizational soundness, the need for radical change is not recognized. Archaic provisions may therefore be maintained through the recovery process. The opportunity for reform offered by the transition from war to peace is missed. The civil service, emboldened by its own survival, imposes its conservative instincts. The Angolan recovery process, buoyed by abundant oil revenues, is strongly influenced by this approach.

Management structures

In many countries, the state administrative structure is replicated in the health sector, with central (national), intermediate (province or regions or states) and peripheral (districts or counties) layers. These administrative units may have been long-established, and have in this way gained strong significance in the eyes of local constituencies. Countries adopting decentralized structures may have previously eliminated the intermediate level or scaled down its mandate. In some countries, ethnic criteria have been followed in drawing administrative borders.

The surface area and population covered by the administrative units vary across and within countries. Districts may range from a population of 10,000 to 500,000. The size of the population to be served, the area to be covered, and internal communications are the main parameters to be considered in relation to health service management. The theoretical administrative partition must be matched against field conditions and constraints. Sometimes, district authorities exist only on paper or have fled the area they were supposed to administer. And large population movements may void available census data of any meaning. In 2001, the number of health administrative units in the Democratic Republic of the Congo was increased from 308 to 515. As the restructuring was not backed by adequate resource and capacity allocation, many *Zones de Santé* remained virtual constructs.

The variety of population settings covered by the administrative partition clashes with the propensity of many MoHs to apportion most important resources, be they health facilities, staff, funds or equipment, according to administrative unit. Clearly, other criteria are needed. They include the stratification of districts according to their population size, so that different resource standards can be applied, or the linking of different resources to other, specific indicators. The latter, reasonable approach demands an updated and reliable information base and the capacity to process it, conditions rarely met in unstable contexts. In some cases, rather than following formal criteria, managers adjust resource allocations to field needs. Informal arrangements weave together several districts around a referral hospital receiving a larger share of resources, perhaps through a supporting NGO. These solutions may address the problem, but are inherently unstable, particularly when the turnover of managers is rapid.

Some health sectors have tried to tackle the discrepancy between their administrative structure and healthcare delivery concerns by clustering several districts into health service management units. In post-conflict Cambodia, the Health Coverage Plan introduced operational districts, self-contained units encompassing some contiguous districts. This rational reform was inadequately resourced and met with strong resistance from many quarters. Several years after its introduction, the Health Coverage Plan has been only partially implemented. See *Annex 12* for additional details.

The management structure in some situations is shaped on the health network. Hospitals take a prominent role, operating autonomous budgets and being formally

responsible for the peripheral network located around them. As most hospitals have developed organically over time, they are rarely distributed and sized in balanced ways. A management structure shaped on them is therefore unlikely to respond to true health care needs. Additionally, hospitals are intrinsically ill-equipped to support PHC services. The common outcome of this old-fashioned approach is the concentration of resources and power in the main facilities, to the detriment of lower levels of services. The efficiency and effectiveness of service delivery are likely to suffer when these settings prevail, as in Angola.

Large cities may have developed special management arrangements, backed by donor expertise and resources. These arrangements are usually aimed at improving the poor performance of urban health services, commonplace despite their comparative advantage in terms of inputs and skills. The security advantage often enjoyed by large cities in turbulent times, associated with the swelling of their population due to internal displacements, attracts investments in urban health care, frequently linked to special management schemes. These well-meant efforts add resources to situations of privilege in relation to the rest of the country, often failing to address the structural reasons behind the poor performance of urban health services. Rationalizing urban health care provision is always a difficult endeavour, fraught with organizational and political obstacles. See *Module 7* for further discussion.

Changes in management practice induced by crisis

As the crisis deepens and aid expands, original management systems are sidelined or abandoned. Long-established working habits are forgotten. Crisis management prevails. “Good management practice” becomes an uncertain quantity, subject to challenge by newcomers. Cohabitation of diverging management practices becomes the rule. Working models emerge, are temporarily adopted and are soon replaced.

As experienced managers leave and decisions are taken by junior colleagues and newcomers, *institutional memory and knowledge suffer*. In protracted and severe crises, such as Afghanistan or Somalia, the diaspora may encompass most of the best cadres. Once the crisis ends, many of them may remain abroad, work with international agencies, or, upon return, appear singularly out of touch with the new situation.

As communication and control lines break down, *decision-making and power disperse and fragment*. Reporting duties change in favour of bodies or people in control of resources. International aid agencies and NGOs gain influence over recipient authorities, as in Southern Sudan. Their diversity and individual autonomy ensure that no coherent policy is enforced. MoH departments related to services or areas favoured by donors get access to privileged funding and grow accordingly, enjoying special status within the ministry and large autonomy in decision-making.

The responsibilities of different public departments blur under pressure, as new and old tasks are assigned to bodies presumed able to carry them out, regardless of their functional position in the overall management architecture. Underperforming departments stagnate, sidelined by decision-makers and exposed to lower and lower expectations, while keeping hold of their share of resources and organizational status, perhaps for historical or political reasons. This sometimes salvages them from deserved decay. Organizational capacity waxes and wanes, largely depending on donor financing and the related movements of skilled individuals.

Chosen policies may fail because of a management architecture that is ill-suited to their implementation. In times of crisis, the usual response to the inadequacy of management structures is setting up new special arrangements. Change is pursued by apposition, rather than by replacing old structures with new ones. Progressively, most functioning management structures are “special”, and temporary in their

original design and intentions. Many of these structures may survive the crisis and become permanent.

Laissez-faire permeates the behaviour of recipient authorities. Insecure of their tenure, unclear about their future, acutely aware of their limited power, health authorities at national and peripheral level tend to adopt a split posture. At the political level, they may vindicate their mandate to govern and vent their frustration and resentment of being impeded from fully doing so. At the same time, in their daily practice they may exert less power than they might do, thus serially agreeing to most proposals submitted to them by donors, development banks, NGOs. Conflicting goals may be endorsed, even dubbed as “priorities”. Negotiations may turn out to be ceremonial events, with recipient authorities playing a dignified but hollow role and aid managers getting most or all of what they want, i.e. an endorsement for their proposals, endorsement in most cases not backed by true commitment.

This is hardly surprising, as many of the requests issued by aid agencies as conditions to proceed with the proposed programmes cannot be satisfied by recipient authorities. A point in case is the recipient’s commitment to shoulder the recurrent costs incurred by a new facility built with donor support, as well as to staff it. No health manager of a troubled sector can conceivably know whether this pledge can be honoured in the future. Given the prevailing feeling that all potential resources must be tapped to address health needs and the awareness that default on commitments is easy to justify, recipient officials prefer to accommodate most donor proposals, even those they are sceptical about. And if a department within government objects, another one may easily be found to rubber stamp the proposal. The net result is a widespread hands-off posture, with government officials reduced to observers (sometimes participants) of the multiple initiatives going on in the health arena.

Backed by external aid agencies, vertical programmes multiply. Areas neglected by aid agencies badly suffer. Fragmentation can attain extreme degrees, such as in Angola in the 1990s, where about thirty vertical programmes (in some case real, but often rather virtual) were expected to support a large array of health activities. Setting up a special programme, hopefully backed by donor resources, becomes the favourite way of addressing a problem. In partitioned settings, multiple programmes may be in place to address the same health issue. Additionally, limited funding may reduce the coverage of certain management systems to a handful of provinces. Balkanization is common.

Special programmes tend to establish separated management systems, which consolidate and expand during protracted crises. Thus, the same facility can be supplied with drugs from several sources and report activities to different authorities. In Southern Sudan, the polio eradication programme operated a large stand-alone system that dwarfed general health services. It created its own territorial boundaries, setting aside those followed either by the central government or by rebel authorities. In cases of state failure, service provision is fully taken over by aid agencies. The usual interaction between national authorities and the aid community gives way to peculiar set-ups, as seen in the Democratic Republic of the Congo, Liberia, Somalia and Southern Sudan. Participants struggle to establish appropriate mechanisms to manage services and to meet the heightened security demands imposed by most failed states. The unique challenges posed by these situations are inadequately studied. In Somalia, the aid community established the Somalia Aid Coordination Body (SACB), whose experience deserves close scrutiny (see *True Story No 12*).

After total state collapse, or in the case of the creation of a new state administration, devolving the responsibility of running health services to managers lacking any practical experience of it and to newly-established management structures presents unique difficulties. Emerging health authorities may push for gaining control over operations, without realizing the hurdles they face and the disruption to healthcare delivery that a sudden transfer of responsibility might cause. A phased approach,

by at first offering indigenous managers small-scale, controlled opportunities for hands-on learning, may represent a sensible approach to a controversial power and legitimacy issue.

Finding a mix of management structures inherited from the past and new ones resulting from disparate initiatives introduced over time is common. Due to the interests entrenched in most of these arrangements, rationalizing these management patchworks represents an enormous challenge.

Managing Aid

Dispersion of external assistance across multiple agencies and intermediaries, particularly at the peak of a complex emergency or in the case of state failure, is the norm. Additionally, many aid agencies suffer from severe internal fragmentation, with multiple layers of control, programmes and initiatives. Inconsistent actions or conflicting instructions are commonplace within large organizations.

Dissatisfaction with the side effects of fragmentation has led to experiments with new aid management tools, such as trust funds or pools. The desirability of shared channels, through which external resources can transparently flow, increases during transitions from war to peace. Exigencies of state building, the massive requirements of reconstruction against absorption bottlenecks, and the changing programming climate encourage the introduction of funding instruments compatible with standard public financial management systems. These financial instruments may be managed by established agencies, such as WB, UNDP or UNICEF, or jointly operated by these agencies and recipient authorities. In some contexts, dedicated structures have been set up to manage these financing instruments.

The heavy procedures that international agencies are bound to impose on the aid management instruments they operate may outstrip local capacity and be ill-adapted to the local context. In Timor-Leste, *“The most important area of constraint in working with the World Bank is summarized in one word: procurement. The first aspect of this was a concern with procurement rules that at times, and in some World Bank staff members, appeared obsessive. While a strong desire to guard against corruption and collusion is understandable, preoccupation with the avoidance of any suggestion of misprocurement can lead to an excessively rigid application of the rules.”* (Tulloch et al., 2003).

In transitional situations, a delicate trade-off between preserving multiple options, so that basic functions are ensured even when some schemes fail to deliver, and reducing the fragmentation established during the emergency period, must be pursued. Integrating funding mechanisms already in place into larger ones may help to rationalize aid management without risking operational paralysis, or absorbing excessive attention.

Experience with joint aid management instruments suggests long preparation times, high costs incurred in establishing them, associated controversy arising from the restructuring of power relationships, and uneven progress. These downsides must be weighted against their potential high returns in terms of operational efficiency, transparency and capacity building.

Only agencies prepared to invest significantly in long-term processes should consider engaging with these aid management tools, and only after a thorough assessment of the context and of the existing opportunities in favour of their introduction. Whereas recipients, eager to acquire at least partial control on donor inputs, may be willing to accept stringent conditions for the establishment of these mechanisms (like the opening of their books to independent auditing), they are unlikely to appreciate in full the implications of such instruments. A period of mutual scrutiny between financiers and recipients is usually needed before both sides grasp the key aspects of a new way of working. Key to this restructuring is the shared realization that it entails a profound change in the working habits and procedural rules of both partners.

Given the absorption constraints hindering sector recovery at the end of a long conflict, the introduction of new aid management tools (perhaps of limited financial value and scope) in wartime might save time later. In this way, the expanded aid inputs conceded to support recovery in the aftermath of a peace settlement would flow through well-tested instruments, without delays or breakdowns. This important point is usually overlooked by donor officials, who are used to waiting until a political breakthrough materializes, before starting negotiations meant to establish new aid management instruments.

For a thorough review of aid instruments, see Leader and Colenso (2005). An informative review of recent international developments in aid management for health is provided by WHO (2008).

Multi-donor trust funds

To manage aid flows, multi-donor trust funds (MDTFs) have been established in several transitional contexts, like Afghanistan, Bosnia and Herzegovina, Iraq, Sudan, Timor-Leste, and West Bank and Gaza. A MDTF is defined by Randel, Mowjee and Jacquand (2006) as “... a country-specific financing mechanism which receives contributions from more than one donor which are then pooled and disbursed by an Administrator to a number of recipients (government, UN, NGOs, depending on governance and purpose)”. MDTFs have evolved over time, according to the accumulated experience. Existing MDTFs differ significantly from each other. A standard model has not yet emerged. They are usually highly structured, in terms of procedures and legal provisions.

MDTFs rank among the financial instruments preferred by international lending institutions. Donors are attracted by these mechanisms that allow for substantial financial flows, even in countries with inadequate indigenous public-expenditure management systems. Also, small donors without a presence in country are offered an opportunity to participate, at low cost and without incurring significant fiduciary risks. In forbidding environments, such as Iraq, donors opt for disbursing funds through MDTFs to avoid unwanted visibility and the subsequent retaliations. Furthermore, certain political sensitivities typical of transitional processes, like those provoked by cohabitation cabinets, may be alleviated by the establishment of these instruments.

Where an interim authority replaces the national government, a significant portion of donor funding may be channelled into trust funds managed by international agencies. In the absence of internal public revenues, this funding line is likely to represent the most important part of the financing available to the public sector.

Usually, MDTFs cover a broad range of expenses across the public sector, from ordinary budget lines to reconstruction-related investments. MDTFs of various orientation, managed by different agencies, may coexist. Whereas a given MDTF is meant to shoulder the recurrent expenses of the recovering (or created anew) public sector, another one may be designed to finance projects promoted by NGOs. Humanitarian activities are usually funded under different mechanisms. Also, expenses related to the army, the police and the prisons may remain outside the remit of certain MDTFs, due to donor reluctance to become involved in these sensitive areas, or to norms explicitly barring some institutions to finance them.

MDTFs have been introduced also in contested or fragmented settings, with multiple government bodies and diverging donor agendas, like Bosnia and Herzegovina. Sectoral or thematic trust funds tend to prevail in these contexts. Donor conditions for channelling their contributions through a MDTF may impair its overall allocative coherence. Whereas the trust fund may represent a big improvement in terms of financial procedures, its spending profile may remain distorted.

Sectors or areas favoured by certain donors may remain outside the scope of a general MDTF. Given the privileged funding arrangements enjoyed by the health sector,

True Story No. 12

Coordinating aid in the political vacuum of Somalia

Since 1991, Somalia has represented an unusual working environment for the international aid system, marked by weak or absent public structures, troublesome factions, resilient informal political and economic networks, and in some regions endemic levels of violence. In the search for workable strategic and operational solutions, external actors have been forced to experiment with original approaches. Improving aid coordination represented a central concern in such a fragmented context. The way it has been pursued deserves consideration.

The Somalia Aid Coordination Body (SACB), established in Nairobi in 1994, provided a permanent platform, where humanitarian and development issues were discussed, information was collected and disseminated, responses to crises were planned, and joint positions and actions were negotiated. Additionally, security-related information was shared with interested participants, in view of a need to respond uniformly to incidents. The SACB compiled data of increasing quality related to aid flows to Somalia, in this way throwing light on a very opaque field. Participation was voluntary and open (on an equal footing) to donors, UN agencies and NGOs. Decisions were taken by consensus or, in case of disagreement, by majority. The involvement of non-Western actors was very limited. Given the weight of Muslim charities in Somalia, their absence from the SACB forum represented a major drawback.

The Health Steering Committee of SACB stood out for its influence and performance. Over the years, it accumulated a wealth of knowledge about health issues in Somalia, and strengthened its web of contacts and collaborators. The Health Steering Committee encouraged the formulation of a health strategic framework, and succeeded in mobilizing substantial resources from the GAVI Alliance and the Global Fund against HIV/AIDS, Tuberculosis and Malaria (GFATM), in fact filling the gap left by absent health authorities. It was at the forefront in responding to disasters and epidemics.

As with other high-profile coordination mechanisms, the SACB was controversial. Its detractors were as vocal as its supporters. Critics stressed its Nairobi base, the inadequate Somali participation, the costs incurred by participants attending frequent meetings, the negligible impact of the codes and guidelines that SACB produced. To these justified charges, it should be added that despite years of joint work, no effective aid management instrument, like a pool or a trust fund, was established. The Health Steering Committee was blamed for the pressure it put on participants to adhere to agreed initiatives and behaviours. Clearly, not every actor was prepared to relinquish the freedom of action it enjoyed, or to account in full for the funds it received.

Personal factors played a central role in the achievements of SACB, as well as in the troubles it went through. Despite the criticism it aroused, the SACB refused to die, and maintained its central role in most transactions, particularly in the health sector. Actors continued to support the SACB, or at least to tolerate its existence. The SACB was simply too useful to be closed down in the absence of better alternative mechanisms.

Donor reluctance to make firm commitments in a troublesome and volatile context, low aid levels and the absence of credible indigenous counterparts explain some of the weaknesses imputed to SACB. Strong coordination arrangements may simply be impracticable in the political and security conditions of Somalia. Rivalries within the aid system affected the life of SACB. Its coordinating mandate was challenged by agencies eager to replace it, at least at sector levels. Quarrels of this sort are commonplace in contexts as fragmented, unclear and unstable as Somalia. They should be anticipated by stakeholders considering the establishment of effective aid management mechanisms in any distressed country.

The SACB was renamed as *Coordination of International Support to Somalis* (CISS) in 2006. The CISS operates through a network of committees, including the health sector one, aided by the *Somali Support Secretariat* (SSS). Whether changed names entail changed functions and enhanced effectiveness is debatable. In fact, the challenges faced by partners have remained as daunting as ever.

directly negotiated among donors, NGOs and health authorities, general MDTFs may be seen only as second-rate funding options by health managers.

MDTFs have both fiduciary and executive functions. Additionally, in many situations they have to play the financing role of a proto-government. Capacity building is called for in relation to all the functions of a MDTF. Unsurprisingly, accommodating all these dimensions in a balanced design is fraught with difficulties. *“Post crisis MDTFs are not just financial mechanisms, they affect behaviour. Evidence suggests that they give incentives for donors to harmonise, for funding to follow a national plan, for government engagement and for collaboration between implementers. But common funding does not automatically result in coordination. Lessons to date, demonstrate that the way the fund is managed can have a major impact on the behavioural changes it encourages”* (Randel, Mowjee and Jacquand, 2006).

Where good public-expenditure management practice has been long-abandoned, MDTFs provide instructive models of the way financial transactions should take place in a normalized public sector. Prospective public managers, if given the opportunity, may take advantage of this learning ground to acquire the discipline and procedural skills they will need later, to deal with overseeing bodies like the Ministry of Finance.

A MDTF is usually administered by a development bank or UN agency, on behalf of donors, organized into some sort of board of trustees. The *administrator* interacts with the government’s *aid management agency*, which may be (or may be located within) the Ministry of Planning, of Finance or of Cooperation. In cases of previous state collapse, like in Afghanistan, an aid management agency was set up by the government, as an interim body taking over the functions of incipient ministries, until some capacity emerged within them. Sometimes, certain fiduciary functions have been outsourced to a *monitoring agent* (usually an international firm), who acts on behalf of the administrator and of the aid management agency. This particular arrangement helps with interfacing between the main parties and defusing tensions when difficulties arise.

The experience accumulated so far suggests that *the fiduciary function of MDTFs is fulfilled in most cases.* In the chaotic environment of a collapsed state, ensuring effective and transparent financial management is certainly a major achievement. This can, however, be attained at high cost, by slowing down operations and suffocating the emergence of indigenous institutions. Also, the response to unforeseen events may be affected by procedural requirements. Pressing operational concerns may sideline long-term capacity building. Learning opportunities may be missed. And the very success of a trust fund in the fiduciary role may perpetuate its existence beyond what might be desirable, as far as institutional development is concerned. *“Aid management agencies are easier to start up than to kill off. The worst examples become governments within governments and become entrenched in project implementation and corruption.”* (McKechnie, 2003).

Additional problems include the relationship between the WB and the UN, with their different requirements and working habits, the diversity of financial practices within the UN family, the conflicts of interest arising when these agencies make decisions on their own funding, and the insistence of some donors in earmarking their contributions. Accommodating the legal and administrative requirements of multiple participants within the same mechanism is a constant challenge, which has led in several instances to over-elaborated constructs. Also, the promise of rational allocations across the range of public expenses may remain hollow if national recovery plans are compilations of non-prioritized demands on shared funds.

The potential benefits of channelling a large portion of external assistance through a MDTF are huge. To reap the expected benefits in full, several conditions must be met. Robust macro-policies, solidly linked to sector recovery strategies, must be followed. The emerging government must enjoy a measure of credibility. Donors

must ensure sustained support to the country, and pursue agendas consistent with the chosen general policies. Additionally, local capacity must be able to rise to the challenge. Without this last requirement, the chances that the trust fund plays a substitutive role for much longer than originally anticipated are high.

The allocative coherence of sector expenditure depends greatly on the degree of donor participation in the MDTF(s). If important financiers opt for channelling their resources apart from the MDTF, or participating donors maintain large funding flows outside it, spending distortions may persist. Reaching a critical mass of participating donors is therefore crucial to make MDTF(s) effective sector-wide programming tools.

For detailed discussions of MDTFs, see Schiavo-Campo (2003) and Randel, Mowjee and Jacquand (2006).

Pools

Pools are usually smaller and less structured than trust funds. Their remit is in most cases sectoral or sub-sectoral. Sometimes, they are introduced to fill public expenditure gaps left by trust funds, or to provide flexible financial responses to pressing or unforeseen needs. Additionally, pools may be chosen by partners to distance donors from sensitive roles like policy formulation.

Pooling schemes may support specific spending lines, where aid dependency is high and donor interests converge. Pools for drug purchasing are typical examples. Pooling may represent an exploratory tactic chosen by donors willing to engage with the government, but reluctant to take firm commitments without having first tested the waters of concrete collaboration.

At sector level, the pooling of donor funds is attractive on several counts. It simplifies and stabilizes aid flows, increases the transparency of aid transactions, reduces (or better, makes uniform) the strings attached to donor support, consolidates reporting requirements and offers room for coherent decision-making. Additionally, the mutual knowledge of goals, perceptions and *modus operandi* gained by recipients and financiers must be counted among the soft returns of pooling.

As with other forms of coordination, pooling demands that sustained effort be introduced and maintained in place. Transaction costs may remain high. The impact of pooling on ownership is mixed. When in charge of daily management, recipient authorities usually gain in terms of programming discretion; the price they have to pay is to concede ground to donors in relation to strategic choices. Pooling schemes are common in contexts where recipient governments are weak or even absent, and donors expand their role beyond that of financing bodies.

Donor concerns with accountability may lead to a concentration on financial mechanisms, accompanied by failure to clarify the ultimate goals of the supported expenditure. By concentrating disproportionate resources on certain areas (not necessarily the most important ones), at the expense of others, pools supporting specific spending lines may have distortional effects on the whole sector. Carrying out a sector expenditure review provides partners with a broader perspective of financial flows, and may motivate them to adjust their contributions accordingly.

Common funds for humanitarian action

In 2006, in the context of the reform of the international humanitarian architecture, common funds have been introduced in Sudan and the Democratic Republic of the Congo. By forcing UN agencies and NGOs participating in such schemes to negotiate country-wide annual work plans, these funds have strengthened the planning and coordination of the humanitarian response in both countries. However, some of the well-known shortcomings affecting aid operations, such as unpredictable disbursements, cumbersome donor procedures and requirements, high transaction costs, and conflicts of interest, remained unaddressed. Whereas some weaknesses

True Story No. 13**Sector budget support to provincial recurrent health expenditure in Mozambique in the 1990s**

Sector budget support was introduced towards the end of the war (1992), as a gap-filling measure to keep underfunded and derelict health services alive. It evolved over time, to play a major role in the service expansion recorded in the decade that followed. The scheme was initially supposed to flow through state financial management channels, according to indigenous decision-making procedures. The decay of state management systems, an unreliable information base and arguable priority-setting habits represented serious obstacles, which delayed its implantation, and imposed multiple adjustments in its design. However, the offer of unallocated fresh funds constituted a powerful incentive for local officials to put their management systems in order.

Explicitly linked to service outputs, sector budget support promoted the use of existing information systems, which in this way were strengthened. Within a few years of hard work and thanks to the robust technical support provided to them by the involved donor, most provinces were able to tap these financial resources, to allocate them in meaningful ways and to account for their expenses at levels acceptable to the financier. Health service coverages expanded dramatically in the following years, and wide service imbalances were reduced. Provincial decision-making greatly benefited from a flexible funding channel, designed to complement state financing mechanisms, and to minimize their flaws.

Further, the scheme forced partners to review all the resources allocated to provinces and districts, so that the available budget support could be directed to cover the most serious gaps. The fragmentation induced by special programmes was reduced by the availability of un-earmarked funding. Operational efficiency improved significantly.

The information gathered through the provincial programming exercises permitted the analysis of resource and output patterns at national level, in turn affecting the structure of the state budget, and the allocative decisions of some donors. Coordination consequently improved. Other donors joined the scheme, in this way providing a working model for the SWAp discussions that started towards the end of the 1990s. Additionally, the programming and accounting practice gained by managing budget support equipped the health sector to absorb the progressively increasing state funding.

The process was not smooth. Overcoming technical weaknesses was the easy part. Resistance to change within the public administration was strong. The improved management practice exposed the technical shortcomings, as well as the deliberate misbehaviour, of many officials. Central officials resented the loss of control over provincial allocative decisions that this funding modality implied. Scepticism among donors used to exerting a tight control on their funds was widespread. Important donor agencies felt sidelined by an intervention of growing profile and influence. That the scheme survived and managed to grow over a decade of life is proof of its inherent value in the eyes of concerned stakeholders. It was eventually absorbed into broader mainstream aid management mechanisms.

Most of the appealing long-term effects of the scheme were not foreseen at the time of launching it. An almost desperate initiative, introduced in the least propitious environment, contributed beyond expectations to health service recovery. Key factors behind this success include the embedding of the arrangement into indigenous systems, its incremental growth according to recorded progress, persistence through the many crises arising along the way, openness to innovation and to change, a solid understanding of local conditions, and a measure of risk-taking.

will be dealt with as the schemes mature, others may be structural. Overall, common funds as piloted in Sudan and the Democratic Republic of the Congo are perceived as notable improvements over the customary *Consolidated Appeal Processes* (Stoddard et al., 2006).

They present however huge technical, procedural and political challenges to participants. Most involved agencies were unable or unwilling to restructure their internal functioning, in order to satisfy the demands of the new financing instruments. Whether the common funds put enough pressure on donors, UN agencies and NGOs to induce them to change their internal procedures and working habits remains to be seen. In large, severely disrupted countries, developing an annual humanitarian work plan encompassing most sectors and actors is dauntingly difficult. In the Democratic Republic of the Congo, the needs assessment on which the formulation of the humanitarian action plan was based engaged a 30-strong team and took two months of work to be completed. Within pervasive information shortcomings, allocating funds across sectors, regions and interventions implies delicate, often arbitrary tradeoffs. But once the decision is reached, overall coherence may improve remarkably. Ensuring flexibility and quick adjustments to changes in field conditions is another challenge. It demands permanent and independent intelligence capacity, backed by robust management systems.

Given the promise they bear and the reassuring results attained in their first year of life, similar funds are likely to be pushed by donors in other countries in crisis. For a full discussion, see Stoddard et al., 2006.

Comparative strengths and weaknesses of public and private health care providers

Healthcare provision is privatized through a variety of mechanisms, sometimes formal but more often informal. Individual private practice prevails over institutional arrangements. Grey areas abound, with participants unwilling to clarify roles, responsibilities and ownership. Whereas the official discourse may stress separation or even competition between public and private sub-sectors, considerable complicity shapes behaviours in the field. Transfers or free use of public assets to support private earnings is commonplace. Drugs, equipment, workplaces fill the salary gap left unpaid by the public sector.

Private investment decisions in healthcare assets like facilities, equipment and training, are usually taken in isolation. In Somalia, diaspora members are financing new hospitals and specialist services, regardless of their appropriateness. Charity hospitals are often located close to the missions owning them, which may lie apart from the population centres and main roads. Emergency-oriented agencies may be reluctant to negotiate scope, size and location of their health services with local authorities and other stakeholders. Elsewhere, private non-profit providers may be able to attract considerable external support, and in this way to provide health services of superior technical content. As their supply of high-quality services becomes recognized by the public, their catchment area expands. In localities experiencing health service collapse, this expanded demand may overwhelm a conscientious NGO's capacity to supply.

By definition, for-profit health care providers follow commercial considerations, often in a regulatory vacuum. In the end, the fabled public-private mix may be irrational and imbalanced to such a degree that it eludes any meaningful integration of its ill-assorted pieces. See *True Story No. 14* for an eloquent example.

After years of rampant privatization and commoditization of healthcare provision, as witnessed in the most severe crises, assuming that most health workers and institutions behave like private agents seems sensible. Given the pervasiveness and entrenchment of profit incentives, reversing this state of affairs may be impossible.

Thus, the temptation of resuscitating a large public sector should be resisted. The genuine acceptance of the central role played by private actors in health service delivery in most war-torn countries calls for a cultural revolution among public-sector decision-makers.

Unfortunately, ideology distorts the discussion about public and private healthcare provision. Sweeping generalizations about the private health sub-sector are made, in this way downplaying its intrinsic heterogeneity. Strong beliefs are held against a dearth of relevant information. Private providers remain inadequately studied – and subject to speculation – in most war-torn and transitional countries. A thorough review of private healthcare providers is needed everywhere their share of the health sector is considered large and crucial policy decisions have to be taken. These conditions apply in most health sectors moving from war to peace. Formal and informal private healthcare provision must be studied, prevailing business models understood, and effective incentives for health providers identified.

Such a study presents, however, serious difficulties, and must be carefully prepared and carried out. Additionally, ideology must be kept at bay when its findings are assessed. To be truly helpful, a study of private healthcare provision must encompass formal as well as informal operators, and their relationships with public health authorities, a sensitive area whose scrutiny is likely to generate controversy. No study of this kind carried out in a country in crisis has been found. The Democratic Republic of the Congo or Somalia would be natural choices for such an investigation. Its feasibility in such challenging environments remains to be verified.

Prevailing planning practices

Health sectors present a variety of planning traditions. Planning departments within MoHs may be large and influential, or under-resourced and sidelined. Often, they are identified with special implementing units funded by donors (as described in *True Story No 6*). Central planning has fallen into disrepute, but central planning instincts within MoHs are often strong, particularly in regard to issuing laws, directives, instructions and guidelines.

During a severe crisis, planning horizons contract, adjusting to emergency project timeframes. Long-term investments, such as in human resources and infrastructure, are neglected in favour of short-term actions, whose returns are difficult to assess. Planning activities may stop altogether, or proceed in growing isolation from field developments. Powerless planners may indulge in the formulation of over-detailed, irrelevant plans. Alternatively, the attentions of central planners may be absorbed by privileged enclaves of better security, where big investment projects are often directed. In these cases, central planners take over the duties of local officials. Allocative concerns are replaced by administrative and implementing ones.

Central planning may be fragmented because of institutional flaws, predating the disruption but reinforced by it. Thus, capital and recurrent expenditure are budgeted in mutual isolation by two different departments, while a third body plans HRD. The frequent squeeze of internal recurrent funding coexists with substantial capital inputs provided by donors. Allocative decisions are taken piecemeal, de-linked from each other. Decentralizing measures, often including the devolution of PHC services to local authorities, associated with the maintenance of large hospitals under central control, introduce additional obstacles to sound planning.

To compound these shortcomings, in most cases central plans cover only the portion of total allocative decisions controlled by the MoH. Even inputs provided by other branches of the public sector may fail to be incorporated into MoH plans. Additionally, donor resources known to central health authorities and in some cases managed by their special implementing units may escape inclusion in planning documents, due to restrictive budget rules, or sheer expediency. The eventual outcome of planning processes evolving under these conditions is predictably poor.

Despite the expertise and resources donor agencies rely on, their planning products may be equally misinformed, fragmented and deficient. Planning tools favoured in donor circles may be poorly adapted to unstable environments (Gasper, 2000). Political decisions expose the presumptions of rationality and objectiveness on which planning is usually built (Hill, 2000). And the information disadvantage affecting donor choices in complex emergencies encourages the adoption of one-size-fits-all approaches.

Ambitious worldwide initiatives, like the Millennium Development Goals (MDGs), look out of place in health sectors lacking the flimsiest foundations of health service delivery. In forbidding contexts like Southern Sudan, result-oriented planning approaches, based on questionable, often implicit assumptions, and endorsed without a careful analysis of available resources and operational constraints, are condemned to irrelevance, despite the tribute ritually paid to them in official discourse. Gross mismatches between stated goals and allocated resources are commonplace. In Chad, for example, service coverage fulfilling the MDGs demands human resources four-fold stronger than those expected to be available in 2015 (Kurowski et al., 2004).

The determined pursuit of overambitious goals tends to lead to the establishment of dedicated (and especially expensive) programmes. Given the space for manoeuvre enjoyed by donors during a severe crisis and the large resources they control, the damage their misconceived initiatives may inflict on health services vastly surpasses that caused by flawed government choices.

To assess the cumulative effects of the multiple planning processes going on in the health sector, several dimensions must be considered:

- *The relevant information made available to decision-makers.* Without a robust understanding of the global situation, plans fall prey to wishful thinking, dominant fashions, unsupported assumptions (usually masked as facts) and political manoeuvring. The first step to revamp derelict planning functions is to collate disparate pieces of information into a comprehensive, meaningful picture. If this is disseminated in a convincing way, collective decision-making may be greatly enhanced.
- *The proportion of un-earmarked resources flowing through the health system.* When most resources are allocated to special programmes, no space for sector planning is left. The introduction of flexible aid management tools aimed at filling the gaps left by project allocations may greatly enhance sector coherence and effectiveness. See *True Story No. 13*.
- *The political environment within which health planning takes place.* Feeble health authorities may lack the clout needed to impose their views on central and peripheral governments. Or powerful lobbies may rule out any modification of the status quo. Further, financing bodies may be bound to support dominant approaches, regardless of their relevance to a specific context, and of the scanty evidence supporting their adoption. These constraints imply political rather than technical solutions.
- *Political, military and economic timeframes conducive (or not) to planning.* Relatively stable governments, recognized by the international community, may invest in planning, despite their conflict-induced difficulties. Conversely, situations where governments may soon be overturned and replaced by other political settings, and where donor agencies refrain from taking binding commitments, are obviously unfavourable to serious planning efforts.
- *The existence of a recognizable direction towards which the health sector is moving.* Sound policies enjoying widespread support may inspire participants to shape their plans consistently with shared goals, even in the absence of enforcing measures. For instance, a serious gap in service provision separating a backward region from the rest of the country, if convincingly documented, may induce

autonomous players to invest in its correction. In troubled environments, *soft* planning may be more successful than the *hard* variety of it.

- *The presence of a planning culture*, built on the awareness of resource and capacity constraints, consistent and mutually exclusive alternatives, decisional discipline, long-term perspectives, and self-restrained initiatives. Powerful elements contribute to the erosion of a planning culture during a protracted crisis. Uncertainty of political outcomes, reduced checks on decision-making, abundance of donor resources, dispersion of power, the haste to move forward with decisions, the proliferation of priorities (all energetically backed by some agency), are some of these elements.
- *The existence of credible guidelines for allocative decisions*, such as criteria for investing in new health facilities, related standard layouts, average cost estimates to assess under- and over-funding, and the long-term financial implications of the chosen plans, criteria to assess efficiency and effectiveness of health activities, and criteria to analyse the composition of health spending. An investment in the production of sound guidelines gives credibility to the claims to leadership of an embattled MoH. The absence of guidelines, or the production of flawed ones, reinforces the hollowness of the same claims.

The dissolution of planning functions, apparent in many crises, may be regarded as inescapable by hard-pressed actors. Some participants may even consider planning as a distraction from competing critical activities. Doubts notwithstanding, the features of the crisis environment (scarce resources, increased needs, disconnected activities, unpredictable events, severe implications of failure, fresh external funding, and new opportunities) call for strengthening and expanding the scope of planning. *True Story No 14* reports on the direction taken by health services in a distressed district of northern Uganda, once central as well as peripheral planning capacity had vanished.

Regulation

Before the crisis, regulation capacity may have been inadequate or absent, as in countries where private practice had previously been banned. During a protracted emergency, regulatory functions suffer badly, or collapse altogether. Weak and often contested public authorities are not in the position of enforcing existing legislation. The multiplication of (mainly foreign) actors and lines of command compounds difficulties. The dispersion of power, combined with poor communications, puts service providers out of the reach of regulatory bodies, if the latter function at all. Unsurprisingly, public authorities in many cases prefer to drop the issue from the policy agenda, and concentrate on service provision.

In many health sectors legislation is available, but neither known to concerned players nor enforced. In some cases, laws and regulations are formulated in vague terms; a limitation which makes them practically useless. Regulatory provisions may be set at such unrealistic levels that their disregard by healthcare providers is the rule. In other instances, sound legislation is not applied, because of crippled or absent regulatory institutions. The ineffectiveness of such institutions may be related to the absolute lack of resources, or to structures inadequate to the tasks they should perform. For instance, some regulatory bodies remain centralized, without sufficient field capacity to fulfil their mandate.

Additionally, regulators may lack adequate incentives to carry out sensitive and in some contexts dangerous functions. In other cases, the lack of political clout is the main constraint. Healthcare providers may also resist what they perceive as an intrusion, particularly by public authorities of contested legitimacy or dubious competence. The general climate of disrespect for the rule of law further undermines the regulation of health care provision.

True Story No. 14 Spontaneous development of healthcare provision in a war-affected district

Gulu is a district of northern Uganda, stricken by decades of violence. In 2002, its population was estimated at 470,000, with 40 inhabitants per square km. Poverty was rife, with household incomes lower than the Ugandan average. Health status indicators were considerably worse than national figures. Annual health expenditure levels, conservatively estimated at US\$ 7-8 per head (private payments excluded), were in line with Ugandan averages. Given that the inputs of relief agencies were not included, true levels might have been substantially higher.

The district was served by four hospitals and 33 PHC facilities, while 22 additional peripheral facilities were closed, mainly due to security problems. About one annual outpatient contact per head was reported. Only 16% of expected deliveries were attended to within health units. EPI coverage was far below the national level. The low uptake of basic services suggests that the PHC facilities considered as functioning were under-utilized; some might have existed only on paper.

Healthcare provision in Gulu was dominated by hospitals. Hospital beds totalled 950, or two per 1,000 population, double the average of one per 1,000 for the whole of Uganda. Two large facilities, Lacor and Gulu Regional, stood out for their size, outputs and absorbed resources. Lacor, a private hospital of 474 beds, operated by a Christian organization, is unique in its history and features. Over forty years, this facility grew from a modest health dispensary to become one of the largest hospitals in Uganda. The extraordinary commitment and capacity of its faith-based managers, staff and supporters were certainly at the root of such an expansion. The recurrent expenditure of Lacor, at US\$ 1.3 million, approached half the district total. Donations and aid contributions covered 70% of its operating costs. User fees accounted for 16%, and government grants for the remaining 14%.

Gulu Regional Hospital was a government facility of 300 beds. Gulu district hosted another public facility of 100 beds, and a private hospital of 80 beds. The role of these smaller hospitals, which function below capacity, was unclear. The two main hospitals accounted for 60% of outpatient contacts within the district. Both facilities reported heavy patient workloads, with high, even excessive bed-occupancy rates. About half the admissions to Lacor hospital were caused by common conditions, thus manageable to a large extent at PHC level. The diminutive number (below 200) of major surgical procedures reported by the Gulu Regional hospital pointed to an even higher proportion of common conditions handled by this unit.

Gulu offered an extreme example of departure from internationally accepted standards of efficient and effective health care provision. The district health care pyramid was in fact turned on its head. Applying mainstream ratios of facility to served population, Gulu's planned health care network might be composed of 40-50 PHC facilities plus a couple of hospitals, with a total of 200-300 beds. Thus, the PHC network fell short of desirable standards, due to the many closed facilities. Conversely, hospital capacity was 3-4 times larger than what a rational plan might envision.

The picture just sketched materialized over the years, due to the convergence of multiple factors. General insecurity featured prominently among the constraints imposed on health service development. The collapse of planning functions during decades of

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turmoil, the dominance of old-fashioned hospital approaches, the inability of decision-makers to consider the district health system as a whole, all common features in disrupted environments, encouraged fragmented responses to the protracted stress endured by district health services. As a result, gross functional redundancies lay alongside huge service gaps.

The competition between public and private health care providers, rooted in mutual mistrust, and the ensuing lack of communication, compounded the picture. A certain abundance of resources provided by charities, private donations, and the central government, propelled large physical investments. These resulted in the described hospital complex, whose replacement cost might be estimated at US\$ 20-25 million.

The generous offer of hospital care (of good quality in the case of Lacor), against crippled PHC services, stimulated patient demand, which in turn led to further investment in hospital capacity. The population of Gulu gained in this way access to above-average curative services concentrated in few delivery points, while forfeiting the benefits of basic health care. Alternative approaches to health care delivery in unstable environments, such as mobile services, or temporary health facilities, did not thrive.

As far as the health status of the population is concerned, the opportunity cost of allocating most resources to hospital care might be high indeed. The reported very high maternal mortality ratio of 700 seemed supportive of this conclusion, even more so given the theoretically easy access to emergency obstetric services that the presence of four hospitals should have ensured. Additionally, serious concerns about the sustainability of such a plethoric hospital network, heavily dependent on external support, within the context of an impoverished district, were legitimate.

The organic growth of hospital care, even if not always of the intensity seen in Gulu, is common in disrupted contexts. This drive may be regarded as a spontaneous reaction to protracted violence. It implies an immediate price to pay, in terms of forsaken basic services, as well as a burden to carry far in the future. Once a large investment in higher-care assets has been made, so that most resources are absorbed by established hospitals, the expansion of basic health services is fatally constrained by present and future funding limits. Awareness of the long-term problems caused by expansive decisions, in the absence of a global development framework, is the only antidote on offer.

The initiative to restructure health care provision in Gulu district must come from its health authorities. The technical choices to be made look straightforward. The responsibility of providing hospital care would be largely assigned to the best performer (Lacor). Substantial resources should be moved away from the two government hospitals, to strengthen the PHC network. This would in turn filter the excess burden of Lacor, enabling it to play its referral role in full at lower cost. In this way, additional resources would be freed to sustain the further expansion of PHC services. This healthy evolution would be possible only if a comprehensive strategy is negotiated by public and private providers in a long-term perspective. Decision-makers considering this rationalist approach would face arduous political challenges, even more so in the charged environment of a district emerging from a protracted conflict.

A unique challenge is posed by failed states, where aid organisations act in a regulatory vacuum. Initiatives to issue self-enforced provisions have registered limited success. In Liberia, concerned NGOs worked hard in 1996-1997 to formulate a *Joint Policy Operation*, which was only partially adhered to (Schowengerdt, Spiegel and Spielberg, 1998).

Public authorities and aid partners considering ways of strengthening regulatory capacity may find the following remarks useful:

- Regulation is an inherently political activity, difficult to practise in contested situations. Powerful vested interests take advantage of the crisis to satisfy their constituencies. MoHs have difficulty restraining professional associations, due to obvious conflicts of interest.
- Health authorities with substantial healthcare provision responsibilities face a conflict of interest when regulating private for-profit and not-for-profit providers. Double standards, whereby the government asks private operators to abide to quality requirements far beyond those attained in public facilities, are common. To ensure fairness, a better option might be an independent regulator, called to oversee both public and private operators.
- Effective regulation is usually resource-intensive. Without adequate capacity and resources, regulatory bodies are condemned to irrelevance, or worse, tend to indulge in corrupt practices, disruptive of service delivery. In extreme cases, no regulation may be preferable to crippled regulation.
- Even in normal health sectors, legislation alone is rarely effective. The main reason for regulation failure is inadequate implementation. Decision-makers should concentrate their attention on this aspect, rather than on legislative and procedural issues.
- Regulatory provisions must be set according to the prevailing conditions of the health sector, and be both applicable for average providers and enforceable by regulators. Demanding ideal standards is the sure way to encourage rule-dodging and corruption.
- In most public sectors, managers raised in a tradition of command and control are not conversant with regulatory issues. Finding adequate expertise within the ranks of the civil service may be arduous. Ambiguous or counterproductive postures, as well as reciprocal mistrust between public officials and private actors, are the common consequence of this cultural constraint. Effective regulation requires extensive high-quality training, strong incentives and enhanced financial and accounting skills.
- Indirect regulation mechanisms can achieve better results than direct (and usually unenforceable) approaches. For instance, informing the public about good healthcare practices may be more effective than sanctioning the misbehaviour of health workers. The accreditation of performing providers may apply pressure on weaker colleagues to upgrade their standards. The offer of incentives to move from overcrowded areas to neglected ones is another example of “soft” regulation that weak authorities may try to implement with more chances of success than trying to forbid practice in areas with human resources in excess.
- The most difficult area to regulate is represented by informal providers, who usually flourish during protracted crises. Concentrating efforts on formal providers is easier, but may miss the point in situations where informal health care provision dominates. Adequate instruments, likely to be of an indirect or informal nature, may be needed to regulate the informal sub-sector. The first step may be bringing these activities in the open.

Forfeiting regulatory duties, a perhaps unavoidable strategy in crisis times, should be reconsidered in the light of experience, which suggests that *the difficulty of enforcing regulatory measures increases with the time they remained neglected*. Additionally, an incipient private sub-sector is easier to regulate than an organized, powerful one. Hence, postponing the tackling of these issues means facing much greater problems in the future. Preserving basic, even rudimentary regulatory functions during a protracted crisis could pave the way for a more balanced and successful recovery afterwards. And reintroducing sound regulatory mechanisms where they are absent should rank high among the concerns of policy-makers.

The literature related to regulating healthcare delivery in protracted crises is essentially missing. As no positive models have been proposed, the lessons learnt until now are of a negative nature. Indeed, the serious effects of neglecting this area are very apparent in most health sectors. There is, therefore, a strong reason to address this issue positively, exploring whether an approach different from the prevailing *laissez-faire* can be realistically pursued.

Decentralization in a fragile health sector

A protracted crisis disrupts communication and command lines, thus inducing a natural de-concentration of decision-making and encouraging the emergence of new autonomous actors. Shrinking state budgets tend to punish disproportionately peripheral authorities and lower levels of care. Payrolls may remain centralized, particularly in relation to higher-level cadres. And hiring and firing authority is likely to be retained by higher-level administrative bodies, remote from field operations.

Though the autonomy of peripheral officials from the central MoH increases, their scope for decision-making may remain narrow. Most public resources remain under the control of central authorities, whereas the inputs available at local level, provided by NGOs, must be negotiated with these groups. Receiving very little support or guidance from above, the local health manager finds him/herself in an awkward position, whereby a large degree of discretion over the resources controlled at local level is enjoyed, but no say – or even information – is available about the resources to be allocated to his/her administrative unit in the near future. As a passive target of decisions negotiated between donors, NGOs and central authorities and taken far away from the service delivery point, the local manager spends his/her best energies making sense of unpredictable events, such as drug delivery or availability of vehicles, and trying to fill the most critical resource gaps. Sound programming and planning in these conditions look distinctly out of place, and in fact they are rarely practiced.

In very adverse conditions, like in the Democratic Republic of the Congo, local health authorities are forced to introduce fund-raising schemes to finance healthcare delivery. Supply mechanisms, too, are set up to fill the gap left by collapsed central ones. Local governments may sever all links with central authorities, perhaps as a deliberate strategy to affirm indigenous power or interests.

An inventory of the resources controlled by local health authorities helps to assess the degree of real autonomy they enjoy. Results vary, with districts endowed with significant resources, usually channelled through a supporting NGO, alongside districts deprived of even the most basic working tools. Logistical difficulties may explain much in these deprived situations. In many cases, additional factors play a role.

During a protracted crisis, full devolution of power and resources is unlikely to become part of the political agenda. The enfeebled state is usually unable to give life to serious local government. In order to proceed to effective decentralization, a period of consolidation of central state functions may be needed after the disruption. Central health authorities at the end of a protracted crisis grapple with a variety of functions to be revamped. In some cases, like in Southern Sudan, they have to introduce anew

the foundations of a public health system. In other contexts, they have to resuscitate functions that suffered badly during the crisis. In all cases, only performing central authorities are able to provide the whole health sector with the required management procedures, regulatory provisions, financial flows and practical guidelines.

True Story No. 15

Devolution in Sri Lanka

In 1987, within the framework of a peace accord with India linked to the civil war affecting the North-East of the country, the Sri Lankan government passed provisions devolving substantial legislative and executive powers to Provincial Councils (PCs). The reform enjoyed little political support among Sri Lankan people, who perceived it as a foreign imposition. The needed complementary legislation was never introduced. Subsequently, a Maoist insurgency brought the island close to total collapse, until it was ruthlessly put down by the army.

The central civil service resisted the reform. The management capacity of PCs remained woefully inadequate to the responsibilities assigned to them. PCs did not exercise their autonomous powers to the extent foreseen by the law. The North-Eastern part of Sri Lanka benefited the least from the devolution, for fear of outright secession.

By law, PCs had discretion in the usage of their allocations, without having to account for them to central authorities or to voters. Central government allocated grants to PCs, which in 1997 accounted for 77% of their total revenue. Central government allocations to provinces were discretionary. The tax base of the PCs to finance expenditure responsibilities was inadequate. The proportion of health expenditure paid for by Provincial Councils was about 40% in 1988-1996. The financial information related to provincial expenditure remained opaque and insufficient to make sound allocative decisions. No effective auditing system was established.

PCs were made responsible for preventive, promotive and curative health services below higher-level hospitals. The management of doctors remained under the control of the central MoH. Central authorities continued to directly manage the delivery of health services, which were supposed to be the responsibility of provincial bodies. Policy formulation, planning and regulation, supposedly the core duties of the central MoH, were neglected. Provincial facilities were transferred to central control by reclassifying them as tertiary hospitals, with the satisfaction of provincial authorities relieved of that financial burden. Little functional change accompanied this administrative upgrading.

The health sector evolved organically, in response to political exigencies, rather than assessed needs. A radical reform accepted half-heartedly out of diplomatic and military expediency has in fact never taken off.

Condensed from Hsiao, 2000

Decentralization may be regarded by decision-makers as an absolute advance, and put at the centre of the policy agenda, without paying much attention to its goals, the many forms it may take, and the implications of each variant. Crucial differences among brands of decentralization include the breadth of the reform (which may encompass the whole state administration or only a specific sector, such as health), as well as its depth, related to the power and discretion enjoyed by local health

authorities. A key issue is the degree of elaboration of the provisions expected to steer the reform and to manage controversies when they arise. With only vague or incomplete provisions, and in the absence of strong institutions mandated to enforcing their respect, the decentralization process is likely to degenerate into a messy, unfair and ineffective redistribution of power. Health stakeholders at the start of a decentralization-oriented reform would benefit from a thorough exploration of the whole issue, of the ultimate goals of the process, and of the experience earned in other troubled health sectors.

Proposals aimed at pushing devolution may emerge during a transition from conflict to peace. If gross imbalances affect the health sector and aggressive redistributive measures are in order, they should be introduced by the central government before local authorities establish themselves. If not, the better-off councils are bound to defend their privileges, hence making redistribution much more difficult.

Revamping crippled management systems

For years, management systems have attracted the attention of the donor community. Their strengthening or sometimes radical redesign has been considered as a key strategy to revamp flagging health sectors. As a result, management advisers have flourished worldwide. Despite the huge investments made in many settings, results are mixed, when not lacklustre. Health sectors emerging from protracted crises are always at risk of being flooded with donor-driven proposals and initiatives aimed at reforming management systems. Lessons learnt in this area include the following:

- a. Management reforms have been proposed in severely under-resourced health sectors, with predictably poor results. Equally, financially flush health sectors have ignored management reform. Management practice and resource levels must improve simultaneously to make a noticeable difference in health sector performance. For an assessment of the adequacy of the resource envelope, see *Module 6*.
- b. Too many initiatives tend to offset each other, making the task of establishing new management systems impossible. Early negotiations with donor agencies, aimed at agreeing a common strategy to strengthen management systems, may inhibit the multiplication of disconnected management-related initiatives. Measures aimed at reducing the high turn-over of government and donor officials are also required to ensure continuity of approaches and actions.
- c. Given the pervasive inefficiencies affecting health sectors in crisis, improved management practice, by merely exploiting better the resources already in place, may induce remarkable change in service outputs. Sometimes, even the simple scrapping of a misconceived provision may trigger conspicuous improvements. Increasing outputs by better using available inputs is a strong demonstration of management capacity, and by itself is sometimes able to attract additional resources.
- d. Short-term experts may be helpful, particularly at the start of a recovery process. However, the introduction of functioning management systems demands permanent in-house expertise, and efforts sustained over long periods. Over-reliance on outside advisers, which usually distracts managers and encourages the postponement of decisions, should be avoided.
- e. Off-the-shelf standard designs are likely to be offered by incoming consultants. Without slow, painstaking adaptation to local conditions, such packages are unlikely to live up to their promises.
- f. Technology is often offered as the definitive solution to management weaknesses, which is misleading. Technology may boost the overall performance of soundly-designed systems, in turn operated by skilled cadres working in a favourable environment, but cannot replace these factors when they are missing.

- g. Strengthening management systems is often mistaken with providing management training. This is a necessary but in itself insufficient element of a comprehensive package of interventions. Recovering health sectors should consider the establishment (or the revamping if it already exists) of formal post-graduate training for professional health managers.
- h. In most cases, the design of management systems focuses on technical and procedural aspects. Inadequate attention is paid to the interplay of incentives that shapes the behaviour of managers, as well as of managed health workers. Setting right the incentives may constitute the single most important element of performing management systems.
- i. The pluralism created by the crisis calls for different approaches to management practice. Distinctively different from the traditional boss in full control of operations, the manager in a crisis environment acts in a web of relationships, resource flows and discrete decisions, which lacks coherence and direction. Understanding such an environment and steering events in the desired direction is the key to success, or at least to damage control. To that effect, analytical skills are needed to make sense of complex situations, crowded with partners and competitors. Communication skills are demanded to learn about the agendas followed, the resources controlled and the activities carried out by other actors. And negotiating skills are called for to find a common ground for action.

Usually, many actors (particularly outsiders) call for a start-from-scratch approach. Introducing newly-designed systems entails the risk of choosing inappropriate approaches, of disorienting participants used to other practices, of disrupting operations already under severe stress, and of dismantling sound components of the old systems, gone unrecognized in the radical turnaround. Admittedly, in some cases of total collapse, no alternative option to radical change seems available. On the other hand, the birth of new states, or of the creation of a new administration within the existing state, as agreed for Southern Sudan, offers an opportunity for introducing modern, lean, responsive management systems, free of archaic civil-service provisions. This opportunity may be missed because of job-creation pressures, common towards the end of a crisis.

In less crippled situations, an interim strategy of reviving management systems along old lines, so that their merits and drawbacks can be scrutinized, may be fully justified. Additionally, the appropriateness of old systems to the changed context can be studied. The results of this assessment then offer a sound foundation for the design of thought-through new management systems, which would maintain selected sound old settings, complemented by new appropriate designs. Care is needed to apply constant pressure to the process, to avoid it stopping midway, with old management systems brought back to life, but needed reforms postponed or dropped from the agenda. Satisfaction with the early results of recovery is commonplace, and, as a justification for stalling, should be actively counteracted.

Some of the building blocks of future management systems may already be in the field, waiting to be recognized as promising models. Severe crises foster experimentation, innovation and natural selection. After years of trial-and-error in demanding conditions, the emergence of sound management systems, even if limited in scope and size, is likely. The thorough study of field developments should help identifying those schemes suited for adoption on a larger scale. For an example from the Democratic Republic of the Congo, see *True Story No. 19*.

Assessing existing capacity

“Capacity” is an elusive concept, as it emerges from the vast literature related to it. Assessing capacity is dauntingly difficult in any complex context, and even more so in a troubled health sector. Nonetheless, mechanically assuming that in a protracted

crisis capacity has to be low is wide of the mark. Different levels of capacity respond to a crisis in different ways.

Systemic capacity is likely to suffer the most during the crisis, as the health sector fragments, loses direction and sub-systems are deranged. Indeed, a health sector is considered “disrupted” when its overall capacity to fulfil its role falls below acceptable levels. In these cases, the root of the problems lies in the breaking of the links between the components of the system, many of which, if considered in isolation, can be stronger than before the crisis. It is the inability of the components to interact consistently over time that dramatically reduces the overall systemic performance. The sum is less than the total of parts.

Islands of *organizational capacity* emerge or arrive from abroad. Implementing or problem-solving capacity may be high, or grow within, the strongest organizations, but will be expensive and imported, thus unsustainable and transient. Foreigners, who occupy senior positions within these organizations, exploit the learning grounds offered by the crisis to a larger extent than nationals, who usually hold junior posts.

The total stock of *personal capacity* may increase with the massive inflow of foreign skilled cadres. Its domestic component is likely to suffer, because of outward migration, combined with the actual downgrading of the responsibilities held by most experienced local staff, who leave indigenous high-level positions to take up lower-level posts with international agencies or NGOs. Additionally, individual survival imperatives push skilled cadres to fill posts unrelated to their core expertise. Scarce skills become even scarcer, whereas the performance of these cadres in alien fields may be inadequate. Personal technical skills may suffer, because they remain unused in a troubled working environment. And coping with the personal aspects of the crisis subtracts energy, time and attention from the professional development of local cadres.

The assessment of existing capacity may start with an overview of the sector, aimed at identifying areas of comparatively better performance: a province, a special programme, a specific functional area, an NGO, etc. The reasons of the better performance should be explored and understood. In some cases, the conclusions are grim. The performing area may have achieved success by sucking away from other underprivileged areas the few skilled cadres available within the system. Prominence has been achieved at the expense of overall performance. This pattern is frequently recognizable with donor-backed special implementing units. In other cases, success may be built on potentially replicable factors: right incentives, clear goals and approaches, effective management methods, etc. The existence of some success stories suggests that portions of untapped capacity, scattered across the health sector, may be exploited with positive systemic effects.

Too often, poor performance is explained solely on low-salary grounds; an explanation which is sensible but usually insufficient. Inadequate financial rewards certainly explain to a large extent the low motivation that so visibly affects service delivery. Nonetheless, incompetent staff will perform poorly (at least in technical terms) even when motivated by an adequate salary. The motivational impact of salary increases alone is, in any case, short-lived; after a period, under-performance will readjust to its earlier levels. And poor general education and low training levels are the norm in protracted crises. Shaky professional skills, only too easy to recognize, are likely to hamper sector development many years after the end of the crisis. The victims of the disruption, who have spent years of painful effort earning sub-standard qualifications and degrees, understandably find this fact unpalatable. Despite that, assessing the gravity of this skill gap is key to gauging the personal capacity stock that the health sector is likely to rely upon in the future and to drawing realistic plans for its recovery and development.

Capacity is strongly affected by constraints external to the health sector. The scarcity of contractors, common at the end of a protracted crisis, may represent a

major hurdle to reconstruction. The lack of roads and communications slows down the pace of recovery, while inflating its costs. Missing or inadequate legislation is often a key obstacle to sound public management practice. Obsolete civil-service provisions heavily affect the performance of the health sector. Any assessment of existing capacity must look at the roots of the main problems. A narrow focus on the health sector is frequently the cause of misguided corrective measures.

Assessing existing capacity means exploring a number of dimensions, on which “capacity” is built:

- *Knowledge and memory* may suffer from the migration of indigenous cadres and the quick turnover of expatriates, induced by hard field conditions. Personal memory is usually more resilient than the institutional one. Islands of knowledge and memory may remain unrecognized and untapped, or become marginalized, because of political expediency or pressures to act in a direction that could be challenged by a solid understanding of the situation.
- *Information.* The assessment of the completeness, reliability, updated status and accessibility of the existing information, as well as the study of the ways information is maintained, disseminated, agreed upon, and used for decision-making gives a measure of the existing capacity. The awareness of individual actors about the composition of the field and the activities ongoing, as well as in the pipeline, is another important clue. The analysis should go beyond official information systems. As knowledge-related institutional instruments close down or disorganize, they may be replaced by new, sometimes informal facilities, introduced by organizations or resulting from networks of knowledgeable people. In situations where knowledge networks are developed, actual systemic capacity may be better than anticipated by outsiders. Committed actors familiar with these informal knowledge resources may make fairly informed decisions.
- *Policy formulation.* Any evidence of policy debates producing agreed-upon decisions strongly suggests that a measure of systemic capacity is in place. Policy debates unable to usher in consequent actions point in the opposite direction. An overcrowded policy agenda, with attention inconclusively shifting from one issue to another, confirms the worst concerns about poor systemic capacity.
- *Negotiation.* Along the same lines, evidence of concerted action resulting from negotiations among the main actors bears some promise of capacity. Further insights can be gained by exploring whether the issues that elicited those efforts were relevant, whether success arose only from the commitment of a charismatic or energetic player or from a convergence of parties, and whether the efforts were worth the returns.
- *Implementation.* A review of the initiatives actually launched within the health sector is instructive of the prevailing levels of capacity, where it is located, the functional areas where it thrives, and which parties control it. In some cases, special programmes may show surprisingly strong performance, particularly in limited controlled settings. Positive examples may spur confidence in the health sector’s capacity to expand existing activities or to sustain new initiatives. These expectations are often unwarranted.

A common pattern is central authorities indulging in the issuance of irrelevant provisions and guidelines (consistently ignored by implementers), coupled with local health bodies willing and able to act in response to the problems they face. In the Democratic Republic of the Congo in 2005, this contrast between central insignificance and peripheral activism was stark. Large, fragmented countries are prone to open up wide gaps between the capital city with its ministries, and the rest.

- *Learning and evaluation.* The ability of the system to learn from experience is another indication of strong capacity. If the review of available old documentation

detects issues recognized as key for decades and never addressed, or if the same initiatives are launched again and again without taking advantage of previous work, concern is legitimate.

- *Ownership of the existing capacity (indigenous vs. foreigner).* Particularly in very protracted crises, a number of foreigners may have developed personal bonds with the country, becoming very knowledgeable about it and the repository of a sizeable share of the personal capacity in stock. The nationals vs. foreigners divide blurs in relation to capacity, which is held by *insiders*, i.e. that group of national and foreign actors who worked inside the battered health sector long enough to develop an intimate knowledge of it. Symmetrically, national cadres who migrated abroad or isolated themselves from country developments may have become *outsiders* as much as newcomer foreigners.
- *Human resources.* Capacity results from a balanced mix of hardware and software. A review of human resources may reveal some typical shortcomings. The total number of health workers may be insufficient to run the health network and provide services for the whole population, as it has been the case in Cambodia, where mass killings cut deep through the ranks. As the most-affected personnel were the highly-qualified ones, training capacity contracted dramatically, in this way undermining recovery for many years after the crisis. Competent managers may be in short supply in health sectors where officials are recruited from the health professions without receiving specific training. Certain skills or categories may be missing or under-represented. In specific areas, capacity may be particularly strong or poor, according to the presence or absence of the relevant skills.
- *Infrastructure.* Office space, training venues, warehouses, workshops all impact on the capacity of the health sector to deliver its expected outputs. Alongside the derelict physical infrastructure typical of protracted crises, agencies and NGOs have in most cases built, rehabilitated or rented adequate facilities. In the case of equipment, the gap between aid agencies and country authorities may be large. Even well-trained managers perform below their potential in an inadequate working environment. The presence of gross gaps or inconsistencies along functional chains (as with the provision of computer training to cadres working without a computer) act as alerts about poor capacity.
- *Financial resources.* Funding shortages hinder the performance of most disrupted health sectors. Besides the absolute lack of funds, shortages are often caused by the erratic functioning of public financial management systems. In many cases, the seriousness of the induced disruption is out of proportion to the cash actually needed to overcome the service delivery crisis. Modest funding, when addressing critical shortcomings, may achieve wonders. Conversely, poorly-targeted generous financing may only induce further waste.
- *Bottlenecks,* or small constraints with a large impact on the overall system. Sometimes, implementation suffers because of trivial obstacles of which nobody had anticipated the presence. For instance, ambitious decentralization plans in a country with few bank outlets are doomed without the provision of safes to district health authorities. The discovery of such bottlenecks is a strong pointer to poor knowledge of the context by decision-makers, a drawback that is often at the root of poor capacity.
- *Process: rules, regulations, habits, traditions, beliefs.* Are these features assets to be strengthened by incremental improvement or liabilities to be overcome by radical reform? Some health sectors have proved admirably resilient to crisis, enduring protracted stress with relative success. Sector pride, built on past success, a tradition of muddling through difficulties, continuity of leadership, some committed personalities leading colleagues towards sensible goals, number

among the factors contributing to preserving the vital functions of the health sector. These privileged situations call for conservative, respectful approaches to reform.

At the other end of the spectrum, the health system may enter a sort of organizational trance, whereby inputs are absorbed without being translated into outputs, decisions are indefinitely postponed, ministers and managers are replaced without affecting sector performance, and direction is lost. Resilient health sectors, if exposed to stress for long, may degenerate into the sorry conditions just described. Or the disarray of the health sector may be a manifestation of a general disease of the social fabric. These terminal conditions must be addressed by shock therapies.

- *Reactions to acute crises.* Beyond the ability to formulate policies, draw plans, implement activities and evaluate their results, the systemic reactions to an unforeseen event, such as an epidemic or a natural disaster, are instructive of the capacity endowed in the health sector. In an environment used to acute crises, response capacity may attain a conspicuous degree. The strength of these responses should not induce excessive hopes in overall systemic capacity. Indeed, skills, states of mind, timeframes, working habits required to deal with acute crises are usually different from those needed to ensure long-term smooth service delivery. Worse, success in managing an acute crisis tempts managers into tackling service provision with the same approach, with predictable poor results.

Capacity building

The often unverified assumption that disrupted health sectors *must* suffer capacity constraints explains the proliferation of capacity-building initiatives commonly seen in protracted crises. The assessment of these activities is likely to point to several familiar drawbacks:

- Few if any initiatives are inspired by a systemic analysis. As the incentives (positive and negative) at work in the system are rarely taken into account, strategies to alter them in the desired direction are usually overlooked.
- Most efforts aim at providing skills to individual cadres assumed to lack the adequate knowledge, which has to be acquired during (usually short-term) workshops. Practical skills that must be gained through hands-on practice are dealt with in a classroom, far away from the workplace and often from the country. To compound these shortcomings, even if strong skills are acquired through this training, once deployed in dysfunctional environments they remain unused and are quickly lost: though the capacity may be there, its potential cannot unfold.
- Few initiatives take full advantage of the work previously done in this area, most of them starting from square one instead. Precious experience is lost, while repetitions proliferate. As few initiatives are evaluated, no learning from the work done takes place.
- Most training is short-term, is introduced piecemeal and is not sustained over time. Few initiatives last long enough to allow for the expected benefits to emerge and consolidate.
- Often, interventions are conceived and implemented by outsiders, poorly conversant with the context. Blueprinted models are introduced top-down, without adequate adaptation. In some settings, hard-to-overcome language barriers further limit the effectiveness of imported training packages.

When most or all of these features are recognizable as prevalent, the net effect of capacity-building work is likely to be a waste of effort on a grand scale and actual *capacity destruction*.

Recommended Reading

Gaspar D (2000). **Evaluating the 'logical framework approach': towards learning-oriented development evaluation.** *Public Administration and Development*, 20:17–28.

Since the 1970s, the logical framework approach (LFA) has gained currency within the aid industry, until it has become the dominant planning, monitoring and evaluation tool. Many donors consider the submission of well formulated logframes as a key condition to access their funds. However, field practitioners know well how distant from their daily work the logframes they prepare for donor perusal are. This illuminating article explains why this is the case.

".. logframes are inevitably simplifications, which become dangerous when not seen as such; they can help logical thinking, not substitute for it, yet enforcement of a fixed format tends to produce illogic; and they are prone to rigidification and thus to blocking rather than aiding adaptation."

"In conclusion, LFA should be used with care, and sometimes not at all. LFs can usefully encourage thinking about purposes, assumptions and data, but become less helpful as we move from planning to monitoring to evaluation. They can become seriously limiting in evaluation when unintended effects and routes are important, when programme-context interactions are complex and the efficacy of intended means is not well understood in advance, and if there are major differences in priorities among stakeholders – situations which may be the rule rather than the exceptions."

The inherent complexity and instability of violence-stricken environments expose the limitations of structured logical approaches to a further degree. The belief of donor officials in their ability to control aid programming in environments like Afghanistan or the DR Congo from the comfort of their headquarters, through instruments of the nature of logframes is astonishing.

Handy C (2005). **Understanding organizations**, 4th ed. London, Penguin Global.

Simply put, a masterpiece. Handy succeeds in covering a field of renowned aridity with an informative, witty and thought-provoking analysis. The variety of assumptions, models, approaches and cultures that shape modern organizations is explored in detail, constantly inviting the reader to draw his/her own conclusions. Real life takes precedence over theory, which is introduced, discussed and challenged in the light of actual experience.

The many boxes included in the book are always interesting and often fun. The discussion is complemented by a rich and stimulating guide to further study. A pleasure to study, for the prospective as well as the practising manager, the organizational analyst and the general reader interested in gaining insights about the behaviour of people and of the organizations they work in.

Leader N, Colenso P (2005). **Aid instruments in fragile states.** London, DFID (PRDE Working Paper 5).

Review of the options available to donors when dealing with "fragile states", a broad group encompassing violence-affected, institutionally-weak, poorly-managed, badly-ruled, and contested states. The paper shows that the prevailing donor approach to difficult partnerships, based on humanitarian aid, limited engagement, reliance on intermediaries, and risk avoidance, must be abandoned.

A better understanding of the risks posed and of the opportunities offered by these environments, backed by systemic analysis and coherent experimentation, should put donors in the position of being able to make better choices. The authors discuss the strategic and programming options to be considered, with reference to a variety of situations. They conclude that a mix of aid instruments, adapted to each context and evolving over time, in tune with country developments, is likely to be more successful than any single aid model. A sensible message, calling for a radical departure from the way the aid industry uses to work, not only in relation to fragile states.

Potter C, Brough R (2004). Systemic capacity building: a hierarchy of needs. *Health Policy and Planning*, 19:336–345.

Stimulating critique of the way capacity building is conceived and related activities are delivered. The paper argues that serious conceptual flaws lie behind the meagre results attained by capacity-building work in a variety of settings. As a result, weaknesses of lower order, like the lack of equipment, are routinely addressed by capacity-building programmes, while systemic shortcomings are left untouched. Clearly, a fresh approach is needed.

By taking a systems perspective and organizing problems into a hierarchy of capacity needs, a coherent set of interventions can be identified and introduced. Capacity (or lack of) related to *structures*, *systems* and *roles* must be distinguished from that associated to *staff* and *infrastructure*, to *skills* and to *tools*. *“It is surely time for governments of countries struggling to improve their health services, and for development partners ostensibly trying to support their efforts, to move beyond the mantra of ‘lack of capacity’ and the ineffective placebos of equipment, training and construction. By addressing systemic capacity building as a hierarchy of components in which the less tangible are the most important, the authors believe significant improvements could come about in the way development aid resources are used.”*

Saltman RB (2002). Regulating incentives: the past and present role of the state in health care systems. *Social Science and Medicine*, 54:1677–1684.

Lucid discussion of the changes which occurred in many European health sectors that have restructured the way health services are provided, with an important lesson for poor countries. After clarifying the meaning of “regulation” and “incentives”, once applied to healthcare delivery systems, Saltman shows that the planned market introduced by reformers has not trimmed the role of the state. Rather, its regulatory responsibilities have expanded.

“...exercising authority via oversight is an inherently more complex and expensive undertaking than simply exercising direct control. Negotiating and monitoring contracts is more complicated and personnel intensive than paying a budget; designing outcome-tied regulations is more complicated than issuing rules and circulars.”

“... the shift to a more entrepreneurial environment both within the public sector and beyond requires not only a similar level of State activity, but substantially more sophisticated types and levels of activity. This requires better trained and motivated personnel, better information, and greater financial and accounting expertise. All of these, in turn, require considerable funding. Thus, the new regulatory role for the State is likely to be equally if not more expensive than the old command-and-control model. This suggests that adopting market-style incentives as a central mechanism to manage a health care system is not a poor State’s game.”

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SWAp-oriented instruments in conflict-affected and post-conflict health sectors

Annex 8

The interest aroused by sector-wide approaches (SWAs), as a way to rationalize external assistance and to provide coherence to sector operations, and their introduction in many health sectors across the world, has brought the concept onto the policy agenda of countries moving from crisis to recovery.

SWAs have been defined in many ways; they usually include some key features, such as a comprehensive sector policy implemented within a medium-long term timeframe, an expenditure programme capturing most significant contributions, the participation of all significant actors, and the adoption of common approaches aligned to government procedures.

In health sectors affected by severe resource scarcity and dramatic inefficiencies, the SWAp promise of rationality and comprehensiveness maintains an obvious appeal. In fact, many characteristics of conflict-affected environments should encourage the pursuit of a SWAP. The collapse of old institutions, procedures and working habits may favour the exploration of novel approaches. The severe fragmentation affecting most conflict-affected health sectors, and their crippling inefficiencies, call for corrective measures. In order to address needs and attract additional external resources, increasing aid absorption and effectiveness is paramount in aid-dependent contexts. The pluralistic nature of most conflict-affected health sectors favours the adoption of collaborative approaches. And a coherent recovery framework is needed to guide multiple autonomous participants during the transition from war to peace.

Translating these ideals into practice remains a tremendous challenge. Many factors related to the policy environment, the recipient government, and development partners, discourage the adoption of a SWAP.

The policy environment. The policy framework is often missing, with the related debate crippled by a weak institutional memory and confined to narrow circles. Political sensitivities may undermine “rational” policy discussions. The information basis needed by a sound programming approach is usually deficient. Further, forecasting the fiscal position of new states or that of governments emerging from protracted crises may be impossible. Absorptive capacity is low. Public financial management systems, regulatory bodies, auditing firms and even commercial banks may be absent or crippled. The fast-evolving features of transitional contexts rule out protracted negotiations and firm commitments, with hard-pressed actors making speedy decisions.

The recipient government. The government leadership of the policy formulation process is usually inadequate, because of capacity constraints, limited power, contested legitimacy, inability of newly-appointed government officials, or pressing competing tasks. On the one hand, an internally-fragmented and insecure government is likely to refrain from engaging with a cohesive group of donor agencies. On the other hand, risk-averse donors usually refrain from dealing directly with state authorities of dubious legitimacy.

Development partners. In most conflict-affected contexts, donor goals diverge substantially. Dominant agencies competing for influence may be reluctant to negotiate or to compromise. Relief agencies and NGOs, usually not conversant with, nor attracted by SWAs, may dominate the health sector, with large donors preferring to remain backstage, particularly when the political outcome of the crisis is unclear. Unrestrained by the recipient government, aggressive agencies pursue their agendas in isolation, justifying their stance on emergency or absorption grounds. Additionally, the proliferation of private (for-profit and not-for-profit) actors pursuing their own multiple goals – always difficult to accommodate within a shared policy framework – limits the comprehensiveness of the SWAp process, hence its effectiveness.

The above-outlined difficulties may explain why a SWAp has been explicitly adopted in the health sector only in the unique circumstances of Timor-Leste, a newborn country having experienced a short, intense crisis, and placed under a UN transitional administration (Tulloch et al., 2003).

The arguments militating against the pursuit of a SWAp in a disrupted context are powerful. *If a sector-wide approach is premature in most transitional situations, sector-wide thinking is not.* In fact, the approaches adopted during a recovery process pave the way to future structural developments – or, conversely, hinder them. *Several measures may be considered as the building blocks of a future SWAp.* These measures are also attractive on their own, due to the systemic efficiency gains they may generate. Whereas full *alignment* with country systems and procedures is usually unattainable, the *shadow alignment* of donor programming around concrete instruments appears to be the way to go (OECD, 2004).

The study of conflict-affected health sectors shows that considerable experimentation takes place in order to address the prevailing fragmentation. *A variety of sector-wide instruments* have been introduced. Some of them have been adopted as standard approaches by the aid community, whereas others have resulted from local initiatives aimed at solving concrete problems. Most of these instruments are discussed in some detail in other parts of the manual.

Sector-wide analyses have been carried out in view of formulating a health recovery strategy (Mozambique 1990–1992), or in the context of broader exercises, like Post-Conflict Needs Assessments (PCNAs, see *Annex 3*), or a Poverty Reduction Strategy Formulation, like in the Democratic Republic of the Congo and Liberia. All known examples are related to one-off analyses. No health sector has tried to establish a permanent analytical capacity, like a health policy observatory. Given its potential benefits, creating permanent analytical capacity should be nonetheless considered by actors engaging in a long-term transition from war to peace (see *Annex 5* for a brief discussion of the issue).

Joint aid management instruments may be general, like Multi-Donor Trust Funds (MDTFs), or specific to the health sector, like basket funds to cover recurrent expenditure or drugs purchasing (see *Module 8*). Other instruments include the independent auditing of budget support execution, contracting out health service delivery, as done in Cambodia and Afghanistan (see *Annex 7*), and sector-wide supply systems. The innovative Democratic Republic of the Congo drugs purchasing and distribution scheme is briefly covered in *True Story No. 19* in *Module 11. Studying the pharmaceutical area*.

Common programming tools include planning criteria, like standard layouts for health facilities to be built or rehabilitated (Cambodia and Mozambique), basic packages of health services, as introduced in Afghanistan, the Democratic Republic of the Congo, Liberia, and Southern Sudan, a common salary scale for national cadres to be hired, as in Afghanistan (see *True Story No 9* in *Module 5*), and common standard essential drugs lists and treatment guidelines.

Joint instruments related to human resources may refer to job descriptions, certification criteria, course designs, training materials. See *Module 10. Analysing human resources for health* for related details.

Coordination forums exist in every disrupted health sector, but are in most cases considered ineffective, as discussed in *Module 5*. Establishing some of the above sector-wide instruments, which bind participants to shared priorities and common approaches, is a powerful way of providing content and meaning to shallow coordination mechanisms.

Other instruments may be worth considering in such contexts, like a common policy on cost-sharing, establishing an independent accreditation body, and standardized data collection tools. The scope for learning from innovations introduced in other war-affected health sectors is huge. However, not all sector-wide instruments are

well documented, or known abroad. Conversely, instruments favoured by the aid industry, like PCNAs and MDTFs, are promoted and applied to the least propitious environments, with predictable results.

Key to progress is that the opportunities offered by transitional situations are exploited in a development perspective, and adequately documented and evaluated. Each instrument should be assessed according to its own merit, alongside its eligibility for future absorption into recovered indigenous systems. The chances of success increase when the issues to be tackled truly concern most actors. Initially, participation may be limited to a few players willing to test the waters of novel approaches, to be joined later by more cautious partners. The successful addressing of a thorny issue may give participants the confidence needed to tackle other challenging problems.

Sector-wide thinking may provide definite *strategic* benefits, as it encourages the identification of systemic problems (likely to be overlooked) and suggests way to address them. It encourages the study of complex systems *in motion*, and helps to identify long-term directions. Sector coherence may improve dramatically if initiatives are taken within a unified framework, instead of piecemeal. Additionally, sector-wide thinking may provide definite *operational* benefits, if efficiency gains are generated, transparency improves, and the genuineness of the stated commitments is tested. Partners learn to negotiate around concrete procedures and choices, and choose a few true sector priorities among scores of pretenders. Also, the introduction of SWAp-oriented instruments provides a precious learning ground for committed partners, potentially more effective than standard capacity-building training.

The diversity of instruments likely to emerge in a recovering health sector provides alternatives when a major scheme comes to a halt or an unforeseen event must be addressed. Also, it offers to decision-makers factual elements to consider, when choices among competing options have to be made. Without such a direct experience of the pros and cons of each approach, theoretical or fashionable arguments are likely to prevail in the policy arena.

A plethora of dangers and pitfalls exists along the path to sector-wide recovery. For instance, over-ambitious schemes may lead to operational paralysis. Valuable approaches may be crippled by capacity constraints and/or political considerations. Political or military reverses affect commitments and confidence, inducing partners to switch back to emergency approaches. The opportunity cost of establishing SWAp-oriented instruments may exceed their benefits. Prophets of magic bullets, quick wins and big-bang reforms may divert attention from the hard work needed to address entrenched systemic distortions. Too many actors may work outside a sector-wide framework, in fact undermining its significance. Changes in donor agendas, staff and preferences may nullify years of hard work and genuine progress. The list is not exhaustive.

In praise of a strategic incrementalism. The conflict or transition environment calls for a radical departure from the prevailing aid orthodoxy. The slow, patient, inclusive negotiations leading to a SWAp in a stable health sector are out of place in an unstable one. The multiplicity of actors and agendas, typical of disrupted environments, must be turned into strength, i. e., a source of innovation and competition between alternative ways of delivering health services. *Risk-taking, frankness, experimentation, operational freedom, speed, and sensitivity to political factors* are among the elements needed to foster the systemic recovery of a disrupted health sector.

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Module 9

Studying the healthcare network

Contents

The module examines the ways healthcare networks evolve under the effects of disruptive forces. After a broad review of composition, balance and shape of the overall network, relevant aspects – such as geographical distribution, ownership, physical and functional conditions of health facilities – are discussed. The need to disentangle new patterns as they emerge from old distortions, which may worsen during the crisis, is stressed. Suggestions are made regarding how to aggregate available figures into useful indicators for the study of the network. Particular attention is given to hospitals and PHC facilities, as well as to their mutual relationships. The difficulties of planning the recovery of a disrupted health network are sketched, alongside ways to tackle them.

Annex 9 offers practical guidance on the building of a summary database of health facilities.

Closely-related modules:

No 2. Making (rough) sense of (shaky) data

No 6. Understanding health policy processes

No 8. Studying management systems

No 10. Analysing human resources for health

No 12. Formulating strategies for the recovery of a disrupted health sector

The broad features of the network

In most health sectors, facilities are classified by category, according to the size and services provided. Usually, several categories of health units are clustered in levels of care. Most classifications follow a variant of the one sketched below:

Health facilities, by level of care

Level of Care	Functional Description	Remarks
Tertiary	Large, specialized, teaching hospitals, usually located in the main towns and often only in the capital city. Equipped with higher technology and mainly devoted to inpatient care. A large proportion of their existing capacity is usually absorbed in delivering first-contact care. Sometimes lower-care facilities located in the capital city are included in this group.	In some health sectors, this level is split into two segments of higher and lower care. This is usually a theoretical, unhelpful distinction that in practical terms can be ignored, particularly in protracted crises, where higher-care capacity is frequently enfeebled and tertiary hospitals stand out for their size and cost, rather than technical standards.
Secondary	First-referral facilities, located in urban and rural areas, usually including basic surgical and emergency services. In many cases, the outpatient component (mainly providing first-contact care) is quite large. Facilities dubbed as "hospitals", but lacking corresponding functions, are often included in this group.	Urban secondary hospitals are advocated as filters of common conditions, to avoid congestion in higher-level facilities. Particularly in degraded urban settings, with undisciplined referral flows, the benefits of this theoretical filter role remain unproven.
Primary	Small facilities, providing mainly outpatient basic care. Rudimentary units staffed by CHWs are often included in this group. Some facilities may be devoted only to special-programme care activities, such as safe motherhood, tuberculosis control or immunizations. Theoretically, these facilities constitute the base for outreach and preventative work.	Level including the largest proportion of ghost facilities in most disrupted sectors. Underutilization of these health units is very common, particularly in insecure areas.

In some health networks with a tradition of central planning, facilities are built according to standard layouts, particularly at primary level. Their spatial distribution follows some criteria, such as the population to be served, or the country administrative partition. In other situations, where dispersed investment decisions prevailed, facilities are different in size and functions. Also, they may have evolved over time, growing according to local conditions. In between the two models just sketched, the network can be a mixture of standards, each planned from a different point of view. Hence, colonial-era hospitals coexist with facilities built by disease-control programmes, the military, private estates, charities, etc. Clearly, their shape, size, equipment, functions and location differ quite substantively. In some health sectors, the official network structure can appear quite elaborate, with many categories of health units neatly combined in an ideal functional pyramid. However, in most cases the field situation diverges to a large extent from these conceptual constructions of central planners deprived of the means of rationalizing a disparate array of facilities, or of encouraging effective referral flows.

In some cases, the roots of important patterns, such as large geographic gaps in service provision, may be traced back to periods preceding the disruption. Whereas uneven development without adequate redistributive policies is often the root cause of unfair access to health care, in some cases poor health planning may have played a role. This is the case in situations where the main planning criterion has been the country administrative structure, which is usually territorially based. Scarcely-populated administrative units greatly benefit from this approach, to the disadvantage of populated areas. Due to its simplicity, this obviously-flawed planning criterion may be surprisingly popular. It may be uncritically revamped during transitional or reconstruction periods, when information-dependent criteria may seem inapplicable.

Despite the opportunity for change offered by the crisis, entrenched patterns, such as hospital dominance, are usually very resilient. Insiders tend to develop an idealized vision of the situation before the disruption and remain emotionally attached to old models. The existing flaws are easily and mistakenly explained by the crisis and, unrecognized, are not resolutely tackled as they need to be. To disentangle old patterns and trends of a stable nature from crisis-induced, transient ones is one of the most important contributions of an insightful analysis.

Ratios of facilities to population help to infer and compare accessibility across the country. Given the population displacements that take place during protracted crises, these denominators are always questionable and should be handled with the utmost caution. The reported number of functioning facilities is also often unreliable. Beyond the frequent reporting mistakes, in many cases the application of different criteria for classifying facilities helps explain the remarkable fluctuations over time that mark official reports.

Uncertainties notwithstanding, internationally accepted ratios can be used as yardsticks to gauge the gravity of the situation. In poor countries, first-referral hospitals are supposed to serve 150,000 to 300,000 people and comprehensive health centres (expected to provide a full package of basic health services) 10,000 to 20,000. In disrupted health sectors, finding ratios twice or even three times higher is usual. Where bed reports are available and considered fairly reliable, ratios lower than 1 bed per 1,000 population are common. Considering that a large number of these beds can be concentrated in a few tertiary hospitals, actual access to inpatient care is in many cases even lower. Usually, these average ratios hide very large differences across the country, and within the regions composing it. Particularly when a country is partitioned into very large administrative units, disaggregating them into functional sub-units can be necessary to highlight otherwise-hidden imbalances. Comparing the global average figure to the ratios of the most and least favoured areas helps condense the overall picture.

Some indicators related to the healthcare network, collected in health sectors in crisis

Country	Year	Number of Beds	Beds for 1,000 Population	Skilled Health Workers per Bed	Ratio Referral Hospital to PHC Facilities
Afghanistan	2002	≈ 8,400	0.4	1.4	1 : 8
Angola	1998	≈ 8,000	0.7	3.1	
Mozambique	1991	12,000	0.8	1.5	1 : 30
Sudan	2000	23,000	0.7	2.0	1 : 20
Tajikistan	1998	42,000	6.1	7	
West Bank and Gaza	2008	5,000	1.3	2.8	1 : 8

Note: Given that many 'referral hospitals' are in fact sub-standard units, their ratio to PHC facilities may under-estimate the severity of the situation.

The patterns of the inherited network are profoundly affected by protracted crises. Facilities located in war-affected areas may have been destroyed, looted or just abandoned by scared staff. In the absence of regular maintenance, even active facilities can be in ruins. Health units located in overcrowded areas tend to expand in number and size under the pressure of increased demand and because of the availability of aid funding. New health units built by NGOs may mushroom in secure, operationally convenient areas. Basic functions, such as emergency surgery, are sometimes introduced in facilities that were not conceived for hosting them. In health networks contracted under a crisis, overstaffing of the surviving facilities is a quite common finding.

True Story No. 16

The composition of the healthcare network in Afghanistan

Over a number of years, WHO Afghanistan, with the collaboration of provincial and regional informants, compiled lists of existing health facilities, lists which time and again presented dramatic inconsistencies, both internally and when compared to previous years. In 2002, a collaborative initiative studied the network across the country, including all the facilities the surveyors were able to reach.

140 facilities included in the WHO database were considered as inactive, whereas 210 facilities not included in the database were found active. Taken together, the facilities missing from or miss-reported by the WHO database represented about 1/3 of the real total number. The finding of a dramatic mismatch between routine figures and field surveys is rather common in severely disrupted health sectors.

The complex interaction of the forces characterizing the disruption is likely to produce some or all of the following features:

- The crisis-shaped network tends to be composite, inefficient and inequitable. Its composition evolves quickly as the crisis unfolds, old facilities close down or are abandoned, new ones are built, and management and supply relationships change. The arrival of a well-resourced NGO in a given area may boost service delivery, whereas the expiring of an established project leads to service contraction elsewhere. Service provision is therefore in a permanent state of flux. Related figures become quickly outdated.

- The field situation usually diverges dramatically from the information available at national level. Official categories of facilities may be grossly misleading, requiring thorough cross-checking against functional definitions in order to become useful. For instance, a rough and minimalist definition of *Health Centre* might be the following: “*A health facility providing basic health services. To that effect, it must be staffed by at least a mid-level health worker and a trained midwife, and must maintain permanent immunization capacity and a basic laboratory*”. In different settings, the list of minimum requirements for facilities to be included in this category could be scaled up. The essential feature of the chosen functional definition is that the data required to apply it are available on a routine basis, or are easily collectable (see *Annex 9* in this module and *Exercise 9* in *Module 15* for further discussion and application).
- Official reporting tends to underestimate the gravity of the geographic gaps existing across the country, with facilities still considered as active even when they long-ago ceased to report operations and to be supplied. Health units in remote or inaccessible areas are particularly prone to be misreported by information officers reluctant to drop them from official reports. Figures related to for- and not-for-profit private facilities are often wildly inaccurate. The former proliferate in urban settings, where the health care on offer may greatly exceed the levels reported by central authorities. The latter facilities, owned or managed by charities, may be equally ignored by official statistics.
- The number of hospital beds is a common source of inconsistencies, as bed numbers are reported as stable, even when no inpatient activity takes place because of the derelict condition of the ward. Thus, when the number of hospital beds refers just to an empty shell, the size of the facility would be better estimated by its covered surface.
- The financing crisis that usually affects crippled states, coupled with security and logistical constraints, leads to the progressive abandonment of maintenance work. The physical condition of many facilities deteriorates quickly and equipment breaks down. Destruction and looting (whether caused by fighters, health staff or the populace) compound the damage caused by neglect in some cases. The network may become derelict in the course of a few years of turmoil. Sometimes, the poor quality of improvised maintenance work supported by NGOs undermines its effectiveness. Given the level of dilapidation attained in a protracted crisis, the recovery of the network always entails huge investments, sustained over long periods.
- Overall, technical standards fall at each level of care. Complex high-tech functions, such as diagnostic ones, suffer the most.
- Health facilities may internally fragment, due to vertical interventions. Selected resource-endowed services can flourish alongside neglected, barely functioning areas. The concept of health facility therefore becomes of dubious value. Given this fragmentation, the comprehensiveness of services greatly suffers. This constraint is made more serious by the reduced freedom of users to move in search of the service they need. Serious service gaps, such as the lack of emergency surgery, can therefore coexist alongside duplications of other services, simultaneously provided by several NGOs.
- A troubled, shrinking network can evolve in a direction disconnected from other trends underway in the sector. In some situations, such as Afghanistan and Angola, the privatization of health training led to an expansion of the workforce, which largely surpasses the staffing needs of the surviving facilities.
- In countries partitioned by rival factions and marked by prolonged military stalemates, separate health networks are a common feature. Contiguity or even overlapping of services operated by different agencies on each side of

the front may develop. Competing sides may develop recovery plans blind to events taking place across control lines. Mutual distrust may persist even after the brokering of a peace settlement, barring users from taking advantage of health services provided by or identified with rival health authorities. Compiling side by side available data on the health care on offer and outputs reported by separated health authorities helps to gauge the extent of the split, the gravity of the inequities of access to health care, and the measures needed to bring together these mutually secluded portions of health services. This analysis is habitually politically charged, and should be presented to rival parties in very tactful ways.

Against this landscape, national health authorities, in fact devoted to damage control and *laissez-faire* management, may become singularly attached to (often decades-old) official planning criteria, which are unrealistically defended, despite their disconnection with the field situation. This blurs the already limited understanding of the situation by decision-makers.

Gaining further insights about the network

For the purpose of analysing the network's main patterns, in most cases it is convenient to consider it as a continuous and evolving spectrum of increasing functions and complexity (from the smallest health post to the national hospital), whereby no obvious, clear-cut levels are discernible. To this continuum, operational – if arbitrary – thresholds can be applied. For instance, reporting the number of hospitals can be of little use in a sector where many of them are in fact large PHC units. Instead, reporting the number of health units with functioning surgical theatres is much more instructive. Obviously, the chosen criteria will depend on what reliable and updated information is available. Population ratios give a measure of the gaps opening up in the sector, once different services are considered. In Afghanistan in 2002, some key services were available according to the following ratios:

1 PHC unit	for 26,000 population
1 Permanent immunization service	for 38,000 population
1 Delivery care unit	for 123,000 population
1 Laboratory	for 59,000 population
1 Tuberculosis DOTS treatment	for 167,000 population
1 Major surgery theatre	for 204,000 population

The available information does not always allow for this disaggregation, or offers only figures related to certain services, sometimes monitored by special programmes. The ratios obtained must be further studied according to regions and provinces, so as to spot the most important imbalances across the country. The causes behind the inadequacy of particular services may include low priority, underfunding, misconceived or unrealistic policies. For instance, in Angola the training of midwives was discontinued for many years, on the assumption that maternal care would in the future be provided by medical doctors and obstetric specialists. In other cases, a concern with quality of the provided service may have hampered its expansion. In these examples, the political crisis is not directly related to the problem. However, by disconnecting central officials from the field and offering a convenient, all-encompassing explanation for the service inadequacy, the disruption may delay recognition of flaws in the chosen policy.

Once functional segments of the network have been identified, the prevailing features of each facility group must be analysed, in light of their size, number, technical assets, distribution, and services offered. In this way, the broad characteristics of the network can be understood, the main flaws and distortions identified, and possible corrective measures conceived. Among the many aspects to be considered, some stand out:

- The balance between the urban and rural components of the network is critical even in normal sectors. In protracted crises, the rural network suffers disproportionately. In many situations, urban and rural facilities of all levels of care present distinctive features. Hence, two sub-sector networks can be recognized. Urban facilities are usually large, heavily-built, endowed with complex equipment, organized by departments or programmes, and often specialized to provide large-scale single services, such as maternal care or tuberculosis inpatient care. Rural facilities tend to be smaller, numerous, associated to the territorial administrative partition, multi-purpose, lightly-built, with only basic equipment, and staffed by general cadres carrying out many different tasks.
- In countries with uneven economic development, health facilities are often concentrated in advantaged areas, which may also enjoy better security conditions. Because of security concerns and operational advantage, factors that greatly affect the investment decisions of aid organizations, border areas can be crowded with health facilities. A striking example of this pattern was the comparative abundance of health services in Eastern Afghanistan, near the Pakistani border.
- The balance between hospitals and PHC facilities influences access, type of health care provided, and costs. Within the public sector, hospital requirements usually take precedence over other concerns, particularly when resources shrink. Thus, during a protracted crisis the PHC component of the public health network suffers to a greater extent. Within the PHC level, the community, voluntary segment, if dependent mainly on national health authorities for resources and support, is the first to feel the brunt of the crisis. Conversely, when this area is backed by aid agencies, it can enjoy comparative privilege over formal services. This was the case of Southern Sudan, where in 2003 PHC units staffed by CHWs and providing only rudimentary health services were predominant.
- The size and infrastructural characteristics of the health facilities may differ by country, ownership, period of building. In the 1960s and 1970s, state-owned facilities tended to be quite large. Mission rural hospitals, often old, can be even larger, with a capacity frequently in the order of 200 beds. Conversely, facilities built by NGOs in recent times are often small. The technical content of a facility has evolved too, with older buildings being often more endowed than recent ones. The typology of the facilities has obvious consequences in terms of recurrent costs, staffing, rehabilitation needs, and services provided. In areas of difficult access, reliance on local building materials may lead to sub-standard features, with obvious implications for service performance, operating costs and maintenance needs.
- The network ownership mix may have changed substantially during the period of disruption. As the protracted Afghan crisis evolved over time, the old dominance of the public sector gave way to NGOs and private for-profit providers. Frequently, property rights are blurred, entitling different players to claim total or partial ownership over a given facility. Even in situations of clear public ownership, management responsibilities may have been transferred to charities or NGOs, without the backing of corresponding legal agreements.

Hospitals

These facilities play a preponderant role in most health sectors, in terms of visibility, healthcare delivery model, concentration of resources, influence and power. Despite three decades of effort devoted to promoting PHC and reducing the hospital role, these facilities still represent the largest component (in terms of absorbed resources) of many health sectors.

Hospital size varies across countries. Tertiary hospitals account for many hundreds, even thousands, of beds. First-referral hospitals usually range between 50 and 300

beds. Theory suggests that productivity increases with size. In practice, efficiently managing large hospitals has proven difficult. As a result, it is common to find tertiary hospitals split internally into autonomous units of 200–300 beds. At the other end of the spectrum, hospitals smaller than 80 beds are unlikely to perform efficiently, as some fixed assets, such as the surgical theatre, the laboratory and the power generator, are not fully exploited. Given the management weaknesses commonplace in protracted crises, the downsizing of large derelict hospitals as they are rehabilitated, is in most cases a sensible approach.

The relative weight of hospitals is likely to increase under the effects of a protracted crisis, as peripheral facilities close down and health managers confine their attention to the surviving components of the network. Additionally, the demand for surgical and emergency care expands during a war, thus increasing hospital leverage over decision-makers. The growth of these facilities is fuelled by their capacity in lobbying the government for additional resources, as well as of raising revenues through direct user charges, which can attain a sizeable share of their total financing. Hence, a tertiary hospital – or in the aggregate, the hospital capacity of a major city – may emerge from a crisis substantially larger than it would have been if planned in peaceful times. As these events are not the result of stated policies (which usually emphasize hospital downsizing and PHC promotion), but rather of piecemeal decisions, they can proceed unnoticed until the crisis is over. Thus, documenting certain underlying trends before it is too late to correct them can contribute to alleviation of the distortions a recovering sector will have to tackle in the future.

If large, high-tech urban hospitals can comparatively prosper in turmoil, usually rural first-referral ones suffer badly. As security conditions deteriorate, the most qualified cadres flee and supply lines break down. Key services, such as emergency surgery, cease to be delivered. Given that many aid agencies prefer to support the PHC level, this intermediate level of care may end up as the most neglected one. First-referral facilities may suffer also because of botched decentralization measures, which devolve the responsibility for their financing to local authorities deprived of adequate fund-raising capacity and receiving insufficient allocations from the central government. The underperformance of small hospitals may result in their being bypassed in favour of higher-level facilities for even minor conditions, which may attract additional resources. Thus a vicious circle of resource concentration, inefficiency and inappropriate care ensues.

Some first-referral hospitals, enjoying comparatively better security conditions and blessed by the allocation of extraordinary resources provided by emergency-oriented agencies, may enter into a cycle of disproportionate growth. A single hospital may become the centre of a large web of referral flows, often airlifted, covering immense areas. Charities (particularly those most adept at fundraising in the rich world) sometimes sustain the expansion of these facilities, to create hospitals perhaps fully justified during the conflict, but that look worryingly oversized or misplaced in peacetime. See *True Story No. 14* in this module

In many cases, collecting information about hospitals, which enjoy special status and reputation and are prone to develop according to their own internal logic, is difficult. A two-way blindness may therefore develop, with the managers of these hospitals indifferent to developments taking place in the network at large, whereas the policy discussion, as well as the related information, bypasses these self-secluded facilities.

The relative strength of first-referral facilities in relation to tertiary hospitals evolves unfavourably over time, under the forces just mentioned. The network's pyramidal shape, which implies a larger secondary level to offer easy access to first-referral care, disappears to give way to a sort of hourglass, large at the top and at the bottom, and narrow at the middle. In some cases, the disruption has only exacerbated a pre-existing distortion; outside official documents, the pyramid was never really in place.

In health sectors emerging from a crisis, the first-referral hospital level is frequently the most in need of investment. Given the large number of facilities required to grant first-referral services, the long duration of civil works implied, their relative complexity and high cost, revamping this level of care requires high technical capacity and substantial capital financing. Most NGOs are too small to shoulder the necessary commitments, whereas major donors are usually reluctant to cover hospital investments. Consequently, a recovering health sector can grow distortedly, with an expansive PHC level lacking adequate referral backup.

PHC Facilities

A variety of terms is usually included in this group: health centres, health posts, dispensaries, dressing stations, etc. All first-contact facilities should be considered under this umbrella. In most cases, an official description of the functions to be expected from each category of facility is available. The field situation is regularly more blurred, particularly after years of turmoil.

The largest facilities include basic in-patient capacity to treat acute common diseases, such as serious dehydration, pneumonia and severe malaria. In some countries, these facilities are labelled as hospitals and may be included in the intermediate level of care. Additionally, these large PHC units may have a maternity ward and a basic laboratory. Smaller units provide a much narrower range of services. At the lower end of the spectrum, the “health unit” consists only of a single prescriber with some rudimentary training and some essential drugs, such as chloroquine and acetylsalicylic acid. In some special cases related to migrant or displaced populations, no physical infrastructure may be in place. The “facility” in this case may refer to a site visited more or less regularly by a mobile team based at a larger health unit. Thus, to understand coverage, PHC facilities are better disaggregated into groups by the basic services they provide.

Inside the PHC level, the most important practical distinction remains that between professional services and voluntary ones. Some information systems tend to aggregate the two groups, with misleading results. The peripheral network appears in these cases as disproportionately large, just because village health units have been included. Considerations of investment and recurrent costs, management relationships and content of health care militate for the separate handling of the two groups of PHC services.

By their nature, formal health units operated by professional cadres bound by legal contracts tend to be permanent, heavy, expensive, comparatively high-tech, and hierarchically linked. Even if the health facility closes down in wartime, its physical structure tends to survive. Its staff may move away, but they are likely to practice, to preserve their professional status and to maintain a contractual bond with the health services. On the other hand, the village health post is often a temporary structure hosting a part-time volunteer with only short, rudimentary training. Attrition is high, skill retention is low (particularly when support links break down), supply and reporting erratic. After a protracted crisis, usually few volunteers are found still active. Frequently, the active ones are those working inside formal health units, absorbed into the payroll, having over time acquired a sort of professional status.

Referral capacity

Referral flows are usually poorly documented, not only in disrupted health sectors. In many cases, their spontaneous occurrence is anticipated by planners and by concerned providers. Most information systems do not report on the number and nature of referrals. Insights must be gained from field studies, which suggest that in most instances referral flows involve fewer patients than expected. No study of the referral system in a troubled context has been found in the literature.

Generally, referral does not depend on a structured system, but on a potential interaction between facilities of different technical capacity: potential left to the initiative of practitioners and more often of patients. The presence of barriers and norms to discourage the unnecessary use of higher facilities suggests attempts at disciplining referral flows. However, their enforcement must be checked and their impact verified at facility level. When health care at first-contact facilities is perceived as poor, their bypassing is widespread, even in the presence of norms and barriers.

In protracted crises, security constraints and transport shortages cripple referral flows further. Conversely, the concentration of IDPs in secure areas may increase their access to higher-level care. Lack of referral backup is a constant of disrupted health sectors. Patients choose the health unit they will attend, or have no choice in the first place, regardless of the facility's position in the ideal referral structure. The concomitant reliance of NGOs on PHC approaches whose effectiveness heavily depends on the availability of first-referral capacity only stresses its absence.

Establishing or maintaining a functioning referral mechanism in a war-torn environment can be dangerous, practically difficult and extremely expensive, i.e. it represents a realistic option only for a well-resourced international NGO. Conceiving referral as an essential part of a basic, comprehensive health care package, rather than an optional function, ensures that it is taken into account during the planning of an intervention.

Studying the referral capacity across a whole disrupted sector calls for inquiries with multiple players, like the NGOs involved in direct service delivery. Short of specific information, global indicators related to potential referral capacity include the ratio of PHC units to hospitals, average distances, and proportion of health facilities with vehicles, telephone or radio. Ratios of more than 30 PHC facilities per hospital have been found in several war-affected health sectors.

Indicators to be collected at facility level include: a) the proportion of patients referred in the total caseload, b) for self-referral, the proportion of attended patients living beyond a given distance (5 or 10 kms), or within the district where the hospital is located, and c) the proportion of conditions appropriately attended by a facility of a given level.

Even if difficult to study, referral flows should be understood because of their efficiency and effectiveness implications. Referral functions are usually invoked to justify the privileged resource allocations of higher hospitals. To counter-argue with hard evidence of reduced referral caseloads may strengthen the bargaining position of lower-level facilities. Secondly, the expansion of overcrowded tertiary hospitals in fact attending an excessive proportion of common conditions, without offering significant comparative benefits to these patients, can be discouraged. Thirdly, understanding distorted referral flows is central to effective planning.

Support infrastructure

A functioning health network encompasses buildings not devoted to direct healthcare provision, such as offices for administration, training facilities, warehouses, laboratories, research centres. Once considered together, these structures may constitute very conspicuous assets. Many health information systems, however, do not cover these facilities, which are often overlooked in several aspects: they may be ignored when the capital assets of a health sector are estimated; their maintenance may be neglected to a larger degree than that of healthcare facilities; they may not be included in the estimates of the investment needed to revamp the health sector.

Average replacement and rehabilitation costs

Layouts and features, as well as building costs, of health facilities vary dramatically across countries. Discrepancies in the reported costs (across and within countries) can be reconciled (at least partially) by agreeing upon common approaches to calculating

them. For instance, NGOs can underestimate building costs – such as office, supply, warehousing – which are spread across multiple activities, hence not computed as a direct building cost. Sometimes furniture, equipment and supervision costs are not taken into consideration, significantly decreasing the estimated cost of the facility, or its cost appears low only because several important components – such as waste and sewage, water and electricity supply, fencing and staff housing – have not been included in the calculations.

In many countries, small facilities are built according to one or more standard layout(s), which greatly helps in making cost estimates. When this is not the case, a range of different buildings has to be considered to compute the cost of a certain functional category of facility (such as a health centre). In the case of tertiary hospitals, the variety is greater and no standard is usually available. Each hospital needs a specific appraisal. Resulting costs can diverge quite substantially from one hospital to another.

Given the additional costs incurred when building facilities in remote areas, served by poor roads, huge cost differences exist also within countries. At the end of the war in Mozambique, a facility built in a faraway northern area cost near twice as much as an equivalent one built in the south, near the South African border. Ten years later, with improved roads and supply and support systems in the countryside, the differential had gone down to about 50%. Overheads are proportionally higher in relation to small PHC facilities than to large hospitals.

The cost difference between the building of a new facility and the rehabilitation of an existing one becomes negligible when maintenance has been neglected over a long period of time. As a rule of thumb, after more than a decade without maintenance, the rehabilitation cost approaches the replacement one.

Estimating the capital value of the network

Once a reliable if rough picture of the health network has been assembled, an attempt at assessing its capital value may contribute to the policy discussion. To develop this estimate, existing health facilities must be grouped by physical condition. For some units in good shape, the market value would approach their replacement cost. For other derelict facilities, architects and estate agents can offer rough estimates. Obviously, the needed figures are averages for the most important categories of health units. With these averages, the actual value of the present estate can be computed, and then be disaggregated according to some key dimensions: level of care, rural vs. urban, region, ownership.

Based on the total network value, the annual expenditure called for to maintain it in the present physical condition can be easily derived, considering that maintenance costs are usually in the order of 1–2% of the capital value and the replacement investment needed is estimated at 2–4%, depending on the expected useful life of a facility.

The next interesting step might be to estimate the additional investment required to upgrade the present whole network to optimal functioning, without adding or expanding facilities. A further step relates to estimating the investment needed to address the main existing distortions, such as the scarcity of first-referral services, or increasing the coverage of certain under-offered basic services. These computations can influence policy makers, highlighting the (usually underestimated) funding demands of the network and providing a measure of realism to the debate about reconstruction. The lack of such a comprehensive costing exercise, and the ensuing long-term under-resourcing, may have contributed to the defective outcomes of certain reconstruction processes, as witnessed in Cambodia (see *Annex 12* for details).

Planning the recovery of the healthcare network

Planning may be as disrupted, fragmented and ineffective as other management systems, because of different funding lines, poor information base, players proceeding in isolation, special implementation units, questionable and misinformed donor priorities, etc. The aggregate, information-intensive, top-down, long-term, “rational” nature of classical planning looks out of place in protracted crises. Nonetheless, precisely because of the dramatic changes the disruption inevitably induces in the network structure, the comprehensive planning of its recovery is paramount.

In the contested political environment of a complex emergency, “rational” plans stand a chance of being implemented only when they recognize the political interests of the main parties and offer solutions that look acceptable to most of them. Given the fragmentation of decision making, the pursuit of strict planning coherence (or of the all-out victory of a favoured approach over alternative ones) is likely to elude planners, as dissatisfied actors will opt to implement their preferred programmes in isolation and possibly in open contradiction of the options adopted as “national plans”.

Realistic planning tries to set broad achievable goals endorsed by most implementers, works hard to inspire decision-makers so that most decisions are consistent with the chosen plans, and advocates strongly, and with supporting arguments, against the few key initiatives capable of distorting the whole sector to such a degree as to void the original plans of meaning. An outcome fulfilling a large proportion of the original goals should be considered as successful even in the presence of some major departures from the initial plans.

The detailed inventory of the whole network is often invoked as a precondition for the drawing of a sound reconstruction plan. However, particularly in the case of large countries, this approach is neither efficient nor desirable. In fact, the time lag passing from the infrastructural survey and the start of the actual civil works can become very long, in this way making the collected data outdated, hence useless. Phasing the rehabilitation process into planning clusters or segments is in many situations a sensible option. First, summary information should be collected about the physical condition of all accessible facilities, so as to identify a priority group for intervention, along the lines sketched in *Annex 9*. Rough criteria for prioritizing may include the existence of large populations without services, security concerns, the availability of detailed studies, ease of access, the existence of reliable contractors, etc. During the intervention on this first batch, a detailed structural study of a second batch of facilities can be carried out and adequate financing can be secured. A third batch will be surveyed while the interventions on the second batch are carried out, and so on.

The **most frequent planning flaws** are discussed below, together with suggested approaches to avoid or minimize them (*in italics*).

Selective planning. Sometimes, the constraint is self-inflicted, by planning a part of the health sector detached from the rest, as in the case of a special programme backing the strengthening of its target services, in isolation from the facilities where they will be hosted. Fresh distortions and inefficiencies are therefore added to old ones. Planning a single level of care, such as only PHC facilities or tertiary hospital(s), is frequent, due to discrete funding lines, negotiated piecemeal. Another common flaw is planning the public component of the healthcare delivery system, while ignoring – and in some cases competing with – private providers. See *True Story No 14* in *Module 8*.

Also, human resources may evolve disconnected from network development, with serious long-term implications, difficult to correct. No balance among components or respect for resource constraints can be anticipated when this planning approach prevails. Given the propensity of tertiary hospitals for unplanned growth, failure to fix explicit ceilings for them is particularly dangerous. *Area-based plans, encompassing the whole network, elaborated within a single overarching resource constraint, may*

offer several advantages in terms of balance, internal distribution of resources, equity, long-term sustainability, and operational convenience.

Escapist planning. Plans may cover uncontroversial areas, such as the rural PHC, areas where reaching consensus among stakeholders is fairly easy, while leaving apart (“to be planned later” or “needing further studies”) problematic areas, such as urban health care, which are nearer to the interests of powerful groups. Nonetheless, in countries where the majority of population is urban and urban facilities are derelict, as in the case of Angola, towns will attract the bulk of future investments, whether planned or not. *To address urban healthcare provision by developing an explicit planning model that balances rational criteria with urban power games and vested interests may offer room for acceptable trade-offs.*

Patchwork planning. Bottom-up, piecemeal financing, fed by disparate funding sources, invariably results in grossly underserved areas, because of unfulfilled pledges, internal reallocations to cover escalating costs and/or wrong projections. *Developing an overall investment framework may help, provided its composition is adequately defined and disaggregated by province and level of care. The degree of detail must allow managers to check whether discrete investment interventions are consistent with the total framework. Additionally, an investment basket fund helps to consolidate initiatives and to encourage internal competition (provided this is fair, transparent and policy-based). Putting aside a buffer fund helps minimize the unforeseen shocks typical of external funding.*

Need-driven planning. Uncapped by resource constraints, plans may evolve in directions totally detached from reality. Given the objective difficulty of forecasting the financial position of a new country or of one emerging from prolonged turmoil, blind planning is often recognizable. When the discrepancy between plans and resources surfaces, decision-makers may spread the latter too thinly across too many targets, with uniform but severe under-resourcing. Conversely, if insufficient resources are concentrated on a sub-set of the network, gross imbalances result. *Serious plans must be obsessively linked to available resources. When forecasts prove over-optimistic, available funding ends up fatally reallocated to cover the investments already under way. Because of this risk, it is prudent to start investments in the areas of the country that are the most neglected and offer the highest returns. If no macroeconomic forecast is available, setting prudent goals is the best option. Indeed, most planning failures are due to over-ambitious goals. The opposite mistake is rarer.*

Aid-induced planning. Because of the availability of donor funding, expansive plans can be formulated while the long-term macroeconomic outlook is contractive. In war-affected countries, the common perception of an aid-induced bonanza, waiting to be unleashed as soon as a peace settlement is reached, tends to distort the assessments of health officials. Calls for modest recovery plans are ignored. High-tech policy options hold a particularly strong appeal to local decision-makers. In some cases, an opposite phenomenon is recognizable. Disappointed by misconceived investments in previous recovery processes, donors may refuse to provide the capital needed to revamp a derelict health network, even in the case of investments recommended by solid arguments. The excessive focus on hospitals in the past may give place to their present neglect.

Disrupted economies are likely to present an expansive outburst after the end of the crisis, only to decelerate a few years afterwards. This is precisely when most facilities resulting from reconstruction start functioning. *Spreading available aid over longer planning cycles may minimize this mismatch.*

One-size-fits-all planning. Too often health facilities are planned according to fixed ratios (such as one health centre for 10,000 or 20,000 population), without taking into account the spatial distribution of the potential users of the services, or the different patterns of health service delivery needed in urban and rural settings. The mechanical

application of a fixed criterion may lead to disastrous mistakes when IDPs are included in the target population. After the end of the conflict, the resettlement of IDPs leaves in its wake a host of unneeded or oversized health facilities. *Different settling patterns call for correspondingly different health-planning criteria. Where the population is concentrated, fairly large health facilities may provide a comprehensive package of services at acceptable cost, hence adequate returns on investment. At the other end of the density spectrum, health service delivery cannot rely on heavy infrastructure, but rather on a mix of small but numerous health facilities, multi-purpose (mainly female) health professionals, outreach activities and community health workers. The cost of delivering a minimal package of services to dispersed populations is high, a fact to be taken into account during the budgeting process.*

Conservative planning. In some health sectors, the standard typology and the functional features of health facilities are shaped by an entrenched tradition. Meanwhile, during a protracted conflict, previously popular service delivery models may have been revised or abandoned due to shortcomings identified by practice in the field. The war-affected health sector may have lost touch with the evolving international policy debate, remaining attached to old models. A case in point is the over-reliance on Alma Ata-inspired, classic CHWs, despite the increasing international awareness of their limitations and the ensuing reduction of the role assigned to them. Policy proposals formulated in Afghanistan and Southern Sudan seem to assign to CHWs critical roles, reminiscent of bygone times.

Alternatively, new facilities may be built or old ones rehabilitated according to established concepts, even when the health problems to be addressed by the health services have changed to such a degree that facilities of a different nature are called for. For instance, in countries with high prevalence of HIV/AIDS, the demand for inpatient care at PHC level increases, particularly in situations where hospitals are few and far apart. *Ways to make basic inpatient care accessible to the largest number of AIDS sufferers should be explored. In rural areas, where the day-hospital model is clearly not a viable option, the multiplication of health centres with basic laboratory, a skilled practitioner, adequate nursing capacity and upgraded drug supply may be worth considering.*

Aesthetic planning. Elegant conceptual constructions may capture the imagination of planners, shielding them from political and financial constraints. Brilliant planning documents result from strenuous efforts, in most cases taking place in increasing isolation from field realities. Affordability and feasibility concerns, if affecting the compelling logic of the chosen plans, are downplayed. No bargain with quarters likely to be hurt by the emerging plans is sought. Compromises are rejected as alien to the pursued models. Obstacles are not anticipated. Such immaculate plans stand little chance of being successfully implemented. *Recognizing the political and economic space within which plans have to be implemented is the first step to be taken at the start of the planning process. Meeting with possible opponents helps to understand their concerns, to gauge the degree of resistance likely to be induced, and to adjust plans accordingly. Resourcing the chosen plans adequately (which usually means more generously than originally envisaged) avoids implementation delays and stops, as well as the frustration of participants, thus reducing the chances that plans are opposed, abandoned and forgotten. Staying in touch with field operations fosters useful alliances and reduces the likelihood of conceiving unrealistic plans. Incorporating trade-offs, even if they affect the conceptual integrity of the original plans, may remove otherwise insurmountable obstacles.*

Recommended Reading

Barnum H, Kutzin J (1993). ***Public hospitals in developing countries: resource use, cost, financing***. Baltimore, Johns Hopkins University Press. Available online at: <http://go.worldbank.org/AJN22SAOK1>.

A classic book, concerned with “a) the allocation of health sector resources between hospitals and nonhospital alternatives, b) the internal efficiency of hospital operations, and c) effective and equitable cost-recovery policies for hospitals”. Well-researched and comprehensive, it studies hospitals within a broader public health framework, and explores ways to strengthen health systems by reallocating resources and integrating hospitals and nonhospital services. The book does not specifically deal with distressed health sectors. Nevertheless, the reader will find in it a wealth of insights, international comparisons, policy options and analytical techniques, useful to approach hospital and nonhospital issues also in violence-affected contexts.

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Annex 9 Why and how to build a database of health facilities

In many health sectors (not only the war-torn ones), the information available at central level is incomplete, inconsistent and outdated; facts which seriously undermine its usefulness. Cross-checking and consolidating this information is difficult, because it comes from the field as totals aggregated to different degrees, hence impossible to match. Most information is collected according to functional areas, such as personnel or service outputs or available equipment. This set-up makes the assembling of a comprehensive picture of a given facility cumbersome (as many data need to be brought together from different sources and departments) and in some cases impossible. As the main production unit of health services is, at least at PHC level, the health facility, this drawback may reduce substantially the insights to be gained from the gathered data.

Looking at the health sector as a network of health facilities (rather than as a set of programmes) is particularly meaningful in a redistributive perspective. Investment decisions, both in infrastructure and in human resources, take natural precedence over other allocative decisions, which are conditioned today by the investments decided years ago.

An approach to overcome the inadequacy of the available information is to build a nominal database of health facilities. It should be an instrument that guides decision-makers and planners in global decisions, such as: “How many PHC facilities should be rehabilitated in region X in the next Y years?” or “Which are the main geographical imbalances in the PHC network to be addressed if we have enough resources?” or “Which proportion of functioning health centres don’t deliver the expected health care?”.

The proposed database does not replace the specific information needed by special programmes for their detailed planning. Rather, it is a summary tool that brings together data usually collected and kept by different departments. The information contained in the database has to be linked with that coming from other sources (population, financing, other resources, activities, etc.) to be used in a rational way.

The information contained in the database should have the following features:

- It must be regularly updated. Given the fast pace of change at field level, figures should be updated at least annually.
- Included should be key variables relevant to planning purposes, easy to standardize and to collect, providing summary information, but specific enough to characterize the health facilities in terms of their functions (therefore, containing information on relevant resources allocated to each facility).
- It must reach a good level of coverage at country level.

As improving the completeness and quality of the database is a collective effort, the main partners should be involved in advance, through regular meetings at which the status of data collection is presented and the main information gaps are discussed. It must be stressed to all partners that the investment in creating and maintaining the database is worthwhile only if continuity is ensured.

The chosen approach will depend to some extent on the country’s physical characteristics: size, distances, road conditions, natural obstacles, etc., and on the size of the health network. Clearly, the building of an updated and fairly detailed database in Timor-Leste can be largely managed directly from the MoH office, whereas the delegation of fieldwork to formal or informal collaborators is mandatory in large countries such as Afghanistan and Sudan.

Steps

1. The process is iterative, starting with an initial database and improving its coverage and quality by successive data collection, addition and validation

rounds. In many instances, lists of health facilities with some features attached, such as category, number of beds, etc. are already available, compiled by some bodies (government, UN agencies, coordination forums, relief agencies). The most comprehensive and apparently accurate among the existing lists, which are all likely to be either incomplete, outdated or inadequate, can be strengthened by patient cross-checking with the others to provide an acceptable starting point.

2. The first phase of building the database entails a proportion of exploration and experimentation of the many options likely to be available. Obviously, the routine information systems (general, and those maintained by special programmes) should be exploited to the maximum extent. Some variables can be tentatively added to the database, and subsequently modified or discarded, according to experience. It is unlikely that all the desirable variables will be fed by routine information systems. Therefore, the eventual database will include a mixture of data collected at central level from routine reports and others supplied (upon request) by field authorities, or – in most cases – by field operators.
3. The choice of the database electronic support is important. To make experimentation easy, the use of a spreadsheet with which many potential collaborators are familiar should be considered in the initial phase. The database facility included in state-of-the-art spreadsheets is often overlooked, but it is quite powerful. Tailored database software could be considered for a second phase, when the structure is stabilized. If this is the option chosen, care is needed in ensuring a smooth conversion.
4. Once a preliminary database has been assembled by importing the pieces already available, and tentative definitions formulated for the variables, a few checks are needed:
 - The reliability of the figures collected can be verified during field trips (a very uneven situation can be anticipated in this first sample).
 - Some collaborating NGOs can be asked to field test the database in their areas, feeding back to the database administrators their findings, such as the time needed for data collection, ambiguities in definitions used, and usefulness of the options.
 - Based on the results of the field test, the structure and definitions of the database can be reviewed. Another round of checks is recommended at this point.
5. Once the experimentation phase is over and the database structure is considered acceptable, some formalization of tasks and responsibilities is in order: where the master database is maintained and who has the overall responsibility for it need to be decided. Further decisions have to be made on the procedures for updating, consolidating and disseminating the available information.
6. The consolidation phase can start once the database structure, its electronic format and the routine updating procedures have been finalized. Copies of the database (or relevant parts of it) should be circulated to all partners, with the request to check the information and update it. Surveys and field missions offer a good low-cost opportunity for improving the database.
7. If a continuous and incremental process of validation and updating of the database does not attain satisfactory results, the alternative of a nationwide survey can be considered. This is a costly and time-consuming exercise, requiring preparation, development and testing of tools, training of tens/hundreds surveyors, strong logistic means, supervision and quality control. It can provide more precise information than the first option (if the survey is properly designed and high standards are maintained), but the need for updating and maintaining the

database remains the same. As it is usually impossible to repeat a major field survey frequently, the obtained results are likely to become quickly outdated.

Below, an annotated menu of the variables to be included in the database is offered for consideration. Obviously, it would be desirable to include many more interesting variables, or to maintain a higher degree of disaggregation. The proposed variables represent a trade-off between simplicity and operational convenience on the one hand and completeness on the other. Indeed, even collecting this reduced dataset will prove a tough proposition. Some very important figures, such as healthcare activities (inpatient days, outpatient contacts, attended deliveries, etc.) are not included in the menu, despite their extraordinary value, because of their unavailability and unreliability in most situations, at least at central level. When updated and reliable information of this nature is in fact available, such performance is hardly typical of a “disrupted” health sector.

Starting with a small and manageable dataset and adding variables incrementally, keeping in mind that central decisions are by their nature aggregate, thus needing summary information, is advisable. The same sort of database, maintained at provincial/regional/state level, can and must be richer in detail and further disaggregated. The proposed database is a stop-gap tool, useful until a revamped information system is put in place. This could provide the desired richness of data to manage health services with a high degree of knowledge. The experience provided by designing and operating the summary database will prove precious in conceiving a more ambitious information system.

Variables to be considered for inclusion in a database of health facilities

Variable	Options	Remarks
Name of the Facility		Beware of misspelling, so as to minimize double entries.
District or equivalent		
Province or equivalent		
Geographic Position		Geographical coordinates provided by GPS.
Status	Operating / Closed	Work out a practical definition of "operating".
Category		Nominal/official, to be compared with the functional one, to be inferred looking at the other variables. The database might include offices, warehouses, training facilities, etc.
Population served		Reliable figures are difficult to obtain. Could be expressed as a range between higher and lower estimates. In terms of physical planning, pre-disruption population data might be more relevant than recent data, heavily influenced by temporary population movements and opportunistic estimates.
Supported by NGO?	No / Yes - Name of the NGO(s)	When several NGOs provide support to the same facility, the most important one should head the list.
Total number of beds		Refer to beds actually existing / functioning / being utilized, and not to the theoretical number of beds.
No. of maternity beds		Optional.

Variable	Options	Remarks
Deliveries with trained midwives in attendance?	Yes / No	"Trained" should mean a professional health worker.
Functioning laboratory?	Yes / No	For each of these variables, a clear operational definition must be formulated.
Functioning EPI fridge?	Yes / No	
Functioning vehicle?	Yes / No	
Functioning motorbike?	Yes / No	
Functioning pharmacy?	Yes / No	
Functioning surgical theatre?	Yes / No	
Functioning X-ray apparatus?	Yes / No	
Water supply?	Pipe / Well / Borehole / Superficial / None	For each of these variables, a clear operational definition must be formulated.
Toilets / latrines?	Usable / Unusable	
Telephone / radio equipment?	Available 24 hrs / part of the day / None	
Electricity?	24 hours from mains / Generator / Solar panels / None	
Physical condition	New Building/ Totally Rehabilitated/ Partially Rehabilitated/New Extension/Old, Acceptable/Old, Derelict	
Ownership	Government Private For-Profit/ Private Not-for Profit / Firm	The ownership status may be in some cases ambiguous, with shared rights and responsibilities. If legislation is not explicit, an operational criterion, such as one related to the "main owner", is needed.
No. of university-level staff		Staff should be aggregated according to salary levels. Only staff actually active should be counted. Part-time staff could be translated into full-time equivalent.
No. of mid-level staff		
No. of low-level staff		
No. of unskilled staff		
No. of community health workers		If the CHW programme is substantive in size and scope, CHWs should be distinguished between those working at the health facility and those active at village level, but supported by the health facility. In many cases, information is available only for CHWs working at the health facility.

Variable	Options	Remarks
Main referral unit?	Name of the unit	
	Distance of the unit	Using travel time (by vehicle) instead of kms could be more informative in areas with very poor roads.
Date of the last update		
Key qualitative remarks		

Additional information about hospitals

The summary database sketched above provides decision-makers and planners with a map of the health network. Broad allocative decisions can be taken straight away with the information made available by such a database. Specific components of the network will need further study, due to their cost implications, the variety of facilities they encompass, and the specific functions assigned to them. Hospitals, training institutions, offices and warehouses, all deserve the collection of additional, dedicated information.

In most health sectors, hospitals are limited in number but heterogeneous in features. Averaging them would mask important pieces of information. Informants often hold detailed knowledge of hospital characteristics. Given the conditions mentioned, the assembling of a portfolio of summary descriptions of each hospital is well worth the effort needed. To the baseline information included in the general database, specific variables related to inpatient activities must be added. Additionally, a rough appraisal of the health care provided can be attempted. Prospects for hospital development and subsequent resource implications complete the picture. When good informants are available, such a portfolio can be completed quickly and at low cost. Field visits can later validate and update findings.

The hospital portfolio may need to be diversified into two further groups, composed of:

- a. tertiary hospitals, usually few and complex, thus demanding elaborated descriptions, and
- b. first-referral hospitals, with a capacity of 50–200 beds and providing only basic curative care. Their main features can be adequately captured by a standard summary datasheet. Given that this subset of hospitals is in most cases badly affected by conflict, their recovery (functional and structural) demands special effort. A reliable portfolio can therefore be of special value, particularly at the beginning of a recovery process.

Module 10

Analysing human resources for health

Contents

This module reviews the many aspects to be considered in the study of a health workforce. It starts with the most common developments witnessed in troubled health sectors. The size and composition of the workforce, in relation to the population to be served and the healthcare network to be operated, are then discussed. The main features of several war-affected workforces are examined, highlighting similarities as well as differences among them.

Training, attrition, job descriptions, deployment, staffing patterns and staff performance are studied. Volunteer health workers, a prominent feature in many protracted crises, are discussed. Issues related to regulating human resources are touched upon. The role of expatriate staff is briefly covered. The challenges posed by the integration of formerly rival health workers into a unified workforce are considered. Civil-service and salary provisions and constraints are in turn discussed. A review of strategies to be adopted to restructure a distorted and dilapidated workforce concludes the module.

Annex 10 presents the post-conflict restructuring of the Mozambican workforce. The baseline situation is compared to the human resources for health resulting from implementing a 10-year plan. Achievements are singled out along with shortcomings.

Closely-related modules:

No 6. Analysing health financing and expenditure

No 8. Studying management systems

No 9. Studying the healthcare network

No 12. Formulating strategies for the recovery of a disrupted health sector

The impact of violence on the health workforce

A severe crisis, particularly when protracted, affects human resources (HRs) in multiple ways. Conflict-related violence may lead to the killing of many health workers, sometimes as part of a deliberate strategy. In Cambodia, the workforce emerged from the conflict dramatically reduced in size, particularly within its most trained ranks. In other situations, the deregulated privatization of training outlets leads to the proliferation of health personnel, who can be recruited by the public sector – irrespective of service needs – out of political expediency.

Some acute conflicts, such as those of Kosovo and Timor-Leste, give way to new political arrangements, with many cadres leaving the country and others, previously marginalized on ethnic or political grounds, taking over. Changes in human resources for health are just part of the general redefinition of states, boundaries, and public sectors that emerges from these processes.

A protracted crisis invariably affects the skills of the workforce. Training standards suffer, management systems collapse and the working environment deteriorates. Professional values decline, while the coping strategies adopted by health workers distort their behaviour and dent their morale. Employment arrangements blur, as many workers formally contracted by the public sector moonlight or practice privately within public facilities. Other health workers are hired by aid agencies and NGOs. Many maintain some relationship with the public sector, and may continue to earn a salary despite their absence from the workplace. Managers may remain out of contact with staff deployed to remote areas for years. *Most if not all health workers surviving a severe crisis need intensive and sustained retraining and skill upgrading.*

HR problems are often poorly documented, thus overlooked by decision-makers and donors. The recovery of human resources is neglected on the questionable assumption that, once provided with adequate raw resources, health workers will make the best use of them. Crisis-induced decisions affect the workforce long after the end of the conflict. The distortions caused or strengthened by disruption do not

heal spontaneously, but need to be addressed by an aggressive, sustained and well-resourced strategy. *By highlighting its entrenched deficiencies, a crisis provides a critical test of the effectiveness of the health workforce.*

Financial aspects of HRD

The development of a health workforce is the product of long-term investments, for the most part *sunk*, that is, unrecoverable. Additionally, salaries account for the largest part, mainly fixed, of recurrent expenditure. Furthermore, human capital requires continuous maintenance to control its spontaneous decay; maintenance which is expensive, technically demanding and specifically sensitive. Surprisingly, these financial aspects of human resources for health are often neglected by policy-makers and donors.

As losses mount and professional skills wear down, most of the investment incurred before a protracted crisis is wasted. To redress this deterioration, a comparable investment – usually in the order of many millions of US dollars – is called for (see in *Annex 10* the magnitude of the cost incurred in Mozambique). Funding bodies are understandably reluctant to devote huge sums to the workforce in wartime. However, this investment may be instrumental in keeping the sector in shape during the conflict and in paving the way for future recovery. Its huge cost can be partially footed by savings obtained from stopping unplanned, piecemeal and usually expensive in-service training initiatives.

Available figures of personnel costs may grossly underestimate true values. The salary bill captures only a part of total costs. Private payments and donor inputs (like drugs provided free but sold to patients, equipment, housing and salary supplements) inflate the true cost of personnel. The multiplicity of employers, the reluctance of aid agencies and NGOs to disclose the wages they pay, and the inclusion of personnel-related expenses under aggregated project figures, constitute additional difficulties. When personnel costs are computed at levels significantly below 2/3 of total recurrent costs, considerable chunks of true spending are likely to have escaped computation.

The size and composition of the health workforce that the country could afford depend on the overall resource envelope to be allocated to the health sector in the future. Misconceived policies, political pressures or lack of HR planning often result in a financially unaffordable workforce. Squeezing salaries is the usual response of troubled health sectors to this problem, with the predictable impact on the behaviour of workers. A bloated workforce is resistant to correction. Trying to prevent aberrant growth before it is too late seems a better option. For a further discussion on assessing the adequacy of the available resource envelope, see *Module 6*.

Studying the health workforce

A review of the human resources for health starts with the scrutiny of the aspects presented in the box below. The picture obtained in this way must be compared with that reported for previous years (for example, with the situation at the beginning of the crisis), so as to understand the way the workforce is changing under the brunt of the disruption. Then, the evolution of the workforce, in the absence of any purposeful intervention, can be forecast. When the emerging political settings are new, as in Southern Sudan, the pre-conflict baseline information may refer to a bygone picture bearing no resemblance to the present, radically changed one. Comparisons are in this case of limited value.

In troubled health sectors, the available information is usually incomplete and ridden with problems. Personnel-related data tend to be dispersed across multiple employers, whose number grows during a crisis. Payrolls and personal files become outdated or get lost. “Ghost workers” (i.e. included in the payroll, but emigrated, dead, or employed by other entities) proliferate. The confidential nature of some relevant data introduces an additional obstacle. Further, personnel files may be

organized in ways that hinder meaningful analysis. True deployment, for instance, may escape recording.

Professional registers, when they are maintained, may provide data about staff who have earned a formal qualification, but such registers become grossly outdated, failing to inform about outward migration and missing cadres who graduated abroad, or excluding expatriate personnel. Partitioned health sectors present further difficulties, with each side blind to the developments taking place across the frontline, as seen in Sudan. Parallel training strategies, pursued by opponents in isolation from each other, are common. In Kosovo, Albanians set up an autonomous health training network in opposition to the official one, controlled by the Serb authorities.

The information about private (profit and non-profit) healthcare providers is usually inadequate. Available estimates of the workforce tend to be related to the public sector, while failing to account for health workers employed outside it. To underestimate the true size of the workforce is a common mistake. On the other hand, many public health workers practice in formal or informal private outlets, making double counting a constant risk.

To study broad features, such as costs, supply and attrition, a practical way of clustering health workers of different categories into a manageable number of groups must be found. Given that educational levels and years of professional training translate into costs of labour, technical duties and hierarchical status, health workers can be arranged into three or four groups. This stratification works for many health sectors, although different denominations will be found (Baker, 1988).

University-level, or professional	Full basic education + 6-11 years of professional training
Mid-level, or assistant	9-10 years of basic education + 3-5 years of professional training
Basic-level, or aide	6-9 years of basic education + 2 years of professional training
Elementary-level, or community health worker, or rudimentary	6 years of basic education + 6 months – 1 year of health training

In some health sectors, the two lower-level groups are merged into a single one. Educational levels and professional training differ across countries, so the grouping best suited to each situation must be found. Some health sectors tabulate their staff by profession, such as nurses or pharmacists. This way of aggregating workers masks different skills, status and costs, and should always be complemented by the one proposed above, by level.

Assessing size and composition of the workforce

Before it is accepted as a real problem, the staff shortage lamented in virtually every battered health sector must always be investigated. In many cases, the perception of shortage is not supported by evidence. In the aftermath of an acute crisis, as in Timor-Leste, newcomers may incorrectly assume a lack of health cadres, and launch unnecessary and sometimes ill-conceived training activities (Smith, 2005). The perception of staff shortage may be induced by the resettlement of cadres away from risky areas, by the difficulty of deploying health workers across lines of political and military control, or by widespread absenteeism. Spots of true staff shortage may intermingle with overstaffed areas. Aggregate figures help to gauge whether the workforce is truly undersized or simply unevenly and inefficiently distributed.

An abundance of health workers is a rather common finding. The expansion of the ranks may be very uneven, with some echelons of the workforce growing more than others. In Angola, low-level training accounted for much of the workforce's growth, whereas in Afghanistan and Northern Sudan a proliferation of medical schools resulted in an excess of physicians, who could not be absorbed by public

Features to be considered in a review of the workforce

Number:	<ul style="list-style-type: none"> - Trained (holding a formal professional qualification) <ul style="list-style-type: none"> University-level Mid-level Basic-level (1-2 years of training) - Volunteers / community (with short, mainly informal, training) - Ancillary
Composition:	<ul style="list-style-type: none"> - Hospital-oriented (doctors, nurses, laboratory technicians, etc.) - PHC-oriented (in health sectors where these categories were introduced) - Managers and other non-health skilled staff
Characteristics:	<ul style="list-style-type: none"> - Citizenship (national vs. expatriate) <ul style="list-style-type: none"> - Age structure - Sex - Urban/rural, ethnic or regional upbringing of health workers, if relevant
Supply:	<ul style="list-style-type: none"> - Features of the training network <ul style="list-style-type: none"> Geographic distribution Ownership of training outlets Training capacity, by level and health discipline - Training costs - Training outputs (number of trainees and quality of training received)
Management:	<ul style="list-style-type: none"> - Civil service. Career perspectives - Professional associations - Regulatory bodies
Employer:	<ul style="list-style-type: none"> - Public sector - Private for-profit (often-self-employed) - Private not-for-profit (charities and NGOs) - Mixed arrangements - Rebel organization(s) <p>Assess patterns of unemployment, if relevant</p>
Deployment:	<ul style="list-style-type: none"> - By region, province, and district - By population - By level and type of care (hospital vs. PHC) - By rural / urban - Mobility of health cadres
Performance:	<ul style="list-style-type: none"> - Technical capacity, by level of training - Productivity, by key categories - Utilization. Tasks carried out in the workplace - Absenteeism
Cost:	<ul style="list-style-type: none"> - Investment and recurrent. Disaggregating the salary bill (and other staff-related costs, if possible) by the criteria above, according to the issue under study - Cost of expatriate health workers, if relevant
Evolution:	<ul style="list-style-type: none"> - Future output of the training network - Imports from abroad - Attrition <ul style="list-style-type: none"> - natural (retirements, disease-induced, migration, etc.) - conflict-induced - Maintenance (patterns of personnel management and in-service training)
Culture:	Influential traditions and habits impacting on the health sector

health services. Sometimes, certain categories are grossly under-represented. Both Angola and Afghanistan face a severe shortage of midwives, due to different reasons (unrealistic plans in the former, gender disadvantage in the latter). In Iraq, nurses were in scarce supply. In contexts where relief agencies and NGOs have been active during protracted periods, as in Afghanistan or Southern Sudan, the proliferation of community health workers with disparate job descriptions and training contents is common.

Size and composition of the workforce must be analyzed in relation to the health network to be staffed, the services to be provided and the population to be served.

Given the labour-intensiveness of inpatient care, the size of the hospital network plays a major role in determining staff requirements. The degree to which large urban hospitals have survived destruction during the war, or the neglect frequently associated with major crises, influences staff needs. Health sectors with large hospital components, like Afghanistan, need more doctors and nurses than others with fewer, mainly small hospitals, like Southern Sudan. The ratio of health professionals to hospital bed offers indications about the availability of staff, but must be used with caution, given the well-known fickleness of related data.

The population to be served refers to a potential demand for health care, demand usually only partially expressed. The immediate staff requirements of a large population deprived of services may be minimal. Ratios of health workers to served population are useful to spot internal deployment imbalances, in this way suggesting whether redeployment is a better option than supplying new health workers.

Population settlement patterns, if reflected by the healthcare network, impact on the size and composition of the needed workforce. Sparsely-distributed communities call for large numbers of small health facilities, to be staffed by low-level personnel to remain affordable. Conversely, densely-populated settings allow for more qualified cadres, thanks to the implied economies of scale. For categories deployed according to the distribution of the hospital network, population ratios are of limited value.

No normative criteria about the ideal composition of the health workforce, which should vary across sectors and countries, are available. Nonetheless, troubled health sectors show features diverging from a balanced mix to such a degree that they can be easily spotted. Rules of thumb to be considered in relation to the composition of the workforce may include:

- a. Support staff (workers without professional training) should not exceed 1/3 of the total.
- b. University-level staff would be considered as “scarce” when representing less than 5%, and “abundant” when exceeding 20%, of total skilled personnel.
- c. Ratios of doctors to nurses ranging between 1 : 4 and 1 : 9 may be regarded as acceptable. Midwives must be counted apart from nurses, even if they may be administratively considered as such. Where PHC cadres have been introduced, the ratio of doctors to nurses tends to be lower. Where doctors are more numerous than nurses, the health workforce is seriously unbalanced.

The table below tries to capture the variety of situations found in selected war-torn health sectors.

Summary features of the workforce, in selected war-affected health sectors

Country	Year	Skilled Health Workers				Overall Size	Main Internal Distortions	Remarks
		Number	per 1,000	per Bed	% of university-level workers			
Afghanistan	2002	12,100	0.6	1.4	24%	Small, but numerically sufficient to operate a run-down network.	Excess of medical doctors. Shortage of midwives.	Concentrated in the eastern part of the country.
Angola	1998	25,100	1.9	3.1	3.2%	Vastly in excess, both in relation to population and network.	Abundance of lower-level cadres and support staff. Shortage of midwives. Absence of PHC-oriented categories.	Hyper-concentrated in urban settings. The workforce has grown further in 2002-2004.
Cambodia	1992	22,000	1.5			Considered large.		Post-conflict recovery marked by the unregulated proliferation of categories and training programmes.
Iraq	2003	35,000	1.4	1-1.5	40%	Sufficient to operate the large network.	Abundance of doctors against a shortage of nurses.	The reported figures were very tentative.
Mozambique	1991	8,000	0.5	1.5	1.5%	Small, but numerically sufficient to run a network cut down by war destruction.	Lack of higher- and mid-level cadres. Excess of auxiliary staff.	See <i>Annex 10</i> for details.
(Northern) Sudan	2002	45,000	1.8	2.0	11%	Large for a derelict and underused network.		The oversupply of medical doctors has led to unemployment and emigration.
Southern Sudan	2003	4,600	0.2	3.1	1%	Very small, but numerically large for the tiny network to be operated.	Severe scarcity of higher- and mid-level cadres. Excess of CHWs.	Data refer to SPLM-controlled areas. Khartoum-controlled garrison towns were crowded with health workers, who had to be absorbed into a unified workforce after 2005. Multiplicity of training programmes and categories of workers (concentrated in the southern portion of the region).
Timor-Leste	1999	2,600	3.3		1.2%	Oversized.	Shortage of higher-level staff (1% of the total). Abundance of nurses and midwives.	The assessment of true staffing requirements suggested the halving of the existing workforce.
West Bank and Gaza Strip	2001	10,000		4.0	33%	Large, to operate a very fragmented healthcare network.	Abundance of university-level cadres. Large and fragmented training network.	The workforce has grown further after 2001.

Note: In many situations, available data refer the number or proportion of doctors, rather than university-level workers. The discrepancy is usually modest.

Training (pre-service and in-service) capacity

Health workers are trained according to a variety of country-specific models. In many situations, training was the exclusive domain of the public sector, of either the MoH or the Ministry of Education, or both. The financing of health training used to be partially or totally subsidized. During the crisis, private training outlets may emerge, as an alternative economic activity of health workers (like in Angola), or under the pressure of peripheral constituencies (like in Afghanistan). When these training initiatives are not backed by adequate resources and capacity, their qualitative levels may be dismal. The private financing of health training programmes may expand, particularly in the case of medical schools.

The training network is usually severely affected by conflict. Training facilities suffer serious funding cuts, induced by the financial squeeze affecting the public sector. Institutions located in insecure areas close down. Access by pupils to training sites decreases due to frontlines, disrupted communications, and economic hardships. Senior trainers emigrate, or move to other more remunerative jobs. Operational constraints affect the quality of the training provided. Training standards are impaired, attaining barely acceptable levels. High dropout rates, a common finding in struggling training institutions, inflate the cost per trainee and dent outputs. Trainees leave their courses holding only a fraction of the skills implied by their diplomas.

The concomitant disruption of the education system, with the associated regulatory vacuum, compounds the picture. The number of applicants eligible for health training shrinks, while their basic educational levels suffer. Periods of gap-filling education in language skills and basic science are often needed before the start of professional training, with the incurred additional costs.

The information about training institutions is always poor, even more so in cases of multiple ownership and management arrangements. A survey of the main institutions is usually needed. Aspects to be studied include: physical capacity (classrooms, beds), training aids and materials available, teaching staff, quality of training, health facilities where healthcare practice is held, enrolments, outputs, losses, operating costs, and geographic distribution. A dedicated survey is needed to study the in-service training area, which is less structured than the pre-service one. Specific indicators have to be used to capture the key features of the provided in-service training, and its effectiveness.

Aid agencies and NGOs respond to the poor performance of most health workers by financing countless in-service training initiatives. These absorb huge resources, enjoy unconditional support among personnel (for whom they represent important sources of income), incur heavy opportunity costs and have a negligible impact on performance. In-service training initiatives promoted by outsiders poorly acquainted with the local context and unable to communicate in the local language are common (Smith, 2005). The effectiveness of in-service training is further undermined by its usual separation from pre-service training.

To provide effective training to adult health workers who have gone through exacting times and whose basic skills have badly suffered, is extraordinarily demanding. Thus, training activities should be launched only after adequate preparation. Even good-quality training may fail to provide benefits, when not integrated into a consistent HRD strategy. To rationalize in-service training activities promoted by multiple, autonomous actors is challenging. Effective in-service training implies detailed knowledge of the factors affecting the performance of health workers, a focus on them (as opposed to diseases or programmes), technical capacity, resources and sustained action. A tall order, anywhere, and even more so in a health sector in crisis.

Attrition

Attrition is a natural phenomenon, to some extent built into the system. An ageing and sick workforce needs additional replacements. If the conflict has disrupted

training activities for long, as in Somalia, the surviving workforce may be ageing. In countries badly stricken by HIV/AIDS, the attrition of health workers is severe, and even a large workforce may become unable to sustain health services without constant replacements. To these factors, the conflict adds specific phenomena: violent deaths and abandonment of health-related jobs for more lucrative opportunities (mainly with international organizations), political appointments, or recruitment by a fighting force. Outward migration, usually of cadres holding internationally-recognized qualifications and fluent in languages of world-wide currency, may also deplete the ranks.

Natural annual attrition falls usually in the range of 3-5% of the workforce. Violence and AIDS increase baseline attrition by a variable extent, difficult to guess but often sizeable.

Conflicts with strong religious connotations may have a severe impact on female health cadres, with disastrous effects on the delivery of related health services. The enrolment of women in health courses may drop. In the extreme case of Taliban-dominated Afghanistan, female health workers were discharged en masse from health services.

In settings where emigration has been high, there may be elevated expectations of regaining high-level cadres once the conflict abates. Known attempts at enticing the diaspora back have met with limited success. Also, by creating resentment among those who remained in country under duress, these packages may be politically contentious. Furthermore, professionals who lived abroad for long may have become detached from local conditions, hence ill-suited to reintegration.

Job descriptions, training contents and professional qualifications

In several countries, such as Afghanistan, Angola, and (Northern) Sudan, dominant job descriptions and training contents maintain a strong hospital orientation: medical doctors and nurses constitute the bulk of the workforce; no PHC-oriented cadres have been introduced, or their ranks are negligible. In these situations, the adoption of PHC is undermined by the lack of suitable trainers, truly experienced in that service delivery approach. The hospital bias perpetuates itself.

Job descriptions and training contents, maintained untouched through the crisis, may become detached from the changing requirements of the workplace. Despite their relevance during a complex emergency, issues like refugee health care, rural service provision, mobile services, the treatment of violence-related conditions, as well as responding to human-rights abuses, to famine and to epidemics, are usually absent from professional training programmes. The urge to provide these services may offer to innovative trainers precious opportunities to take pupils away from the classroom, and put them in direct contact with real-life practice. Effectiveness and appropriateness of training may rise dramatically.

The protracted crisis, blocking the evolution of the health sector, may have discouraged experimentation and contributed to the preservation of old models. In Afghanistan, the Soviet invasion brought with it a strong hospital bias, still perceptible today. In other cases, the crisis may push decision-makers to explore alternative service delivery models and to introduce new categories adapted to them. The pressure to find solutions to problems left unaddressed by traditional approaches may soften resistance to change. To staff rural hospitals deserted by doctors, a post-graduate, intensive training programme for mid-level surgeons has been developed with some success in Mozambique.

PHC-oriented categories are less standardized than traditional, hospital-oriented ones. Countries have experimented with a variety of approaches. No dominant professional model has emerged. To deliver quality PHC, cadres need to master a balanced mix of curative, preventive, management and communication skills. They

must learn to identify problems and solve them, adapting to changing and unforeseen situations. They must perform in difficult conditions, without much support. Skills like the ones mentioned are better learned hands-on, interactively, at the service delivery point and in the community. Successful training is necessarily demanding and resource-intensive.

In cases of dramatic contraction of public financing, as well as of state failure, training duties are taken over by international agencies and NGOs. Facing a true or perceived shortage of health workers, NGOs and agencies promote the training of new staff, often through short-term, intensive courses. New categories, or new terms for old categories, are introduced. Special programmes can play an important role in encouraging the training of some categories, instead of others. Training programmes and categories of health workers tend to proliferate in poorly-documented ways.

Deployment

The urban bias affecting so many health workforces in the developing world is frequently exacerbated by protracted conflict. Health workers move within the country in search of safe havens, or take refuge abroad. The most qualified cadres tend to leave risky posts sooner and in larger proportions. Given that rural PHC facilities are frequently more vulnerable to armed action than hospitals, conflict-induced redeployment tends to swell the staff of the latter to the detriment of the former.

When the conflict bears ethnic and/or religious connotations, health workers move to reach the communities within which they feel safer. The outcome of these staff movements is the concentration of health workers in certain areas, irrespective of service needs. Inequalities in service provision may worsen, particularly in regions deprived of indigenous health workers.

The unbalanced distribution of NGOs, frequently found in war-torn countries and induced by operational convenience and security concerns, is another factor influencing the distribution of health workers, as seen in Afghanistan and Southern Sudan. In both cases, a preponderant proportion of facilities, and hence of staff, was found near secure borders, respectively with Pakistan and Uganda.

Deployment biases strengthened by conflict tend to take root, and to resist correction once the crisis is overcome. The war-related destruction of health facilities and staff houses reduces the scope for redeployment. Health workers resist posting to rural areas, because they fear a recrudescence of violence, or risk losing the earning and career advancement opportunities they enjoyed in town, or because of the hardships of remote positions.

The redeployment of lower-level cadres offers less resistance. The urban bias is likely to remain stronger with higher-level staff. Even the largely successful redeployment of the Mozambican workforce (see *Annex 10*) was incomplete in relation to its most qualified cadres.

Sometimes, the deployment bias is related to gender. Educated women eligible for enrolment in health courses may be very scarce in backward regions. If job opportunities in these areas are rejected by health workers from other parts of the country, the deployment of categories open only to women remains badly unbalanced. To redress the shortage of educated women demands special efforts (mainly applied outside the health sector) over long periods of time.

Improving deployment distortions demands management capacity, backed by adequate resources. Robust incentives are needed to motivate health workers to accept hardship posts. The provision of decent housing conditions ranks high among the measures aimed at ensuring the redistribution of staff. Providing access to education for their children is another powerful incentive. Evenly distributed training opportunities helps to ensure the supply of local cadres. Incentives can be

insufficient, however, if civil-service provisions encourage staff to resist unappealing positions.

Deployment must be planned within an overall recovery strategy that ensures a general redistribution of infrastructures and resources across the health sector.

Staffing patterns

Health authorities may have formulated staffing guidelines. They have to be assessed against the network to be operated, patient loads and financing levels. Generous staffing patterns, vastly exceeding service demands, available personnel and estimated funding, are rather common. In stable settings, fixed staffing criteria related to facilities suffer from the large variance of patient loads borne by them. In health sectors dominated by NGOs, the variety of health facilities makes the application of standard staffing guidelines harder. Criteria related to population are even worse, given wide differences in service utilization across communities, and the dependency of many posts on infrastructure, rather than on population.

Fixed criteria, despite the criticism they have attracted from HR experts, remain popular, because of their simplicity. The alternative approach of deploying staff according to workloads demands better information, a scarce asset in a crisis. In any case, the population and personnel movements triggered by conflict void fixed criteria of their usefulness. As the heterogeneity of health facilities increases, in terms of size, delivered services and served population, the value of standards decline. Healthcare providers add to this fragmentation, adopting new or imported criteria, or making choices according to local constraints.

Staffing guidelines that ignore the substantial difference between rural and urban health care are common. Urban health facilities are larger, with high patient loads and easy access to referral care. Rural facilities are smaller, with lower patient loads, but deal with a larger proportion of serious conditions, for which referral is the exception rather than the rule. As the support they receive is limited, rural personnel have to confront higher hurdles. The increase in number and severity of violence-related conditions compounds this universal feature. Staffing patterns should reflect this broad distinction, with rural health teams constituted by comparatively better qualified, mainly multi-purpose cadres.

The following table presents staffing guidelines issued for four different war-torn health sectors. Some adaptation has been needed to adjust for the different terminology of health facilities. The proposed health teams look remarkably similar. Differences in the size of facilities across countries account for part of the variation.

Size of health teams, by type of facility, as recommended by health authorities

Health Facility	Afghanistan 2003	Cambodia 1997	Mozambique 1992	Southern Sudan 1998
Small, or basic health centre	4	6	3	4
Large, or comprehensive health centre (usually with beds)	11	15	8-13	13
First-referral hospital	30	49	42	57

The actual average health teams of a sample of health facilities, and the proportion of them regarded as adequately or inadequately staffed, provide clues about the relation existing between field conditions and existing norms. For instance, a large proportion of PHC facilities with only ancillary or volunteer personnel points to unacceptable standards of care, a precious piece of information that will be missed if only staffing averages were considered. In health sectors with scarcity of higher-level cadres,

the main shortcoming may relate to the technical capacity of numerically adequate health teams. A useful way of assessing this aspect is the proportion of facilities staffed by the most qualified cadres foreseen by the existing norm, the apex post, such as a doctor for a first-referral hospital.

Finding average health teams following the norm does not ensure overall adequate availability of staff. In some cases, such as in Mozambique (see *Annex 10*), sufficient staffing levels in the surviving health facilities were due to the severe contraction of the peripheral healthcare network. In Southern Sudan, the proposed health teams were attainable, given the tiny network. Once a post-conflict expansion of services starts and the number of functioning facilities expands, standard teams need to be reconsidered.

Assessing staff performance

The inadequacy of most health workers for the post they are given is a very common finding in war-torn environments. It stems from a combination of factors:

- senior staff leave poorly-paid, hardship or risky positions to pursue better job opportunities, or just retreat to secure areas; junior replacements are appointed in haste, and deployed without adequate preparation;
- posts are increasingly assigned to staff not trained to fill them;
- the crisis raises the technical, emotional and organizational demands of any given job;
- as professional training standards decline, new health workers face increasing troubles in carrying out the tasks implied by their job position;
- expectations by peers and senior colleagues are reduced. Positive professional models weaken and lose appeal;
- supervision and supply lines crumble, denying cadres of needed support and feedback; the working environment becomes increasingly unfavourable;
- survival concerns and severe hardships affect professional commitment and encourage questionable practices.

Assessing staff performance is a demanding task, even in stable contexts. Comprehensive reviews of large samples of staff are expensive and fraught with difficulties. Thus, they are rarely available. Nonetheless, small-scale assessments are frequently carried out by agencies, special programmes and NGOs, sometimes following standard formats. A review of the available documentation may provide useful hints, to be judiciously assembled into a progressively larger picture. Attention must be paid to discarding the obviously flawed assessments, refraining from aggregating incompatible data, and respecting the caveats of the original studies.

Additionally, caution is needed in choosing specific indicators as proxies of overall performance. Information about activities supported by special programmes, like immunizations or family planning, is frequently available, but provides biased representations of the global picture. Well-chosen informants can provide valuable help in checking whether certain findings can be retained as plausible or must be discarded altogether.

The study of workloads demands dedicated surveys in most cases. In over-staffed and under-resourced facilities, low productivity is a common finding. User charges may decrease workloads further. The crippling of referral functions may reduce the service demand placed on hospitals. Conversely, patients may bypass primary facilities, seeking health care in hospitals. Health activities that offer earning opportunities, such as curative care or immunization campaigns supported by donors, expand at the expense of others.

Against reduced outputs, the unit cost of poor-quality services may be rather high. This finding, by shifting attention from absolute resource scarcity (the usual culprit for bad performance) to poor resource utilization (a recurrent flaw in conflict-affected health sectors), has far-reaching implications for decision-makers.

Semi-professional cadres: community health workers, volunteers, aides, etc.

Healthcare providers lacking formal professional qualifications are a common sight in disrupted health sectors. They may have been trained by NGOs and aid agencies, or by rebel armies and parties. Given the withdrawal of the most qualified professionals to secure areas, the technical responsibilities assigned to these health providers may greatly exceed their skills.

Many volunteer schemes are small and local in nature. They may differ greatly among themselves, particularly in countries where no national job descriptions and training programmes have been designed. Whereas some projects may have explored and documented specific arrangements in detail, comprehensive reviews of the whole semi-professional area are usually missing.

The lack of formal contract relationships induces volunteer health workers to find alternative ways to earn a living, usually charging for their services or selling medicines. These transactions go mainly unreported. Supervision is frequently erratic or at least intermittent. Routine reporting by these health workers is usually unsatisfactory. Thus, the existing information about the number of active health providers or health activities produced by them is always questionable and inadequate. Attrition among volunteer health providers is generally high. When considering the numbers trained, assuming that only a portion of them are active is generally sensible.

Despite the emphasis given by training programmes to preventive care, CHWs tend to shift their attention to treating common ailments with the essential drugs supplied to them. This universal trend is accentuated during a conflict, with its heightened concerns for curative care, especially of violence-related conditions. Particularly when replacing absent professionals, CHWs gradually become part of formal health services, at least in the perceptions of users. Their absorption into the payroll with a professional qualification, perhaps after an upgrading course, is a rather common outcome of this shift. In some health sectors, these cadres maintain the denomination of CHWs, despite a changed job description (formally stated or not). In these cases, the label of CHWs is misleading about their actual duties. They are simply low-cost, elementary-level healthcare providers.

During the 1990s, CHWs have fallen from the top to the bottom of the health policy debate. Now, they are mostly perceived as a low-profile option, suitable to NGOs active at local level. Gained experience notwithstanding, CHWs may be uncritically resurrected and given once again disproportionate responsibilities (at least in policy documents), as recently witnessed in Afghanistan and Southern Sudan. In both cases, the CHW option looks rooted in the incapacity of a crippled training network to produce professional alternatives. Rather than a deliberate policy, it seems an admission of the constraints with which the health sector is grappling. Whether in ravaged health sectors CHWs are able to perform better than in stable ones remains to be seen.

HR regulation

Over time, the number of health workers lacking adequate certification expands, because official certifying bodies have stopped functioning, or are contested by political adversaries. In many cases, the training received does not entitle workers to earn a full qualification, or else the relevant documentation has been lost, due to war events. Some health workers try to cheat, pretending to hold a qualification

they did not earn. An additional problem is constituted by those cadres who studied abroad, and hold a qualification not suited to direct conversion into a national one. In Afghanistan in 2002, only 53% of active health workers held a professional diploma issued by a body recognized by the government (Government of Afghanistan, 2002). The reestablishment of certification functions is certainly a key component of a HR recovery strategy. In Cambodia, the 59 different categories of health workers counted in 1993 were re-grouped into 23 categories, for which a diploma was required. The process required the use of an equivalency framework (Smith, 2005). Dedicated training programmes are required in many cases to complement the informal or incomplete training received in wartime and convert it into a professional qualification recognized by health authorities and peer health workers. These complementing training programmes are technically demanding, hence expensive.

Incentives. During a protracted crisis, the interplay of incentives shaping the behaviour of health workers, always central to HRD, becomes even more intricate. Most of the positive incentives at work in stable health sectors weaken, whereas some of them turn perverse. Health workers in the public sector remain in the payroll even without moving to their assigned posts; controls over resources wane; poor performance is not recognized or disciplined. The conflict provides an all-embracing excuse for every sort of failure. Financial hardships sideline other professional concerns. Even good performance may translate into undesirable outcomes, as in the case of health workers getting a position with an international agency, or a study grant that makes emigration easier.

Aid agencies and NGOs, by controlling powerful incentives – better salaries, increased security and career opportunities – strongly affect the labour market. They are often able to deploy cadres to areas deserted by civil servants. Their managers have discretion over the hiring and firing of local cadres. Within agencies, professional performance is better monitored, and indigenous health workers hired by international organizations are exposed to ideas, approaches and techniques of worldwide currency. Furthermore, they learn to work in a competitive labour market, unshielded by civil-service provisions. Provided adequate inducements are ensured, the recovering health sector may fill senior positions drawing from this pool of expertise.

The wage differential between locally-recruited and expatriate workers is a powerful incentive to move abroad. This creates odd situations, with swaps of personnel between countries. The balance of skills traded in this way may be only marginally affected, whereas total costs rise greatly. These movements may be beneficial, as in the case of Mozambicans who moved to Angola towards the end of the 1990s, and took with them the experience gained at home during the recovery process.

The role of expatriate health workers

Expatriate health workers are a prominent, if controversial, feature of many complex emergencies. They are brought in by aid agencies, donors and NGOs, sometimes to fill severe gaps in the local workforce (usually in its upper echelons), sometimes to manage resources and activities of which agencies wish to retain full control. Complaints about skills, appropriateness and capacity of expatriate health workers are commonplace. Resentment against their higher salaries, powerful positions and decision-making freedom is widespread among local staff.

In many situations, as diverse as Cambodia, Mozambique and Southern Sudan, the shortage of indigenous skilled personnel has been so severe that reliance on foreign health workers represented the only available option. In other cases, such as in the Balkans, Iraq or Northern Sudan, aid agencies might have conceivably exploited local expertise to a greater extent. Over-reliance on expatriate health workers may stem from organizational inertia, poor knowledge of the context, or domestic and labour market pressures.

Expatriate skilled cadres may be recruited at low cost, if appropriate management schemes are put in place, and deployed without much resistance, as seen in many troubled health sectors, where most hardship doctor posts are filled by foreigners. In situations of severe skill shortage, like in Southern Sudan, foreign professionals may be cheaper to hire than indigenous cadres. Thus, open-market recruitment makes good economic sense for resource-strapped health authorities. This consideration is often overlooked, or only reluctantly conceded, by indigenous officials, who suffer having to rely on foreigners.

In some cases, highly-skilled health workers are deployed in large numbers as the result of political agreements between friendly countries. Timor-Leste has negotiated with Cuba a massive supply of medical doctors, distributed to fill most positions within the health system. This approach ensures homogeneity in healthcare provision; it implies the adhesion to delivery model, training and language of the supplying country, as well. When the presence of expatriate health workers is pervasive and their practice consistent, indigenous policy choices may be overruled.

The hiring of expatriates may bring a measure of neutrality in situations plagued by mistrust between hostile sides. Thus, foreigners protected by special status may be allowed to provide health care where no national would be, or would be at high personal risk. Certain foreigners settle in countries affected by conflict, spending large portions of their professional life in them. Their privileged position offers access to experiences and information barred to local colleagues; additionally, foreigners are spared part of the stress felt by nationals. Their relative immunity from political prosecution makes them comparatively more outspoken. Due to this combination of factors, those foreigners staying in country for a long period and able to overcome language and cultural barriers become very knowledgeable of the local picture, thus precious informants.

Integrating formerly rival health workers

Military health services expand during a conflict, competing with the health sector for trained cadres. Warring parties may establish their own health services, staffed by politically-affiliated or forcibly-recruited workers. Once the conflict is over, these personnel may have to be absorbed by the public arm of the health sector, irrespective of service needs and of the appropriateness of their skills. In Angola, cadres demobilized from strong military health services brought with them comparatively better skills. Military health personnel tend to be overlooked by civilian planners. The strength of their ranks is usually unknown until they are discharged by the army. In many cases, as in Iraq, their substantive number alters to a significant degree the assessment of the availability of staff.

After a peace settlement, the integration of health workers belonging to rival parties into a unified workforce poses unique challenges. The terms of the integration are influenced by the relative strength of the former enemies. In Angola and Mozambique, rebel health workers had to accept conditions largely dictated by governments that retained (politically as well as technically) the upper hand during negotiations. In both cases, the reintegration strategy included a census of health workers, an assessment of their qualifications and skills, the registration of those suitable and a robust training package for most of the remaining ones (WHO, 2003). Low educational levels are prominent among the obstacles to integration found in these situations.

Where rebel parties have struck a peace deal from stronger positions, or have replaced former rulers, their cadres obtain better terms of integration, sometimes embedded in the peace agreement. It becomes mandatory to enrol these health workers, despite their frequent lack of formal qualifications, into the workforce. When the separation between portions of the health sector has lasted for long, additional difficulties may

arise. Different job descriptions, training programmes and materials, working habits and languages may keep health workers apart.

Given the political sensitivity of the issue, planning the integration exercise in advance and endowing it with adequate resources is largely justified. Aware of this, donors are usually ready to finance integration schemes. However, the financial implications of absorbing large pools of employees into the public sector may be substantial, and unlikely to be borne by donors for long. Health teams oversized in respect to suggested norms are a common outcome of transitional processes.

Health workers, civil service, and salary issues

In most war-torn countries, civil-service rules and procedures are bypassed and abandoned, replaced by multiple informal arrangements, often justified on practical grounds. Civil-service structures, stopped in their evolution by the crisis, calcify into archaic prescriptions detached from health-service needs. Their resuscitation once the conflict is over can move the clock back by several decades. The changes in HR management imposed by the disruption, if adequately studied, may offer the foundation for the redesign of civil-service rules and procedures. Unfortunately, the health sector may lack the leverage over the state administration that is needed to spearhead the reform of civil-service provisions.

Frequently, real wages in the civil service have declined over the years to negligible levels. Additionally, the workforce may have expanded beyond control. This double trend makes the financing of a substantive salary increase unaffordable for a (usually distressed) treasury. The issue is financially thorny, as well as politically charged, for governments usually lacking both the power and the confidence to carry out radical reforms.

State collapse, or the emergence of new state settings, leads to the absence of a structured civil service, as witnessed in Afghanistan, Somalia, and Southern Sudan. Healthcare delivery is largely left to NGOs, aid agencies and disease-control programmes. Salary levels and employment conditions vary according to the employer, the site, and the job market. Mapping prevailing patterns requires dedicated studies.

The dissolution of the civil service offers room for experimentation and innovation. A new personnel management approach may be introduced without the resistance to be expected in a stable context. Such an approach may include salary levels higher than and de-linked from civil-service ones, lean and decentralized hire-and-fire procedures, large portions of total earnings paid as hardship and performance bonuses, fixed-term contracts linked to specific posts, salary scales rewarding responsibility and seniority to a greater extent than academic qualifications, etc.

Forecasting salary levels in a country emerging from conflict is inherently difficult. The box below presents a possible approach to the problem, as applied to the Afghanistan situation in 2002. An alternative and preferable approach (if available data allow) would recognize that health professionals are not unconditionally bound to the civil service and that their market value is usually higher than the average salaries paid across the public sector. Thus, competing rates in the private sector have to be considered. Additionally, border and international wage rates should be taken into account for health cadres holding qualifications that are tradable abroad. Setting hypothetical salary levels for public health workers that are not too distant from these benchmarks may foster a situation where health workers are fairly motivated to stay in the public sector (Hay, 2000).

In most situations, adequate salary increases imply the dramatic downsizing of the workforce, an option that frightens most politicians. Given the low productivity prevailing in most public health sectors, outputs would not suffer if better pay were accompanied by better performance. Experience shows that increased salaries are

usually insufficient to raise productivity, particularly in situations where absenteeism, poor performance, and deficient controls have prevailed during a long time. To boost productivity, concomitant better managerial practice is called for.

Forecasting future size and salary levels of the Afghanistan civil service

"... international comparisons can help somewhat in setting the broad parameters for an initial compensation structure: in recent years, average government wages have been equivalent to 5.7 times per capita GDP in Africa, 2.7 times in Latin America, 3.4 times in Middle East and North Africa, and 3 times in Asia. In the region, government wages have averaged about 7 times per capita GDP in India, 4.1 times in Bangladesh, and about twice per capita GDP in Pakistan. The notion of a relatively small but efficient government implies an adequate level of compensation of government employees. A multiplier of 4 could be an option to be considered as a starting point by the Afghanistan Interim Administration — or about the equivalent of \$1,000 a year on average. While this is low, given the low current per capita income in Afghanistan, it is higher than has been the practice in the past.

A total government workforce of 1% of population (including central, provincial, and local governments, but not the military) would be lower than comparable countries in the region, and among the lowest in the developing world. Limiting government employment to 1% of population requires, in addition to a policy of limited government, substantial recourse to the private sector, communities, and NGOs to deliver public services. A population of about 25 million would therefore yield an "optimal" total government workforce of 250,000. At present there are about 170,000 government employees. An average wage of \$100/month is assumed initially, which rises in parallel with the projected increase in per capita GDP to about \$140/month on average during years 5 - 10. Wage levels would therefore be at about 5 times per capita GDP throughout the 10-year period and would compare favourably with other countries in the region and the developing world in general."

Source: ADB, UNDP, WB, 2002

National human resource development strategy

Not many health sectors have formulated formal HRD strategies in wartime. Some others have embarked in forward planning towards or after the end of a protracted crisis. In some cases, only some components of a comprehensive HRD strategy have been sketched. For instance, overall staffing goals may have been set, without delving into implementing details, or into the cost of attaining the proposed goals. These HRD proposals fail in most cases to withstand thorough scrutiny, due to unrealistic assumptions, neglected but crushing constraints, unsustainable standards, and insufficient resource levels. In these cases, comparing the field situation with the aspirations of HR planners shows wide, unbridgeable gaps. HRD prescriptions may bear no relationship to operational decisions, which proceed in directions altogether incompatible with them. Only the frank recognition of the inadequacy of such prescriptions can lead to their replacement with something useful to orient actions.

The shortcomings of a HRD strategy are not only rooted in technical incompetence or wishful thinking. In fact, decisions related to health workers are strongly influenced by political, cultural and economic forces. Particularly in tense, transitional settings,

when the government is eager to appease grievances, politicians feel compelled to provide jobs to unemployed youths. Professional lobbies exert strong pressures on decision-makers, to benefit the cadres they represent. The aspirations of urban elites lead to preferential investment in the training of doctors (adding to the world's oversupply), to the disadvantage of other needed staff. Salary scales are negotiated to satisfy powerful constituencies. Deployment decisions, made by weakened health authorities, are bent in order to satisfy workers' demands, with little concern for service needs.

An additional difficulty lies in the dispersion of decision-making centres that in many countries characterizes the field of human resources for health (HRH). The Ministries of Health, Education, Defence, Finance, Civil Service and Local Government have different and often diverging stakes in shaping the features of the workforce. Donors, NGOs, charities, private training providers also play important roles. And health workers themselves (individually and as structured groups) actively steer developments in directions appealing to them. A HRD strategy may fail to materialize because the authority issuing it lacks adequate control over crucial implementing levers. Recognizing the parties influencing the human resource field and the interests defended by each of them is the first step towards negotiating a successful HRD strategy.

In some troubled health sectors, the stated HRD strategy is silent about the crisis under way, and its impact on the workforce. In other cases, as in Angola towards the end of the war, the strategy frankly recognized the main flaws affecting HRs and proposed sensible corrective measures (Ministério da Saúde, 1999). Unfortunately, the existing distortions grew beyond technical repair. Amending the situation would imply giant and sustained investments of resources, capacity and political capital. Whereas Angola might afford the first element of the needed investment, it suffers from a conspicuous shortage of the remaining two. See *True Story No 17*.

Strategies to restructure a distorted and dilapidated workforce

The strategy chosen to restructure the workforce depends on the main distortions affecting it, on the overall direction chosen for health sector recovery, on the resources allocated to such a recovery, and on the technical capacity and political clout (both likely to be limited) of health authorities.

The rehabilitation of the health workforce is usually slower than the rehabilitation of physical infrastructures: the results can be appreciated only after several years. A time lag between the effects of the former and those of the latter, translating into new facilities without adequate staff, is frequently recognizable. Minimizing this imbalance calls for anticipating events, rather than responding to them. This implies investing early in human resource development.

Given internal displacements to secure areas and ensuing overstaffing, measures aimed at revamping the workforce may be introduced in wartime, without disrupting health service delivery. In this way, stronger and more appropriate cadres can be prepared for the challenges posed by the transition from war to peace. Usually neglected, this investment may offer substantial pay-offs to forward-looking decision-makers.

To correct a bloated, under-skilled workforce, a massive retrenchment programme constitutes an unappealing option for an enfeebled government, due to its high political cost. A less controversial strategy is the selective freezing of new recruitments, with natural losses left in charge of streamlining the workforce. The training of under-represented categories, as well as the in-service upgrading and strengthening of the most suitable cadres, must be associated with the progressive contraction of the ranks. Compensation schemes are needed for the losers in this

True Story No. 17

Rationalist planning in a politically-charged context: human resources for health in Angola during the transition from war to peace

By the mid-1990s, the Angolan health workforce was in appalling shape. Its ranks had expanded to reach 35,000. Unskilled employees accounted for 50% of the total. Only 4% of the health workers held a university-level qualification. Certain cadres, like midwives, were scarce. Skilled workers were concentrated in Luanda and the other main cities. The training of low-level workers proceeded unabated. Hospital-oriented contents permeated training programmes. The productivity of health workers was abysmally low, while the health care they provided was poor.

Aware of the gravity of the situation, the Angolan MoH launched a Human Resource Development Plan, formulated in 1997–1999 through an extensive participatory process. The plan recognized the structural distortions affecting the Angolan workforce, and proposed a coherent set of measures to correct them. The employees of the public health sector would fall below 30,000. Under-represented categories would be expanded, low-level workers upgraded, and ancillary staff trimmed. The proportion of university- and mid-level cadres would increase. Training standards would improve at all levels. The performance of the workforce had to be boosted by appropriate PHC-oriented training and strengthened motivation. The enhanced management of human resources would reduce pervasive inefficiencies. Staff had to be redeployed across country and by level of care, to expand access to health services.

Despite its merits, the plan suffered from several limitations, including the inadequate information basis it relied upon, the lack of a comprehensive and realistic health policy to build on, and the disproportion between the magnitude and difficulty of the problems to be addressed and existing capacity. Perhaps the main weakness of the plan was of a conceptual order. It was sound in technical terms, but paid inadequate attention to the political, administrative, military and economic implications of its implementation. Also, the impact of the peace process (at the time stalled) on the health sector and its workforce was not explicitly considered.

By 2005, progress had been registered on several fronts (Pavignani, 2006). Legislation covering several areas related to the health workforce had been passed. The salary scale had been restructured, with dramatic improvements in the earning of public employees. Disparate old categories and careers had been converted into standard ones and absorbed into a new unified system, while 3,800 ghost workers had been removed from the payroll. A new health training system, envisaging fewer but enhanced training facilities, had been designed and launched. Provisions aimed to reduce the enrolment of new students in health-related courses had been issued. In-service training and health management training programmes had been designed and introduced. Several training programmes had been reviewed, and some formulated anew.

On the negative side, the expansion of the workforce had continued at breakneck pace, due to the absorption into the workforce of 9,100 demobilized health workers and of 12,000 new trainees. By 2006, the Angolan workforce totalled more than 60,000 employees, 54% of whom were skilled health workers. In relation to the health network to be staffed and healthcare outputs, the workforce was largely oversized. The serious urban and hospital biases had remained virtually unaltered.

The plan may be regarded as a modest success, given the progress registered despite an extremely unfavourable implementing context. Conversely, it may be seen as an unqualified failure, in light of the consolidation of the distortions the plan was meant to address. Among the many determinants of the described outcome, several deserve mention:

- The imperatives of the peace process of promoting reconciliation and buying social rest. Job creation took precedence over efficiency concerns and long-term sustainability. Buoyant oil revenues made expansive choices easier.
- The progressive de-concentration of decision-making, which encouraged the opening of new courses and the hiring of new workers at provincial level, despite the restrictions issued by the central MoH.
- The limited political clout of the MoH vis-à-vis other government bodies.
- Weak information systems, which delayed the recognition of emerging problems and affected decisions.
- The conservatism permeating the post-conflict recovery process, which favoured the maintenance of the status quo, or the return to pre-war settings. Within the health sector, influential but conservative bodies, like professional associations, strengthened this risk-averse climate.

restructuring. The freezing of new recruitment may be difficult to sustain against political pressure, as witnessed in Angola, where the aggregated workforce doubled in size during the years of post-conflict transition.

A difficult problem to address is the presence of many training outlets outside the control of health authorities, churning out health professionals not demanded by the services. Information to the public about the limited job opportunities likely to arise in the future health sector may alleviate this source of potential oversupply of health workers. The proliferation of training facilities is common in polarized or partitioned situations, where distrustful parties struggle to ensure that training opportunities are granted to them. Donors on good terms with one side may be willing to finance the establishment of high-profile institutions, such as universities, despite the inadequate demand for graduates, to the detriment of the other side. Rational arguments about realism and restraint often fall on deaf ears.

A slim, under-skilled workforce may be strengthened by replacing natural losses with more competent cadres. Pre-service training is in this case the central element of the restructuring strategy (for a concrete example, see *Annex 10*). Investing in training capacity must rank among the top priorities of a recovering health sector. To attain good training standards demands sustained efforts. In fact, the skills of trainers suffer during a conflict to the same extent of those of ordinary health workers. Additionally, effective training demands stronger capacity than in normal times, due to the poor educational background of the trainees enrolled in health courses.

Reorienting the health sector, notoriously difficult in peaceful times, may stand a realistic chance of success during a transitional period, when many health workers have in any case to go through some form of training, and resistance to change may be less entrenched. A radical change in the strategic direction chosen for the health sector is likely to demand the retraining of many cadres.

The lack of PHC-oriented training has been considered as one of the reasons behind the unsatisfactory results obtained in many countries in implementing PHC. Changing training contents and practice is always difficult. It calls for a comprehensive restructuring of training venues, methods and materials. It may need the recruitment of outside trainers, at least during the taking off of large-scale training programmes. To manage multi-purpose health providers scattered over large areas and working in fairly autonomous ways, the contracting and deployment procedures, and support systems must change as well.

Correcting an excess of medical doctors presents unique difficulties. A workforce affected by this distortion induces high levels of health spending and reinforces curative, hospital-based habits. This imbalance is common, as seen in the states of the former Soviet Union, and in Afghanistan, Iraq and Sudan. Reducing the supply of medical doctors (the main response to the problem) is always politically difficult, due to the prestige enjoyed everywhere by medical schools. Where the training standards of many medical schools are clearly inadequate, imposing stringent conditions for recognizing the degrees issued by them may help. This approach too is hard to sustain. Encouraging the emigration of unneeded medical doctors, a common practice in the former Soviet Union and in Sudan, may alleviate the problem.

The restructuring of the workforce, however successful, may fail to translate into improved performance, if perverse incentives remain in place. In cases where the interplay of incentives is clearly unfavourable and structural distortions are not dominant, recalibrating the former may be the most sensible strategy. Measures taken within the health sector may fall short of addressing the true problems, when these lie outside it. The disruption affecting the public sector may offer an opportunity to change its functioning, or to take a fresh look at the public-private mix. The most influential reform to be introduced during a transitional period might be de-linking the health workforce from the mainstream civil service.

Main lessons learnt in previous crises

- Conceive HRD as a fundamental component of health sector recovery, to be firmly inscribed into the overall sector strategy, and to be tightly bound to projected resource constraints.
- Start planning the rehabilitation of human resources as soon as possible, better already in wartime, so as to introduce corrective measures without delay, when opportunities arise. Early HRD may be instrumental to other crucial recovery-oriented measures.
- Disentangle the components of HRD that need state intervention from those to be left to market forces.
- Formulate a HRD strategy coherent with the political, economic, administrative and social changes under way in the country. HRD strategists must connect with bodies outside the health field, and understand how their decisions will impact on HRH.
- Try to anticipate the impact of the peace process on the health workforce, and incorporate it into recovery plans.
- Allocate adequate resources to HRD, which is a long-term and resource-intensive endeavour. Severe, protracted disruptions call for robust corrective measures, possible only when generously resourced.
- Expect and project fairly high personnel costs, either formally acknowledged by salary levels, or opaquely obtained through benefits and user charges. Maintain salary increases firmly linked to performance-boosting measures.
- Refrain from launching piecemeal training activities, in the absence of a planning framework based on a thorough assessment of the whole workforce. Carried out apart from other necessary interventions, training is likely to be ineffective.
- Closely consider existing training capacity. In most cases, it will be found to be in appalling condition and in need of radical overhauling. The importation of competent trainers may stand out as one of the most needed, sensitive and difficult measures to be taken.
- Ensure adequate political support to inherently controversial measures, such as those aimed at restructuring the workforce. A convergence of powerful players within government and among donors offers the best chance of success.
- Give attention to management and regulation of HRs, as well as to the incentives affecting their behaviour, even if this implies difficult decisions. Consider civil-service aspects of HRs for health. Invest in strengthening the central HR department, which is usually unable to cope with the expanded responsibilities of a recovery process.
- Set broad long-term goals and leave room to implementers for exploration, adaptation and discovery. Establish a strong monitoring capacity, to adjust plans according to the registered progress and to tackle evidence-free, but politically strong, proposals for change.
- Search for promising indigenous responses to the challenges posed by the crisis. They can offer inspiration and provide true expertise for the design of comprehensive restructuring plans.
- Split a comprehensive, long-term HRD strategy into discrete components that can be sequentially implemented, given existing capacity and resource constraints.

Recommended Reading

Hay R (2000). ***Publicly-provided health care: incentives matter***. Oxford, Oxford Policy Institute (Policy Brief No. 2).

Short, clear discussion of the evolution of healthcare provision in poor countries. Expansive health sectors designed to provide publicly-financed universal coverage bore the brunt of economic decline and shrinking public revenues. Financial squeezes led to the “...*wholesale, unplanned and unregulated privatisation of health services...*”. Cost-sharing policies failed to fulfil their promises. Reforms overlooked provider incentives and regulation. In some health sectors, the damage done was so severe that correcting existing distortions might be impossible.

To stop this deterioration, a coherent set of measures, designed to consider the interplay of incentives that shape provider behaviour, must be introduced. Downsizing the health workforce, outsourcing and contracting, raising salary levels, strengthening regulatory functions, concentrating public resources and capacity on core tasks are among the proposed measures. “*How successful such reform will be remains to be seen.*” No panacea is in sight.

The HRH Global Resource Center, at: www.hrhresourcecenter.org, accessed 17 September 2008.

This a digital library devoted to human resources for health.

Smith J (2005). ***Guide to health workforce development in post-conflict environments***. Geneva, WHO. Available online at: www.who.int, accessed 17 September 2008.

Comprehensive analysis of the main aspects of the subject, which helps to put human resource development where it should be, i.e. at the centre of any post-conflict health recovery process. The discussion is based on true field experience, gathered in several health sectors in transition, and is backed by a wealth of helpful examples and relevant literature. A welcome guide, which fills a serious gap. It should assist participants in a recovery process to approach the human resource field equipped with true insights of the issues at stake. To be disseminated beyond the small circle of human-resource specialists.

USAID (2003). ***The health sector human resource crisis in Africa: an issues paper***. Available online at: www.healthgap.org, accessed 17 September 2008.

Sobering review of an inadequately-recognized structural crisis, already attaining alarming proportions. A web of factors, including political, economic and military troubles, misguided civil-service and health-personnel policies, outward migration and HIV/AIDS, fuels the crisis. Tackling it calls for immediate, resolute and sustained action by governments and donors alike. Effective corrective measures must be grounded in a systemic analysis of the HRH of each country, and of the world market of health personnel. Radical restructuring of the ways health workers are produced, deployed, utilized, retained, managed and motivated is required.

Walt G, ed. (1990). ***Community health workers in national programmes: just another pair of hands?*** Philadelphia, Open University Press.

Penetrating inquiry into the origins of CHWs, the world-wide expansion of schemes supporting them in the 1970s and 1980s, and the concerns about their role, effectiveness and future, fuelled by the accumulating subsequent field experience. The book shows that, in the overheated climate generated by PHC ideals, “...*enthusiasm and haste triumphed over planning and management*”. The extraordinary expectations placed upon CHWs went predictably unfulfilled. Rather than becoming agents for social change and the cornerstone of PHC, they adjusted to the more modest role of extenders of health services, with which users identified them. The narrowing of the role of CHWs went on alongside the scaling up of promising pilot schemes to become national programmes. In this aspect, the CHWs’ trajectory is unexceptional: small-scale, exploratory and usually well-resourced experiences tend to resist the expansion and formalization typical of national programmes, or to change their nature as they adapt to the new settings.

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Pavignani E (2006). *Revisão do plano de desenvolvimento de recursos humanos de saúde 1997 – 2007*. República de Angola, Ministério da Saúde. Unpublished report. Ministério da Saúde. República de Angola. Direcção Nacional dos Recursos Humanos (1999). *Plano de desenvolvimento dos recursos humanos 1997/2007*. Luanda. Unpublished report.

Transitional Islamic Government of Afghanistan. Ministry of Health (2002). *Afghanistan national health resources assessment*.

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Annex 10 Restructuring the workforce in a post-conflict health sector¹

Mozambique 1990–2002

The workforce in the 1980s, composed of 16,000 staff, was slim for a country the size of Mozambique, due to a tight and steadily declining budget, limited training capacity, shortage of candidates for health training with adequate education level and cumbersome civil service procedures. The workforce was internally distorted, with 50% of staff unskilled; of the skilled cadres, only 3% were trained at university-level and 11% at mid-level. Hospital-oriented personnel dominated. PHC-oriented workers were trained in insufficient numbers. The training network, concentrated in the capital city and underdeveloped in the north, was severely under-resourced. No private training outlets existed. Deployment suffered from a serious urban bias aggravated by the war, with more than half of professional staff concentrated in cities, and from understaffing north of the Zambezi River. A rigid civil service structure and culture compounded the picture.

The *Health Manpower Development Plan 1992 – 2002* formulated in 1991, at the end of the war, as part of a post-war reconstruction strategy (Noormahomed and Segall, 1994), aimed at addressing these problems by restructuring the workforce on a sustainable basis. The overall number of MoH employees was projected to increase by only 9%. However, professionally trained staff was due to increase by 45%, while the number of ancillary workers was to decline by 22%. PHC-oriented personnel were expected to account for most of the increase of professional staff. Higher-level cadres were due to increase two- or three-fold. Training capacity was to expand most in underserved provinces, where the health network was expected to grow significantly once reconstruction had started.

The plan relied on a comprehensive sector situation analysis, which provided a robust rationale for the chosen goals. The planned workforce had to develop according to the staffing needs of the recovering health sector, within explicit budget constraints. Only broad implementation guidelines were elaborated, in this way leaving room for adaptation. To equip new staff with skills appropriate to PHC delivery, key training programmes were radically restructured. A mix of curative care, community health and management skills was learned hands-on, mainly at the service delivery point, emphasizing problem-solving and self-instruction. The resource requirements of such an appropriate training rose accordingly.

The plan, resulting from a year-long consultation exercise involving all senior officials at the MoH, called for donor support, which was generously given. Major agencies carved out their commitments within the plan's framework. The World Bank made the plan's implementation a central component of its second loan to the health sector. To implement the plan, the financing of training activities expanded dramatically. The investment targeting the training network has been in the order of US\$ 15 million. Recurrent expenditure for training exceeded US\$ 4 million in 1997. In the same year, the average cost of graduating a mid- or basic-level health professional was estimated at US\$ 10,000. These figures exclude university-level training (responsibility of the Ministry of Education) and training abroad. During the period covered by the plan, investment in physical reconstruction was in the order of US\$ 20–30 million per year.

1 With contributions by: Ferruccio Vio

Results

National staff employed by the National Health Service (NHS)

Training Level	1990 (baseline)	Situation 2003	2002 Targets	Results vs. Targets
Superior	207	662	500	+ 32%
Middle	865	2,698	2,720	- 1%
Basic	5,197	5,339	6,060	- 9%
Elementary	1,660	2,776	1,710	+ 62%
Ancillary	8,231	6,478	6,350	+ 2%
Total	16,160	17,953	17,340	+ 4%

In aggregate terms, by 2003 the NHS workforce corresponded to a remarkable degree to the targets chosen in 1991. As planned, skilled staff grew by 45%. The proportion of most skilled cadres expanded three-fold, whereas unskilled staff has been reduced by 22%. The main departures from the original targets were not a source of concern. The higher-than-projected increase of university-level cadres remained within affordable margins. Furthermore, the large growth of elementary health workers, resulting from decentralized decision-making (as foreseen by the plan) and responding to the objective need of staffing the most remote health facilities, had no serious budgetary implications, given the low salary level paid to these cadres.

Roughly mid-way in the implementation of the plan, a census of the workforce found and removed from the payroll about 2,000 ghost workers. Supposing that an unknown part of them already existed in 1990, the actual expansion of the ranks is larger than that officially acknowledged.

PHC-oriented cadres grew less than planned, for several reasons, including the difficulty of recruiting appropriate trainers. The scrutiny of the workforce by categories showed sizeable divergences between planned and actual strengths. None of them, however, looked of worrisome proportions.

Deployment of skilled health workers, by region

Regions	% Population	1990	%	2002	%
Northern (Niassa, Cabo Delgado, Nampula, Zambézia)	52%	2,284	34%	3,986	37%
Central (Tete, Manica, Sofala)	23%	1,481	22%	3,099	29%
Southern (Inhambane, Gaza, Maputo Province)	20%	1,452	21%	2,064	19%
Maputo City	6%	1,585	23%	1,697	16%
Total		6,802		10,846	

Note: Population shares as per 2000.

Deployment patterns improved in aggregate terms, with the Northern region reducing its gap and the South losing some of its relative advantage. Once these figures were disaggregated by level of training, they showed that the correction of the old bias was only partial. In fact, Maputo City retained 44% of national university-level cadres.

Average health teams, 1990 – 2002

Level of Training	Health Posts		Small Health Centres		Large Health Centres		Rural Hospitals	
	1990	2002	1990	2002	1990	2002	1990	2002
University	0	0	0	0	0	0.6	0.5	2.0
Mid	0	0.1	0.1	0.4	0.4	3.8	3.2	13.6
Basic	0.4	0.6	2.1	2.0	9.2	11.3	27.5	21.3
Elementary	0.4	0.8	1.5	1.6	5.8	5.7	6.4	7.5
Average Team	0.8	1.5	3.7	4.1	15.4	21.5	37.6	44.3

The change in staffing patterns was remarkable. Whereas total average teams expanded modestly, in tune with the expansion of facility sizes induced by reconstruction, the proportion of staff with university and mid-level training within each average team increased spectacularly. Health Posts present a pattern apart from other facilities, justified by the role they play in offering rudimentary services in remote, low-density areas.

From 1993 to 2001, average workloads (computed as the weighted sum of inpatient and outpatient main health activities) expanded by 29%. Global service outputs grew by 69% during the same years. The MoH salary bill increased during the second half of the 1990s. By 2001, once adjusted for inflation, it was 122% higher than the 1991 baseline.

The expanded and strengthened training network established with donor support and geared to resuscitating a dilapidated workforce became a considerable asset one decade later, when the NHS needed to increase the supply of personnel, to respond to augmented losses within its ranks, as well as to augmented service workloads, both induced by HIV/AIDS.

Shortcomings

The quality of the training provided stood out among the weakest aspects of the work done. Given dramatically-increased inputs, there were still margins for improving the skills gained by trainees. Sustainability of the MoH's training system in the long term was also matter of concern. In 1997, 47% of recurrent costs were covered by donors; the WB's soft loan added 29% and only 24% was paid by the Treasury.

In general, efforts within the health sector were hampered by obstacles outside its control, that is by the persistence of rigid, archaic rules and procedures enforced across the civil service. *Almost by default, most attention was devoted to the supply of personnel.* Crucial areas, such as the management and regulation of human resources, as well as the balance of incentives affecting their behaviour, were not adequately addressed by the MoH. A key recommendation of the plan, the training of professional health administrators, was ignored. As a result, the NHS was largely run by hospital-oriented medical doctors without specific management skills.

These drawbacks undermined sector performance, limiting the full exploitation of the returns the restructuring of the workforce might have provided. The still significant understaffing of the region north of the Zambezi River might be better addressed by offering proper incentives to staff and by more flexible management practice, than by relying solely on local training of new cadres, as was the case until 2003. The same held for the strong urban bias, which remained at the same levels of a decade before. 54% of the skilled workforce was posted to urban health facilities. 85% of university-level and 68% of mid-level cadres worked in cities. To compute these proportions, the skilled staff belonging to central and peripheral health authorities were excluded.

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Annex 10

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Notes:

Module 11

Studying the pharmaceutical area

Contents

The present module discusses the patterns observable in the pharmaceutical area of most conflict-affected health sectors, arguing that the usual difficulties in data gathering and analysis faced in such contexts are amplified by the peculiar features of the field, which demands some additional expertise from analysts of health systems. First, drugs policy is reviewed in its main components, namely policy formulation, drug selection, registration and quality assurance, regulation, financing, procurement and distribution. Then, key logistical aspects of the drug cycle are discussed: production, warehousing, distribution and waste. The merits of alternative approaches to these functions are compared. The ways in which pharmaceutical areas adapt to disruption if left to their own devices are described, as are the reform opportunities offered by protracted crises. A discussion of the steps required to restructure the area closes the module.

Annex 11 presents a map of actors and activities in the Southern Sudanese pharmaceutical area, sketched in spring 2006.

Closely-related modules:

No 2. Making (rough) sense of (shaky) data

No 5. Understanding health policy processes

No 6. Analysing health financing and expenditure

No 7. Analysing patterns of healthcare provision

No 8. Studying management systems

Introduction

Studies of the pharmaceutical sub-sector in unstable countries are rare. Even thorough analyses of troubled health sectors may pay only cursory attention – or no attention at all – to the pharmaceutical area. The objective difficulty of studying a complex, crowded field, dominated by big financial interests, where many transactions take place underground and information is often kept undisclosed, is compounded by its specialist nature, which makes general analysts reluctant to explore the area in depth.

Comprehensive drug-related information is scarce even in stable health sectors. In troubled contexts, data are invariably fraught with problems, or altogether lacking. To start, a broad review of the field along the lines suggested in this module may be attempted. It will provide pointers to problems and to possible solutions, rather than clear-cut conclusions, which must be based on firmer grounds. In severely disrupted contexts, where very little is in place, like Afghanistan in 2002, a rapid, summary appraisal is often adequate to capture the main features of the field (Baghdadi, Chomilier and Graaff, 2002). In other situations of higher complexity, a dedicated, detailed study may be worthwhile (for advice, see MSH, URC and PAHO, 1995). Given the centrality of medicines in healthcare delivery and its huge cost involved, launching such a study usually makes good economic sense.

National drugs policy

Countries vary in their policy approach to medicines. At one end of the spectrum, the (usually implicit) drugs policy may be the unleashing of market forces, unconstrained by regulatory restrictions. *Laissez-faire* may become the only “policy” adopted by health authorities, even if some legislation has been passed and is from time to time ritually referred to. At the other end of the spectrum, some countries have made tremendous efforts in conceiving and enforcing a formal drugs policy, usually built on several cornerstones: legislation, drug selection, registration and quality assurance, procurement and distribution, education and training, information for the public and research. In many cases, support to local production is part of the policy.

National pharmaceutical policies thrived during the 1970s and 1980s, and scored some remarkable successes, to fade away from the agenda in the 1990s, as market-oriented health sector reforms (usually silent on medicines, unless in relation to charging users for them) gained supremacy. As unstable health sectors become engulfed in deepening troubles, pharmaceutical areas previously governed by progressive drug policies may move towards deregulation, privatization and eventually towards outright anarchy.

The existing drugs policy must be scrutinized in several aspects, including the following:

- **Policy content** in relation to the present, troubled context. Outdated or misconceived elements of it may be identified. For instance, the policy may assume a government capacity to enforce the letter of the law that is not anymore – or has never been – in place. Additionally, the appropriateness of the pharmaceutical policy to the changed, or foreseeable future political and economic settings of the country should be considered.
- **Elements of the existing drugs policy that are actually enforced.** Some unstable countries have been able to reduce the consumption of expensive inessential medicines to negligible proportions, through the abundant supply of cheap, generic essential ones, which have in fact squeezed fancy alternative drugs into marginal niches, on price and availability grounds.
- **Enforceability of neglected elements of the stated policy.** For instance, many cost-sharing schemes include exemption criteria for very poor users, an awkward concept to enforce in some protracted crises, where most people fall into this category. In practice, many related decisions are left to the judgement of health workers, with unsatisfactory results.
- **Aspects left unaddressed by the policy**, which may make only cursory reference to controversial issues, or ignore crucial operational details. Thus, the need for an independent regulatory body may be invoked, without providing it with financial resources and clarifying the legal basis of its supposed autonomy.
- **Distribution of the main responsibilities within the public sector.** Countries with a tradition of public service delivery tend to assign most or all duties (including regulatory ones) to departments within the same MoH, in this way blurring responsibilities and creating obvious conflicts of interest. *New Public Management* thinking suggests that policy formulation, financing and regulation should be responsibility of public bodies, clearly separated from implementing agencies concerned with the commercial and logistic aspects of pharmaceutical products. Both the clarity of the policy in this respect and its enforcement in practice must therefore be assessed.
- **Agendas of the main (internal and external) stakeholders.** The Ministry of Finance and the IMF may try to tighten drug imports, whereas donor agencies may be willing to finance them. The WB may be keen to provide soft loans for drug purchasing, while elsewhere grant funding may be available. The medical lobby may resist the imposition of a restrictive essential drugs list. Mapping the interests, activities and capacities of actors helps to understand the policy's chances of being enforced.
- **The consistency of the drugs policy with the overall health policy** and the country's political and economic environment is another important aspect to be considered. In Angola in the 1980s, PHC was endorsed without reforming the pharmaceutical area (among other fields left unaddressed, such as HRD), with predictably poor results.

Given the leverage held by donors over drug-related choices, their perceptions of the existing drugs policy and of the pharmaceutical area in general must be studied. In

Mozambique, donors have consistently been supportive of this sub-sector. In other countries, afraid of the risk of mismanagement pending upon the large funds usually involved, donors have preferred to abstain from engaging on a grand scale in the field of medicines, or to rely on trusted implementing agencies. Different donor responses are not always built on objective differences of policies or capacities, but are heavily influenced by donor domestic concerns, the nature of the interaction with recipient authorities, the ability of these to show results, the example of prominent agencies and, not to be forgotten, the pack instincts of most donor agencies and officials.

In troubled health sectors, the relative weight of in-kind drug donations makes the way they are dealt with by the existing pharmaceutical policy worthy of consideration. In some cases, no explicit related policy is in place. Otherwise, a donation policy may exist but be only partially enforced or be altogether disregarded. Sometimes, concerned donors and NGOs have taken the initiative of formulating a policy and of voluntarily following it.

Drug financing

Pharmaceuticals are paid for by the government, by donors, by firms, by charities and by users. Whereas it is usually possible to obtain some information about public allocations to drug purchasing and, with some effort, about donor financing, reliable data related to other sources of drug financing are always inadequate.

The most common situation in a disrupted health sector is the declining allocation of state funds for drug purchasing, due to mounting fiscal difficulties. Donors step in to fill the gap to a variable degree. When external assistance is scarce, serious shortages ensue and the share of drug supply covered by private for-profit operators increases dramatically.

Drug expenditure absorbs a large share of total expenditure for health: on the average, about one fourth in sub-Saharan Africa and about one fifth in Asia, but, interestingly, only 8% in established market economies (Velásquez, Madrid and Quick, 1998). In a war-torn country with a shrinking health budget, the share absorbed by medicines tends to increase. To find (or more often, to guess) that one third of the total recurrent health expenditure is absorbed by drugs is rather common. Most of this increase is shouldered by private spending, already dominant in poor countries. These aggregate patterns, based on averages drawn from very large ranges of values, hide huge differences between and across countries. As a large proportion of private expenditure in a given country may be induced by a small amount of brand drugs consumed by affluent patients, caution is in order before inferences are drawn.

Drug consumption, expressed as a proportion of GDP, is remarkably similar across countries, varying between 0.5 and 0.9%. Given that drugs are international commodities, poor countries with lower domestic purchasing power are penalized, obtaining smaller amounts of drugs for the same level of spending. In a conflict-stricken country, with a contracting economy and a large drug inflow supported by external assistance, drug consumption may attain higher proportions of GDP.

Drug financing supported by the state budget may be known, but expressed in the local currency. Given that imported drugs are paid for in hard currency and that exchange rates are often distorted, some adjustment may be in order before state allocations can be interpreted. Also, budget figures may correspond in part or in total to forfeited tax revenues or counterpart funds, inscribed against equivalent donor financing. While important on macroeconomic grounds, this sort of budget allocations does not always convert into actual drug purchasing. Additional problems arise in some federal countries, where public financing for medicines is not centralized.

Drug purchases may be financed by loans provided by development banks, who usually do not manage the purchasing process directly, preferring instead to rely on government agencies when their performance is considered acceptable, or

alternatively on international organizations. Even if they abstain from direct control over procurement, development banks are usually keen to ensure that their rules and regulations are followed and that strict standards of accountability are adhered to. In practice, this legitimate requirement often translates into the demand for levels of performance well beyond the capacity of beneficiaries. Severe delays and under-implementation of programmed expenditures are commonplace in situations demanding quick and timely responses. Sometimes, operations are perturbed by the adoption of general procurement rules, poorly adapted to the pharmaceutical market.

True Story No 18 **Drug donations to Mozambique in 2000**

The great floods of 2000 in Mozambique, a country previously ravaged by civil war that by then had enjoyed eight years of peace, captured the attention of the world media, which in turn triggered an outburst of international solidarity. Donations of drugs (among other items) proliferated. At least 71 shipments arrived over 45 days, most without warning, and many with no documentation or packing list.

514 tons of drugs were donated, or 37% of the total tonnage requested by the MoH. Of the donated drugs, only 25% corresponded to drugs actually requested. Against requests for 33 drugs, issued by the MoH, 403 different items were received. 68% of them were not included in the National Drug Formulary. Overall quantitatively, only 15% of the requested drugs were actually received.

The MoH management of the crisis, as well as the requests issued by it, were considered as sound by independent assessments. In contrast, donors reacted insufficiently and inappropriately. Most unsatisfactory donations came from small organizations with little knowledge of the field, from governments of developing countries anxious to get rid of surplus drugs and from local distributors inside the country.

Modified from Autier et al. (2002).

Understanding the always-fragmented field of donor financing for medicines calls for a thorough inventory (for details, see *Annex 6a*). Aspects specific to drugs, to be considered when studying donor financing, include: a) the handling of drugs supplied in kind (which usually needs a conversion of the donor original prices or of the amounts donated, by using the prevailing market prices), b) tied drug purchase, imposed by some donors, c) the donation of inappropriate, unnecessary and expired medicines, particularly frequent in acute emergencies (Autier et al., 2002), and d) drugs supplied by relief agencies, particularly prone to escape computation.

Substantial private spending on drugs does not necessarily translate into increased drug availability in the public sector. In many situations, revenues from drug sales are used (formally and informally) to top up the salaries of health workers or to pay for other expenses. This adjustment of the imbalance between salary levels below market rates and the high value of drugs can be sustained only when new supplies, financed by sources complementing private contributions, replace the consumed drugs. In fact, donor agencies are in many cases the main sources of primary financing of drug purchasing for the public sector.

Thorough surveys are needed to study private spending on medicines. Given security concerns, these surveys, when carried out, cover areas unrepresentative of the whole country, such as the capital city. Before inferences about the overall magnitude of private drug expenditure are drawn from available data, judicious attention must be paid to this limitation.

Cost-sharing schemes, formal and informal, multiply as public financing for drug purchases decreases. Many public sectors charge for the drugs they dispense, but often at very low levels, so that not even the administrative costs of charging are recovered. Charities and NGOs apply higher prices and in some cases recover a significant proportion of their operating costs. Given that in many war-torn contexts impoverished users, many of them jobless people, such as IDPs or refugees, cannot shoulder high prices for health care or medicines, the results attained by these cost-sharing schemes are modest (Poletti, 2003). A review of the most interesting schemes may throw light on prevailing patterns (usually rampant deregulated privatization of healthcare provision) and on the measures to be realistically adopted to improve the situation.

Checking whether a drug-financing gap exists and estimating its actual size is by no means an easy task. Complaints about drug shortages are common even in well-supplied health sectors, hence rather unhelpful to gauge the true situation. The monetary value of the drugs actually purchased – or, worse, of donated drugs – may be grossly misleading, due to the huge differences existing in international drug prices. Thus, only in the rare cases of cost figures having been adjusted using shadow prices (see *Glossary* in *Module 14*), may the aggregated expenditure for drug purchasing give information about the availability of medicines within the country.

The minimum financing level required to ensure drug availability was set in the past at US\$ 1–2 per capita, but might be now closer to US\$ 4. The concept holds only when spending is mainly related to cheap, generic drugs, bought through competitive bidding processes, with a large part aimed at supplying primary health care. Without the possibility of checking whether these conditions are met, the mentioned financing level sounds rather meaningless. Financial figures may point to the global commitment to drug purchasing, but fail to inform about what is actually bought by the money spent. Despite the mentioned difficulties, assessing the absolute level of drug supply enjoyed by the health services is crucial to sensible decision-making.

Estimating national drug requirements

In many cases, so-called requirements are estimated by looking at the aggregated consumption of drugs recorded during the previous years – rarely a satisfactory approach. Purchased amounts, rather than corresponding to true needs, depend in most cases on the actual availability of funds for drugs. And delays in the purchasing process may be compounded by funding windfalls, giving rise to noticeable peaks and dips in drug availability. A proper estimate of drug needs, based on morbidity patterns and healthcare attendance, is usually impossible due to the inadequacy of the available information.

Interesting clues may be obtained by choosing some marker drugs, for which reliable information is available, and then trying to translate the purchased amounts into number of potential patient treatments (using national standard treatment guidelines, or in absence of them, international ones). These can be compared to the number of expected cases of the related condition, when this is possible, and the reported total number of patient contacts. Striking discrepancies, if detected, may highlight some problems over others, along the complex chain of decisions and events taking place in the pharmaceutical area. Choosing drugs used to treat only or mainly single but common conditions simplifies the calculations.

Such a rough “testing of the waters” will not provide firm conclusions, but it may suggest lines of further enquiry. For instance, oral rehydration salts, chloroquine, metronidazol, aminophyllin or salbutamol, and iron salts might be chosen for a first round of exploration. If the known amounts of purchased drugs correspond to a theoretical number of outpatient contacts of, say, 0.6 per head and the reported total is of 0.5 (for all conditions), with widespread complaints of shortages of such drugs, considerable waste can be suspected. Acting to address waste bears more promise

than advocating additional drug financing. Conversely, the same computation might suggest that very small amounts of these drugs are made available and that increasing funding to purchase them is the most reasonable response. When field assessments of drug utilization are available, the same calculations can be refined. In this way, micro-findings, matched to macro-figures, improve the understanding of the situation.

The formulation of reliable estimates is made more difficult by hospital requirements, by their nature refractory to standardization. Higher hospitals consume small volumes of high-cost, sometimes brand drugs, following a variety of therapeutic approaches. Large cost differentials are therefore the rule. This contrasts with estimates related to PHC, where low-cost, generic drugs and standard treatment guidelines prevail.

The selection of medicines

Sound drug selection is a cornerstone of a progressive, equity-oriented pharmaceutical policy, even if it is often a controversial one. The experience accumulated in many countries, over decades of hard work, promoted and documented by WHO, leaves little doubt about the huge benefits, in terms of financial savings, safety of use and ease of training, that can be obtained by resolutely opting for this approach. International guidelines are available and the technical issues are certainly not too thorny. The hurdles are mainly of a political and economic nature.

The core concept of essential medicines (EM), endorsed by many countries, *“is that the use of a limited number of carefully selected medicines based on agreed clinical guidelines leads to a better supply of medicines, to more rational prescribing and to lower costs”* (WHO, 2003). The introduction of rigorous drug selection mechanisms stands some chance of success during a transition from turmoil to stability, when policy-makers may have an opportunity to restructure the pharmaceutical area in a progressive direction. For details, see the last section of this module.

As most essential drugs are available as generics in the international market, their price is usually remarkably low. The proportion of generic drugs over the total available gives a key indication about the efficiency of the system. In some cases, it helps to assess the response capacity of the health sector to shock. Some countries have shifted towards generic drugs to adjust to economic distress, or to the increased drug demand induced by HIV/AIDS. Admittedly, a truly troubled health sector may be unable to redirect its drug choices towards generics in a consistent way. However, some of the players active in the area may succeed in enforcing a preference for generic drugs, in this way benefiting the whole sector.

Lists of essential drugs, usually inspired by the model list proposed by WHO, have been developed in many health sectors. The drug selection process may be more or less structured and stringent. The content of the list offers indications about the seriousness of the exercise and the political clout of the players competing in the drug arena. Thus, instead of the few hundred drugs expected to be listed if a rigorous selection takes place, some health sectors, such as in Angola, have maintained lists of allegedly essential drugs in the order of a thousand or more items.

Often, a national drug formulary has been elaborated, specifying the drugs allowed into the country. Ministries of Health with lesser clout in the pharmaceutical area may resort to offering advice, rather than directives, to healthcare providers, about the drugs to be used. The formulary may include fairly detailed diagnostic and therapeutic guidelines. When they are technically sound, clearly spelled out, taught to health workers during their initial professional training and reinforced afterwards, formularies become very powerful tools to ensure good quality of care, even in the hands of health professionals with limited skills. Too often, however, formularies are totemic booklets available only at headquarters, often referred to in the abstract but regularly absent from health practices.

In a troubled health sector with a previous history of sound drug selection, the most common finding is a progressive erosion under multiple pressures – from inside as well as from outside. Hard-won achievements may be reversed. Both the drug formulary and the essential drug list may become outdated or just fall out of use. Less common is the symmetric situation, whereby the previous lack of rigorous drug selection capacity has been addressed under the hardship of the crisis.

A rapid check during visits to health facilities informs whether the formulary or the essential drugs list is available, known and used by health workers. The drugs available at dispensing outlets must be compared with those supposed to be available, according to list(s) and formulary, if they exist. Gross mismatches are common. Sometimes, special disease-control programmes have updated the treatment guidelines of their concern and ensured their circulation. In any case, even an updated and widely-disseminated formulary becomes a tool of marginal value, when drugs not included in it are commonplace and those included are unavailable.

Regulation in the pharmaceutical area

To be effective, a regulatory system must rely on the functioning of all its components. Even in strong health sectors, huge economic interests constantly threaten the effective regulation of the pharmaceutical area. During a protracted crisis, pharmaceutical companies, drug importers, local producers, NGOs, health workers and users collaborate to undermine regulatory functions, which in many cases have already been badly hurt by the troubles affecting the weakened state. Additionally, free-market apostles may encourage further deregulation as a break with supposed state interference, hardly an issue in many troubled health sectors. In fact, several of the distorted manifestations affecting a wrecked public sector can be addressed only by correcting its dysfunctions. Over-reliance on the magic solutions offered by the private sector, whose profit-driven side-effects are known, documented, predictable and consistently damaging even in the most favourable environment of rich developed countries, seems misplaced.

Regulatory components to be reviewed include:

Legislation. It may be outdated, incomplete and/or inconsistent, particularly in protracted crises, in which emergency-oriented governments may have little concern for regulating the pharmaceutical area. In other cases, vested interests have blocked the development of sound legislation or its enforcement. Frequently, the bargains imposed by competing lobbies have distorted the laws during their formulation, in this way making them ambiguous and in fact unenforceable.

Drug registration may have been introduced in peaceful times, but is likely to have been neglected as the crisis unfolded. The mounting pressure of obtaining drugs for the ailing health services makes the agency in charge of authorizing drug circulation increasingly reluctant to deny its clearance to medicines not included in the drug register. The usually slow and expensive procedures needed to obtain proper registration are largely bypassed by private firms, aid agencies or NGOs. Double standards between what is required from private for-profit operators and what is enforced in relation to other players, perceived by health authorities as allied to them, are rather common.

Inspection capacity is regularly compromised, as access to health facilities is limited, sanctions are not easily imposed on transgressors, incentives for inspectors are absent or perverse, and excuses for poor performance or failure to uphold standards abound in the environment.

Quality control depends on a fairly sophisticated laboratory capacity, which may have suffered because of underfunding, loss of the best cadres, lack of equipment maintenance, and shortage of reagents. On top of these problems, the application of quality controls may have shrunk with the multiplication of drug flows. This offers an attractive opportunity to suppliers of substandard or counterfeit drugs, which in these

conditions can freely circulate. Drug batches rejected in other countries on quality grounds may be dumped where no effective controls are in place. Additionally, drug shortages encourage laxity in implementing quality standards. Thus, it is not uncommon that drugs declared improper for use are cleared for consumption, or quietly diverted to supply private sellers. For more information on the circulation of substandard medicines in poor countries, see Caudron et al. (2008).

Prescribing practices, common source of concern even in well-regulated health sectors, may degenerate. Levels of prescription established according to the training of health workers are neglected, untrained or inadequately trained prescribers proliferate, informal private practice by health workers thrives. New drugs unknown to prescribers, as well as old drugs differently packaged, often in foreign languages, become available. Newcomers bring with them different treatment schedules. In-service training initiatives push for therapeutic approaches alternative to standard ones (when these existed in the first place). Briefly, prescribing habits may totally fall apart. See in *Module 7* the section on *Prescription patterns*.

Dispensing standards severely suffer, with the proliferation of selling outlets, which can grow from hundreds to thousands, as seen in Somalia. Street vendors and general shops represent additional selling channels for medicines, of particular strength in nomadic or low-density settings. Drug flows, pulverized in this way, become impossible to track, let alone to regulate.

The dire landscape of regulatory collapse just sketched above is recognizable in many protracted crises (see *Module 8* for a general discussion of regulation). The commercial nature of drugs, combined with pressing demand by users, contributes to turning the pharmaceutical area into a free-for-all playing ground. To impoverished health workers struggling to cope with dire living conditions, drugs represent in many cases the most valuable asset they control, an asset for which customers are usually prepared to pay dearly. Clearly, it is a daunting challenge to conceive realistic ways to address this situation.

Concerted measures among the main partners with a public interest (MoH, aid agencies and NGOs) may alleviate some of the problems discussed, such as those related to the drugs in circulation or to prescribing practices. Prominent NGOs, adequately encouraged by their donors, may negotiate shared lists of drugs to be imported. The existing formulary might be updated on an informal, exploratory basis, with the MoH encouraged to participate in the process. Peer pressure may later induce other NGOs to adhere to the same scheme. Many mainstream instruments, such as guidelines for drug donations, are already available and can be adopted, or adapted if necessary, without spurring much controversy. On the other hand, to win the support of private for-profit healthcare providers to shared, voluntary regulatory schemes is a totally different and tougher proposition. To improve the situation, the training of drug retailers has been suggested as a realistic alternative to the promulgation of regulatory measures impossible to enforce.

Drug procurement

To respond to different needs and mediate between competing interests, the international pharmaceutical field has evolved over time, introducing multiple options, supported by quite elaborate mechanisms. Modalities, as well as prices and quality of the goods eventually acquired, vary dramatically. To strike the right trade-off between cost containment and quality assurance implies a detailed knowledge of the market, operational stability, financial autonomy and management capacity, all scarce assets in battered health sectors.

International competitive bidding is usually the way to obtain the lowest possible prices, but implies cumbersome procedures; it is sometimes associated with delays in drug delivery and incurs the inherent risk of purchasing poor-quality products. Given the weakness of quality controls commonplace in troubled pharmaceutical

areas, the last shortcoming is serious indeed. Limited competitive bidding gives better guarantees of quality drugs, provided the purchaser knows the market and transactions are transparent. Direct purchasing is the simplest approach, indicated for small amounts of drugs, or when a drug is produced only by one firm, or in an emergency. The review of the mix of purchasing methods adopted offers important clues about overall operational efficiency.

To gather information about drug imports is invariably difficult, because of the fragmentation prevailing in protracted crises. Main channels to be considered include the following:

- **Government procurement agencies** exist in many countries. In a serious crisis, the state agency may have seen its budget savagely cut. In some cases, no imports may have taken place for years. Organizational disarray may have made the agency uncompetitive, in this way turning away potential customers.
- **International agencies**, such as UNICEF, WHO, UNFPA or the ICRC, may be among the main channels for importing drugs. MSF is specialized in emergency drug supply. According to their rules, UN agencies cannot participate in competitive bids. To accept orders, the supply arms of these agencies require advance payment, which can be covered by the mother agency, by other donors or by the health authority, like a MoH, that will eventually use the purchased drugs.
- **Firms (non-profit or low-profit)** have specialized in supplying (usually generic) low-cost drugs to poor countries. They include the International Dispensary Association (IDA), Mission Pharma and Imres, which are based in Europe, therefore subject to domestic regulatory checks. This feature may reassure potential buyers about the quality standards followed by these suppliers. The large stocks of common drugs maintained by these firms allow them to respond in many cases to emergency orders. Among NGOs, *Pharmaciens sans Frontières* is the best known. It is present in many countries, including some ravaged by war.
- **NGOs** may import drugs, sometimes through a joint purchasing mechanism, but more often autonomously. Joint ventures of NGOs have been established to supply drugs to whole regions. Since exploring this area is very labour-intensive, good estimates of NGO imports are in most cases not available. Charities obtain some of the medicines they consume through informal mechanisms, even more difficult to study.
- **Private importers** may have proliferated in the deregulated environment typical of a protracted crisis. Usually they concentrate in the main towns, dealing with brand drugs with high profit margins. A part of the drugs handled by private agents may have been smuggled from a neighbouring country. Information about private imports is among the most difficult to acquire. Even if some data are obtained, they frequently cover only a fraction of existing imports. Additionally, the variety of preparations and prices makes the consolidation of the obtained data demanding.
- **Donations** from charities or governments may represent a significant proportion of the imported drugs, at least in terms of nominal prices, particularly when a crisis has enjoyed international media coverage. During the 1992-1995 war, Bosnia and Herzegovina received 30,000 tons of drugs (against estimated needs of 1,800 tons), out of which 50–60% were inappropriate (Autier et al., 2002). The value of donated drugs is likely to be grossly inflated by donors. A well-publicised drug donation to Liberia was said to be worth US\$ 12 million. An independent valuation of the supply, using international average prices for generic medicines, computed a true value of US\$ 73,000 (Osmond, O'Connell and Bunting, 2007).

The comparative efficiency of the main purchasing agents can be assessed by studying the price paid for a set of marker drugs, in relation to average international prices. For the details, see MSH, URC and PAHO, 1995.

True Story No. 19

Responding to the collapse of drug supply systems in the Democratic Republic of the Congo

The disarray caused by state failure and conflict impacted heavily on the pharmaceutical area. Drug shortages were generalized. No regulatory functions survived. In the absence of public financing, households had to pay dearly for drugs of dubious quality. A variety of schemes, private or donor-supported, emerged to cope with this situation. An autonomous non-profit distribution agency, established in 1993 by a group of NGOs to cover the needs of an eastern region, progressively affirmed itself. It constituted a model for other equivalent agencies, later created in nine regions. To achieve economies of scale, a purchasing agency of national scope, answerable to a board including public health authorities, local supply agencies and donors, was established in 2004.

Three donors subsidized the start-up of the distribution agencies. As revenues from drug sales flow in, donor support should progressively be phased out. To reach economic self-sufficiency, expand coverage and ensure fair access to medicines, considerable hurdles have to be overcome. Although the approach remains the same across supported agencies, purchasing procedures must still conform to different donor requirements. Many donors and NGOs continue to operate alternative schemes. The purchasing power of the served communities is low. The turnover of some distribution agencies remains below the levels required to ensure financial viability. And the competition faced by non-profit distribution agencies, based mainly on price, is tough.

In 2005, the system of centralized purchasing and decentralized distribution, endorsed by the national drugs policy, supplied public health facilities and NGOs, serving about one third of the Congolese population. Its expansion to cover new areas was envisaged by involved parties. New donors, attracted by the potentially large efficiency gains of this setup, were considering joining it. Whereas declaring it an unqualified success is premature, particularly in the forbidding Congolese environment, the system bears considerable promise. Starting on a small scale as a local response to the collapse of general supply mechanisms, it has become a constituent of the recovering health sector, and an approach to be considered outside the Democratic Republic of Congo.

The time between the placement of an order and the delivery of the goods varies from a few weeks to some years, depending on the procedures followed, the cost incurred and the requirements of the donor. For big orders of cheap generic drugs, a lapse of one or two years is common. The sound forward programming demanded by this time lag is ill-adjusted to an unpredictable environment. Reliance on short notice procurement with its attached soaring costs is therefore the rule in chronic emergencies. Ideally, a balanced combination of long-term and short-term purchasing capacity is called for. The responsibility for drug procurement could be split between partners with different expertise.

The way drug imports have to be computed depends on the available source data. Drug imports may be aggregated in monetary terms, or by weight or by volume

units, such as containers or kits. Sometimes, no information at all is available. Unsorted drugs, common with donations, pose additional problems. With so many channels for the drugs that enter a disrupted country, legally and illegally, a proper compilation of their features, by pharmaceutical contents and preparation, is never a feasible option. Existing reports are eloquent about the uncertainties affecting data related to drugs.

Developing countries depend on selected harbours (not always in-country) for their overseas imports. In many cases, dedicated drug storage facilities have been located in the proximity of the main entry ports. Landlocked countries may diversify drug entry across many border posts. In a war-affected context, smuggling may become even more important than regular imports. And where drug inflows are generous, outward smuggling may play a central role in causing drug shortages. A review of the internal distribution of medicines, by detecting uneven patterns, with border areas (particularly those with richer countries) privileged in relation to the rest, may raise legitimate suspicions about the true destination of these medicines.

Public and private operators in the pharmaceutical area

In many countries and virtually in all affluent ones, the pharmaceutical area is dominated by private, for-profit operators, involved in the production, promotion, distribution and sale of drugs, financed by a mix of public and private contributions, and regulated, more or less strictly, by government agencies.

In some poor countries, crippled market capacity and widespread poverty assign to the public sector a much wider responsibility. Hence, it is not unusual to find that the pharmaceutical area is mainly financed by public (internal and external) funds, with drugs procured through state agencies and distributed through public channels. Even in situations of collapse of these mechanisms, medicines can be managed by NGOs, that is by not-for-profit, partially publicly-funded agents.

The interplay of public and private actors is dynamic. Each side reacts to the behaviour of the other. A performing public arm minimizes the profit-induced faults of the private one. A wrecked public system encourages the commoditization of drugs. Private operators may supplement inadequate public drug supplies in limited, privileged settings, but are obviously neither equipped, nor motivated, to take over other crucial tasks in the pharmaceutical domain.

To throw light on the pharmaceutical sub-sector, the mutual division of tasks and responsibilities between actors is another issue to be studied. Again, the patterns prevailing in the private for-profit part of the sub-sector may be unknown, the interface among the two components of the area poorly functioning, the relationship confrontational, or more often of ambiguous complicity. To compound the picture, ideological preferences may induce decision-makers to assign responsibilities disproportionate to actual implementing capacity to either one arm or the other.

Domestic pharmaceutical production

Local drug production, both public and private, is usually severely hampered by the disruption affecting the country. In some cases, such as in Afghanistan, production stopped for years. Financial constraints, management disarray, shortages of imported raw materials and spare parts, the flight of top technical staff, lack of replacement of obsolete equipment, direct war destruction and looting are among the factors putting local production in jeopardy.

Even if local production survives in such unfavourable conditions, operational costs are likely to soar to a level where its outputs are undercut by international competitors. Additionally, the protectionist barriers enjoyed by local producers may crumble, in this way crudely exposing their weak competitive position. When this is

the case, private entrepreneurs are usually disinterested in getting involved in local drug production.

In some cases, local production of pharmaceuticals has been pursued despite the country's small population and reduced drug consumption, with the ensuing diseconomies of scale, which might encourage its abandonment even in the most favourable operational conditions. Angola and Afghanistan are cases in point of this inefficient approach.

The quick revival of local production is usually advocated by insiders as one of the cornerstones of a reconstruction strategy. Before endorsing such an approach, its costs and foreseen returns must be thoroughly assessed. In many cases, shelving this option in favour of full reliance on open-market procurement may hurt national pride, but offers obvious advantages, not only in terms of financial savings. In fact, it frees internal capacity and attention, scarce assets in a troubled environment but crucial to a successful reconstruction, to support other measures, which cannot be addressed through imports (such as Human Resources Development).

Special programmes and medicines

Many special programmes, in view of ensuring a steady supply and controlling their use, import and manage the drugs related to their area of intervention. Additionally, some items requiring special care, such as vaccines, are managed apart from mainstream drug supplies. The number of special drug management schemes increases with the disintegration of general supply systems and the proliferation of special programmes. With their funding levels progressively reduced, standard drug management systems see their responsibilities shrinking. If added together, the operational costs of these multiple drug supply systems are usually large. In countries with forbidding terrains, the massive costs incurred in supplying multiple, vast networks of special service outlets may suck away a large share of available financing.

Medicines managed by special programmes are particularly prone to escape the scrutiny of standard reporting systems. The central medical store, for instance, may be unaware of imports of vaccines or of family-planning items. Alertness is always in order to control under-reporting.

Special programmes to be scrutinized in relation to autonomous drug arrangements include EPI, tuberculosis, leprosy, malaria, diarrhoeal diseases, HIV/AIDS, sexually-transmitted diseases, family planning. The drugs managed by these programmes may account for a sizeable proportion of the total. To compute their monetary value is usually cumbersome, due to assorted budget formats, in-kind drug transactions, and financial operations sometimes the responsibility of international agencies based abroad. Additionally, programme managers, aware of their relative privilege in relation to general services, may react defensively towards attempts at quantifying the resources they control.

Internal distribution

Warehousing capacity evolves in response to the logistic constraints induced by the crisis. As public-sector capacity suffers, other players try to replace it. Emergency-oriented agencies, such as WFP and UNICEF, have implanted substantive storage and distribution networks and earned solid experience in many protracted crises. NGOs are also frequently involved in this area, sometimes rehabilitating public facilities and temporarily managing them, sometimes hiring storage facilities from private owners. Ambiguous arrangements, with unclear property titles and blurred responsibilities, are common. Similarly, many public and private agents transport drugs until the service delivery point. Insecurity, poor roads and inadequate management raise transport costs and make supplies erratic.

In an environment impoverished by war, the high economic value of drugs, their easy exportability, the healthcare needs of the military of all sides, turn drugs into an enticing military target, pursued for consumption as well as a source of revenue. Soldiers, health workers and the populace may all take advantage of a drop in security conditions to loot medicines.

Aspects to be studied include:

- **Storage capacity:** location, sizing, physical and security conditions of the existing warehouses, disaggregated by ownership (present and future). The adequateness of the warehousing network to handle present and projected drug supplies should be assessed. Important gaps, such as provinces or regions lacking adequate facilities, must be identified. The rehabilitation needs of the existing outlets should be quantified, alongside the investment needed to overhaul the network to acceptable levels of functioning. Beyond physical conditions, the management of drug stocks is often a cause of serious concern. Poor storage standards, expired batches, deteriorated items, poor or absent records are very common findings.
- **Transport capacity.** Where private transport operators exist and are reliable, this aspect relates mainly to the incurred costs. In many situations, however, private transport firms cannot satisfactorily ensure drug supplies across the whole country and need to be complemented by public operators. Usually, international agencies and NGOs arrange for the transport of the bulk of the supplies in the health sector, particularly during the intensive phases of the conflict or in contested areas, in which they can enjoy privileged security conditions. Air transport is favoured by international agencies and NGOs, due to speed and security concerns. The incurred costs, however, can be extremely high, particularly in relation to bulky and heavy preparations, such as intravenous fluids. Well-endowed operations maintained over long periods with heavy reliance on air transport may see a dominant share of their funding absorbed by related overheads, sometimes attaining levels disproportionate to the value of the transported goods.
- **Distribution modalities.** In many situations, particularly when paid for by donors, medicines are supplied free of charge, that is as valueless items, to health authorities or facilities that dispense them. Thus, under the so called “*push*” system, perverse incentives take root and encourage waste. Cost considerations are therefore kept at higher levels, within the narrow circle of public donors, without flowing down along the supply chain. Most allocative decisions are taken by central decision-makers, belonging to the MoH, the MoF, donor agencies or NGOs. Institutions dispensing drugs are to some extent the passive beneficiaries, more or less privileged according to overall availability, ease of delivery and capacity to lobby for additional supply. Unsurprisingly, tertiary hospitals are able to obtain disproportionate shares of total stocks.

The alternative way to distribute medicines, or the “*pull*” system, is to charge dispensing institutions fully or partially for their value. The main criterion ruling the distribution of available drugs becomes the financing capacity of purchasing bodies. Charities are used to this second modality of drug supply, usually at micro-level. Additionally, revolving funds have been introduced in a variety of situations, including in disrupted health sectors, mainly on a small or medium scale. Large countrywide schemes are uncommon. The risk of commoditizing drugs, inherent in any pull system, is magnified during a crisis by the collapse of supervisory and regulatory functions.

- **Distribution by region and level of care.** When available data allow for the study of this aspect (unfortunately a rare event), important imbalances are usually recognizable. Secure regions or areas near entry ports or borders may be preferred on logistic grounds. Also, areas supporting the government are usually

privileged. Tertiary hospitals take the lion's share of the drugs allocated to a province, and capitals tend to be advantaged in relation to the rest of the country. Given that many supplies are already earmarked to specific projects, regions or levels of care, the correction of these imbalances depends to a large extent on the existence of unallocated drug buffers, to be assigned to fill or at least to minimize the identified gaps.

In many cases, the introduction of a pooled financing line to address emergencies and supply gaps is a promising option to be considered. To realize its potential, this pool needs to be backed by an adequate monitoring capacity, so as to assign buffer drugs according to the true needs and not based on louder or more powerful complaints (which is the most common scenario).

- **Turnover cycles.** The time lag between the arrival in country of a drug batch and its consumption is influenced by many factors, not all controlled by actors within the health sector. Given widespread insecurity and difficult roads, long periods of storage at some intermediate level in the distribution chain are common. To reduce waste, shorter cycles should be pursued within existing logistic constraints.
- **Dispensing outlets.** Fully-fledged pharmacies are usually concentrated in urban, relatively more affluent areas. In some countries, alongside privately-owned pharmacies, the public sector manages its own network, composed of stand-alone pharmacies and of dispensing outlets inside health facilities. Public-sector pharmacies dealing with low-cost generic drugs serve customers of a different nature than for-profit pharmacies selling expensive brand drugs. When the drug field is segmented in this way, competition between private and public operators is therefore averted. The mapping of dispensing outlets across country (when the available information allows for it) helps to study patterns of physical access to drugs. To study financial access, the cost of the medicines sold by the various operators must be considered.

Supply schemes by ration kits

In many countries, the EM concept has been backed by programmes designed to guarantee that subsets of medicines essential for PHC delivery, packaged into standard kits, are available at the service delivery point. To achieve that goal, vertical supply structures have been put in place in many health sectors. Kit schemes were designed with the assumption that they would be complemented by standard systems able to distribute the drugs not included in the kits and to supply supplementary amounts of medicines when necessary. In many protracted crises, kits systems have become the main and even the sole drug suppliers for PHC facilities. This shift has exposed their lack of flexibility, a shortcoming that has attracted serious criticism. In some particularly troubled health sectors, such as Angola or Southern Sudan, kit systems backed by different donors and adopting different composition and distribution criteria have multiplied. Needless to say, this fragmentation undermines the potential benefits of the system.

Field experience suggests that the kit system offers several logistic advantages. In troubled environments, its attractiveness tends to increase, while its drawbacks tend to pale. The kit system offers simplicity, objective if rough distribution criteria, improved security, easier and safer storage, predictability. It protects supplies to PHC providers against powerful competitors. Additionally, even if it is not explicitly acknowledged, it forces a measure of rationing that may discourage over-prescription. The kit system generates simple records, easy to analyse. In many health sectors, data related to drug kits are the only ones available when supplies are studied. Given the low cost of the basic generic drugs they contain, the kits are likely to account for only a fraction of the total expense of medicines.

Each EM programme must be assessed by its main components, to check whether they are sound. In fact, beyond the adoption of some general principles, programmes can diverge in details that crucially affect their effectiveness. For instance, the composition of the kits that result may be more or less appropriate to the common conditions to be treated at PHC level, to the skills of the prescribers and to the categories of health facility. Procurement may be more or less efficient, depending on the prices charged by suppliers, the time-lag between orders and deliveries, and the quality of the medicines included in the kits.

Distribution criteria may relate to population (a problematic norm in unstable conditions) or to outpatient turnouts (in principle, a satisfactory criterion, but an awkward one when reports are frequently missing). Given the inconsistencies usually found in the classification of health facilities, even the attribution of types of kit may be flawed. A convenient alternative is to condition the type of supplied kit upon the category of the most skilled prescriber.

A common finding in protracted crises is the thriving of the kit supply system, in the absence of the elements supposed to complement it. Thus, no or little training about rational drug use may be under way, no information about disease patterns and patient loads is collected, and no standard supply system is in place to correct the rigidity of the kit mechanism. When this imbalance between supply and other functions takes place, results are predictably poor.

Before kit schemes are downsized or discarded, as frequently advocated by critics, a dramatic overhaul of standard supply systems is called for. In most troubled health sectors, kit supply schemes are likely to play a dominant role in ensuring regular supplies of basic medicines.

Availability of medicines

The availability of drugs at the service delivery point is the end result of a long and complex chain, influenced by many players. Information about drug availability is in most instances anecdotal, usually expressed in dramatic overtones, and unreliable, because of the obvious interests of reporting sources. To obtain a trustworthy picture, structured surveys are called for. Well-known, robust and relatively easy to apply (and if necessary to adapt to specific field conditions) instruments are available (MSH, URC and PAHO, 1995).

Many NGOs, familiar with these tools, carry out these surveys on their own. Provided definitions and collecting methods are adhered to, the available pieces of evidence can be collated into an instructive patchwork, particularly when a variety of facilities has been studied. The outcome is likely to be very uneven, with well-supplied facilities alongside neglected ones. Differences in drug availability can be very large indeed, with secure, mainly urban areas awash with drugs supposed to supply the whole health network and not distributed because of logistic or security constraints. Given the wide range of features usually found, averages are often less informative than the proportion of facilities found in some respect performing below acceptable standards.

Preferential channels are in this regard as important as the personal initiatives of concerned health workers, who can devote serious effort to obtain medicines, particularly when they are sold for a price (which is the most common situation). The impressive expansion of service outputs registered in post-war Mozambique might well have been fuelled by a combination of generous drug supplies (obtained through competitive procurement) and their vigorous peripheral distribution, propped up by health workers committed to tap the profit opportunity offered by the deregulated environment. A formal “*push*” system was therefore complemented by an informal “*pull*” one.

Well-supplied facilities do not always translate into the satisfactory use of medicines. Wary of shortages and unsure about the next supply, drug managers are sometimes

inclined to over-ration available stocks. Interviews of users are always needed to check whether drugs are actually dispensed to them.

The finding of very uneven availability helps to strengthen the estimates of total drug requirements. In many cases, redistribution without increased supplies might go a long way towards addressing the perceived drug shortage. This assessment is possible only when local data can be assembled into a picture of the whole situation. In many cases, the field is too fragmented to allow for it.

Flawed distribution relates not only to quantities, but also to the type of the supplied medicines. Hence, the discovery in a health centre of drugs supposed to be used only in hospitals is rather common. Surveying for the presence of the wrong drugs is as important as looking for the availability of the right ones.

Erratic supply lines impose studies over fairly long periods of time. Episodes of absolute lack of drugs may be followed by large supplies (perhaps of drugs approaching their expiry date), as communications are re-established. Given the poor storage capacity of PHC facilities, these peaks of wealth after spells of dearth may only encourage over-prescription and waste.

Waste

Substantial even in developed health sectors, where a loss of 30% can be considered acceptable, drug waste may attain extraordinary levels in disrupted contexts. Poor warehousing, crippled transport systems, ambushes and looting, landmines, pilfering, expiration, over-prescription, poor patient compliance, all conspire against the effective use of medicines by those needing them. Given the variety of factors affecting the drug chain and the complexity of studying it in troubled environments, studies of waste are rare. Nonetheless, by pointing to the main problems that can be realistically addressed in a difficult situation, they could offer substantive returns.

Waste is often downplayed or altogether ignored, as an intractable problem not deserving serious efforts to redress. The lack of reliable information in relation to it compounds the interest of different parties in looking elsewhere (usually to under-financing) to explain drug scarcity. A summary tracking study of the fate of a few selected drugs, from entry harbour to the end-user, can help to raise awareness of the enormous potential for saving through better warehousing or prescribing.

Human resources in the pharmaceutical area

To function properly, the pharmaceutical area needs a mix of economic, managerial, pharmaceutical, chemical, industrial, medical, legal and logistical expertise. In most cases, pharmacists are the dominant group in the area, in collaboration and often in competition with doctors. For the other cadres mentioned, skills are either learned by doing, or remain unavailable.

In many countries where higher-level pharmacy schools are not established, or with the goal of expanding the ranks of dispensing staff, mid-level cadres are trained, usually under a stripped-down pharmacy-training programme. In many locations, the pharmacy staff come from the facility's numerate auxiliary workers, lack specific pharmaceutical training and are only responsible for secure storage and safe dispensing. As regulation capacity weakens, new untrained or inappropriately trained actors enter the field. The proliferation of drug selling outlets observed in many troubled health sectors increases the demand for qualified pharmacists, who concentrate in towns and on the most lucrative portion of the drug market.

When qualified pharmacists are scarce, many public-sector cadres acquire private jobs, associated with their post. After losing in this way its most qualified cadres, the public arm of the pharmaceutical area is run by those who remained in place, often less experienced and qualified, and usually unmotivated. This dire state of affairs

echoes that of the general civil service, only at more severe levels, because of the big money involved in the pharmaceutical field.

To anticipate this crisis in the public sector, the accelerated and expanded training of pharmacy-related cadres is worth considering in every context where they are scarce or even when their ranks look fairly adequate (in fact, they will become scarce as soon as private outlets boom). A second measure may be related to the recruitment of trained cadres, other than pharmacists. This is possible only if salary levels are competitive in relation to market alternatives. Indeed, paying market rates to those cadres, who are in charge of high-value goods with a heavy impact on health service delivery, seems sensible. Given the reduced number of workers involved, the salary bill will always be modest in comparison with the cost of the medicines involved. Unfortunately, in many cases civil-service regulations prevent the addressing of these problems. Nonetheless, cadres holding privileged power positions are able to overcome paper constraints and even to take advantage of them. Rather than blaming their “corrupt” behaviour, one asks whether unrealistic rules should not be held responsible for it in the first place.

Selected indicators

The study of the pharmaceutical area calls for the collection of many indicators, a selection of which is presented in the following box. In health sectors in crisis, few or none of them will be available. Or the indicators at hand, will be mostly outdated, or refer to restricted settings. The list on the facing page is condensed and modified from MSH, URC and PAHO (1995), to which the reader is referred for more information. Most indicators are standardized, and have been in use for decades.

About the difficulties of collecting meaningful, reliable indicators in disrupted environments, see *Module 2* and *Annex 2*. A comprehensive review of the pharmaceutical area would imply the collection of a broad range of indicators, like those presented here. The detailed study of aspects of particular interest implies the addition of other indicators.

Restructuring the pharmaceutical area

Translating into positive practice the insights gathered from a summary review of the pharmaceutical area, carried along the lines sketched in this module, is a daunting challenge. Decision-makers are vulnerable to political and economic pressures. Controversy and public outrage are easily spurred by involved parties. The benefits of change emerge slowly, whereas shortcomings are quickly recognized and vocally denounced by opponents. Difficulties notwithstanding, restructuring the pharmaceutical area bears the promise of huge benefits in terms of financial savings, expansion of service coverage, better quality of care, reduction of harmful practices and improved credibility of health services.

Paradoxically, in a battered health sector powerful incentives push for the restructuring of the area, which becomes feasible to an extent denied in stable situations. Factors encouraging bold measures may include: a) the financial squeeze caused by the crisis, which translates into severe drug shortages; these may be exacerbated by b) the collapse of local production, which may remove a powerful interest group, hostile to radical change; c) the declining interest of big international firms for a contracting drug market; d) weakening government controls over the pharmaceutical area; and e) the opening of the field to new entrants, such as large NGOs, used to purchasing drugs through open-market mechanisms.

Many of the needed reform measures, such as competitive procurement, may be introduced at sector level by a few key decision-makers, even in wartime. Additionally, the experience gained in this area can spearhead initiatives in other areas. In sum, progress in the pharmaceutical area is both possible and extremely

Selected indicators for the study of the pharmaceutical area**A. POLICY, LEGISLATION AND REGULATION**

1. Existence of a national drugs policy approved by the government
2. Existence of comprehensive drug control legislation, regulations and enforcement agencies
3. Number of drug product quality laboratory tests carried out during the past year
4. Existence of a National Drug Formulary List
5. Number of unique drug products on the National Drug Formulary List
6. Existence of an official manual, based on the National Drug Formulary List, providing basic drug information to prescribers, revised and published within the last five years
7. Percentage of health facilities visited with the most current edition of an official manual based on the National Drug Formulary List

B. FINANCING AND EXPENDITURE

1. Expenditure on pharmaceuticals, US\$ per capita per year, by funding sources (public domestic, donors and private) and by region, rural/urban and level of care
2. Percentage of total expenditure for pharmaceuticals, over total healthcare expenditure

C. PHARMACEUTICAL PROCUREMENT

1. Percentage by value of drugs purchased through a central procurement system
2. Percentage of average international price paid for last regular procurement of a set of marker drugs
3. Value of drugs purchased through competitive tender, over total procured
4. Total value (adjusted using shadow prices) of drug donations in the past year

D. PHARMACEUTICAL LOGISTICS

1. Average percentage of stock records that corresponds with physical counts for a set of marker drugs in warehouses and health facilities
2. Drug availability, expressed as average percentage of a set of unexpired marker drugs available in warehouses and health facilities
3. Drug distribution, by region, rural/urban, ownership of the outlet and level of care
4. Number and relative weight of mechanisms supplying medicines to health outlets, by level of care
5. Proportion of drugs wasted (damaged, stolen, expired, mis-prescribed, misused etc.) along the supply chain

E. PATIENT ACCESS AND DRUG UTILIZATION

1. Number of drug retail outlets, split by public and private (for-profit and not-for-profit); private outlets split by licensed and not
2. Average number of drugs prescribed per curative outpatient encounter
3. Percentage of prescriptions including injections
4. Percentage of prescriptions including antibiotics
5. Percentage of prescribed drugs presented for dispensing that are actually dispensed in health facilities
6. Percentage of prescriptions in accordance with treatment guidelines
7. Average drug cost per encounter, split by public and private retail outlet

rewarding in terms of health service performance. It should rank high among the concerns of stakeholders.

Restructuring the pharmaceutical area is a long-term endeavour, which can be articulated into several steps:

1. **Carry out a thorough situation analysis.** This includes the mapping of interests, perceptions, agendas, commitments and capacities of the main stakeholders. The main weaknesses of the sub-sector must be identified and measures to address them considered. The political and economic hurdles that may obstruct the restructuring of the area must be recognized. The way the pharmaceutical area was structured before the crisis and evolved during it is worth considering. Valuable elements having survived the disruption may be singled out as the foundations of a recovering sub-sector. New arrangements may have taken root during the crisis, providing building blocks for the future pharmaceutical area. When very little of worth can be salvaged, and a new architecture must be built from scratch, innovative approaches may be adopted without serious resistance.
2. **Discuss with key stakeholders the main features of a national drugs policy** and negotiate progressively more robust versions of it. Involved players must be prepared to face hurdles and crises positively. Weak health authorities may lack the clout to impose the policy they choose, or to negotiate it aggressively with powerful partners. Thus, patient advocacy with interested partners, flexibility, realism, peer pressure and informal arrangements may be needed to build an interim platform, on which the future policy may take root.
3. **Consolidate the elements of a future pharmaceutical policy already in place,** in this way exposing participants to features, implications and advantages of the restructuring. Leave room for experimentation. Anticipate obstacles and delays. Maintaining some diversity within the area, until the instruments devoted to materialize the drugs policy perform adequately, may represent a sensible option, which protects the system from unforeseen shocks and offers insights about the comparative advantage of different approaches. Among the elements deserving attention at the start of the process, in many contexts some will stand out:
 - Streamlining procurement and supply systems, in a way that operational costs are contained and access to essential medicines improves;
 - Integrating disconnected financing flows into comprehensive ones;
 - Elaborating an essential drugs list and treatment guidelines for most common conditions.
4. **Formalize the drugs policy** and negotiate with participants a strategic plan to materialize it. Ensure that the emerging pharmaceutical policy is coherent with the overall health policy chosen for the recovering health sector, and is compatible with the broad political and economic environment. Lay the grounds for the strengthening or if necessary the establishment of the institutions tasked with implementing the strategic plan. Estimate the capacity and resource implications of implementing the plan.
5. **Continuously monitor events, developments and opportunities,** so that problems are recognized early and appropriate measures are timely taken. Disseminate findings among concerned parties, including influential players outside the health field. Try to anticipate backlashes from politicians, journalists, activists, and/or professional lobbies by feeding them with timely, accurate and understandable information.

Recommended Reading

Kanji N et al. (1992). ***Drugs Policy in Developing Countries***. London, Zed Books.

Despite its age, an excellent introduction to the field, which reviews the foundations of rational drugs policies, their emergence during the 1980s, the progress registered since then, and the hurdles met in the increasing free-market environment of the 1990s. The roles of the major players (particularly of WHO) on the world policy stage are discussed. Several cases of progressive national drugs policies are described. Useful to appreciate in full the mountain to be climbed by decision-makers committed to make effective medicines available and affordable to the users in impoverished countries.

Management Sciences for Health (MSH), University Research Corporation (URC) and Pan American Health Organization (PAHO) (1995). ***Rapid pharmaceutical management assessment: an indicator-based approach***. Arlington, VA, Management Sciences for Health. Available online at: www.msh.org, accessed 17 September 2008.

A valuable reference text, which defines and discusses a set of key indicators, and provides practical guidelines to design and carry out an assessment of the pharmaceutical area. Examples of the forms and questionnaires to be used are included. Helpful not only for drugs managers and analysts, but also for readers interested in understanding the meaning of a particular indicator, and the way it is collected and computed.

Quick JD et al., eds. (1997). ***Managing drug supply: the selection, procurement, distribution and use of pharmaceuticals***. 2nd ed. West Hartford, CT, Kumarian Press.

Monumental work, covering in detail a complex and diverse field. The reader is taken through all aspects of drug supply: policy and legal framework, drug management cycle and management support systems. This classic manual brings together a wealth of international and country experiences. The many approaches adopted in a variety of political, economic and organizational settings are empirically appraised, highlighting their strengths, weaknesses and side-effects. A book that everybody working in the pharmaceutical area and in health policy-making should study and keep at hand.

World Health Organization. ***WHO Policy Perspectives on Medicines series***. Available online at: <http://www.who.int/medicines/publications/policyperspectives/en/index.html>, accessed 17 September 2008.

Very informative series, composed of short updated reviews of important topics. Antimicrobial resistance, equitable access to essential medicines, medicines regulation, and formulating a national drugs policy are themes covered by its issues.

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Mapping actors and activities in the Southern Sudanese pharmaceutical area

Annex 11

Given the fragmentation that characterizes most pharmaceutical areas, mapping actors and activities under way and in the pipeline is necessary to start assembling a comprehensive picture. No policy formulation process should start without taking this step. The following matrix offers an overview of the main participants and of their respective roles in the pharmaceutical area of Southern Sudan at the beginning of 2006. This map was compiled by WHO staff, through contacts with informants and by collating discrete pieces of information. Not all actors were included. In particular, due to incomplete feedback, only some of the over seventy NGOs involved in the health sector are presented. And many blank spaces betray the limitations of the picture assembled in this way. Given the rapid pace of change characterizing Southern Sudan, these findings quickly become obsolete if they are not frequently revisited and updated.

Shortcomings notwithstanding, the assembling of such a map throws light on several important features of the pharmaceutical area, and points to the main issues that must be explored before proceeding in the policy debate. The process of gathering information needed to build the map contributed to clarify poorly-understood problems, and to raise awareness among stakeholders. Additionally, this map, if properly circulated, would help actors to become true partners, by informing each of them about what was being done by the others, and in which areas beneficial alliances might be forged.

The matrix is an example of a concise way of presenting information related to a real-life pharmaceutical area, taken at a crucial juncture, during the transition from war to peace and while the basic elements of a health administration were being laid down. The chosen layout might be adapted to other health sectors in crisis, according to local conditions and needs.

Introductory notes to Southern Sudan and its health sector

In early 2006, Southern Sudan was emerging from protracted conflict, following the signing in January 2005 of a peace agreement between the central government in Khartoum and the Sudan People's Liberation Army/Movement (SPLA/M). This uneasy peace, marked by occasional tensions and relapses to violence, and by concomitant crises elsewhere in Sudan, particularly in Darfur, allowed the SPLM to start implanting the basic elements of an autonomous government for Southern Sudan. Meanwhile, garrison towns previously controlled by Khartoum were brought into the unified administration.

Southern Sudan was one of the poorest regions in the world. It lacked roads, communications and basic economic infrastructure. The climate is harsh: seasonal floods impede transports and restrain physical investment. Education levels were dismally low. The three southern states were more developed than the rest of the region. The northern part of Southern Sudan, however, had substantive oil reserves. The revenues from oil extraction were equally divided between Khartoum and the Southern government.

The health status was dramatically poor. Most tropical diseases showed record levels of transmission. Rudimentary health services were provided by a multitude of international agencies and NGOs. Service delivery costs were extremely high, due to logistic constraints and operational fragmentation. The existing health infrastructure was grossly inadequate, with health facilities, warehouses, training outlets and offices that were, if not derelict, reduced in number, undersized and unevenly distributed. Access to health care was limited, particularly in the northern part of the region.

Newly-appointed health authorities were struggling to lay the foundations of a unified health system. Capacity constraints were crushing. Most skilled health cadres were expatriates. Management systems were absent, or in their infancy. Donors pledged sizeable funds to support the recovery of the Southern Sudanese health sector, but their absorption was poor.

For additional information and references on the Southern Sudanese health sector, see *Module 14. Resources*.

Mapping actors and activities in the Southern Sudanese pharmaceutical area

Update April 2006

Prepared by: Isabel Soares and Giorgio Cometto

Actors	Policy formulation and coordination	Regulation	Financing	Planning drug imports	Human resources development	Procurement, storage and distribution	Rational use and dispensing of medicines
Ministry of Health of the Government of South Sudan (MoH of GoSS)	The Directorate for Pharmaceuticals and Curative Services has formulated in 2005 a National Drug Policy for South Sudan. Doubts about the ambition, realism and appropriateness of the policy have been voiced by partners (not involved in its formulation).	Envisaged by the new pharmaceutical policy through a complex set of committees, regulatory bodies and directorates, but not implemented yet.	The 2005 budget did not cover drugs. Budget for 2006 not published yet. About US\$ 20 million will be available for drug procurement in 2006–2008, through the Multi- Donor Trust Fund (MDTF) – see below.	Never done before, at the beginning it will most likely happen in the form of PHC-kits and emergency drug kits for hospitals. The policy was developed apart from any effort aimed at preparing an operational procurement plan.	Formal training programmes for pharmacy staff are not available.	The pharmaceutical policy envisages a centrally managed procurement system, with a central warehouse in Juba and several regional / state warehouses. Stock management and distribution most likely will be contracted out to PSF (see below).	A draft essential drugs list, modelled on the WHO's list, was presented to sector partners in 2006. Treatment guidelines for PHC-Centres and hospitals are being developed. PHC-Units guidelines have been finalized and approved.
Federal Ministry of Health of the Government of Sudan (controlling the former garrison towns, phased out in 2006)	Central policy existing, but not enforced in former garrison towns.	Reportedly, Khartoum enforces strict requirements for drug imports. Flourishing private sector in the former garrison towns, only partially regulated.	Global budget unknown. A revolving drug fund (RDF) was put in place in 2003. The replenishment of the revolving drug fund was inadequate, due to corrupt practices.	For the RDF, based on orders placed by health facilities. Not known for emergency drugs.	No training of pharmaceutical cadres was going on in former garrison towns.	Procurement through the central agency in Khartoum. The RDF bought drugs at a subsidized price and sold them with a 25% profit margin. Emergency drugs were procured apart from the RDF.	
Multi- Donor Trust Fund (MDTF), administered by the World Bank; funded by donors (1/3) and the GoSS (2/3).	The MDTF is supposed to review the pharmaceutical policy and translate it into concrete development plans.		US\$ 5.7 million in 2006 of emergency drugs, procured mostly for former garrison towns. UNICEF was in charge of procurement and distribution.	Under the MDTF, technical assistance will be posted to the MoH Pharmaceutical Department.		The development of procurement systems and facilities is to be supported by the MDTF (US\$ 8 million).	

Actors	Policy formulation and coordination	Regulation	Financing	Planning drug imports	Human resources development	Procurement, storage and distribution	Rational use and dispensing of medicines
UNICEF	<p>The content of UNICEF drug kits is periodically reviewed. UNICEF draws up agreements with partners, based on project proposals submitted by them.</p> <p>UNICEF also provides drugs to respond to disease outbreaks, upon technical advice from WHO.</p>	UNICEF health officers directly supervise health service delivery. The officers also provide technical guidance to agencies within their focus areas.	Drug expenditure has been in the annual range of US\$ 300,000–700,000 in recent years. UNICEF procures over 90% of the vaccines used in South Sudan. An estimated US\$ 50 000 is spent on emergency drugs.	Kits for 1,000 outpatient contacts cover 1/3 (about 300) of existing PHC-Units. UNICEF undertakes an annual planning exercise with partners. A procurement plan is agreed with UNIPAC (the UN procurement agency in Copenhagen).	UNICEF supports the training of health workers and cold chain assistants in EPI supplies management.	Orders are split into three batches and stored in 5 well-ventilated regional warehouses, where partners collect the kits. The UNICEF procurement system might be phased out as the new one supported by the MDTF becomes operational. UNICEF will however remain in charge of procuring vaccines.	UNICEF directly supervises health facilities, although on an irregular and infrequent basis. Monthly morbidity reports are produced by partners, without specific focus on the use of medicines.
World Health Organization (WHO)	WHO was unable to assist the MoH in the development of the policy, as originally requested. Later, WHO refrained from endorsing the pharmaceutical policy of the MoH.				WHO is assisting the MoH in the development of a comprehensive HR policy, including the development of a pharmacy cadre.		WHO participated in the formulation of the treatment guidelines and in the development of the essential drugs list.
	WHO supports disease-control programmes (sleeping sickness, malaria, leishmaniasis, onchocerciasis, leprosy and tuberculosis).				In-service training, inclusive of drug utilization.	WHO purchases and distributes to implementing partners (NGOs) the drugs for the respective disease-control programs.	Supported the preparation of guidelines.
Global Fund against AIDS, Tuberculosis and Malaria (GFATM), managed by UNDP			About US\$ 2 million per year for malaria, tuberculosis and HIV-related drugs.	Based on yearly projections of sub-recipients implementing the program (NGOs, FBOs).	In-service training on disease management, contracted out to WHO and Population Services International.	Contracted out to PSF (sub-recipient of the three grants for the procurement component).	

Actors	Policy formulation and coordination	Regulation	Financing	Planning drug imports	Human resources development	Procurement, storage and distribution	Rational use and dispensing of medicines
Pharmaciens sans Frontières, Comité International (PSF-CI)	PSF-CI participated in the development of the pharmaceutical policy and was involved in discussions on the procurement component of the MDTF Health Umbrella Programme.	PSF-CI has internal procedures to ensure the quality, safety and efficacy of medicines, according to international standards.	Procurement agent for ECHO- and GFAMT-funded service providers, amounting to approximately US\$ 3 million of drugs and procurement services in 2005. Currently PSF cannot work directly with partners outside these two funding mechanisms.	Planning is based on NGO requests, submitted 4-6 times a year, based on consumption and disease patterns. Monitoring criteria: monthly report on stocks, diagnosed conditions and prescriptions; field visits twice a year; standard indicators.	PSF-CI provides very basic on-the-job training on rational use and stock management.	Procurement follows WHO cost-effectiveness and quality principles. Drugs are supplied in bulk or in kits of variable content, adjusted to NGO requests/needs (checked by PSF). Drugs are delivered twice a year.	Guidelines on stock management and rational drug use have recently been developed.
MSF (France, Spain, Belgium, Holland, Switzerland)	The MSF family follows a standard policy in relation to choice of drugs, distribution and charges. MSF is supposed to address the emergency needs of: (a) Health facilities; (b) Vertical programs (sleeping sickness, kala-azar, tuberculosis); (c) Pure emergency relief.	The MSF family follows common guidelines and protocols (mostly in accordance with WHO's).	More than 50% of funds are raised from MSF own sources. Donors include DFID-UK, JOA-UK, CDB-Swiss, other MSF sections (Italy, USA, Austria). Cost-sharing is incompatible with MSF policy.	Requests are received from the field, then reviewed and approved by each MSF head office in Nairobi. Orders are sent to the respective MSF HQs.	PSF-CI provides very basic on-the-job training on rational use and stock management. MSF-CH (Swiss) provides on-the-job training on drug management, medical diagnosis and treatment. MSF-CH employs a pharmacist for training and supervision. There is no collaboration with other MSF sections in this domain.	Orders are sent either to the MSF Logistics Centre in Nairobi or to the Centrale Humanitaire Medicaux-Pharmaceutique (CHMP), which has offices and warehouses in Nairobi, and from there to the field.	The MSF family follows its own treatment guidelines, which are mostly in accordance with WHO's. Each MSF section then adjusts guidelines to local context and project.
International Committee of the Red Cross (ICRC)	The internal global policy on drugs is annually reviewed and updated.		No updated figures are available for Lokichokio hospital (being phased out). Juba hospital requires drugs for US\$400,000.	Yearly plan and 6-monthly and bi-monthly revisions.		2-monthly orders, storage in hospital facilities in Juba.	

Actors	Policy formulation and coordination	Regulation	Financing	Planning drug imports	Human resources development	Procurement, storage and distribution	Rational use and dispensing of medicines
Malteser	Malteser follows the Essential Drug Lists and kit contents indicated either by WHO, MSF, IDA or Aktion Medeor.	Malteser usually follows WHO guidelines; others are: IMCI, syndromic management for STIs etc.	Multiple donors, including ECHO and BMZ. Cost-sharing policy consistent with SPLM guidelines. No charges for sleeping sickness, tuberculosis and leprosy treatment.	Requests are received from the field, then reviewed and approved by the regional office in Nairobi.	Basic on-site training in rational management and ordering. Monitored locally and by the regional office in Nairobi.	Procurement reviewed and managed at country and regional offices. In Nairobi: CHMP and Mission for Essential Drug Supply (MEDS). In Kampala: Joint Medical Stores.	Treatment mostly in accord with WHO guidelines. Dispensing to patients directly from health facilities.
Comitato Collaborazione Medica		Usually WHO or MSF protocols and guidelines are followed.	Procures about US\$ 200,000 of drugs per year. Most funding is provided by institutional donors.		On-the-job training takes place at some sites.	Drugs are purchased through CHMP or MEDS in Nairobi, transported by road to Loki and then by air to Southern Sudan. Storage conditions are not adequate. For the GFATM-supported program, CCM will rely on PSF procurement.	Although internationally accepted guidelines are recommended, the limited skills of prescribers affect the rational use of drugs.
GOAL	Generally follows the composition of UNICEF kits. In absence of referral and poor coverage of units/centres, additional amounts and range are supplied.	Policy and protocol constructed from WHO guidelines.	Funding received from Development Cooperation Ireland (DCI) In 2003 US\$ 300,000 were spent on medicines.	Standard kits were agreed with the field and in reference to the working group on the drug list / UNICEF kits and other agencies kits.	Basic on-the-job training on stock management, classification of the drugs etc.	All items purchased in Kenya on a tender system, from commercial and NGO suppliers. Quarterly supply with monthly distribution to health facilities.	Through treatment guidelines and protocols, largely in line with WHO recommendations. Drugs dispensed at a separate pharmacy store.

Actors	Policy formulation and coordination	Regulation	Financing	Planning drug imports	Human resources development	Procurement, storage and distribution	Rational use and dispensing of medicines
Norwegian People's Aid	Drug management guidelines have been recently introduced. The choice of drugs and hospitals supplies is based on morbidity patterns, price, effectiveness etc.	Drug management guidelines include regulatory provisions at all levels of drug management.	In 2004, drugs, laboratory reagents and theatre supplies were budgeted close to US\$ 300,000. Funding comes from the Norwegian Agency for Development and Cooperation. Minimal cost-sharing has been introduced at one location.	Drug orders are sent from the field to Nairobi. Orders are placed every four months for most items, according to a standard drug list.	On-the-job basic drug management training is underway in partnership with PSF. Seven staff have already been trained at one location and two more locations will be included soon.	Prices from 3 selected Nairobi suppliers are assessed. Drugs are transported to the field by land and air. Drugs are kept in drug stores and delivered to facilities, based on requests approved by the doctor in charge.	No standardized treatment guidelines are followed. Dispensing takes place at outpatient departments and in wards. Drugs are dispensed in envelopes and with advice on their use.
US agencies: USAID, OFDA, the Sudan Health Transformation Project (SHTP)	The SHTP, managed by John Snow International, was expected to support the MoH Department for Pharmaceuticals and Curative Services.		OFDA has been supporting NGOs, through emergency projects. The SHTP was expected to gradually replace OFDA, including in funding drugs and medical supplies.			The procurement of PHC drugs for SHTP-supported 6 counties met severe obstacles. The project will not be expanded to the foreseen 20 counties and might be phased out.	
Italian Cooperation			Finances the drug supply of Italian NGOs.				
Norwegian Cooperation			Finances the drug supply of Norwegian NGOs.				
Private importers						Drugs are purchased in neighbouring countries, through multiple mechanisms.	
Informal operators	Market forces apply		Many outlets are run or part-owned by health staff.				Drugs are sold in shops and markets.

Notes:

Module 12

Formulating strategies for the recovery of a disrupted health sector

Contents

Module 12 discusses practical ways to approach the recovery of a disrupted health sector, suggesting step-by-step iterations aimed at appraising and costing merits and drawbacks of different broad options available to policy-makers. Ways to project the effects of recovery strategies that aim at preserving the status quo, alongside those induced by the adoption of alternative service delivery models, are described. Flaws commonly found in troubled health sectors and possible policy responses are sketched. The methods described are intended to be applied to a transitional context, such as during the last years of a conflict, when peace negotiations are under way, or after a final settlement has been reached. This module assumes familiarity by the reader with most of the issues covered by *Modules 2* through *11*. For the sake of brevity, issues and methods discussed in detail in other parts of the manual are only mentioned.

Annex 12 presents summaries of some completed reconstruction processes, proposed as empirical reference frames to decision-makers involved in transitional health sectors.

Introduction

Recovery after extensive destruction may offer a unique chance to reconsider the whole health sector and plan it on a comprehensive, rational basis. In some instances, large amounts of capital become available to address major allocative distortions; the atmosphere of change may reduce resistance aimed at preserving the status quo; massive destruction and dilapidation make the abandonment of unwanted facilities easier. Thus, building an equitable and sustainable (in the long-term) health system may become a realistic, if difficult target. *A country emerging from a prolonged crisis cannot afford to miss that chance.*

Furthermore, in the optimistic mood that usually characterizes reconstruction, investment decisions should not be taken light-heartedly. They will shape the health sector far into the future. Just as present allocative decisions are heavily influenced by investment choices made decades ago, the future allocation of recurrent resources will follow to a large extent the size and distribution of the physical infrastructure resulting from the recovery.

The rethinking of the health sector should go beyond the hardware that usually absorbs the attention of decision-makers. To take advantage of the opportunity and to complete the reassessment of the sector, legal, regulatory and management systems, as well as healthcare delivery models, equally need revisiting. If the rethinking of the sector is based on a sound understanding of the situation, success can follow. Conversely, policy changes inspired by imported and often untested recipes imposed by outsiders, whose only merit is their powerful backing, are frequently unsuccessful. A sensible and effective recovery strategy is likely to emerge from the balanced encounter of insiders knowledgeable of the country and outsiders familiar with the potentials and pitfalls of the transitional processes.

Many health sectors grow organically over the years, being shaped by countless political and economic decisions unrelated to each other. Even in countries where PHC has dominated the policy discourse over a long time, certain distortions – such as the hospital bias – may persist unabated, because of strong interests. Additionally, protracted crises tend to hide existing distortions, which when left unrecognized and unaddressed can only get worse.

In most instances, the recovery of a disrupted health sector calls for:

1. expansion of service provision to cover underserved areas and populations; in some cases, the merging of formerly partitioned health services is part of the process.

2. improvement of the technical contents of the health care offered; basic surgical care, laboratory and other diagnostic aids, and inpatient care must all be made accessible to users.
3. adoption of new service delivery models, if the dominant ones are recognized as outdated, in light of new health needs or a changed environment.
4. increased returns from the inputs absorbed by the delivery process, so as to free resources to support the actions mentioned above.

Thus, to revamp a crippled sector means to increase its *equity, effectiveness, appropriateness and efficiency*. These dimensions can receive different degrees of attention, according to the perceptions and priorities of decision-makers and the constraints influencing their actions. For instance, expanding service provision to cover previously destitute populations may appear more attractive to politicians than to health professionals, who are often more worried about the quality of the offered care. Local grievances may be appeased with health infrastructures, financed by aid agencies, as a peace-building measure. Ruling elites, mainly concerned with their own and their constituency's welfare, are prone to give precedence to tertiary care in the capital town. MoH officials may perceive the recovery process as an opportunity to claw power back from aid agencies. Other stakeholders, such as external donors, may emphasize efficiency considerations, or, when under pressure to demonstrate progress, just give precedence to actions that are visible, easy and rapid to implement. Frequently, most parties support physical rehabilitation, while other aspects of healthcare delivery are neglected.

Learning from previous recovery processes

Despite the efforts of researchers and practitioners over the last two decades, learning from previous conflict and post-conflict experiences has not thrived. Responses to new crises range from the mechanical replication of previous approaches to starting anew every time, in this way “discovering” again some already well-known lessons. Furthermore, the difficulty of comparing different situations and of drawing correct, appropriate lessons from them is not limited to conflict-affected health sectors.

Investigating the field of health sector reform, McPake and Mills (2000) argue that the propensity for either none or too much transfer of approaches reflects two symmetric fallacies: “*the search for a single best model*” on the one hand, against “*the belief that nothing can be learned from other contexts*” on the other hand. They suggest a way out of this unhelpful dichotomy, by using a conceptual framework that recognizes three groups of valid conclusions: a) those generalizable to most or all situations; b) those specific to a given context; and c) those valid for a subgroup of situations, considered sufficiently similar. Clarifying the nature of the conclusions should prevent decision-makers from transferring a b-type conclusion to another crisis, or from transferring a c-type conclusion to a crisis of different character. The snag of this sensible approach is that it demands of decision-makers a solid knowledge of both previous crises and of new ones – knowledge that very few involved players hold.

Objective constraints limit the access to the required knowledge. A first group of problems lies with the nature of the lessons learnt. Learning from crises is difficult, even for insiders, who are exposed to fragments of evidence, rarely assembled into a coherent picture. Thus, comprehensive lessons are rarely learnt, whereas incomplete ones may be wrong or misleading. Further, the shortage of solid, widely-accepted information makes most lessons arguable (particularly the controversial ones). Parties displeased by a certain conclusion will generally find ways to demolish it. Politics and vested interests inform and sometimes distort knowledge, hence limiting its transferability.

A second group of constraints relates to the way knowledge is managed and exchanged. Available knowledge is dispersed across agencies, research centres and NGOs. Much knowledge, held by individuals, remains unwritten and not transferred to who could use it. Even written knowledge tends to get lost in the crisis environment. Language barriers, frontlines, mistrust, displacements, short assignments, all hinder the exchange of information among participants.

A third group of difficulties is linked to actors. The insiders of a health sector living through a crisis are usually not conversant with the issues, nor with the international debate related to healthcare provision in conflict and post-conflict settings. Conversely, outsiders, failing to understand the specific features of a new crisis, bring with them the lessons learnt elsewhere, which may not apply to the new context. Researchers are in a better position to facilitate the transfer of knowledge, but they convey it according to academic jargon, hardly the most appropriate tool to communicate with decision-makers. Additionally, they tend to remain in-country only for short time spans and may publish their findings after years of delay, when decisions have been already made.

A fourth group of obstacles relates to the way the aid industry is structured. Donor agencies have been singled out as poor learners (Berg, 2000). They shape the policy debate, often undermining learning from previous crises, by imposing corporate policies. These sometimes lack a strong empirical basis, may be inappropriate to the local context (Strong, Wali and Sondorp, 2005), and are usually presented to policy-makers stripped of assumptions and caveats. Also, by fragmenting the health field and drumming in their own priorities, donors raise the level of noise to such an extent that learning, both from inside experience and from outside knowledge, is drowned out. Short programming cycles and assignments compound the picture and distort learning: what looked promising at a given point in time might emerge as a flop later on, when some unanticipated side-effects emerge. In this way, wrong lessons may be drawn or right lessons may be neglected.

The host of barriers to learning from experience is discouraging. Those of a structural nature cannot be fully overcome, just controlled to lessen their impact. Other constraints might be addressed only by a radical change in the way the aid system operates. Hence, the most likely outcome of future crises is the familiar constellation of wrong lessons applied, right lessons ignored, insensitive decisions made and ineffective action pursued.

“Best practice” is unlikely to be found embodied in a specific “best” policy or model. Rather, it emerges from a judicious balance of context-sensitive exploration, rational appraisal of alternatives, and restrained generalization of specific experiences. The same approach, to be applied across different crises, should lead to the drawing of different conclusions and to generating different policies. The lesson to be learnt lies in the methods adopted to pursue an adequate understanding of the picture, rather than in the choices triggered by such an understanding.

For an excellent discussion of learning in the humanitarian field, see Van Brabant (1997). *Annex 12* offers for consideration some condensed reviews of documented recovery processes. An insightful, detailed discussion of these issues may be found in Bower (2002). By looking at the variety of situations and responses, the actors of future recovery processes should be able to recognize similarities as well as differences, and make decisions accordingly. For a discussion of the country context and its relationships with the health sector, see *Module 3. Understanding the broader country context: past, present and future*.

Building scenarios for recovery

There is no such a thing as a balanced, uncontroversial blueprint for recovery. Most decisions related to it are eminently political and, therefore, inherently contentious. Hence, technical advice is often ignored by hard-pressed decision-makers.

Negotiations among many parties are central to a successful recovery process. Informed negotiations are more likely to produce tangible results than vague ones. Sensible estimates of the likely effects of different approaches may help managers to make informed decisions, to narrow the spectrum of options and to choose realistic strategies. Without a serious consideration of the different options on offer, the chances are significant that inappropriate, unrealistic, unsustainable, inequitable approaches will prevail.

Alternative, costed scenarios, showing the merits and costs of each approach in maximizing the dimensions mentioned above, as well as the disadvantages, may encourage a productive debate among stakeholders. In the absence of such preparatory work, fashions, subjective preferences, corporate agendas and vested interests are likely to wrestle inconclusively for dominance. The positions of different players may remain unchanged, giving way to a melange of disparate actions. The resulting performance of a sector lacking direction and coherence will remain poor. The availability of reliable estimates of the consequences of choosing among existing options does not ensure that decision-makers will take advantage of them. Their absence, however, virtually guarantees that the policy debate will be shallow and inconclusive.

The elaboration of scenarios is not a one-off exercise, to be carried out at the onset of reconstruction. Rather, it should constitute an ongoing process, where the initial (very tentative, due to the weakness of the available information) assessments and plans are progressively refined, as better data are gathered and experience is gained.

The reader might correctly find that in a given situation not all the scenarios of potential interest must be developed. For instance, a health sector might be found to be in such bad shape that little can be salvaged. The detailed cost figures considered necessary to build an accurate scenario would not be available, nor would they be meaningful. Opting for an analysis of limited depth would make sense. Or, the dominant service delivery model might have been already chosen on political grounds, and little would be gained by assessing in detail the merits of alternative models. Nonetheless, exploring the whole set of options potentially available may offer thought-provoking comparisons and enhance the discussion of their merits.

Approaches

At the onset of the strategy formulation process, precision is never possible and to some extent is usually unnecessary. Most country-wide allocative decisions are by their nature aggregate and approximate, thus robust in relation to the imprecision of the estimates upon which they are based. For example, preliminary figures may suggest that a neglected area needs a dramatic overhaul of its PHC network with rough calculations estimating the existing gap to be in the order of US\$ 4–6 million. The decision to be made is whether or not to encourage an NGO to invest about US\$ 600,000 per year for 3–5 years in PHC facilities. Whatever the size of the gap computed from the accurate figures that will eventually be obtained, it will be substantially reduced by the NGO intervention. The essential feature of the initial analysis is its accuracy in relation to main problems and constraints. In other words, decision-makers need to be reasonably confident that a given major problem, such as the inadequacy of the PHC network in the example mentioned above, is not an artefact, bound to disappear once data precision improves. The exact quantification of such a problem can wait for a later phase, when better data are gathered in order to plan and introduce the needed corrective measures.

At the first attempt of going through the steps suggested below, it will become painfully patent that many of the required figures are not available or are seriously flawed. The manipulation of the available data will contribute to the detection of their shortcomings and will provide a powerful stimulus to strengthen them. By commissioning dedicated studies, when this is feasible, and revisiting source data, so

as to strengthen available estimates, the information base will be strengthened. Periods of lull in the crisis, as during peace negotiations, may offer a precious opportunity for building an enhanced information base and preparing mature, agreed-upon recovery plans. While the needed studies proceed, educated guesses can be used, provided their inadequacy is recorded and future users of the projections obtained in this way are made aware of the caution demanded when using them. As soon as better data become available, the projections must be revisited.

To complete sound recovery plans, a timeframe of 1–2 years can be anticipated, depending on the general environment, the baseline situation and the complexity of the health sector. In some cases, sudden political or military developments hasten the pace of the recovery strategy formulation process, which must take place within months rather than years. Whereas the overall conceptual approach remains the same, a recovery strategy must emerge as soon as possible, to serve as a basis for pressing decisions that cannot wait. The main concern of those involved must be to ensure that catastrophic mistakes are not made in the frantic climate of certain hurried transitions.

The initial round of exploration into the available information and its consolidation may take some months, during which informants and stakeholders are contacted and involved. Precious clues about prevailing perceptions and preferences are obtained. The main recovery directions may emerge at this stage. The findings of this exploratory round may be condensed in a health sector profile highlighting the main problems faced by participants (for details, see *Module 13. Producing a health sector profile*). Additionally, an interim recovery strategy, suggesting possible ways forward, making their implications explicit and pointing to the main information gaps to be filled, may be sketched (for an example, see Health Secretariat of the New Sudan, 2004). Measures deemed urgent, or clarified to such an extent that dedicated studies are not mandatory, may be introduced already at this stage. The health sector profile and the interim recovery strategy should be conceived as discussion and negotiation tools, and be written in a way accessible to most stakeholders.

The second round, consisting of studies considered as essential to put the policy discussion on firm grounds, may demand a longer period, say 6–12 months. The responsibility for carrying out these studies can be distributed among players, to share the burden and increase participation. At this stage, the temptation to study most aspects in detail must be resisted. Given the fast pace of change typical of transitional contexts, most details will become outdated before they have been used to inform action. The needed studies must explore the field only to gather intelligence valuable for the decisions to be made in the short- and mid-term. Detailed studies must be programmed for later stages, when the sector has stabilized and the planning horizon has expanded. Additionally, the studies must be judiciously spaced, to encourage actors to participate and help them absorb findings.

In the third round, new inputs are consolidated in a set of alternative projections, to be submitted to decision-makers. As unforeseen aspects are considered or trade-offs are agreed, the ensuing open debate may lead to revised projections. Once a measure of consensus and support is attained, strategies can be finalized and formally endorsed. Finally, they have to be translated into operational plans, integrating the contributions of most participants into a consistent framework.

This approach calls for the establishment of permanent in-country capacity, so as to strengthen the previous work in light of its limitations and consistently with the methods adopted. Unfortunately, continuity of work is a rare, fortunate event. More often, projections are elaborated during short periods of intense activity by visiting consultants. The limitations and unrealistic assumptions built into their results are quickly forgotten and their conclusions are taken uncritically, at face value. Alternatively, their work is superseded by new developments; other consultants are called in to elaborate new projections, which risk the same degree of oblivion met by the previous ones.

The main responsibility for the proposed work should obviously lie with the government, however weakened its condition. Embarking on an exercise along the lines discussed in this module will attract competent cadres and encourage the emergence of some capacity. If successfully carried out, the exercise will boost self-confidence within the government and improve its standing with development partners. In certain situations, where no “government” is in place, or it is too weak or too contested to play a useful role, interim authorities and aid agencies must assume the bulk of the responsibilities. Local participation should be pursued to the largest possible extent.

Scenarios can be built by following a

- a. **top-down approach**, by starting with a consideration of the global financing envelope and deducing from it what services will be affordable. This approach better suits severely disrupted contexts, where health care is fragmented, health authorities are absent or incipient, and most information is not available. In these conditions, approaching the analysis in aggregated terms may represent the only realistic option. Also, a top-down approach may be indicated in situations of urgency, when additional data cannot be collected. Examples of situations better studied through a top-down approach: Afghanistan in 2002 and Southern Sudan in 2003.

Alternatively, the analysis may start the other way round, following a

- b. **bottom-up approach**, considering the facility unit recurrent cost and progressing to compute the total expenditure of running the whole health sector. This more information-intensive approach looks appropriate to distressed (but not collapsed) and fairly stable health sectors. The existing information base, although deficient, may provide a starting point for the analysis. In some cases, a stalled peace process may offer the opportunity to collect the missing data, in this way enhancing the results of the exercise. Example: Mozambique in 1990-1992.

The computations proposed below proceed iteratively. Usually, several rounds are needed in order to reach acceptable results. The computations are presented in several sequential steps, to convey the logic of the process, but do not necessarily need to be carried out in the same order. Convenience and availability of data may suggest a different sequence. The eventual results should not differ significantly. The steps proposed are common to both approaches; they are discussed only once for the sake of brevity. When feasible, approaching the exercise from both sides is recommended, on learning and consistency grounds. In this way, the resulting final estimates will gain robustness.

a. Top-Down Approach

Step One: Estimate the **present level of aggregate financing**, total and per head. Include all sources of financing. Private contributions, often unknown, can be very significant and should not be neglected. They vary dramatically across countries and, given the dispersion of provider-patient transactions, are difficult to estimate. Censuses or household surveys, which usually supply this information, are in most cases not available, or cover only secure areas, i.e. very unrepresentative ones. The judicious consideration of countries considered similar in terms of socio-economic development (but not undergoing serious crises) can provide some indications.

Step Two: Try to forecast the **level of internal and external financing to be allocated to the health sector in the mid- and long-term**, given macroeconomic perspectives (usually studied with some accuracy, by IFIs, independent analysts, donor agencies etc.). This depends on several factors, including economic growth, the government capacity to extract revenues, the priority given to health by decision-makers, the popularity of the country within donor circles etc. Build a set of scenarios (best-case, average and worst-case). See *Module 6. Analysing health financing and expenditure*, for a detailed discussion of forecasting financing levels.

Consider that in most war-torn countries fiscal capacity has suffered badly, when it has not collapsed altogether. Recovery from fiscal collapse is usually slow. Also, the substantial cost of the peace process, likely to be felt far into the future, may offset anticipated peace dividends. And other important sectors compete with health for government attention. Finally, donors tend to make generous pledges at reconstruction conferences, but then they often fail to disburse funds quickly: a financing gap between humanitarian and recovery aid is frequent. Thus, be wary of over-optimistic forecasts, quite common in transitional environments, when expectations are high and the implications of rebuilding a devastated country are not appreciated in full. On the other hand, the forecasting of meagre resource levels does not always discourage the formulation of need-oriented, ambitious recovery plans.

***Step Three:* Compare the global resource envelope likely to be available to the health sector in the mid- and long-term to equivalent figures for other countries** and analyse what they have achieved. There is no reported example of a very poor country able to provide its citizens with universal coverage of comprehensive basic services of acceptable technical quality. A realistic estimate (Hay, 2003), which puts the annual minimum cost of comprehensive, universal publicly-financed health care at between IS\$ 75 and 120 per capita, goes a long way towards explaining why the goal of universal coverage is out of reach for the poorest countries. Thus, the figure arrived at for the total resource envelope for poor, war-torn countries, which in most cases falls between the level of Afghanistan in 2002 (US\$ 2–3) and that of Cambodia in 1994 (US\$ 22), imposes on policy-makers very harsh decisions, in terms of scope, coverage, content, and quality of the provided services.

***Step Four:* Study the composition of health expenditure and assess whether it is balanced** (in most cases it is not). In many disrupted health sectors, the information related to health expenditure is grossly inadequate, and only educated guesses are possible. During the first years of physical reconstruction, investment expenditure may expand to absorb up to one third of the total, but later it should stabilize at below 20%. In a labour-intensive sector such as health, salaries should account for between half and two thirds of recurrent expenditure. The balance of recurrent expenditure, after salaries are subtracted, may be roughly equally split between other recurrent expenses and drug purchasing (but drug expenditure may get a much higher share where private firms and brand medicines dominate the scene). If the total expenditure structure is found to be dramatically different from the described pattern, serious distortions are probably present and need to be addressed. For instance, the expenses related to security and logistics may absorb most available funding.

***Step Five:* Identify the major flaws affecting the health sector** and consider the **realistic policy options** available to decision-makers (internal and external) to address such flaws, given the projected financing levels and the present situation in the health sector. The table presented later in this module includes some of the most common problems affecting health sectors emerging from a protracted crisis. Some of the policy options worthy of consideration are sketched and commented upon. *Annex 13* offers an application of this conceptual approach to the Somali health sector in 2008. Consider **different service delivery models and service mixes** (for a full discussion, see below, under *Bottom-Up Approach, Second Round*, and in *Module 7. Analysing patterns of healthcare provision*).

***Step Six:* Work out size and features of an affordable health sector**, given existing constraints. Cost estimates of the sort described below, in the *Bottom-Up* approach, are needed to translate forecasted financing levels into number of facilities and health workers. Estimate the **service coverage** obtained by the health sector projected in the previous step. Consider the management systems needed to run the revamped health sector, according to proposed size, features and healthcare delivery model. Work out the legal, institutional and financial implications of implanting performing management systems. For a discussion of the issue, see *Module 8 Studying Management Systems*.

Enlist the potential efficiency gains on offer and discuss the feasibility of measures aimed at achieving them. For instance, the introduction of a centralized mechanism to purchase generic drugs through international competitive bidding can boost drug availability through the health sector. Other savings, such as downsizing a bloated workforce through an aggressive programme of layoffs, can be politically much more difficult to enforce, particularly in a post-war environment.

Step Seven: Consider the **sustainability, balance, equity, efficiency, and effectiveness** of the projected health sector. Even if all these aspects have been considered earlier in the iteration, a fresh appraisal of the results attained is recommended. Identify the additional interventions deemed necessary. Proceed to the needed adjustments. Consider whether the problems that would remain after revamping the health sector can be more effectively addressed by adopting an alternative service delivery model.

Sustainability: Study the relative proportion of total recurrent and capital expenditure to be supported by internal financing and external grants and loans, respectively. Identify the political conditions (internal and external) that might influence future levels of financing. Given economic forecasts, estimate the time-lag needed before most health recurrent expenditure is financed by internal resources. Chand and Coffman (2008) suggest that in most cases achieving this goal will take decades.

Balance: Consider the future structure of the sector, by rural/urban, hospital/PHC, private/public, by regions across the country. Identify possible remaining distortions once the reconstruction is completed. For instance, an ambitious investment in PHC facilities might fail to bring the expected benefits because a distorted workforce remains such. Assess the degree of damage to sector performance that the persistence of major distortions would induce. Consider whether alternative options could minimize these distortions better than the chosen one.

Equity: Assess the gaps in service provision that the projected health sector would leave unaddressed: if the projections are realistic, the remaining gaps are likely to be substantial. Appraise whether the unaddressed gaps are “fairly” distributed across country and by population group. For instance, at the end of the recovery process the least served province could remain as such, but with its disadvantage from the rest reduced, as the result of preferential allocations. Try to anticipate the political significance of the remaining gaps. They may affect populations bearing particular grievances, which perhaps have been instrumental in igniting the war.

Efficiency: Consider the allocative profile of the projected health sector, assessing the degree to which existing inefficiencies would be addressed by the new settings. Hospital care might remain dominant; common conditions could still be dealt with by high-level practitioners; healthcare provision could remain facility-based at the expense of neglected home care etc. Different management arrangements may offer substantial efficiency gains. Economies of scale can be pursued by appropriately sizing health facilities and their staff. Given that resources are always scarce in relation to needs, efficiency levels should never be regarded as adequate.

Effectiveness: Match the projected capacity of the health services with the forecasted healthcare needs and identify the most important gaps. For example, in a country expected to be badly struck by HIV/AIDS, heavy reliance on CHWs as first-line healthcare providers might be misplaced, and a shift towards expanding the ranks of professional cadres, able to handle the disease more effectively, could be considered instead. Further, if maternal mortality is perceived as an important problem, the expansion of emergency surgical services is mandatory. If the control of the main endemic diseases demands laboratory support, a special investment in this area is needed.

Common systemic flaws and possible policy responses

Common flaws	Possible policy responses	Examples and remarks
<p><i>Bloated, under-skilled workforce</i></p> <p>(for a discussion of this flaw, see <i>Module 10. Analysing human resources for health</i>)</p>	Freeze recruitment of unskilled and low-skilled staff.	Politically difficult to enforce, particularly in decentralized settings. The peace process (as in Angola and Mozambique) may imply the incorporation of rebel health workers into the workforce, in this way further expanding its ranks.
	Expand training of high-skilled cadres.	The lack of educated candidates to enrol into health courses may undermine this approach. Also, recruiting indigenous and appropriate skilled trainers is usually difficult. Unrealistic training plans are commonplace in recovery processes.
	Retrain/upgrade existing staff.	The proliferation of volunteer or semi-volunteer health workers, common in contexts dominated by NGOs, as in Afghanistan or Southern Sudan presents special challenges. A long-term accreditation programme is needed to professionalize these cadres.
	Introduce incentives to facilitate layoffs.	Unaffordable for many resource-starved health sectors. Given the unemployment prevalent in many distressed contexts, retrenchment may represent a politically unacceptable option. Well-designed incentive packages are needed to retain competent cadres, while redundant workers are encouraged to leave. Always difficult to achieve.
<p><i>Rigid civil-service regulations, resulting in a workforce inefficient and unresponsive to need</i></p>	Introduce fixed-term, performance-based contracts.	It can be introduced as an interim measure to fill hardship positions, often with NGOs as sub-contractors. Later, it can be expanded to affect larger parts of the workforce. Monitoring performance is always demanding.
	Devolve hiring and firing responsibilities to local health authorities directly involved in healthcare provision.	Demands fairly robust management capacity at local level. Fungible budget provisions may encourage efficient allocations.
<p><i>Deregulated privatization of service provision</i></p>	Contract out service delivery to NGOs, charities etc.	Cambodia in the 1990s and Afghanistan since 2002. See <i>Annex 7. Contracting for health services</i> for a detailed discussion and references.
	Contract out regulatory functions and/or other services.	As envisioned for Southern Sudan.
	Increase salaries.	Mozambique in the 1990s and recently Angola. Insufficient to curb widespread practice, if not associated with complementing regulatory measures.
	Regulate payments to service providers.	Difficult to achieve when the practice has become entrenched.
	Publicly sanction a few blatant abuses, to discourage widespread practice.	

Common flaws	Possible policy responses	Examples and remarks
<i>Hospital-oriented sector</i>	Close down some redundant and derelict hospitals.	Always highly contentious. Attempts in this direction were done in Kosovo.
	Downsize some hospitals, while rehabilitating them.	
	Build new first-referral hospitals in areas deprived of them.	Mozambique in the 1990s.
	Design PHC-oriented training programmes.	Mozambique in the 1990s.
<i>Overpriced and scarce drugs</i> (for a discussion of this flaw, see <i>Module 11. Studying the pharmaceutical area</i>)	Establish a centralized purchasing system of generic drugs through international competitive bidding.	The purchasing system may be operated by government authorities or by non-profit organizations. A very weak MoH might prefer to delegate drug supply duties to external agencies. Inappropriate donor requirements may impede their participation in efficient procurement schemes.
	Standardize treatment protocols.	
	Promote the essential drug concept.	
<i>Large portions of the population without access to basic services</i>	Invest in underserved areas.	Mozambique in the 1990s. Usually depending on donor largesse. If not well planned and managed, it can create or reinforce serious distortions.
	Design and introduce low-cost service delivery packages.	Service delivery in underserved areas lacking basic infrastructures is usually more expensive than anticipated.
	Introduce incentives to encourage staff redeployment.	Mozambique in the 1990s. Staff housing was included in rehabilitated or new facilities. Also, drug supply to peripheral facilities was ensured.
	Offer incentives to promote exemption schemes for the poor.	Difficult to achieve.
	Remove or reduce formal and informal user charges.	Informal charges may be stopped only by adequately financing health service provision.
	Launch CHW programmes.	Difficult to sustain and to expand. Of limited effectiveness without the support of performing formal health services.
<i>Insufficient financing, absolute or against stated goals</i> (for a discussion of this flaw, see <i>Module 6. Analysing health financing and expenditure</i>)	Narrow the scope of health service provision.	Politically very difficult. No known examples of explicit policies in this sense. Often carried out quietly, in an escapist way, generally with unsatisfactory results.
	Advocate for additional funding (internal and external). Negotiate loans with development banks.	Poor absorption may reduce the benefits of expanded financing. A convincing cost analysis may help raise additional funding.
	Capture existing financing, such as informal charges.	May yield substantial returns in middle-income settings. In very poor ones, service delivery must remain heavily subsidized (explicitly or not).

Common flaws	Possible policy responses	Examples and remarks
High operational costs, due to the dispersion of tasks and activities	Correct existing inefficiencies in service provision.	Often neglected, both in practice and in the policy discourse (which usually emphasizes the need for additional resources).
	Encourage the merging of some functions, like drug supply, training, data collection.	Easier to achieve if linked to convincing policies and realistic goals.
Fragmented, inconclusive, evidence-free policy formulation (for a discussion of this flaw, see Module 5. Understanding health policy processes)	Establish or strengthen autonomous policy intelligence unit(s) and resource centre(s).	Disseminating reliable and relevant information is as important as producing it.
	Establish effective coordination venues.	The commitment of participants is stronger when the discussion is centred around concrete operational issues.
	Promote wide, evidence-based policy discussion.	Difficult to put into practice for weak and often contested governments, constrained by limited capacity and inadequate information, and under pressure from daily operations.
	Introduce aid management instruments that force participants to agree shared policies.	"Shadow" aligning donor interventions (OECD, 2004) is the obvious strategy to be chosen in fragmented health systems, where weak health authorities are unable to play a leading role (see <i>Glossary</i>). Always very labour-intensive and often controversial.
Ineffective management systems (for a discussion of this flaw, see Module 8. Studying management systems)	Introduce competitive, fixed-term appointment schemes for management positions.	Imply a break with traditional civil-service provisions. Easier to establish within a contracting-out framework.
	Introduce performance-related rewards and sanctions for managers.	
	Encourage the emergence of professional managers.	Always difficult in health sectors dominated by medical doctors. A sizeable investment in the training of professional managers must be complemented by provisions aimed at strengthening management practice.
	Reduce civil-service constraints and controls.	Easier to achieve after the collapse of state functions.
	Decentralize accountability.	A weak central government is often at pains to keep a fractured country together, as in Afghanistan. Decentralization in these cases is praised in the policy discourse, but hardly pursued in practice.
	Introduce transparent and regular external audits, carried out according to international standards.	Although constant sources of controversy, formal external audits are valuable to control abuses, as well as to foster the emergence of indigenous capacity. Effective audits demand high technical capacity, not always guaranteed.
	Resolve conflicts of interest for managers, health workers, and service providers.	

Common flaws	Possible policy responses	Examples and remarks
<i>Unbalanced, derelict network</i>	Formulate clear-cut functional criteria to classify health facilities.	See <i>Annex 9</i> in <i>Module 9 Studying the healthcare network</i> and <i>Exercise 9</i> in <i>Module 15 Exercises</i> on this issue.
	Allocate investments to cover neglected areas and populations.	Mozambique in the 1990s.
	Develop standard layouts for health facilities.	

b. Bottom-Up Approach

Recurrent and capital *unit costs* for health facilities of different levels of care provide the starting point. As international experience has shown that *in the long term the financing of recurrent costs is likely to constitute the most serious constraint for health sector development* (Segall, 1991), the total cost incurred in operating a recovered healthcare network is given a dominant weight in the reasoning proposed below. All health facilities, public and private (for-profit and not-for-profit), should be considered in the initial analysis. Later, each sub-sector can be studied in isolation.

True Story No. 20 Estimating the cost of revamping the healthcare network in Mozambique

In 1992, the Ministry of Health of Mozambique finalized a strategy for post-war reconstruction (Noormahomed and Segall, 1994), which set the broad features of the future, recovered and sustainable health sector. In relation to the health infrastructure, the strategy aimed at significantly expanding the number and scope of PHC facilities and first-referral hospitals, while rehabilitating but not enlarging tertiary hospitals. According to the chosen approach, cost estimates elaborated at the time assigned 55% of total investment (projected at approximately US\$ 280 million) to PHC.

In 1998, when reconstruction was under way, new cost estimates were elaborated and compared to the original ones. While the PHC investment fitted fairly accurately into the forecasted one, hospital costs accounted for twice the originally planned investment. This cost escalation took place without any increase in the number of targeted hospitals. In the new estimates, the share of investment allocated to PHC was reduced to 30% of the total. This substantive change was not due to mistakes in the original computations or to a policy change, but resulted from hospital recovery plans developed in isolation from each other. Architects and hospital doctors connived, on perfectly reasonable grounds, to identify additional technical needs for each facility, the satisfaction of which sent the cumulative cost of reconstruction well beyond the ceiling originally agreed upon and considered sustainable.

First Round: Elaborating a reconstruction scenario, while maintaining the present service delivery model

Step One: Obtain/formulate **average total recurrent unit costs** for different categories of health facilities and for different level of performance (good, satisfactory, and poor). Given that they are expensive, labour-intensive and require

adequate expertise to yield reliable results, costing exercises (commissioned by government, NGOs, charities or firms) are usually carried out on small samples of facilities. Obviously, the resulting cost estimates can be used only when the studied facilities are representative of larger groups. In some cases, no estimate is available and figures from other countries considered reasonably similar to the one under study can be adapted as temporary proxies.

In a disrupted health sector, “facility unit costs”, both recurrent and capital, can be a very vague concept. Most derelict, under-supplied and underused facilities, offering dismal levels of care, yield low running costs when they are studied. Conversely, overstaffed facilities in secure areas, supported by well-resourced NGOs, incur very high running costs. Remote facilities performing outreach activities are more expensive to run (per unit of output) than urban ones with heavy patient loads. Thus, considerable caution is demanded when considering available unit cost figures. The values eventually accepted for facilities of “satisfactory” performance should correspond as much as possible to the costs of a “normalized” situation, where wartime distortions are removed, service delivery is largely an indigenous responsibility and operational standards have attained acceptable levels. An additional difficulty is posed by the categorization of existing health facilities, which can be extremely heterogeneous, particularly when built and operated by NGOs. A “shadow” functional classification of facilities may be needed to strengthen estimates (see *Module 9. Studying the healthcare network*).

Cost figures should include both expenditure incurred at the delivery point and that paid for elsewhere, but related to the service production process, such as drug or food donations or in-service training provided by a third party. As in troubled situations a large part of the inputs consumed in healthcare production are not captured by the formal budget of the institution running the facility involved, a detailed inventory of the absorbed inputs must be carried out locally. As a rule of thumb, as one moves upwards from one level of care to the next, the total recurrent costs of the average facility increases several times. Thus, the recurrent expenditure of a first-referral hospital may be 2–5 times higher than that incurred by a health centre offering a comprehensive basic package of services. These ratios, once refined according to size of facilities, number of beds, staffing patterns etc., provide precious indications about the optimal facility mix of the future network. Planners may present interesting options to decision-makers, such as that of choosing between building a rural hospital or three health centres. In this way, decision-making gains content and policies acquire meaning.

Step Two: Estimate **the size and composition of the existing network**, trying to remove “ghost” facilities, i.e. those destroyed or permanently closed down, from available records. The cleaning of the available data may present considerable difficulties. Sometimes, the reliability of data can be improved by triangulating lists elaborated by different departments, such as planning, human resources and supply. Where an Essential Drug Programme is in place, its data can help to discriminate active facilities from inactive ones. Also, special programmes often keep information related to their specific area. Thus, a list of facilities providing emergency obstetric care helps to identify hospitals providing surgical services. Usually, the several available lists compiled by different parties present striking inconsistencies. A way to handle them is to build a nominal database of health facilities, through which many problems can be spotted and reconciled, after diligent enquiry with health authorities, NGOs or knowledgeable people. Each facility must be characterized by key variables (number of beds, staffing, functioning laboratory, fridge, vehicle etc.), selected in order to determine its functional capacity. Given the quick pace of change typical of transitional processes, such a facility database needs continuous updating to remain useful (see *Annex 9* for a detailed discussion).

Classify existing facilities according to their performance level. Reliable inventories of the network are rarely available, so a rough estimate can be obtained

by consulting a panel of knowledgeable people. **Compute the total cost of operating the existing network at the present level of performance.** To obtain the total cost of the health sector, add support systems (administration, training, transport, warehousing etc.). In most cases, these additional costs fall in the order of 10–30% of the total expenditure incurred by direct service delivery. Verify that the total recurrent expenditure computed in this way roughly matches the figure estimated from a macro-perspective. Reconcile discrepancies, if found. Consider present levels of coverage and consumption of basic services. Compare them to the existing healthcare network, staffing patterns, levels of supply etc. In many instances, reported resources will appear large in relation to reported outputs. Identify major shortcomings and inefficiencies in service delivery. A common pattern is the underutilization of peripheral facilities, both of primary and secondary level, due to inadequate support, reduced access, and/or poor performance.

Step Three: Estimate the **total recurrent costs induced by a revamped network** (setting, for example, that 80% of existing facilities perform at a satisfactory level), *without changing its size and structure*. As better quality of care is likely to induce increased utilization of services, a forecast of the levels of coverage and consumption of basic services that would be attained by revamping the performance of such a network can be formulated. Try to estimate the impact on utilization of a change in the existing user-fee policy. When the new policy entails regulating a widespread practice, without increasing the cost to users of accessing services, its impact can be favourable. Conversely, a net increase in the cost shouldered by users could trigger a contraction of consumption. Disaggregate by regions, provinces or states, so as to spot underprivileged situations. Compute the **total investment needed to achieve a satisfactory performance** for the present healthcare network, including the revamping of management systems. Identify and cost interventions aimed at removing existing bottlenecks. For example, if skilled staff are absent in peripheral health facilities, building houses for them and/or providing hardship salary supplements may be more effective than training additional cadres.

Step Four: Estimate the **potential savings** obtained by identifying and correcting some self-evident **major inefficiencies**, such as by closing down or downgrading redundant facilities in over-served areas, by redeploying staff, by downsizing the workforce, or by improving supply systems. Assess the political cost of the implied measures and the likelihood that they are adopted. Compute again total recurrent costs and projected coverage/consumption in a system where efficiency has significantly improved.

Estimate the additional expenses induced by integrating into the present healthcare network facilities run by hostile parties, or released from the military, if the terms of the peace agreement imply such devolution. In some cases, for example in Southern Sudan in 2005, the burden of running hospitals located in garrison towns and operated by the central government is sufficiently heavy to change the whole financial outlook of the emerging autonomous health sector.

Step Five: Project the **additional infrastructure** needed to correct existing inequalities in basic service consumption (split by best-case, mid-case and waste-case scenarios, if possible). For instance, if baseline basic services are estimated to cover about half of the population, the implications in terms of new facilities to be opened, of staffing and supplying them and of increased recurrent costs could be explored for coverage targets of 60%, 70% and 80% (for a discussion of the problems related to population figures, see *Modules 2. Making (rough) sense of (shaky) data* and *4. Studying health status and health needs*). The respective computations should pay attention to the diminishing returns of expanding the access to basic services, hence the increasing marginal costs of the projected growth. This is largely due to uneven patterns of population settlement. The initial service expansion is likely to benefit densely populated and easily reached areas, where health care is provided at

lower unit cost. Later phases will demand the coverage of remote areas with sparse populations, where costs increase considerably. Thus, if the standard basic health centre is planned to serve an average of 20,000 people, a ratio of 15,000 and even 10,000 might be appropriate to cover low-density areas (depending on settlement patterns).

Pay special attention to temporary population settlements, whose coverage by fixed services bears the potential of permanently distorting the health network. This problem can reach serious dimensions in situations where displaced populations (internally and abroad) are large. IDPs, usually poorly known and contended for by warring parties, pose a more difficult challenge than refugees, whose formal status generates better information about their number, settlement and health status.

Project the additional burden the HIV/AIDS pandemic is likely to place on the health sector within the planning timeframe. For countries already badly hit, the disease alters healthcare demand and the response(s) to it. Most aspects of healthcare provision likely to be affected must be considered by the recovery strategy. The demand for inpatient care, laboratory services, drugs, skilled practitioners and nurses are all expected to increase substantially. The ability of people to pay for health care is correspondingly reduced. Increased dependence on external assistance is in most cases an inevitable outcome. For a brief discussion of the relationships of HIV/AIDS and complex political emergencies, see *Annex 4*.

Step Six: Work out the **total recurrent costs incurred by the expanded/restructured network** and the consequent gains in terms of coverage and consumption. Work out the implications/constraints of the proposed expansion in terms of human resource requirements, management systems etc. Try to estimate the incurred costs of transforming the health sector according to the newly set targets.

Step Seven: Choose an alternative considered as affordable from a macro-perspective (in terms of recurrent expenditure), according to the estimates of total available financing developed in the *Top-Down Approach*. Work out the **investment needed to attain the projected levels of coverage/consumption**, also including support sub-systems, such as warehousing, transport and training. Establish a timeframe for health sector recovery, according to the chosen option. Seriously disrupted health sectors need long periods (10–20 years) of sustained effort to recover. Plans tend to underestimate the time demanded for huge, systemic interventions to approach completion. Model the evolution of available financing over time. In many instances, aid flows expand dramatically in the immediate post-conflict years, to recede quickly later, when most of the planned investment kicks off (Collier, 2002). Practical ways to address this mismatch must be identified and negotiated with donors.

Consider the feasibility of the chosen option, given existing implementing *capacity*. In very poor countries, capacity may be as scarce as resources, in such a way that humble recovery plans become inescapable. In certain situations, where abundant mineral wealth encourages financially ambitious choices, capacity may become the decisive criterion for decision-making. Unfortunately, a common symptom of poor capacity is the unawareness of it. The Angolan health sector has consistently been fraught by the oil-induced perception of future opulence and by its capacity shortage. Overambitious, never implemented plans have regularly ensued. For a discussion of capacity, see *Module 8*.

Investment in human resources is particularly important, as its outcome materializes slowly and sometimes in ways diverging from those anticipated. Additionally, training is expensive, labour-intensive, culture-bound and technically demanding. And the workforce, appropriate and productive or not, will anyway absorb the largest part of the future recurrent expenditure. See *Module 10*. Pay special attention to referral systems, whose costs (both capital and recurrent) are always substantial. Rural first-referral hospitals are among the health sector components that suffer most from disruption and whose recovery presents special difficulties. See *Module 9*.

Second Round: Introducing an alternative service delivery model, or a mix of old and new models

Particularly when the country has gone through a prolonged period of disruption, which has screened it from international developments in healthcare provision, the prevailing delivery model may be perceived as outdated, particularly by new rulers. Policy-makers (outsiders as well as insiders) may be attracted by new approaches, each vying as a candidate to replace the old one. For instance, the Kosovo health sector suffers from a heavy hospital bias, inspired by Soviet planning criteria; a bias which needs to be corrected if a viable system is to be built. In other contexts, major common distortions may include service fragmentation along vertical lines, overemphasis on facility-based care, out-of-control privatization or, conversely, over-reliance on public provision (or a mix of many of these distortions). Old patterns of service delivery must be compared to alternative ones. Clearly, an alternative service delivery model must appear very promising, offering clear advantages over the old one, to be worthy of consideration. Healthcare delivery models are discussed in *Module 7*.

A special case is posed by severe, protracted crises, during which health service provision has evolved to such a degree as to rule out the resuscitation of old models. In Afghanistan, where the public sector had closed down for years, a dominant share of health services was provided by NGOs. The reintroduction in these settings of the centrally-planned and financed public provision of health services seemed out of question, at least in the short term. National authorities, encouraged by influential aid agencies, opted for the formal regulation of the field, through the contracting out of service delivery to private non-for-profit operators. See *Annex 7* and *Module 8* for more details, respectively, on contracting out and on regulation.

Adopting an alternative service delivery model usually implies the introduction of new management systems, or substantive changes to existing ones. These implications, often overlooked by decision-makers, must be made explicit as soon as possible, before the choice is made. The financial and political cost of equipping the health sector with management systems adapted to a new delivery model may be substantial, and must be adequately considered when alternatives are appraised.

Elaborating costed estimates of the adoption of an alternative service delivery model poses additional difficulties, because data related to a different approach may not be available. In this case, experience from abroad may help. Also, small-scale pilots may contribute useful information to strengthen the computations. Tightly monitored experimentation in limited settings appears advisable, before a new model is adopted nation-wide. Considerable caution is needed in adopting successful pilot models for countrywide implementation, as pilots are by definition privileged endeavours, bound by nature to succeed one way or another. Scaling up is always a challenge of a different order.

New estimates must be elaborated as soon as reliable data become available. Despite the difficulties of costing the adoption of alternative service delivery models, these sorts of estimates are needed as basis for the policy discussion, which in their absence risks being driven mainly by ideological arguments.

Follow the same steps sketched in the first round and eventually compare projected results. Identify the most promising model (or a mix of models).

Materializing the recovery strategy: common pitfalls

A thoroughly crafted recovery strategy needs to be disseminated, understood and incorporated into the plans of the most important stakeholders, to stand a true chance of being followed. To ensure widespread support for the strategy, negotiation and communication skills are as important as technical ones. Furthermore, awareness among its supporters of the priority of the recovery strategy over other concerns is paramount.

The recovery strategy may stumble, fail or become distorted due to a host of reasons.

- The discussion may remain within the health sector, without the adequate engagement of decisive players, such as the Ministry of Finance (where it works) and the IFIs, or other sectors, like education, for which some consistency of approach in recovery should be reached. As a result, financing agencies may drastically cut or altogether discard carefully developed plans, because of macroeconomic considerations unknown or not understandable to health professionals. Communication between economists and health professionals is often wanting. Financing agencies and service providers are sometimes at pains to understand their mutual arguments. Translating a proposal into a format and language familiar to the counterparts may in some instances overcome this obstacle.
- The concept of having competing, mutually exclusive options for consideration appears obvious to economists, but may sound weird to health professionals. Thus, the conclusions of the analytical work proposed above may be flatly rejected, when found restrictive, because they fall short of expectations, or because they present in concrete terms the objective poverty of the country, or because they may sound politically inconvenient. Involving decision-makers in the actual computations may convert some of them to a measure of allocative discipline, but others will remain resistant to any “rational” argument. A few key personalities may tilt the balance in one direction or in the other.
- The chosen strategy may fail to gather adequate political support, or its political sponsors may run into difficulties, for reasons often unrelated to the health sector. For a discussion of the politics of health policies, see *Module 5*. Also, a resource-bound recovery strategy, even if developed and agreed upon by most stakeholders, may fail to ensure a measure of implementing discipline among some of them, who are unable to recognize the consequences of the endorsement of new “priorities”. In fact, particularly in resource-strapped contexts, a few departures (even if legitimate when considered in isolation) from the chosen strategy can wreck it. Every time proposals for major changes are put forward their proponents must be reminded of their cost implications and the corresponding cuts in other areas. To a certain degree, this tactic can deter some of the proposed changes, or at least can reduce the damage inflicted. In many cases, decision-makers act under pressures that make rational arguments irrelevant to them. When major departures from the adopted plans materialize, planners need to revisit the whole strategy, adapting it to the new reality, or declaring it dead if that is the case.
- The conclusions of the process may be misunderstood, distorted or misused by the media and the public. In the sensitive or contested post-conflict climate, redistributive allocations are particularly prone to be misrepresented. Sensible decisions, easy to defend on technical grounds, may be exposed to political manipulation.
- The chosen strategy may fail to guide field implementers because it remains too aggregated, with expenditure ceilings, global size of the workforce, total number of facilities and so on, elaborated only at the national level. Implementation will inevitably be split into discrete components, particularly when NGOs are its main vehicle. These components will be managed by teams under different command lines and not always in touch with each other. Implementers may find it difficult to assess whether their provincial or district interventions are consistent with national ceilings not explicitly broken down to smaller units. Without translating the country-wide strategy into sub-national operational goals and plans (which may be contentious, as some constituencies will complain they are neglected), the discipline embedded in the global recovery strategy is likely to be bypassed even by implementers with a genuine commitment to it.

A global strategy cannot be too detailed and precise, because of the inadequate information it is built upon and the uncertainties about the way transitional periods unfold. And in any case, a detailed strategy is bound to become soon outdated, to such a degree as to become useless. But broad quotas of the most important resources to be allocated, such as investment and staff, are paramount to guide field implementers. For instance, a province with 10% of the population, but 6% of beds and 5% of staff, might be attributed 15% of the investment planned over 5–10 years, to redress its gap. Once more, quotas may be set broad at the start of implementation, and be revised later, when a better understanding of the field situation emerges.

- A heavyweight player, such as an aid agency driven by strong ideological beliefs or structured approaches, may ignore the results of the analytical exercise and decide to move forward with its favourite interventions. For instance, an agency may be committed to “quick impact projects”, which are by definition designed in haste, and have almost invariably a limited impact at regional or national level. The most disruptive initiatives are those unknown to partners, who cannot adjust their plans accordingly. Intelligence, political skills, peer pressure, and patient bargaining are needed to minimize the damage caused by such behaviour.
- Interest groups inside the health sector may feel threatened by the chosen strategy and react, sometimes openly but often covertly.
- A recovery strategy may be associated with the agenda of a certain agency, and resisted on these grounds only, regardless of its merits. At the beginning of the recovery process, agencies are likely to differ in relation to the strategy formulation exercise, showing a range of reactions, from indifference to serious commitment. Their stance may evolve over time, as the strategy is consolidated and attracts attention. Associating as many partners as possible from the inception of the exercise, to diffuse perceived entitlements to the strategy, is recommended.
- A once-pliant recovery strategy may fossilize, perhaps because its main authors have departed, and become increasingly irrelevant to the evolving policy context. Or the still-flexible strategy may be implemented in a rigid way, as if carved in stone. Continuous updating, adaptation to the changing environment, operational flexibility and common sense are essential to successful implementation.

Recommended Reading

Bower H (2002). ***Reconstructing Afghanistan's health system: are lessons being learned from the past?*** (MSc. Dissertation). London School of Hygiene and Tropical Medicine.

A brilliant inquiry into the complexities of the Afghan health sector at a time of dramatic changes. Very perceptive discussion of policy-making and coordination in an extremely disrupted and fast-moving context. The relevance and applicability of experiences from abroad to the Afghan situation is realistically appraised. This analysis should be complemented and updated by Strong L, Wali A, Sondorp E (2005). *Health policy in Afghanistan: two years of rapid change (a review of the process from 2001 to 2003)*. LSHTM.

Health Secretariat of the New Sudan (2004). ***Laying the grounds for the recovery of the health sector in a post-conflict Southern Sudan***. (Second Draft) March 2004.

A long-term recovery strategy developed under pressure at the beginning of 2004, when the peace agreement for Sudan seemed imminent and stakeholders started exploring the health implications of the coming political deal, which was in fact signed one year later. The severely inadequate information basis limited the depth and robustness of the formulation exercise. To be compared to the Mozambican recovery strategy, built on much stronger knowledge and formulated over a longer time span and with broader participation.

The main findings, goals and rationale of the Southern Sudanese strategy were later absorbed in the multi-donor Joint Needs Assessment finalized by the end of 2004. Despite this high-level endorsement, most of the measures recommended by the strategy to launch the recovery process only started to be implemented more than one year later. A time-lag between conception and implementation of policies of one or two years is commonplace in post-conflict settings.

Macrae J, Zwi AB, Birungi H (1994). ***A healthy peace? rehabilitation and development of the health sector in a 'post'-conflict situation: the case of Uganda***. London School of Hygiene and Tropical Medicine.

A classic report, groundbreaking and very influential. Several of the patterns shaping transition from war to peace are described and critically discussed. A synthesis of the report's main themes is given by Macrae J, Zwi AB, Gilson L (1996). *A Triple Burden for Health Sector Reform: 'Post'-Conflict Rehabilitation in Uganda*. *Social Science and Medicine*, 42:1095–1108.

Noormahomed AR, Segall M (1994). ***The public health sector in Mozambique: a post-war strategy for rehabilitation and sustained development***. Geneva, WHO (Macroeconomics, health and development series No. 14). Available online at: http://whqlibdoc.who.int/hq/1994/WHO_ICO_MESD.14.pdf, accessed 17 September 2008.

This recovery strategy, developed before the end of the war in 1992 by the Ministry of Health of Mozambique, was later published by WHO as “best practice”. One decade later, it still deserves this title. Resulting from three years of studies and discussions and largely conceived by insiders, this document set a clear resource

constraint for health sector recovery, planning what was at the time considered affordable in the long term. Its influence on the reconstruction process was vast. If the reconstruction of the health sector resulted in a (qualified) success, it was also because many autonomous actors tried vigorously to materialize the vision laid down in this document. Despite its age, recommended reading to every practitioner involved in a recovery process.

Pavignani E, Colombo A (2001). ***Providing health services in countries disrupted by civil wars: a comparative analysis of Mozambique and Angola 1975–2000***. WHO. Available online at: www.who.int/hac/techguidance/hbp/Providing_services_main/en, accessed 17 September 2008.

An exploration of the diverging evolution of the health sectors of two war-torn countries, with the aim of understanding the reasons behind their comparative success and failure. The challenges posed by and the lessons learnt from the post-conflict reconstruction of Mozambique were discussed in relation to Angola and other countries embroiled in or emerging from conflict. Instructive for decision-makers, health planners and aid officials called to face the dilemmas posed by protracted crises and post-war transitions.

Pavignani E (2006). **Health service delivery in post-conflict states**. Chapter 14 in: *High-level forum on the health millennium development goals: selected papers, 2003–2005*. Geneva, WHO and World Bank.

This paper analyses post-conflict transition processes, and reviews the challenges faced by donor agencies engaged in such processes, stressing the related dangers as well as the opportunities. It highlights the importance of investing in the development of health services, with a view to alleviating the suffering of war-torn populations and contributing to the consolidation of long-term peace processes. The article recommends experience-based principles to be adopted and approaches to be avoided. It discusses the factors that influence health interventions and suggests ways of addressing likely dilemmas and tensions. This paper may be read as an introduction to many of the themes discussed at length in this manual.

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The reconstruction of disrupted health sectors

Annex 12

The case of Mozambique

The situation at the end of the war (1990–1992)

- Massive destruction and displacement
- Low coverage of basic services (accessible to only one fourth of the population). Hospital and urban biases
- Overall poor quality of care (outside privileged project areas)
- Under-skilled workforce, concentrated in towns
- Negligible state financing (below US\$ 1 per head), alleviated by external contributions (US\$ 4–5 per head)
- Severe donor dependency. NGO proliferation. Massive projectization and fragmentation of health activities
- Scarce, incomplete and unreliable information about available resources and service outputs. Desertion of sound financial management practices (by both donors and recipients)

The adopted approach to reconstruction

- Continuity of institutional and management settings
- Formulation of a costed, realistic recovery strategy
- Dominance of the public sector in health service provision
- Incremental, organic growth of facility-based services
- Equity, rather than quality of care or efficiency, as the main driving concern
- Painful decisions regularly postponed to “more propitious times”

The resources made available for reconstruction

About US\$ 300 million invested in the reconstruction process over a decade by donor agencies and development banks. Main channels:

- UN agencies (through the CAP mechanisms during the first years)
- NGOs (mainly targeting PHC delivery)
- Government (mainly targeting hospitals, training, support systems)

The constraints encountered

- Overcrowding of the policy agenda. Proliferation of (mainly donor-driven) priorities
- Weak political leadership. The line of least resistance was regularly preferred
- Weak technical and managerial capacity. No explicit strategy introduced to overhaul management structures and capacity
- Delayed and erratic availability of resources (internal and external)
- Despite the stated PHC policy, decision-making remained dominated by hospital-oriented medical doctors

The Long-Term Results

• Positive

Expanded health services, both in volume (+59% from 1993 to 2000) and coverage (roughly two thirds of the population used basic services in 2002)

Redistributed healthcare provision to cover underserved areas

Increased total financing (around US\$ 10 per head in 2002). Expanding internal funding (51% in 2000)

Upgraded and redeployed workforce

Restructured pharmaceutical area, which dramatically improved the availability of essential medicines of proven efficacy

Reduced fragmentation and inefficiencies

Increased management responsibilities of recipient authorities

Improved information and transparency

- **Negative**

Poor absorption capacity of expanded financing

Widespread informal privatization of healthcare provision

Weak or absent regulatory systems

Management structure and practice remaining outdated, top-down, rigid, procedure- rather than result-oriented

Poor patterns of quality of care

Hospital-bias maintained. Facility-focus maintained and strengthened

Lack of preparedness of the health sector to respond to HIV/AIDS

Unclear direction of sector development. Reforms (decentralization, public sector reform, financing, health sector reform etc.) talked about but not acted upon

Overstretched public sector, trying to deliver all services and address all issues

Powerful negative incentives outweigh stated policies

The lessons to be retained for other reconstruction processes

- Forever postponing painful decisions leads to problems of intractable proportions
- In the long-term, the lack of a robust regulatory system may jeopardize even substantive achievements in service provision
- The cautious incrementalism often appropriate to transitional contexts may slowly give way to indifferent conservatism
- Anticipating events is key to system development
- Getting incentives right is the most important component of a recovery process

The case of Mozambique

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The case of Uganda¹

The situation at the end of the war (1986)

- Scarce, incomplete and unreliable information for policy design. Absence of a real health policy and of a meaningful health policy debate
- Different actors bypassed the MoH and collected their own data with their own information systems
- Severe donor dependency. No coordination. No guidance from Ministry of Health
- Widespread population impoverishment, displacement, destruction of infrastructure, breakdown of social structures. Continuing localized conflicts especially in the north and east of the country (about 25% of the national territory)
- Very low levels of public revenue. By 1986 public health budget about 6.4% of its 1970 levels
- Health workforce decimated by outward migration and widespread killing. The under-skilled cadres left concentrated in hospitals and in towns
- Health system collapsed. Hospital bias. Health units, especially lower-level ones, without qualified personnel, equipment, drugs
- Services available mainly in health units run by churches (especially hospitals and in the north)
- Overall poor quality of care (with very few exceptions)
- Many disconnected projects supported by dozens of international agencies and hundreds of local NGOs: massive projectization and fragmentation.

The adopted approach to reconstruction

- Restoration rather than redefinition: a return to the pre-1970s health system irrespective of appropriateness or viability
- Expansion of service coverage through a reliance on vertical programmes (e.g. immunizations, essential medicines)
- Acceptance of donor choices and priorities rather than investigation and satisfaction of population needs
- No attempt to develop a strategic vision for the health system
- Emphasis on infrastructure rehabilitation as a means to establish legitimacy of new government

The resources made available for reconstruction

- Substantial donor contribution to infrastructure rehabilitation (especially, but not only, from the World Bank and through loans rather than grants)
- United Nations and bilateral agencies mainly involved in “Selective” Primary Health Care activities
- Donor funds increased eightfold over four years from about US\$ 5 million in 1982/1983
- Government expenditures primarily directed towards secondary and tertiary care
- In 1986–1987 Kampala’s main hospital consumed 30% of the recurrent and 70% of the development budget

¹ Prepared by: Maurizio Murru

The constraints encountered

- No policy debate. Limited analytical, technical and managerial capacity. Proliferation of mainly donor-driven “priorities”, based on little evidence
- Investment primarily serving political rather than health needs
- Continuing guerrilla war in several districts diverting funds from social to defence expenditure
- Ready donor funding for capital investments, with no budget provision for recurrent costs
- Low public-sector salaries led to informal charges and uncontrolled privatization of services provision
- Despite the stated PHC policy, decision-making dominated by hospital-oriented medical doctors
- Equity, social justice, community participation, of no real concern for government and donors

The long-term results

- **Positive**

Many units physically rehabilitated added to the legitimacy of the new government
 Service provision expanded, although mainly in urban and peri-urban areas
 Capacity for information-gathering and analysis recovered slowly, to attain respectable levels

Critical voices provoked a meaningful health policy debate in the following years.
 In fact, a period of reforms started about a decade later

- **Negative**

Missed opportunity for the reshaping of the health system

Introduction of perverse donor-driven incentives and allowances

Weak or absent regulatory systems. Widespread informal, unregulated privatization of healthcare provision

Poor quality of care

Curative, hospital-bias maintained and even strengthened

Development of many vertical programs

The lessons to be retained for other reconstruction processes

- To work without a coherent and comprehensive policy leads to the chaotic proliferation of interventions, whose wide-ranging negative consequences will be felt for decades to come
- If long-term results are of real concern, donors should work inside government structures, so as to strengthen them
- Promoting a wide, evidence-based policy debate may help in raising the real issues at an early stage. Inclusion of local authorities in such a debate is crucial for creating and strengthening capacity and ownership
- In situations where areas of the country are still unsafe, reconstruction (rather than pure military force) could be a useful strategy to win legitimacy and confidence
- The perverse incentives introduced by donors bear the potential of distorting the whole health sector and of offsetting progress otherwise registered
- To anticipate events is key to system development. To pursue restoration without considering the structural changes induced by decades of civil war is short-sighted.

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The case of
Uganda

The case of Cambodia²

The situation at the end of the war (1993)

- Over two decades of attrition of health services, beginning in 1970 with the civil war following the Lon Nol coup, the Khmer Rouge genocide (1975–1979), UN sanctions against the Vietnam-backed People's Republic of Kampuchea (1980–1991)
- Persisting insecurity in more remote areas until 1997
- Extensive destruction of facilities
- Decimation of health workforce due to violence and induced migration
- Accelerated training of health personnel, with limited resources, and hospital focus
- Concentration of resources in Phnom Penh and provincial capitals
- 30% of population covered by basic services
- Poor Ministry of Health capacity
- No designated health budget. MoH expenditure US\$ 1.02 per capita in 1994
- Heavy donor dependency
- No multilateral involvement other than UNICEF
- NGO role prominent. MEDICAM, an informal coordinating mechanism, established by international NGOs
- Vertical programs dominated health sector with strong donor links
- Poor information base, with data limited to hospital collections

The adopted approach to reconstruction

- Comprehensive health sector reform program initiated in 1996 following strengthening of MoH capacity
- Health Coverage Plan with two-tier Operational District structure based on population rather than administrative boundaries
- Minimum Package of Activities (MPA) delivered by health centres to aggregate populations of 10,000; Complementary Package of Activities (CPA) delivered by referral hospitals to populations of 150,000–200,000
- Extensive rehabilitation and building of infrastructure
- UNICEF, WHO technical advisers at MoH and provincial level
- Former district hospitals and commune clinics to be rationalized into new coverage plan
- Workforce to be standardized, training of doctors contained, training of nurses and midwives upgraded
- Vertical programs to be integrated into MPA
- National Financial Charter to improve access to budget funds and to permit cost recovery at health centres and hospitals
- Establishment of exemption schemes (subsequently equity funds) for the poor

The resources made available for reconstruction

- Substantial donor contribution to physical rehabilitation of infrastructure (World Bank and Asian Development Bank loans, bilateral donors)

² Prepared by: Peter Hill

- Continuing multilateral and bilateral donor support for vertical programs
- NGOs heavily involved in district-level and PHC services
- MOH maintained salaries, with increasing budget allocations (from US\$ 15 million in 1994 to US\$ 31.8 million in 2000); actual expenditure increased in percentage as well, over the reform period

The constraints encountered

- Further conflict in 1997, resulting in 25% fall in development assistance through sanctions
- Total funding support (MoH and donors) inadequate to finance reforms
- Human resource development not consistent with the demands of the Health Coverage Plan
- Poor financial incentives for staff limited MoH leverage to redistribute workforce
- Initial capacity within central MoH and at provincial and district level severely limited
- Quality of services in government facilities poor
- Cost recovery not sufficient to meet health workers expectations
- Resistance to changes implicit in Health Coverage Plan, especially closure of commune clinics and downgrading of former district hospitals

The long-term results

- **Positive**

Infrastructure enhanced

Access to health services substantially increased

Effective drug procurement and distribution through central medical stores

Better coordination of multilateral and bilateral donor and NGO activities

Commitment of key donors/banks to sector-wide management

MPA delivery extending immunization and antenatal coverage

Increased budget for health, increased revenue from cost recovery

Significant increase in MoH capacity and ownership of reforms

- **Negative**

Human resource management lagged behind infrastructure

Limited implementation of Complementary Package of Activities

Financial package not adequate

Regulation of private health care providers not achieved

Equity issues not systemically addressed

The lessons to be retained for other reconstruction processes

- The financial package available determines the parameters of possible infrastructure reform
- Reinforcement of existing strengths – such as the provincial hospitals – needs to proceed before other initiatives are taken
- Human resource development must keep pace with service delivery reforms, particularly where new hospital-based technology is planned
- Without effective regulatory controls, or salary incentives, the MoH is powerless to bring about the necessary redistribution of the health workforce
- Private health care providers must be dealt with as part of the reform process,

particularly where they supply a large and growing proportion of primary medical services

- In situations like Cambodia, in-service training faces a dual task: a) to reorient health staff towards working in their new roles, in a cooperative team, and b) re-teach basic clinical skills not acquired during their original vocational training.

The case of Cambodia

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Producing a health sector profile

Module 13

Contents

This module discusses the practicalities of developing a Health Sector Profile (HSP). It starts by describing its nature and goals, followed by a discussion of timing, preparatory work, and political and organizational aspects of the exercise. We then review the indicators to be collected, and provide a few hints related to interviews and group discussions, the management of the gathered information and the writing of the report. A production template sketching the many issues to be kept in mind during the study is then presented. A barebones approach to carrying out a rapid exploration of a disrupted health sector, within a tight time constraint, closes the discussion. After it, several examples of HSPs, reflecting different situations, are briefly commented upon.

Annex 13 proposes a concise way of mapping the information collected on a troubled health sector to bring together main issues, doubts about findings, policy options, and lessons learnt elsewhere and considered relevant. The example used is Somalia in 2008.

Introduction

The HSP is a synthetic instrument, offering a systemic, updated, as reliable as possible view of a health sector, including its structure, resources, outputs, performance and dynamics. By providing a map of the sector stripped of the beliefs and rumours that abound in crisis environments, and built to the maximum extent on verified facts, the HSP intends to help willing actors find their role within a shared framework.

This analysis pays particular attention to the interplay between underlying features (preceding the disruption, but being affected by it) and the new characteristics induced by violent events, or by external changes. The main goal of the HSP is to help decision-makers active at national and international level understand the main patterns, problems and distortions of a troubled health sector, so as to inform their actions.

In the majority of situations, the production of a HSP becomes an iterative exercise, whereby a first exploration generates a tentative profile, fraught by doubts caused by the existing information gaps. This tentative profile offers a stimulus for addressing uncertainties. Thus, after a period of further search for new information and the carrying out of dedicated studies, a second version of the profile is likely to be more confident and exhaustive. In some very complex situations, a third round of exploration may be needed. Then, to ensure that the profile is updated and enriched with the new information that becomes available over the years, permanent follow-up capacity should be ensured.

Why and when to produce a HSP

Reasons to produce a HSP include:

- a. To document a situation before a crisis, or at its beginning. In this way, the available information can be exploited in a relatively stable environment, which allows for field visits, contacts, interviews, etc. These opportunities will not present themselves later, when the crisis fully unfolds and most information is lost.
- b. To document and understand the changes introduced in the health sector by the crisis, particularly when the entry of many outsider actors fragments and blurs the picture.
- c. To brief newcomers (particularly donors) about the patterns prevailing in the health sector and offer a map to guide their decisions.
- d. To offer specialists a broad view of the sector they work within.

- e. To constitute a baseline to inspire discussions about reconstruction, when political and military denouements make it to appear as imminent.

The nature and pace of the crisis condition the timing of the study, as well as the operational approach to it. In the run up to the 2003 war in Iraq, a HSP capturing the essentials of the situation before the collapse of the public sector would have been produced summarily and under pressure (along the lines sketched in the last section of this module, *A barebones approach*). In turbulent crises that evolve fast, where important decisions have to be taken within few months, the sooner the exploration is completed and its results are offered to decision-makers, the bigger the chances are that they are used. A stronger analysis, made available months or years after critical decisions were taken, is clearly of limited value, if not as historic reference.

Conversely, in stalled situations with slow peace negotiations under way and frozen military operations, such as in Sudan in 2003–2004, a review of the sector can be thoroughly prepared and carried out with some accuracy and broader participation. The commissioning of dedicated studies to address major information gaps becomes a concrete option.

Practical arrangements

An important issue to be discussed at the beginning of the study is the time allowed to it. Severely wrecked sectors of large and complex countries, such as the Democratic Republic of the Congo or Afghanistan, call for several months of work. Serious language barriers, large inaccessible areas, poor communications, lack of previous analyses, protracted data retrieval times and the need to produce most of the information for the first time: all factors converge to expand the time required to complete the exercise. Conversely, small countries such as Liberia might entail shorter periods of study. Before starting the exercise, it is difficult to assess with any accuracy its time requirements. A specific clause in the terms of reference, clarifying that the eventual duration of the study will be agreed upon only after a round of exploratory work that throws light on what is already known and what remains to be studied, might be considered by sponsors and analysts.

The analyst(s) tasked with producing a HSP may be insiders knowledgeable of the sector or outsiders, perhaps exposed for the first time to it. While the former option should be pursued whenever possible, the latter offers potential advantages, such as international experience, emotional detachment, a fresh look at problems, and a perceived fairness of appraisal. *The European Observatory on Health Care Systems* (see for information in *Examples of HSP*) chose to associate insiders to outsiders, an approach to be recommended when feasible. A possible obstacle is the unavailability of indigenous experts familiar with the sort of study under discussion. In some cases, a local junior analyst can join a senior outsider in a de facto apprenticeship collaboration, preferably made explicit by the contract. Associating an apprentice to the study strengthens the chances of the HSP being followed up and updated after its completion.

Heavy reliance on outsiders implies heavier costs (due to higher fees and longer periods of work), imposes a tight timeframe for concluding the exercise, and incurs the risk of returning a shallow product, made of already-known bits of information wrapped with international platitudes. In fact, the acid test of the validity and usefulness of a HSP is the extent it challenges the received wisdom with fresh and reliable insights. As a rule of thumb, outsiders are useful in the measure that the assignment is clear (including in its political implications), the commissioning agency is strong and prepared to invest time and energy in the exercise, and there is genuine interest within the health sector for the end product.

Preparatory work

Desk study before starting the fieldwork. A preliminary desk study carried out during the intensive phase of information gathering may provide an excellent yield of data, contacts and tentative insights at reasonably low cost. It will save time in-country, step up the learning curve and, if they are new to the health sector to be studied, introduce the analyst(s) to insiders under a more favourable light. Given the outward migration that affects most troubled countries and the worldwide dispersion of valuable documents, a thorough and comprehensive preliminary desk study is likely to add special value, both in terms of written and oral information.

Module 14. Resources suggests some useful sources, to start a review of what is available. The commissioning agency may contribute to the desk study with valuable materials. Visits to well-endowed resource centres are also helpful. But the best source of grey literature, which usually accounts for the main part of the information to be relied upon to build a HSP, are knowledgeable people, who should be contacted right at the onset of the study. Some of them are well known to most staff involved in gathering information about a given country. Others may be identified only later, at the end of a long chain of contacts.

The *references* of the obtained reports must be thoroughly scrutinized for promising titles. Unfortunately, many titles are not very instructive about the actual contents of the respective reports. After several checks, repeated references pointing at the narrowness of the existing information will be identified in many cases. Usually, only a fraction of the screened promising documents may be found on the Internet. As more virtual resource facilities are created, things might change quickly. The yield of searches on the Internet is always unpredictable: something interesting is usually found, even if it is not what was originally sought. To control the risk of dispersing time and attentions on marginal issues (only weakly related to the main issues under study), or in the retrieval of documents of dubious value, a measure of self-discipline is demanded from the analyst(s).

Political dimensions of the study. Despite the technical nature of the HSP, many issues touched by it have political implications, which inevitably induce strong reactions. Analyst(s) and sponsors of the HSP should be prepared to withstand political arguments. The political nature (true or perceived) of the exercise influences both its execution and its eventual reception by stakeholders. A quick look at the politics of the health sector may help to approach informants, agencies and decision-makers in an appropriate way. The credibility of the sponsoring agency plays a heavy role in shaping the way the study is perceived by actors, as well as in influencing their expectations about it. Thus, the overselling of the analysis to be carried out (particularly at the beginning) may become counterproductive.

The analyst(s), if perceived as strongly associated to a powerful and aggressive commissioning agency, may find those informants who oppose it less outspoken and later less inclined to endorse the conclusions of the study, whatever they are. To dilute the bonding of the analyst(s) to the promoting agency, a joint venture involving several sponsors may be helpful. This approach too may backfire, as when initiatives launched by the most powerful, 'like-minded' donors are perceived as imposed on recipients, and are therefore rejected in fact (despite the ritual assurances to the contrary), regardless of their merits. The diversity of the promoting group may overcome these dangers, usually at a price. In fact, inclusiveness implies long negotiations and the incorporation of disparate information demands and participation needs, which may weaken the study's focus. The study team may swell to include unlikely partners, unable to work together effectively. In politically-charged environments, institutions perceived as technically reliable and less loaded with political biases, such as research ones, may offer a practical solution to this problem.

In the end, the quality of the resulting analysis affects to some extent its reception and in some cases might even overcome an unfavourable political environment.

Nonetheless, the analyst(s) would be wise to consider the political space within which they move and avoid the most obvious traps, without excessively relying on the technical strengths of their work as a guarantee of its acceptance. Many decision-makers are political appointees, not necessarily conversant with technical issues, who work under heavy political pressures that they cannot forego because a brilliant analysis suggests they should act otherwise.

For an example of the difficulty of carrying out a joint analytical exercise in a bewilderingly complex context, see *True Story No. 21. The saga of the Palestinian Health Sector Review 2003–2007*.

Organizational aspects. The sponsoring agency(ies) may take several steps to prepare participants for the exercise. Letters explaining the goals of the study and the approach to data collection should be sent in advance to concerned bodies, specifically asking each of them to designate the most appropriate informant(s) and to organize the relevant materials they have available. Later, meetings with participating agencies are needed to clarify doubts and sharpen the study briefing, for instance identifying the perceived information priorities and the expectations of different agencies. In this phase, similar or competing studies, at sector or sub-sector level, already programmed or still incipient, can be identified. Overlaps may be reduced and synergies identified. These meetings may help to foster a culture of information sharing and overcome the diffidence of some participants.

A list of relevant materials available with each agency should be compiled. Another list with the contacts of identified informants offers to the study team a simple way to start interacting with them. Early contacts are recommended, as knowledgeable people are often travelling, overloaded with work and distracted by competing concerns.

A particular problem arises when many key documents are written in languages inaccessible to the study team. The hiring of additional analysts (even junior ones) fluent in those languages is a way to address this important obstacle.

Indicators to be collected

All the indicators presented and discussed in this manual are relevant to the elaboration of a Health Sector Profile. Some of them are commented in *Annex 2*. Their availability varies across countries. In most protracted crises, many of the proposed indicators are missing. The reporting formats used in some cases induce the use of indicators of equivalent value, instead of those suggested in the tables. Frequently, unreliable indicators must be discarded, so that the dataset on which the analysis is built may become worryingly flimsy. Clearly, when most indicators are unavailable, the HSP must be drafted in a tentative way, with its inadequacies clearly highlighted, and presented to the reader as a preliminary attempt at studying the situation. Practical ways of correcting the shortcomings of this provisional profile must be proposed.

Making the most of interviews and group discussions

Interviews may provide essential clues, but when poorly prepared and targeted they may become a serious waste of time, for interviewers and interviewees alike. A common mistake is to interview mainly or only heads of agency or department, who may not be the most knowledgeable people, are usually very busy and may prefer generic, “politically correct” statements to seriously delving into specific issues. As a general rule, postponing interviews to a later phase, when written materials have been fully exploited and key questions are emerging, is more productive. Interviews by email may contribute significantly to the analysis, particularly in sectors where many knowledgeable people are based abroad or have left.

Thoroughly selecting respondents according to their knowledge and expertise saves time. Additionally, preparing the key questions and submitting them to informants in advance helps to obtain thought-through, valuable answers and to save time by dropping interviews with the wrong informants. Short minutes of the interviews (at least of the most interesting ones) are worth the effort needed to compile them, particularly in later phases, when specific issues must be revisited.

Thematic group discussions may be very productive, provided they are well prepared and firmly guided by a moderator. Given the inherently erratic flow of these discussions, their results must later be structured into summaries that capture the essential points touched, with the rest discarded. Choosing topics that look relevant to prospective participants will increase the yield of the sessions. The participation in thematic discussions should be kept lean. Large gatherings inhibit many people, who may prefer to keep quiet even if they have important contributions to make. A group with a size of 10–15 is adequate in most cases. In order to ensure that number of participants, it is usually necessary to invite more people. Productive thematic discussions will motivate informants to participate actively in the following sessions. The first discussions are therefore crucial to ensure the credibility of the analyst(s).

Several days before a discussion, informants should receive a sketch of the issues to be covered, with the main questions to be asked. The more precisely these are formulated, the more productive the session is likely to be. A snapshot of the information gathered in relation to the theme to be addressed will help participants to recognize the aspects more or less understood, as well as those inadequately grasped. This will also encourage reactions, which will help to correct inaccuracies and misunderstandings. After each session, the convenors must write a summary of the conclusions reached during the discussion and invite participants to react. The most knowledgeable informants might be approached later, on an individual basis, for further discussions.

The topics chosen for the thematic discussions may be related to components of the health sector – like HRD, medicines, financing – or to issues of particular interest or controversy – like user fees and contracting. Hot issues must be prepared particularly well, with concise background documents submitted in advance to invitees, and moderated by somebody respected by most participants. Without this thorough preparation, group discussions of controversial topics are likely to degenerate in evidence-free skirmishes, ending up with the useless reaffirmation of strong beliefs and ideological positions by disagreeing participants. The convenors of a thematic discussion should make clear whether its main goal is information gathering, or the review of the opinions and positions of different actors.

Thematic discussions, like other meetings, incur heavy opportunity costs, and should be convened sparingly, only when they are judged necessary. In situations where written information is severely inadequate, the knowledge of actors may represent the main source of understanding, which may be tapped effectively and fairly efficiently through well-managed meetings. Additionally, these events may help to consolidate a shared view of important issues among stakeholders.

Organizing the collected information

The analysis of a disrupted health sector, particularly when attempted for the first time, entails the retrieval and scrutiny of a vast array of heterogeneous materials, both in digital and paper form. Given the need to continuously strengthen and update the HSP, the frequent revisiting of the original source materials is commonplace. Organizing them in a manner that is easily accessible to interested parties facilitates the process.

As a starting point, lists of the collected materials, specifying whether they are available as digital files or printed documents and where they can be found, should be elaborated. The lists should flag the papers found most informative and reliable,

as well as those seriously flawed, with brief comments. The original sources of the data used in the HSP, as well as the intermediate results produced during the analysis, should be included in the lists, if possible. These lists should be prepared in a way to be understandable to other users, beyond the author(s) of the HSP. In this way, the analysts tasked in the future of updating the HSP will be offered a valuable starting point, which gives depth to their work and saves time and efforts. To make this linkage easy, a note in the HSP should inform future users about the site from which this information can be retrieved.

If the collected information is abundant and of fairly acceptable quality (a rare event in disrupted health sectors), its compilation into a statistical information sourcebook could be considered. The publishing of such a statistical sourcebook, routine practice in many health sectors, may have been discontinued during a protracted crisis. However, the HSP should not try to replace it. Such a resource would complement the HSP with detailed data, not only of systemic interest, but also valuable for specific narrow purposes. For instance, the many disease-control programmes, to be discussed together in the HSP, might be looked at in greater detail in the statistical information sourcebook, whose main purpose is the documentation and preservation from oblivion of interesting information, even if inferences are not necessarily drawn from it.

It is good practice to share with informants the lists of collected materials, associated with an offer of making them available to interested readers. This measure disseminates the most interesting reports and usually generates useful feedback, in the form of comments on the shared materials and of new materials unknown to the collector.

Contacts should be sought with agencies interested in documentation, to determine the sites where the collected materials will eventually be stored. Given the propensity of documents to get lost in troubled environments, it is a sensible policy to store the most important items in several accessible and organized sites. Digital materials are easy to share, but tend to get buried and forgotten inside large hard disks. CD-ROMs containing a collection of selected documents are easier to identify and to disseminate. Information technology offers elegant ways to make the collected materials easily accessible. A website is an option. However, given the fragility of communication lines in these environments, traditional access alternatives must be guaranteed.

To become useful, information storage sites must be well known and easily accessible to the public. In troubled environments, security concerns may exclude many agencies from hosting public-domain documentation centres. In most countries, UN agencies are fairly open to visitors, thus better candidates for this function. The office with the best organized and most accessible documentation centre should be chosen. If no agency looks naturally eligible for this documentation role, discussions to motivate one to become the data-holder of the health sector, on behalf of all interested parties, should be held. To be effective, stability over time of this function has to be ensured.

Assembling a meaningful picture of the health sector

After the first round of exploration, once the most relevant materials have been reviewed, it may be helpful to organize the main ideas so far gathered in a matrix structure, where facts, doubts, information gaps, policy issues and tentative options, and lines of further exploration can be spelled out in a condensed form. By pointing at those areas where insights are emerging, and by singling out inadequately-understood ones where additional efforts are required, such an exercise helps to clarify the status of the study.

Provided it is acceptably concise, clear and conceptually sound, the resulting matrix may be circulated to check with informants the validity of the incipient analysis and

to encourage feedback. Also, interested parties may obtain clues about the direction the study is taking and assess whether crucial issues have not been spotted yet. And the matrix, if properly used, may offer a condensed starting point for wider policy debates.

Annex 13 presents an example of such a matrix, developed to map the situation in the Somali health sector in 2008. The matrix was based on what could be gathered about Somalia from documents and informants. Its preliminary and tentative nature should be patent by the way many statements are worded. By offering a sketch of the main issues, constraints, policy options and lessons learnt elsewhere, this map offers a common ground for discussion and for decision. Also, by pointing to the severe inadequacy of the available information, the matrix could encourage concerned participants to address this crucial shortcoming.

The format and the headings of the matrix should be adapted to different contexts and to different requirements.

Degree of precision needed by the analysis

The strengthening of the information on which the analysis is based progresses over time, as the most serious flaws are corrected, the consistency of data improves and understanding improves. Clearly, there is no obvious upper boundary to limit improvements and refinements to the collected information. A critical decision is therefore related to the point when the attained level of robustness is considered acceptable, so that no additional work on producing or refining the available information is required. This level strongly depends on the nature of the decisions influenced by the analysis. When the availability of data of increased precision does not affect to a significant degree major decisions, high-cost work on primary data is not advisable. As a general rule, broad allocative decisions are less vulnerable to imprecise data than programmatic ones. Thus, a donor policy forum needs information of lower precision and detail than a group of NGOs trying to coordinate their daily work.

Writing the report

Preparing an outline of the report at the beginning of the data collection phase offers several advantages:

- the main issues to be studied can be singled out from the onset and kept in mind as the research advances;
- the outline can be submitted to informants and reviewers to introduce the study and obtain useful suggestions and materials;
- emerging fragments of the report may be appended to the outline, as the findings so far collected allow for their composition. Put in the outline frame, these pieces can be better assessed and understood by readers.

The outline evolves as the study of the health sector proceeds, its main ideas are clarified and its overall direction is sharpened. The production template included in this module may offer an outline to start with, to be progressively adapted to the context and to the results of the study.

A concise report is more likely to be read and understood in its key points. To that effect, a parsimonious use of details is demanded. At the end of the enquiry, the main findings emerging from it should be clearly spelt out and given adequate resonance in the HSP. Details should be included in the most condensed form, to support the main findings and conclusions. Those details of some interest but considered unrelated to the core body of analytical work should be dropped.

Gaps, weaknesses, problem areas must be flagged in the draft text, as it grows from an outline to a full report. In this way, the author(s) are reminded of certain

difficulties and readers are encouraged to contribute to solving the problems that are still pending. As the data collection phase approaches completion, and several serious information gaps are recognized as impossible to address with the available information, the studies to be carried out to overcome these gaps should be conceived and steps towards ensuring they take place encouraged. The next phase of data analysis, aimed at producing a second, strengthened version of the HSP, can in this way be agreed upon among stakeholders.

If time allows for their redaction, **different versions of the HSP, aimed at different audiences** (politicians, aid officials, health professionals, journalists, ordinary citizens), **should be elaborated**. Alternatively, the most important audience must be identified as soon as possible, so as to orient the writing of the report towards them. A sensible compromise may be the writing of a very concise main report, interesting for and understandable to most potential readers, and to supplement it with as many annexes as needed, each of them providing detailed information about a specific area of interest. For example, the short financial chapter of the main report may be expanded into an annex, to address the information needs and the interests of the ministry of finance and of the main donor agencies, whereas another annex covering quality of care would target health professionals. Each annex could use a different technical jargon. The concise main report should instead be as jargon-free as possible. This approach would also help to address the issue of translating the HSP. Certain components could be selected for translation, according to the language used by their main prospective users.

Tables, charts, images and maps should be used to condense the information presented in the HSP, to clarify the main messages and to highlight them. No redundant graphical presentations should be included for the sake of embellishing the report. To verify whether graphical components convey the messages according to the intentions of the author(s), reviewers should be asked to comment on their meaning. A judicious balance between text and visual display of data is required. Some readers find tables and charts straightforwardly informative, whereas others are peculiarly blind to them and need to be guided through visual aids by an accompanying text. Sometimes, a measure of redundancy, to ensure that the main messages get across, is called for.

Pitfalls to be thoroughly avoided when displaying data include:

- cluttered images difficult to read, particularly after multiple photocopying;
- overuse of colours, fonts, drawings, pictures, which confound readers or divert their attention from core issues;
- loss of information passing from figures to charts or maps;
- misleading scales or representations of figures;
- overemphasis on ratios when denominators are unreliable;
- lack of notes or disclaimers indicating missing or doubtful values, and
- use of decimal figures suggesting precise measurements, when this is not the case.

Sensitive issues abound in protracted crisis, and contributions aimed at throwing light on them risk fomenting further controversy. For instance, the HSP may show that the MoH is discriminatorily acting against its stated progressive policies, or that certain aggressive donor agencies are pushing for evidence-free approaches, or that some NGOs incur prohibitively high overheads and deliver preciously little return on their claimed investment. Most important of all, the discussion of the ways the conflict impacts on healthcare delivery, obviously a key component of a HSP, may hurt the sensitivities of the military and of intelligence agencies.

The way the HSP deals with controversial issues must be finely balanced by its author(s). To a certain extent, the frankness of the report is conditioned by its

institutional nature. If commissioned and officially endorsed by an agency, sensitive themes must be handled with caution. Conversely, the discussion may take explicit tones when no institution is directly involved and the author(s) enjoy total control of and responsibility for the HSP.

In any case, careful consideration of the pros and cons of frankness is in order. On the one hand, to deal too cautiously with crucial issues of serious concern to most stakeholders, or worse to ignore them, would betray the main goal of the HSP and suggest that other findings too might have been sanitized. On the other hand, to address sensitive issues in abrasive ways risks inducing overreactions and diverting attention from other important themes studied in the profile. The acceptance of the whole product might become polarized, according to political positions and emotional feelings, rather than to the objective merits of the analysis. In this case too, the HSP would be doomed.

Getting useful feedback from knowledgeable people is invaluable, precisely because most of the collected information is fraught with problems. If most knowledgeable people find a preliminary finding convincing, it can be retained with increased assurance. A broad readership is also useful to identify unclear parts of the report and to reformulate them, so as to avoid misunderstandings later, when the report is finalized and enjoys an official circulation.

The circulation of written drafts usually elicits reactions from a number of informants. Other people need to be encouraged to react through face-to-face interviews, which may provide very important clues, particularly about issues informants are reluctant to comment upon in writing and by email. In countries with an intrusive security apparatus, informants may prefer to remain in the sidelines and not to be quoted. Also due to constraints of this order, personal interviews are often more rewarding than larger meetings, where sometimes only uncontroversial issues are addressed.

The circle of reviewers may expand as the report progresses. Preliminary drafts should be kept within a narrow group of readers, each personally informed and motivated to react by the author(s). As the profile gains content and strength, its readership may be expanded to include distant (either physically or hierarchically) knowledgeable people. Feedback from informants active at field level, possibly in different parts of the country, must be actively sought. Lack of reactions by many (usually the majority) among those asked to review the draft report should not discourage its author(s). Informants, particularly good ones, are usually busy people. To review and comment on a dense manuscript of the nature of a HSP entails time and concentration, scarce assets for actors or scholars of protracted crises.

To help readers to organize their files, use only updated versions and assess progress, the drafts of the HSP should be labelled on the cover page according to their status (i.e. preliminary incomplete draft; interim draft; final report, etc.) and date of release.

True Story No. 21

The saga of the Palestinian Health Sector Review, 2003–2007

The Health Sector Review (HSR) was launched in 2003, at the initiative of major donors. The Ministry of Health endorsed the Review, which was supposed to be concluded within six months. The collective exercise was aimed at assessing the whole health sector and identifying its main problems. Its findings would in turn provide stakeholders with firm foundations for planning adequate and coherent interventions.

Distinguished research institutions and consultants were brought in by supporting agencies to further the Review. Many documents were produced. Findings were discussed in several high-profile meetings, held in Cyprus (twice), Rome, Luxor, Jordan and Jerusalem. The interest of stakeholders waxed and waned over the years. The Ministry of Health participated in the technical aspects of the exercise, without taking full charge of its political and policy implications. The engagement of supporting agencies declined with the replacement of the officials who had originally promoted the HSR.

The nature of the review changed according to the agendas and perceptions of the involved actors. Some actors perceived the HSR as a mere technical tool to strengthen planning and programming, while others saw it as a process aimed at encouraging dialogue among distant partners. Others took advantage of the exercise to push for the launching of a health sector reform package. Many expectations were in the end frustrated.

In 2007, the HSR was formally closed down. The final document attempts to provide a synthesis of the many reports produced under the Review's umbrella, without taking full stock of their richness and variety. These products remain separated, still associated in the perceptions of players to the agencies that commissioned them. Technically sound analytical efforts failed to inspire decisions aimed at correcting the problems highlighted by the Review. Stakeholders did not feel compelled to formally endorse it. Thus, a shared understanding of the health sector is still missing. Inconsistent initiatives are the norm. With hindsight, the HSR looks as an egregious missed opportunity, which incurred enormous opportunity costs.

The HSR is the most visible example of joint sector-wide venture attempted in the Palestinian health arena. The troubles and the delays it went through provide an indication of the difficulty of launching coordinated initiatives in a fragmented, unstable and dependent health sector. Also, the experience of the HSR shows clearly that technical knowledge is insufficient to drive decision-making, when most of the needed decisions are politically unpalatable, and the MoH leadership lacks confidence, stability and clout to act resolutely.

Reasons for the inability of the HSR to reach clear, shared and formally endorsed conclusions:

1. an over-emphasis on technical aspects in the reading of some external analysts, who downplayed the political factors behind the flaws affecting the health sector, and the political implications of tackling them.
2. the failure of supporting donor agencies to agree at the start with the MoH an explicit agenda for change around the HSR, which was therefore perceived as an interesting but unbinding exercise.
3. the participation of too many institutions, whose contributions were uneven and sometimes technically flawed.
4. the performance of some experts, which fell short of expectations.
5. a participatory process that in the absence of firm leadership failed to result in a sound and consensual product.

By 2008, the Review had been shelved and seemed forgotten, while influential donors were promoting new analytical rounds in the hope of reviving a stalled policy discussion. The lessons learnt during the life of the HSR risked to be ignored.

For further details, see Abed (2007).

Production template - Issues to be explored

The comprehensive analysis of a disrupted health sector implies the review of many assorted and often disparate materials, which can divert the attention of analyst(s) from important aspects. The issues presented below, in most cases relevant to the study of a sector, should therefore be kept in mind as a reference checklist during the analysis. Not all of them will necessarily be studied. Other important issues, peculiar to specific situations, might be added when judged necessary. In any case, this checklist of crucial issues is proposed as a mere starting point for the analysis, rather than as a format to be strictly adhered to.

The broader country context: past, present and future

- Historical, cultural, political, economic (is a structural adjustment programme or other reform under way?) Does health enjoy a high profile in the domestic political arena?
- Aid patterns: intensity, origins, channels, evolution over time.
- The nature of the disruption. Root causes. Prevailing military patterns. Factors presently fuelling the conflict. Perspectives of conflict resolution.
- Crisis duration. Protracted low-intensity crisis? Short high-intensity crisis? Cyclical, punctuated crisis?
- How is the crisis framed by international media? Is this reading accurate? What are its implications?
- Is the country partitioned into areas controlled by hostile parties? What is the access to certain populations and areas? How did aid agencies respond to this situation?
- Displacement and migrations. Political and operational responses to flows of refugees in neighbouring countries.
- Administrative. Relevance of the country's administrative partition for health service delivery. Ongoing processes, such as public sector reform (this should include a discussion of the civil service). Centralized vs. decentralized settings.
- Find or build a chronology of the main events having characterized the country environment and the health sector, starting with the last years before the crisis. See *Module 3* for an example.
- Situation of other relevant sectors: energy, food, security, transport, education, water, communication. How do these aspects impact on health status and health service delivery?

Studying health status and health needs. Understanding their links with the history and politics of the country.

- What is known? Useful proxies of health status. Are national figures available? Are they reliable? Are sub-national figures informative of the broad situation?
- Available population estimates. Which one should be chosen?
- Nutritional patterns.
- What are the main determinants of health status? How are they related to the crisis?
- Main epidemics reported during the last years, with affected areas, number of cases and deaths.
- Main endemic diseases, with for each the estimated prevalence and incidence if known (avoid mentioning figures lacking empiric basis or, if they are mentioned, stress their inadequacy).
- HIV/AIDS. Present situation and likely evolution.
- Performance of surveillance mechanisms.

Analysing health policy processes

- Tracing the evolution of the health sector over time. The policy-making context.
- Policy formulation and implementation. To what degree do stated policies match field realities? What obstacles to implementing stated policies may be recognized?
- Nature of the existing/proposed policies. Comprehensive or sub-sectoral? Imported or indigenous? Appropriate to context (present and future)? Feasible? Realistic? Sustainable in the long term?
- Unstated, underground policies. Are important pressure groups and professional lobbies recognizable?
- Is a health sector reform under way? Assess its appropriateness and feasibility.
- Who are the main actors in the policy arena? Who is setting the policy agenda? What are the main concerns of different actors?
 - government, central and peripheral. Positions and contributions of different ministries;
 - rebel groups, if any;
 - donor, relief, UN agencies; international development banks;
 - international and national NGOs (including charities);
 - professional associations and private for-profit health service providers.
- Coordination of external assistance (or otherwise lack of it). Main coordination mechanisms. Effectiveness and efficiency of the present coordination settings.

Analysing health sector expenditure and financing

- Sources and flows of funds (internal and external).
- The resource envelope, present and projected. Discuss the size of the resource gap in relation to health sector needs.
- Composition of health expenditure. What main imbalances can be recognized?
- Degree of aid dependency. If serious, will the health sector remain dependent on aid for long?
- Aid management tools in place in the health sector.
- To what degree are financial management systems effective and efficient?
- Is absorption capacity perceived as a serious constraint?

Analysing patterns of healthcare provision

- Coverage of health services. What indicators are available? Best-served and worst-served areas. Are important inequities and inequalities in access to health services recognizable?
- Utilization of health services.
- Quality of care, perceived by users and technically assessed. Is it a debated issue? Are related studies available?
- Prevailing healthcare delivery models.
- Services packages. Have they been developed? Are they costed? To what extent are they appropriate to the existing/future situation?
- What vertical/disease control programmes are in place? Importance, resources and performance of the main programmes.
- Health care for urban settlers, for refugees and IDPs, for nomadic groups. Is health care provided to these population groups in a structured way?

Studying management systems

- How did the health sector respond to the crisis?
- What “management systems” are recognizable?
- What regulation systems are in place? Are they soundly designed? Are they effective?
- Is the sector architecture appropriate to the pursuit of the chosen policy goals?
- Assessing existing capacity.
- Assessing effectiveness and efficiency of health service delivery.
- Procurement arrangements.
- Public/private. Comparative strengths and weaknesses of different healthcare providers.
- Formal/informal healthcare delivery.
- Management arrangements of vertical/disease-control programmes.
- Does a decentralization policy exist? Does it encompass the whole public sector or is it limited to the health sector? Patterns, merits and opportunities.

Studying the healthcare network

- The broad patterns of the network:
 - Pre-crisis features. How did the network change over time? Adjustments induced by the crisis. Degree of dilapidation of the existing network.
 - Was the network planned or is it composed of disparate components?
 - Is it balanced (between levels of care)? Is it uniformly distributed across country?
 - How does the urban healthcare network compare in size, delivery model, and technical contents to the rural one?
- Hospitals (tertiary and first-referral).
- PHC facilities. Developed? How were they affected by the crisis? Do PHC facilities follow standard layouts and/or functional profiles?
- Referral capacity.
- Support infrastructure (administration, training, warehousing, maintenance).
- Estimation of the capital value of the network.
- Identification of existing distortions. Formulating strategies to address them. Planning the recovery of the healthcare network.

Analysing human resources for health

- Number and composition, deployment (by region, level of care, public/private). Migration (internal and abroad) of health workers. Attrition.
- Registration mechanisms. Ghost workers.
- Staffing patterns: norms vs. actual. Workloads, aggregated and for the main categories.
- Training (pre-service and in-service) capacity. Public/private training financing and provision.
- Job descriptions and training contents. PHC vs. hospital orientation of the main categories. Balance of power between them.
- Assessing staff performance.
- Semi-professional cadres: community health workers, volunteers, aides, etc.
- Civil service and salary issues. Regulation. Incentives (positive and negative).
- Qualifications and skills belonging to belligerent organizations. Integrating formerly rival health workers.

- Identification of existing distortions. Formulating strategies to address them. Critical assessment of the National Human Resource Development strategy, if it exists. Is it consistent with the overall health policy?

Studying the pharmaceutical area

- Analysing the national drugs policy, if it exists. Is it known? Is it enforced? Is it enforceable? Is it appropriate? Is it consistent with the overall health policy?
- Who does what and where in the pharmaceutical area: funding, regulation, procurement, storage, distribution, dispensing and prescribing?
- Financing, public (internal and external) and private. Is there a gap in drug imports? Main reasons for it. What is its size? Existing cost-sharing schemes. Exemption criteria and practice.
- Are health services adequately supplied with medicines? If not, what is the main reason? Underfunding, flawed choice of drugs, inefficient procurement, wastage along the supply chain?
- Regulatory systems (legislation, drug register, national drug formulary, inspection capacity, quality control, dispensing and prescribing practices, etc.). Public and private operators in the pharmaceutical area.
- Essential medicines: concept and programme. Circulation of generic vs. brand drugs.
- Domestic pharmaceutical production, public and private. Quality standards. Drug imports. Aggregate volumes. Main channels. Are drug donations important?
- The role of vertical/disease control programmes in relation to drug supply.
- Internal distribution (push vs. pull). How fragmented is it? Warehousing and transport.
- Human resources in the pharmaceutical area. The training of pharmacists.
- Drug availability at facility level, by level of care, by region and by rural/urban.
- Waste.

Putting the pieces together. Priorities for action

- What are the most serious systemic weaknesses and distortions to be addressed? Which of them are caused by the violent disruption and which are underlying it?
- What strengths can be recognized?
- In which direction(s) is the health sector being pushed by the most influential actors? Are these directions already set, are they under discussion, or is no clear orientation yet recognizable?
- Addressing absolute/relative resource constraints. Addressing external dependency. What financing levels can be realistically anticipated for the health sector in the mid- and long-term?
- Addressing management weaknesses and induced inefficiencies. How to deal with fragmentation.
- Addressing inequities and inequalities. Will a settlement of the ongoing conflict alleviate or worsen existing inequities and inequalities?
- Spell out the main political, military, economic, administrative preconditions for health sector recovery.
- Is a “big-bang” reform a feasible/desirable option in the present situation? Can the health sector be “fixed” by marginal corrections or is it in need of structural overhauling?
- Perspectives for recovery. What timeframe is anticipated for the recovery of the health sector? What order of magnitude is anticipated for the cost of restoring

healthcare delivery to satisfactory levels? Develop high-level, mid-level and low-level scenarios.

- Which studies are urgently needed to address the most serious information gaps?
- Summing up: what are the priority needs of the sector and the priority interventions that need to be implemented to address those needs? And what are the rough cost implications for such interventions? Discriminate between mid- and long-term interventions.

Carrying out a rapid exploration of a disrupted health sector within a tight timeframe

A barebones approach

Contexts imposing a rapid exploration. Understanding the inner features of a troubled health sector calls for a serious effort, sustained over several months and involving a large number of participants. However, as witnessed in Kosovo, Timor-Leste, Afghanistan and Iraq, the quick pace of events may impose a very tight timeframe, thereby ruling out a careful study along the lines described in this module.

This time constraint holds particularly true in situations involving a sudden opening of space for action. Under political and media pressure, actors are given the resources and are pushed to move forward with the implementation of health activities, even if the main features of the health sector are poorly understood, due to deficient documentation or to dramatic change. Typically, a major donor conference may be scheduled within a month or two from a decisive event, such as a ceasefire, and that deadline frames the window of opportunity for carrying out a study that helps decision-makers. This last section tries to sketch an approach aimed at glimpsing the fundamental features of the sector, stripped-down of its non-core aspects.

Suggested approach to a rapid exploration

Tips:

- It is never too early to start exploring the sector. Start in earnest, without waiting for the formal beginning of the study.
- Streamline background reading. For example, the EIU is usually enough to obtain a decent grasp of the political, military and economic background. Put aside promising reports related to non-core issues. The useful details found in them may be revisited later, when the circumstances allow for it.
- Drop field trips from the work plan. Instead, ask seasoned insiders about the main features of health services.
- Make parsimonious use of meetings; drop ceremonial ones.
- Keep the study team small (1–2). Only seasoned analysts, with previous experience of disrupted contexts, should be considered for the assignment. Clarify the respective duties at the beginning of the work. Prepare an outline of the HSP as soon as possible.
- Identify at the beginning of the exploration a narrow circle of very knowledgeable people and obtain their collaboration, in order to obtain information, analyse data and validate conclusions. Some of these people may live abroad.
- Start writing pieces of the report A.S.A.P.

Steps:

- **Select a set of core aspects**, essential to the comprehension of the situation of the health sector, and concentrate efforts on studying them. In most cases, this narrowing of the study perspective includes the following aspects:
 - Foreseen political, military and economic outcomes of the events under way. Development level of the country (before and after the conflict).
 - Broad features of the health sector and their evolution over time. Main changes induced by the disruption. Health status (only roughly sketched).
 - Total resource envelope expected to be attributed to health in the short- and mid-term. Sources of financing (public internal and external, private). Internal composition of health expenditure (even a rough appraisal would help).
 - Main actors in the health sector (government, rebels, donors, UN agencies, NGOs, etc.); their relative influence on events.
 - Infrastructures (composition and distribution). Physical condition. Rehabilitation demands.
 - Size, composition, skills and deployment of the health workforce. Salary issues.
 - Expenditure for medicines. Main shortcomings in the drug chain.
 - Service outputs, as aggregated as available data formats allow.
 - Balance/imbalance among inputs, outputs and population.
 - Indications of efficiency and effectiveness (systemic and operational). The public-private mix.
 - Use of health services. Prevailing healthcare provision models. Equity issues.
- **Compare the findings with countries of similar characteristics**, starting within the same region.
- **Identify the main problems and distortions**. Map them, alongside policy options, constraints, and doubts. The matrix presented in *Annex 13* offers an example of such a rough mapping.
- **Discriminate** between **a)** the flaws considered by the analysts as reasonably understood and **b)** issues requiring further analysis, before corrective measures to address them are conceived.
- **Identify concrete measures to address the problems of group a)**. Discriminate between immediately-needed measures (proposing realistic timeframes for their implementation) and others, such as HRD, whose nature demands long preparation and implementation cycles.
- **Advocate for the postponing of decisions related to the problems of group b)**. Advise on the conception of studies to clarify these blurred issues, as well as on realistic timeframes and resources needed to carry out these studies.
- **Review the emerging perspectives for recovery**: total cost of different policy options (roughly assessed), sources of financing, implementing capacity, requirements, basic assumptions, role and contributions of different participants, etc.
- **Submit the preliminary summary analysis to knowledgeable people to validate it** and to clarify poorly-understood issues.
- **Present the study conclusions in a condensed form, singling out the main pending problems**.
- **Participate in the upcoming decision-making events**, to contribute to the debate and gather additional insights, which will have to be incorporated into the preliminary analysis as soon as possible. Advocate for the establishing of follow-up capacity, to ensure that the hurried HSP is adequately consolidated.

Examples of Health Sector Profile

European Observatory on Health Systems and Policies. ***Health care systems in transition.***

“Health Systems in Transition (HiT) profiles are country-based reports that provide a detailed description of each health care system and of reform and policy initiatives in progress or under development”. The HiT profiles are produced by country experts in collaboration with the research directors and staff of the European Observatory on Health Care Systems, a joint venture including WHO, donor agencies, development banks and leading academic institutions. The Observatory prepares and periodically updates profiles of all countries belonging to the WHO European Region, which spans over a portion of Asia, plus some other countries outside it. The profiles are available on the Observatory’s website, available online at: www.euro.who.int/observatory (accessed 28 September 2008). The approach chosen for the preparation of HiT profiles is mainly tailored to developed, stable countries, with a declared interest in health sector reform. HiT analysts, however, succeeded also in preparing high-quality profiles of troubled countries.

Hsiao WC (2000). ***A preliminary assessment of Sri Lanka’s health sector and steps forward.*** Cambridge, MA, Harvard University Press.

Excellent example of a detailed review, which takes full advantage of the wealth of quality information available in relation to the Sri Lanka’s health sector. The study gives due attention to the political, cultural and economic factors that influence healthcare delivery, realistically commenting on the macroeconomic and fiscal constraints within which the health sector operates. The organization of health services, health financing, and regulation are in turn discussed. A long-term perspective helps the reader to follow the past evolution of the sector, the causes behind its present shape, and the direction the sector is likely to take in the near future. A penetrating discussion of the politics of decentralization and the way this translates into allocation patterns offers additional insights. An appraisal of health sector’s performance closes the study. Even if this level of analytical depth cannot be attained in most health sectors in crisis, due to crushing information shortcomings, this health sector profile can be considered as a model.

Mozambique Ministry of Health (1997). ***Mozambique health sector profile.*** Maputo.

This profile was developed in 1993-1994, just after the end of the war, and was continuously strengthened and updated until 1998 by insiders within the ministry, who incorporated relevant data as they became available. As no dedicated studies or missions were carried out to contribute to the profile, it was a low-cost production, which enjoyed large circulation within and outside Mozambique. Newcomers unfamiliar with local settings found it particularly valuable. Insiders disseminated the HSP, because it saved them the pains of introducing the main patterns of the health sector to new players. Readers found the honest recognition of the flaws affecting the health sector, which shaped a report formally endorsed by the MoH, refreshing. Probably, this frankness contributed to ensure a reputation of objectivity and reliability to the report. The analysis presented in the HSP, never challenged by alternative readings and broadly confirmed by the new evidence that emerged years after the last update of the HSP, offered to stakeholders shared grounds for looking at the health sector and debating about its future.

Pavignani E, Modol X, Colombo A (2002). ***Afghanistan health sector profile 2002: a contribution to the debate on health sector recovery.*** Available online at: www.aims.org.af/services/sectoral/health/health_sector_profile_aug_02.pdf, accessed 17 September 2008.

Promoted and funded by WHO HQs and produced by outsiders to Afghanistan over six months of 2001–2002, this profile failed to attract the interest of the main stakeholders at country and regional levels. The report was not widely discussed, nor disseminated, during its development, and consequently remained unfinished. Adequate political backing did not match the technical efforts invested in developing the profile. A high-cost production, whose value was overlooked by its potential users, resulted in the waste of energies and resources.

World Bank (2005). ***Democratic Republic of Congo: health, nutrition and population – country status report.*** Washington, DC. (Also available in French, as: Banque Mondiale. *Santé et Pauvreté en République Démocratique du Congo: Analyse et Cadre Stratégique de Lutte contre la Pauvreté.*)

An example of solid situation analysis, on which any serious policy discussion about health service delivery in the Democratic Republic of the Congo should be built.

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Pan American Health Organization (2000). *Guidelines for the preparation of health system profiles for the countries of the region.* 2nd edition. Washington, DC.

Yin RK (1994). *Case study research: design and methods.* 2nd ed. Thousand Oaks, CA, Sage.

Annex 13:

Supporting the recovery of the Somali health sector - 2008

An exercise of mapping key issues, constraints, policy options and lessons learnt

Area / Issue	Situation	Remarks	Policy options (not mutually exclusive)	Relevant experiences from other countries in transition
<i>Policy formulation</i>	<ul style="list-style-type: none"> • The health authorities of Somaliland and Puntland have formulated policy documents. • Some of the building blocks needed to develop a Somalia-wide health policy and recovery strategy have been produced by engaged agencies. • The information encompassing the whole health sector has improved over the years. Most data remain dispersed in the hands of knowledgeable people, NGOs and special programmes. Research and field studies are commissioned by agencies, according to specific interests. • Key data, like population or financing, are highly tentative, or source of controversy. • Most policy-makers are based in Nairobi, far from field operations. • Many stakeholders ignore key portions of the available information. 	<ul style="list-style-type: none"> • A large gap exists between policy statements and field realities. The health sectors of Somaliland and Puntland are operating under crushing financing and capacity constraints. • The Health Sector Committee of the Coordination of International Support to Somalis offers a privileged venue for productive policy debates. Some important actors, however, are operating outside it. • The protracted agony of Somalia has prevented many stakeholders from implementing the recovery plans developed so far. • The partition of the country into three portions and the absence of an effective territorial and sectoral administration in Central-Southern Somalia, jeopardize rational, evidence-based policy formulation. • Policy proposals have so far concentrated on the public segment of the health field, without squarely addressing its massive privatization. • Permanent and transient nomadic groups call for innovative approaches to health service delivery. 	<ul style="list-style-type: none"> • Establish an autonomous policy analysis unit, tasked with collecting sector-wide information, analysing it and disseminating the most important findings. • Pay attention to policies adopted in the field by stakeholders, rather than to policy documents. • Review existing policy documents and field arrangements, identifying those elements suitable for integration into an overarching health policy. • Establish thematic policy debate forums, to assess existing data, identify gaps and appraise available policy options. • Concentrate policy attentions on discrete, concrete issues, with the potential of providing tangible benefits for the health system. The formulation of ambitious, comprehensive policies is considered premature, and beyond the implementing capacity of the health sector. 	<ul style="list-style-type: none"> • Post-conflict openness to new approaches offers opportunities to introduce structural reforms. • The fundamental changes induced by a protracted crisis rule out a return to pre-conflict settings. • Policy formulation is futile, unless there is capacity and willingness to implement decisions. • The open space offered by the health sector is likely to induce hasty reform initiatives, advocated particularly by newcomers. • Radical reform approaches have a poor record in severely disrupted environments. • Policy analysis units identified with their sponsoring agencies are perceived as biased even when they are not such. • Negotiating skills are as important as technical ones in ensuring coherent policy decisions. • Coordination is labour-intensive and contentious, particularly when it is effective.
<i>Financing</i>	<ul style="list-style-type: none"> • External health financing is fragmented and earmarked to a large extent. • Some vertical disease-control programmes account for a disproportionate share of health financing. • No shared financial instruments are in place to channel donor contributions. • Thanks to new entrants (Polio Eradication, Global Fund), total international support to health has risen in the last years. • External assistance from Islamic sources is considered as substantial. Its flows are largely undocumented. • Private contributions to health expenditure are large. Most private financing is unregulated, thus unrecorded. • Many cost-sharing mechanisms have been introduced over the years, as local responses to funding squeezes. • Some costing work (recurrent and investment) has started. 	<ul style="list-style-type: none"> • The international community might expand its support, if the internal political context evolves positively. • International security considerations will heavily condition donor decisions in relation to Somalia. • Security concerns tend to direct investment towards Northern Somalia. • According to macroeconomic forecasts, domestic health financing is likely to remain tight in the mid-term. • Total health financing might be in the order of US\$ 12–20 per capita, i.e. higher than what the dismal performance of the health sector would suggest. • No comprehensive review of the cost-sharing issue has ever been attempted. • Health authorities in Somaliland and Puntland have stated their commitment to cost-sharing approaches. • The capital cost of a recovery process, and the recurrent cost of a recovered health sector, must be estimated. • The costing exercise must be completed. The generated figures have to be validated by thorough field data collection. 	<ul style="list-style-type: none"> • Establish aid management instruments, like pools or trust funds, to ensure the basic functioning of the sector. The introduction of common funding, monitoring and evaluation criteria takes precedence over fiduciary concerns. • Reduce the prevailing fragmentation, by merging related small funding mechanisms into larger ones. • Introduce schemes aimed at ensuring sustained and stable external financing. • Expand the health policy discussion to engage important actors now absent from it. • Study private financing, to throw light on this crucial grey area. • Carry out a detailed review of the experience gathered so far with cost-sharing schemes, in view of appraising its merits and identifying the most promising models to be adopted across the health sector. 	<ul style="list-style-type: none"> • A few post-conflict years of donor largesse are frequently followed by declining allocations. • Donor financing is driven by political considerations, rather than by the objective appraisal of needs. • Generous donor financing is prone to be squandered. • A variety of aid management instruments might respond better to unforeseen obstacles and to new demands, than a single, centralized one. • Donor preferences, by stressing some components at the expense of others, may distort health service development. • Cost-sharing schemes have failed to live up to their promises in war-torn, poor environments. Urban tertiary hospitals have attained better results than PHC schemes. • Recovery plans must be shaped by the resource constraints likely to affect the health sector in the long-term. Over-expansive options must be discarded as unsustainable, even if capital for investment becomes available. • Cost figures computed during a conflict (when they are abnormally high) become quickly outdated.

Area / Issue	Situation	Remarks	Policy options (not mutually exclusive)	Relevant experiences from other countries in transition
<i>Infrastructures</i>	<ul style="list-style-type: none"> • The public healthcare network is small, concentrated in the main towns. • Utilization of hospital services is low. No fully-fledged tertiary hospital exists in Somalia. • Large portions of the country, particularly in Central-Southern Somalia, are deprived of essential health services, due to past destruction and present security concerns. • Patients are very mobile. • Private facilities have multiplied. They constitute a heterogeneous group, including some fairly high-tech facilities. • Investment decisions are driven by profit concerns, or by the availability of diaspora support. 	<ul style="list-style-type: none"> • Most health facilities deliver substandard services, due to poor management, and inadequate financing, infrastructure, equipment, staffing and supplies. • No standards have been formulated for health facilities, which present a variety of features. • The PHC network is underused and undersized. • Poor territorial access is further reduced by faction/clan concerns. • No comprehensive inventory of the main features of the public healthcare network is available. The existing incomplete lists must be merged into a comprehensive one, cleaned of as many inconsistencies as possible. • The information about private health-care outlets is grossly inadequate. No serious planning is possible without improving it. 	<ul style="list-style-type: none"> • Assemble and maintain a summary database of the healthcare network (including sizeable private facilities), to guide investment decisions. • Formulate a working definition for health facilities, in order to properly classify them. • Develop standard layouts and building guidelines, including cost estimates. • Link investment decisions to explicit resource constraints, as well as HR development, supplies and management. • Formulate realistic development plans in secure areas, taking into consideration their size, settlement patterns and population density. • Strengthen existing health facilities, by making them to function according to their level. • Introduce incentives geared at directing field operators to underserved areas. 	<ul style="list-style-type: none"> • Many private-for-profit healthcare outlets may escape inclusion in “official” inventories. • Uncoordinated, NGO-led reconstruction tends to privilege areas with better security and operational conditions, in this way strengthening or perpetuating old flaws and biases. • Investment is often disconnected from considerations of recurrent financing, which jeopardizes future sustainability. • Area-based comprehensive planning promises better results than selective planning (such as planning PHC, or hospitals, in isolation from the rest of the network).
<i>Human Resources (HRs)</i>	<ul style="list-style-type: none"> • The workforce is inadequately trained. Overall competence levels are poor. • Staff deployment is skewed in favour of secure (mainly urban) areas. Somaliland and Puntland have benefited from security-induced staff movements. • Many cadres have not completed formal training programmes or hold non-standard qualifications. They are in need of retraining and formal certification. • Curative, hospital-oriented approaches prevail among health cadres. PHC-oriented categories are scarce. • Many qualified Somali cadres work abroad. • Training capacity is concentrated on producing medical doctors and nurses. • Private training institutions have multiplied over the years. New health workers of heterogeneous skills are entering the labour market. • In Somaliland and Puntland, the regulation of healthcare practice is seen as the remit of professional associations. 	<ul style="list-style-type: none"> • Many (Somali and expatriated) qualified staff are employed by international agencies and NGOs, following a variety of contract modalities and salary levels. • Private practice (formally acknowledged or not) is widespread. • Information about ranks and deployment of Somali and expatriated staff is inaccurate and outdated. • Training responds mainly to the needs of the aid agencies and NGOs organizing and managing it, rather than to service requirements. • Staffing patterns are overall poor. Some privileged facilities coexist with many understaffed ones. • Reorienting the workforce away from hospital traditions, towards modern models that are appropriate to the Somali context, entails sustained, far-reaching work. • The mismatch between the diminutive hospital network and the predominance of medical and nursing training is patent. • Poor educational levels are likely to constrain the training of new health workers and the upgrading of active ones. • Phased training, along the lines experimented in Southern Sudan, might be appropriate to the Somali situation. 	<ul style="list-style-type: none"> • Formulate a long-term human resource development plan, aimed at restructuring the workforce, and adequately finance its implementation. • Explore the pros and cons of introducing PHC-oriented new categories, according to models adopted in many Sub-Saharan African countries. • Establish a certification body, tasked with standardizing job descriptions, screening active health workers and designing programmes to upgrade or convert those found as inadequately skilled. • Design and launch an in-service training programme to improve the skills of active health workers. • Introduce a formal and transparent incentive system, to encourage the redeployment of cadres to hardship areas, and to increase the proportion of female health workers. • Define realistic, efficient and sustainable staffing patterns for standard health facilities. • Negotiate with employers shared contract and salary provisions, to be introduced across a broad range of job positions. 	<ul style="list-style-type: none"> • During a protracted crisis, the skills of the workforce suffer severely. Substantial retraining is always needed. • Strengthening the workforce is a long-term, labour- and resource-intensive endeavour, which needs to be thoroughly planned and implemented. • Most HR development plans have failed to be implemented, because overambitious and inappropriate. • Certification bodies covering the whole health workforce are fairer and more effective than those operated by professional associations. • A derelict workforce has not the capacity of regenerating itself. Expatriate trainers are usually needed to fill the capacity gap and to introduce modern training approaches. • In-service training initiatives de-linked from other structural measures are usually ineffective. • Emphasis on supplying new cadres may lead to neglecting the regulation and management of human resources. • Training abroad may be driven by the preferences of funding agencies or grant beneficiaries, rather than to documented service needs. Many trainees may fail to return after their graduation, particularly if they hold an internationally-recognized qualification. • Programmes to motivate health cadres in the diaspora to return home tend to be expensive, contentious and of limited impact.

Area / Issue	Situation	Remarks	Policy options (not mutually exclusive)	Relevant experiences from other countries in transition
<i>Pharmaceutical area</i>	<ul style="list-style-type: none"> • Private drug-selling outlets have proliferated across Somalia. Unregulated drug sales are widespread. Self-medication is likely to be the most common form of drug usage. Counterfeited medicines circulate freely. • Multiple drug purchasing mechanisms exist. PHC kits are provided and distributed by UNICEF. Hospitals are mainly supplied by supporting NGOs, with drugs purchased within Somalia or abroad (including Kenya). • Disease-control programmes purchase and distribute (often with WHO support) drugs related to their interests, accounting for a sizeable share of drug financing. • No pre-service pharmacy training programme is provided within Somalia. • Some groundwork has been done to promote the rational use of drugs. An essential drug list, a national formulary and standard treatment guidelines have been finalized. Their adoption is, however, limited. 	<ul style="list-style-type: none"> • The health authorities of Puntland and Somaliland have issued regulatory provisions, which remain to be enforced. • Most NGOs have their own stock management control mechanisms, and sometimes guidelines for the rational use of drugs. • The drug purchases made by disease-control programmes might suffer from serious inefficiencies, due to the small amounts involved and the multiplication of supply lines. • The kit supply system might need a redesign of kit contents and distribution criteria. • The rationalization of the pharmaceutical area has to proceed incrementally, based on discrete elements to be progressively introduced and consolidated. • Encouraging the adoption of standard prescribing instruments in the absence of regulatory mechanisms calls for enhanced negotiation skills and for the introduction of appropriate incentives. 	<ul style="list-style-type: none"> • Start a comprehensive drugs policy review process, backed by studies of the most relevant areas. The situation of the three portions of Somalia must be assessed and compared. • Ensure the basic procurement and distribution of drugs, encouraging an open, healthy competition among existing schemes, in view of their progressive merging/reduction. • Expand the coverage of basic services, as part of general healthcare provision (as opposed to special programmes). • Formulate and strengthen regulatory functions, including quality control. • Define responsibilities and roles of the involved institutions and organizations, considering the Somali context. 	<ul style="list-style-type: none"> • Introducing regulatory measures in a disrupted, deregulated environment is a challenging endeavour, likely to succeed only when adequately resourced and backed by firm political commitment. • A rational, well-enforced drug policy may provide dramatic efficiency gains, in this way freeing resources to cover other priority areas. Additionally, it may greatly boost service uptake. • To bring special disease-control programmes under general drug management arrangements is possible only when the latter are perceived as reliable. • An efficient purchasing system can out-market small drug importers, in this way greatly reducing unregulated drug flows. • In many recovery processes, the pharmaceutical area has not enjoyed the attention it deserves. Imbalances and inefficiencies have regularly ensued due to this strange oversight.
<i>Health service delivery</i>	<ul style="list-style-type: none"> • Health service coverage is low. Access to a comprehensive package of basic services is the exception, rather than the rule. • Quality of care is poor, with negative effects on service uptake. • Private operators deliver most health services, which have become increasingly commoditized. • Dangerous practices are widespread. • Curative care, mainly delivered by private providers, has thrived, whereas public health has lagged behind. • The recently-formulated Essential Package of Health Services waits to be rolled out. 	<ul style="list-style-type: none"> • The boundaries between public and private healthcare provision are blurred. • Functioning health facilities are not part of a coherent and organized health system. • Many public health services are left to the responsibility of aid agencies and NGOs. • Despite peace and stability, health service delivery remains poor, also in Northern Somalia. • Hospital-centred approaches exert a strong appeal to Somali health professionals. • Any delivery model to be introduced must explicitly encompass private health providers. • Health service design must address the variety of settlement patterns and lifestyles of target populations. Nomadic communities present particular challenges. 	<ul style="list-style-type: none"> • Carry out a comprehensive assessment of private healthcare providers. • Opt for affordable service delivery approaches (given foreseeable resource constraints). • Encourage the merging of selected functions (like supply) of special programmes, as the first step towards their progressive integration into general health services. • Identify concrete measures aimed at improving quality of care. Start designing a long-term, comprehensive programme, targeting both private and public service providers. • Introduce appropriate incentives (positive and negative) for private and public service providers. 	<ul style="list-style-type: none"> • Donor-supported areas may thrive at the expense of general services. A review of "priority" areas and of their relative strength is needed to identify the few true general priorities, where efforts must be concentrated. • Realistic, adapted, quality guidelines and manuals, provided they are widely disseminated, may contribute to reduce fragmentation and give coherence to a pluralistic health sector. • No recognized good-practice approach to healthcare provision for nomadic populations is presently available. To develop a satisfactory one entails patient experimentation.

Area / Issue	Situation	Remarks	Policy options (not mutually exclusive)	Relevant experiences from other countries in transition
<i>Management systems</i>	<ul style="list-style-type: none"> • The health space is governed by a multitude of formal and informal management arrangements, adopted by Somali health authorities, international agencies, NGOs and special programmes. • Management systems are fragmented territorially as well as vertically. • Informal management practice might be more influential than formal procedures in shaping field events. • Dedicated data collection arrangements are operated by agencies and special programmes. 	<ul style="list-style-type: none"> • The experimentation under way across Somalia might provide valuable models to be integrated into countrywide health management arrangements. • Given the degree of freedom enjoyed by stakeholders, persuasion remains the main management lever. • Information systems must be brought back to a coherent whole. Permanent analytical capacity is needed, to feed decision-makers with relevant insights. • The collapse of old, fossilized civil-service structures offers room for introducing modern, lean and responsive provisions. • The relationships between central and peripheral health authorities are likely to evolve over time, as new arrangements are tested, and then discarded or retained. 	<ul style="list-style-type: none"> • Analyse existing management systems, and procedures adopted by agencies and NGOs. • Identify core functions to be successfully assumed by Somali health authorities, and others to be outsourced to partners. • Start designing and introducing regulatory systems, clarifying public and private roles and partnerships. • Formulate a clear, thought-through, shared strategy, to give direction to the development of management systems. • Foster shared management responsibilities that induce partners to negotiate mutually satisfactory trade-offs. • Conceive and test management arrangements that don't rely on standard command-and-control procedures, but can influence the behaviour of autonomous actors. 	<ul style="list-style-type: none"> • To regulate a disrupted sector is intrinsically difficult: sticks and carrots must be used in complementing and innovative ways. • Transitional periods see a flurry of imported, pre-packaged, donor-backed, disconnected and inconclusive management strengthening initiatives. Considerable self-restraint by partners is mandatory. • Management instruments of limited scope may offer learning grounds to prospective health managers. Building on existing arrangements is easier and more effective than introducing new systems. • The debate about strengthening management systems may get lost in abstract constructions, detached from field realities. • In the absence of a formal budget, no management systems can work. Interim budget surrogates may help incipient management systems to take root.
<i>Equity</i>	<ul style="list-style-type: none"> • Given the dominance of private financing and provision, the poor are likely to face severe hurdles in accessing health services. • A large imbalance in service access between sedentary (mainly urban) and nomadic populations is likely to exist. • Women are severely disadvantaged in accessing health services. 	<ul style="list-style-type: none"> • Equity-oriented measures may be financed by efficiency gains in service delivery. • Inequalities of access to health services are poorly documented. A better understanding of field inequalities, differentiated by zones and regions, is needed to conceive effective countermeasures. • Security constraints heavily condition equity-oriented investment. 	<ul style="list-style-type: none"> • Work out "regional development plans" with a strong equity focus, supported by committed partners. • Privilege the least-favoured areas with targeted investments. • Diversify policy approaches and service delivery models, to take development differentials into account. Allow for higher service delivery costs in backward areas. 	<ul style="list-style-type: none"> • Too often, inequalities are <i>assumed</i> in the absence of solid data. • An un-oriented reconstruction process might increase equity differentials and distortions. • Equity-oriented measures are politically sensitive and may be misconstrued by suspicious parties. To avoid this risk, they must be tactfully presented to the public. • Investment in basic infrastructures – such as roads, communications, banks – responds to economic imperatives, poorly related to social concerns. Health plans must take this mismatch into account, by making resource allocation choices that favour disadvantaged populations.

Note: A column with the heading 'Urgent measures to be taken during the next twelve months' may be added, to clarify the sequencing of priorities and actions.

Notes:

Resources

Module 14

Contents

This module brings together several resources considered as valuable for the study of health sectors in crisis. First, some sources of relevant information are briefly reviewed. A table follows with definitions of relief or aid management instruments and related references. A glossary of concepts and definitions, covering a range of key epidemiologic, statistical, economic, financial, management and aid-related terms, is included. The module is closed by introductory notes to selected health sectors in crisis, complemented by recommended reading. These short overviews of health sectors can be used as starting point for more detailed studies or as an example of how the analysis of health sectors can be organised at an initial stage.

Online sources of relevant information

Center for Global Development. www.cgdev.org, accessed 30 September 2008. *Unrestricted access.*

“CGD is an independent, not-for-profit think tank that works to reduce global poverty and inequality by encouraging policy change in the U.S. and other rich countries through rigorous research and active engagement with the policy community.” The Center publishes valuable studies on (among others) aid effectiveness, debt relief, the Millennium Development Goals, globalization and global health.

Centre for Research on the Epidemiology of Disasters. (CRED). www.cred.be, accessed 30 September 2008. *Unrestricted access.*

CRED offers a database on natural (including epidemics) and man-made disasters (called EM-DAT), and a database on complex emergencies, CE-DAT. The database contains essential core data on the occurrence and effects of mass disasters in the world from the year 1900 to present, drawing from different sources, including the UN, non-governmental organizations, insurance companies, research institutes and press agencies. The site contains also various statistical reports and briefs, figures tables and maps, highlighting various aspects of emergencies.

Conflict and Health. www.conflictandhealth.com, accessed 30 September 2008. *Unrestricted access.*

“Conflict and Health is an open access, peer-reviewed, online journal encompassing all aspects of the intertwined relationship between health and conflict.” A dedicated online journal, started in 2007, to be closely followed as it tries to establish itself in the conflict studies’ arena.

The Economist Intelligence Unit. www.eiu.com, accessed 30 September 2008. *Restricted access.*

An essential source of updated, authoritative, concise, often astonishingly well-researched country information. The website offers different thematic products, forecasts, indicators, etc., usually in condensed form. Only subscribers have access to full country documents. *Country Profiles* are issued annually and contain a comprehensive country overview, including its historical background. *Country Reports* are issued on a quarterly basis, or more often when needed, and provide an updated, detailed political and economic picture. Usually, these reports represent the best way to start the study of a country environment. Many aid organizations subscribe to this expensive, but invaluable, service.

Eldis. <http://www.eldis.org>, accessed 5 October 2009. *Unrestricted access.*

A portal that give access to a vast library of interesting documents on health systems and programs, often relevant to countries affected by crises.

The Feinstein International Center. <http://fic.tufts.edu>, accessed 30 September 2008. *Unrestricted access.*

Based at Tuft University (US), the *Center* develops and promotes “operational and policy responses to protect and strengthen the lives and livelihoods of people living in crisis-affected and marginalized communities”. The Center has published valuable country-level studies on the reform of the humanitarian enterprise. A website deserving a visit.

The International Monetary Fund. www.imf.org, accessed 30 September 2008. *Unrestricted access.*

Useful source of mainly macroeconomic information, presenting official policies and figures for countries where an IMF programme is under way, plus specific, often high-quality studies. Very informative materials to draw upon, once their technical jargon is penetrated.

Integrated Regional Information Networks (IRIN). www.irinnews.org, accessed 30 September 2008. *Unrestricted access.*

IRIN is part of the UN Office of the Coordinator of Humanitarian Affairs (OCHA). It delivers a wide range of documents (analytical reports, fact sheets, country updates, interviews, etc.) focusing on humanitarian crises, through its web site and an e-mail distribution service. The geographical coverage of IRIN includes most of Africa and Central Asia.

International Crisis Group. www.crisisgroup.org, accessed 30 September 2008. *Unrestricted access.*

An independent, distinguished think-tank, specialized in the political analysis of countries in, or at risk of, conflict. The organization covers most crisis areas in Africa, Asia, Europe, Middle East and Latin America. These analytical reports, based on first-class political and military intelligence, provide excellent background information, useful also to the health systems analyst. The best resource for starting the study of the roots, evolution, characteristics and foreseeable direction of an actual or potential conflict.

Overseas Development Institute. www.odi.org.uk, accessed 30 September 2008. *Unrestricted access.*

One of the most useful websites is managed by ODI, an independent research institution, working on international development and humanitarian issues. The quality and scope of ODI publications make them essential reading for all humanitarian workers, including those involved in the health field. ODI is home to the *Humanitarian Policy Network*, directly accessible at: www.odihpn.org. ODI also publishes *Disasters*, the leading journal on complex emergencies and natural disasters. ODI released a CD-Rom with most of its publications in the area of humanitarian policy and practice: *ODI Humanitarian Practice Network. Publications 1994 – 2004*, to be requested to hpn@odi.org.uk.

ReliefWeb. www.reliefweb.int, accessed 30 September 2008. *Unrestricted access.*

ReliefWeb, a project of OCHA, is the world's leading website in humanitarian assistance, covering all ongoing emergencies. Additionally, it includes consolidated appeals, as well as a *financial tracking system* (FTS). Among other services provided, there is a map centre, an inventory of humanitarian vacancies and a vast searchable database of UN documents, policy studies and analyses, dating back to 1981. When starting a search for information on an emergency, this is probably the first site you want to visit.

Reuters AlertNet. www.alertnet.org, accessed 30 September 2008. *Unrestricted access.*

AlertNet, run by Reuters Foundation (an educational and humanitarian trust created by the global news and information group) provides global news, communications and logistics services to the international disaster relief community and the public. A useful source of updated news.

The use of epidemiological tools in conflict-affected populations: open-access educational resources for policy-makers. London School of Hygiene and Tropical Medicine <http://www.lshtm.ac.uk/hpu/conflict/epidemiology/>. accessed 29 November 2009. *Unrestricted access.*

This site is an introductory guide to field epidemiology as applied to humanitarian crises. Its target audience consists of “*those policy-makers in the humanitarian relief and human security fields who, despite not having a background in public health and epidemiology, are nonetheless often in the position of having to commission, interpret, and act upon epidemiological assessments*”.

The World Bank. www.worldbank.org, accessed 30 September 2008. *Unrestricted access.*

A very rich website, giving access to many of the WB publications. Maps, country reports and research papers, and tables with a broad range of indicators, are all made available. Sub-sites deal with specific areas, including a large one on Health, Nutrition and Population (www.worldbank.org/hnp). The Fragile and conflict-affected countries page, which offers materials related to the causes of fragility, the political economy of conflicts and the implications for conflict reduction, is accessible at www.worldbank.org/fragilityandconflict.

Of great interest are also Public Expenditure Reviews (PERs), comprehensive, detailed and high-quality analyses that usually include also a chapter on health. Given the information demands of these exercises, they have not been carried out in many countries in crisis. When available, PERs are worth a thorough study.

The World Health Organization. www.who.int, accessed 30 September 2008. *Unrestricted access.*

The main WHO portal, linking to countries, documents, publications and other WHO web pages. It links to the Health Action in Crises webpage (see below), dedicated to health issues in emergencies. Two WHO-related websites offer health systems profiles for countries belonging to the Eastern Mediterranean region (<http://gis.emro.who.int/healthsystemobservatory/main/Forms/main.aspx>) and to the European region (www.euro.who.int/observatory) of WHO.

WHO Health Action in Crises. www.who.int/hac, accessed 30 September 2008. *Unrestricted access.*

The site contains health information on countries (or regions) in crisis and technical guidance on public health topics that are relevant to health emergency management. Resource materials, such as manuals, fact-sheets, policy papers and the newsletter *Health in Emergencies* (published since 2005) are also available. Training events related to health emergency management are regularly advertised.

Health Library for Disasters. 2007 edition, published by the World Health Organization and Pan America Health Organization. Available online at www.helid.desastres.net, accessed 30 September 2008. *Unrestricted access.*

A digital information resource on public health in disasters and complex emergencies reduction. The 2007 edition contains more than 650 full-text technical documents in English, French and Spanish on public health and emergency management, food and nutrition, reproductive health, communicable diseases, AIDS, essential drugs, human rights, etc. The documents are available both on CD-Rom and the web. An easy way to travel light. The CD-Rom has to be requested from WHO Geneva (crisis@who.int) or PAHO (disaster-publications@paho.org).

Relief / Aid management instruments / coordination mechanisms

Name and Acronym	Description	Reference
<i>Central Emergency Response Fund</i> (<i>CERF</i>)	<i>"... established by the United Nations to enable more timely and reliable humanitarian assistance to those affected by natural disasters and armed conflicts. ... CERF is funded by voluntary contributions from around the globe from Member States of the United Nations, private businesses, foundations and individuals. ... CERF is intended to complement – not substitute – existing humanitarian funding mechanisms such as the UN Consolidated Appeals."</i>	http://cerf.un.org , accessed 3 November 2008.
<i>Consolidated Appeal Process</i> (<i>CAP</i>)	<i>"... an inclusive, coordinated programme cycle of strategic planning (leading to a CHAP), resource mobilisation (leading to a Consolidated Appeal or a Flash Appeal), coordinated implementation, joint monitoring and evaluation, revision of the CHAP if necessary and reporting on results. The CAP is initiated by the UN Humanitarian Coordinator with partner organisations in case of a major or complex emergency"</i>	<i>UN Inter-Agency Standing Committee Appeal and Strategy Documents</i> . March 2003. www.reliefweb.int , accessed 3 November 2008.
<i>Common Country Assessment</i> (<i>CCA</i>)	<i>"... the CCA is the common instrument of the United Nations system to analyse the national development situation and identify key development issues. Both a process and a product, the CCA takes into account national priorities, with a focus on the MDGs and the other commitments, goals and targets of the Millennium Declaration and international conferences, summits and conventions."</i>	United Nations. <i>Common Country Assessment and United Nations Development Assistance Framework</i> . Integrated Guidelines. 22 May 2002.
<i>Common Humanitarian Action Plan</i> (<i>CHAP</i>)	<i>"A strategic plan for humanitarian response in a given country or region". It is developed at field level by the UN Country Team and it focuses on a common analysis of the humanitarian context, an assessment of needs and vulnerabilities, the development of scenarios, the definition of goals, objectives and strategy. It is the foundation for developing a Consolidated or Flash Appeal.</i>	<i>UN Inter-Agency Standing Committee Appeal and Strategy Documents</i> . March 2003. www.reliefweb.int .
<i>Financial Tracking Service</i> (<i>FTS</i>)	<i>"The FTS is a global, real-time database which records all reported international humanitarian aid (including that for NGOs and the Red Cross / Red Crescent Movement, bilateral aid, in-kind aid, and private donations). FTS features a special focus on consolidated and flash appeals, because they cover the major humanitarian crises and because their funding requirements are well defined – which allows FTS to indicate whether populations in crisis are receiving humanitarian aid in proportion to needs. FTS is managed by the UN Office for Coordination of Humanitarian Affairs (OCHA). All FTS data are provided by donors or recipient organisations."</i>	www.reliefweb.int , accessed 3 November 2008.
<i>Heavily-Indebted Poor Countries Initiative</i> (<i>HIPC</i>)	<i>"the HIPC Initiative is an agreement among official creditors to help the most heavily indebted countries to obtain debt relief". It was proposed by the WB and IMF and agreed by governments around the world in 1996; a major review was undertaken in 1999.</i>	www.worldbank.org/hipc , accessed 3 November 2008.
<i>Inter-Agency Standing Committee</i> (<i>IASC</i>)	<i>"The Inter-Agency Standing Committee (IASC) is a unique inter-agency forum for coordination, policy development and decision-making involving the key UN and non-UN humanitarian partners. Under the leadership of the Emergency Relief Coordinator, the IASC develops humanitarian policies, agrees on a clear division of responsibility for the various aspects of humanitarian assistance, identifies and addresses gaps in response, and advocates for effective application of humanitarian principles."</i>	www.humanitarianinfo.org/iasc/content/about/default.asp , accessed 3 November 2008.

Name and Acronym	Description	Reference
<i>IMF staff-monitored program</i>	<i>"A staff-monitored program is an agreement between national authorities and IMF staff to monitor the implementation of the authorities' economic and financial program during a specified period—normally 12-18 months. Such staff monitoring does not represent endorsement of the program by the IMF Executive Board or involve Fund financing."</i>	www.imf.org, accessed 3 November 2008.
<i>Medium Term Expenditure Framework</i>	<i>"The MTEF consists of a top-down resource envelope, a bottom-up estimation of the current and medium-term costs of existing policy and, ultimately, the matching of these costs with available resources...in the context of the annual budget process."</i> It is a planning tool that overcomes the short timeframe of budgeting, in order to better align policy, planning and budgeting over a longer period, usually of 3-5 years.	World Bank's Public Expenditure Management Handbook, 1998.
<i>Post-Conflict Needs Assessment</i>	<i>"A complex analytical process led by the national authorities and supported by the international community and carried out by multilateral agencies on their behalf, with the closest possible collaboration of national stakeholders and civil society. The needs assessment aims to overcome consequences of conflict or war, prevent renewed outbreak and shape the short-term and potentially mid-term recovery priorities as well as articulate their financial implications on the basis of an overall long-term vision or goal".</i>	Kievelitz U et al. (2004). <i>Practical guide to multilateral needs assessments in post-conflict situations: a joint project of UNDG, UNDP and World Bank.</i> Washington, DC. See Annex 3
<i>Poverty Reduction and Growth Facility (PRGF)</i>	<i>"The PRGF is the IMF's low-interest lending facility for poor countries",</i> which has replaced the Enhanced Structural Adjustment Facility (ESAF).	www.imf.org/external/np/exr/facts/prgf.htm, accessed 3 November 2008.
<i>Poverty Reduction Strategy Paper (PRSP)</i>	<i>"PRSPs describe a country's macroeconomic, structural and social policies and programs to promote growth and reduce poverty, as well as associated external financing needs."</i> PRSPs are to provide the basis for assistance from the WB and the IMF as well as debt relief under the HIPC initiative. They are updated every three years with annual progress reports.	www.worldbank.org/poverty/strategies, accessed 3 November 2008.
<i>Public Expenditure Reviews (PERs)</i>	<i>"Public expenditure reviews (PERs) analyse the allocation and management of public expenditure. They may cover all government expenditure or focus on a few priority sectors (e.g. health, basic education, agriculture, water, roads). They can be used to inform strategic planning and budget preparation and to identify ways in which to improve the efficiency and effectiveness of resource allocations. Increasingly, PERs also review expenditure management systems and institutions, in recognition of the fact that it is the institutional framework, organisational capacity, and everyday expenditure management practice of government which determines the allocation and management of public expenditures."</i>	www.opml.co.uk, accessed 5 March 2009.
<i>Results-Focused Transitional Matrix</i>	A standardized way of compiling the results of a Post-Conflict Needs Assessment.	See Annex 3 for a full discussion.
<i>United Nations Development Assistance Framework (UNDAF)</i>	<i>"As the common strategic framework for the operational activities of the United Nations system at the country level, the UNDAF provides a collective, coherent and integrated United Nations system response to national priorities and needs within the framework of the MDGs and the other commitments, goals and targets of the Millennium Declaration and the declarations and programmes of action adopted at international conferences and summits and through major United Nations conventions. The UNDAF emerges from the analytical and collaborative effort of the CCA and is the foundation for United Nations system programmes of cooperation."</i>	United Nations. <i>Common country assessment and United Nations development assistance framework: integrated guidelines.</i> 22 May 2002.

A glossary of concepts and definitions

Term	Definition	Source	Recommended reading
Accreditation	"Accreditation is a formal process by which a recognized body, usually a non-governmental organization (NGO), assesses and recognizes that a health care organization meets applicable pre-determined and published standards. Accreditation standards are usually regarded as optimal and achievable, and are designed to encourage continuous improvement efforts within accredited organizations. An accreditation decision about a specific health care organization is made following a periodic on-site evaluation by a team of peer reviewers, typically conducted every two to three years. Accreditation is often a voluntary process in which organizations choose to participate, rather than one required by law and regulation."	Rooney AL, van Ostenberg PR (1999). <i>Licensure, accreditation, and certification: approaches to health services quality</i> . Bethesda, MD, Quality Assurance Project. Available online at: www.qaproject.org/pubs/PDFs/accredmon.pdf , accessed 30 September 2008.	
Accuracy	"The degree to which a measurement or an estimate based on measurements represents the true value of the attribute that is being measured."	Last JM, ed. (2001). <i>A dictionary of epidemiology</i> . 4th ed. New York, Oxford University Press.	
Aid effectiveness agenda	International reform agenda set in 2005 by the Paris Declaration on Aid Effectiveness. "The Paris declaration rests on five common-sense tenets, that aid is more likely to promote development when: <ul style="list-style-type: none"> • Developing countries exercise leadership over their development policies and plans (ownership). • Donors base their support on countries' development strategies and systems (alignment). • Donors co-ordinate their activities and minimise the cost of delivering aid (harmonisation). • Developing countries and donors orient their activities to achieve the desired results (managing for results). • Donors and developing countries are accountable to each other for progress in managing aid better and in achieving development results (mutual accountability)." 	OECD (2007). <i>2006 survey on monitoring the Paris declaration. Overview of the results</i> . Available online at: www.oecd.org/dac/effectiveness/monitoring .	World Health Organization (2008). <i>Effective aid, better health: report prepared for the Accra High-level Forum on aid effectiveness</i> . 2-4 September 2008. WHO, OECD, World Bank.
Aid-in-kind	"Flows of goods and services with no payment in money or debt instruments in exchange. In some cases, 'commodity aid' goods (such as grain) are subsequently sold and the receipts are used in the budget or, more commonly through a special fund, for public expenditure."	International Monetary Fund (2007). <i>Manual on fiscal transparency</i> . Available online at: http://internationalmonetaryfund.com/external/np/pp/2007/eng/051507m.pdf , accessed 30 September 2008.	
Alignment	"Alignment of assistance for development effectiveness refers to external partners' actions to increase development assistance coherence, synergy and complementarity with country-owned strategies."	World Bank (2003). <i>Aligning assistance for development effectiveness</i> . Washington, DC.	OECD (2005). Development Co-Operation Directorate. <i>Harmonisation and alignment in fragile states</i> . Draft Report by Overseas Development Institute.
Allocative efficiency	The capacity of a system to distribute resources among competing activities, in a way that no alternative reallocation offers improvements in returns. Related to the comparative efficacy of interventions and to priority setting. An aggregate concept, referring to competing options, inside or outside the health sector, and to the scale of programmes. Allocative efficiency assumes that competing options work at the same level of technical efficiency.		Hensher M (2001). <i>Financing health systems through efficiency gains</i> . CMH Working Papers Series. Paper No. WG3: 2. Available online at: www.emro.who.int/cbi/pdf/FinancingHealthSystems.pdf , accessed 30 September 2008.
Assessment	"A formal process of evaluation of a process or system, preferably quantitative, but sometimes necessarily qualitative."	Last JM (2007). <i>A dictionary of public health</i> . Oxford University Press.	
Audit	"The legal requirement for a corporation to have its balance sheet, financial statement, and underlying accounting system and records examined by a qualified auditor so as to enable an opinion to be formed as to whether the financial statement accurately represent the company's financial condition and whether they comply with relevant statutes."	World Health Organization (2003). <i>Guide to producing national health accounts: with special applications for low-income and middle income countries</i> .	

Term	Definition	Source	Recommended reading
Benchmark	"A measurement or point of reference at the beginning of an activity which is used for comparison with subsequent measurements of the same variable. Alternatively, an acceptable standard in evaluation"	Last, 2007.	
Bias	"Deviation of results or inferences from the truth, or processes leading to such deviation". Its presence leads to inaccuracies.	Last, 2001.	
Budget support	<p><i>"Direct budget support is defined as a method of financing a partner country's budget through a transfer of resources from an external financing agency to the partner government's national treasury. The funds thus transferred are managed in accordance with the recipient's budgetary procedures. Funds transferred to the national treasury for financing programmes or projects managed according to different budgetary procedures from those of the partner country, with the intention or earmarking the resources for specific uses, are therefore excluded from this definition of budget support.</i></p> <p><i>Sector budget support is a sub-category of direct budget support — resources are transferred to the partner government's national treasury and are managed according to the recipient's budgetary procedures. Sector budget support means that dialogue between donors and partner governments focuses on sector-specific concerns rather than on overall policy and budget priorities.</i></p> <p><i>General budget support is a sub-category of direct budget support. In the case of general budget support, the dialogue between donors and partner governments focuses on overall policy and budget priorities."</i></p>	OECD-DAC (2006). <i>Harmonizing donor practices for effective aid delivery. Volume 2: Budget support, sector-wide approaches, and capacity development in public financial management.</i> Paris.	
Capital expenditure	The cost for resources that last more than one year, such as building, vehicles, computers, pre-service training. Sometime a price ceiling is also defined (usually \$US100), below which costs are considered as recurrent. The cost of capital equipment is net of depreciation (see definition below).		
Catastrophe	<i>Catastrophe or Cataclysm</i> describes disasters of special magnitude (although there has been no known attempt at quantification, as yet). It has a "narrative", descriptive value and, mostly, an advocacy purpose. Conceptually, it relates best to reconstruction activities.		
Certification	"Certification is a process by which an authorized body, either a governmental or non-governmental organization, evaluates and recognizes either an individual or an organization as meeting pre-determined requirements or criteria. Although the terms accreditation and certification are often used interchangeably, accreditation usually applies only to organizations, while certification may apply to individuals, as well as to organizations. When applied to individual practitioners, certification usually implies that the individual has received additional education and training, and demonstrated competence in a specialty area beyond the minimum requirements set for licensure. An example of such a certification process is a physician who receives certification by a professional specialty board in the practice of obstetrics. When applied to an organization, or part of an organization, such as the laboratory, certification usually implies that the organization has additional services, technology, or capacity beyond those found in similar organizations.	Rooney and van Ostenberg, 1999.	
Cluster approach	[The Cluster Approach is a]... "mechanism that can help to address identified gaps in response and enhance the quality of humanitarian action. It is part of a wider reform process aimed at improving the effectiveness of humanitarian response by ensuring greater predictability and accountability, while at the same time strengthening partnerships between NGOs, international organizations, the International Red Cross and Red Crescent Movement and UN agencies."	Inter-Agency Standing Committee (2006). Guidance note on using the cluster approach to strengthen humanitarian response. Available online at: www.who.int/hac/network/interagency/news/iastc_guidance_note.pdf , accessed 3 November 2008.	

Term	Definition	Source	Recommended reading
<i>Commitment</i>	<i>"In accounting usage, commitments refer to a stage in the expenditure process at which contracts or other forms of agreement are entered into, generally for future delivery of goods or services. A liability will not be recognized until delivery of the item, but the government is contractually committed to meeting the obligation once delivery is made. The term is also used in a more general, noncontractual sense to mean firm promises of the government made in policy statements."</i>	International Monetary Fund (2007). <i>Manual on fiscal transparency</i> . Washington, DC.	
<i>Commodity</i>	<i>"An economic good; one that is subject to ready exchange or exploitation within a market."</i>	Merriam-Webster's online dictionary.	
<i>Complex emergency</i>	<i>"A humanitarian crisis in a country, region or society where there is total or considerable breakdown of authority resulting from internal or external conflict and which requires an international response that goes beyond the mandate or capacity of any single agency and/or the ongoing UN country programme."</i>	Inter-Agency Standing Committee (1994). <i>Working paper on the definition of complex emergencies</i> . New York.	
<i>Contracting-out</i>	<i>"The practice of the public sector or private firms of employing and financing an outside agent to perform some specific task rather than managing it themselves."</i>	WHO Task Force on Health Economics (1995). <i>Glossary</i> .	See Annex 7 on contracting.
<i>Cost-effectiveness</i>	<i>"A measure of the comparative efficiency of discrete strategies and methods for achieving the same objective."</i>	The Joint Learning Initiative (2004). <i>Human Resources for Health. Overcoming the Crisis</i> . Global Equity Initiative, Harvard University.	Doherty J, Govender R (2004). <i>The cost-effectiveness of primary care services in developing countries: a review of the international literature</i> . Disease Control Priorities Project (Working Paper No. 37). Available online at: www.dcp2.org , accessed 22 August 2008.
<i>Cost-recovery (or cost-sharing)</i>	<i>"Receipt, by a health provider, of income from individuals or the community in exchange for health services. It may be expressed as a percentage of expenditure."</i>	WHO Task Force on Health Economics (1995). <i>Glossary</i> .	Poletti T (2003). Healthcare financing in complex emergencies: a background issues paper on cost-sharing. London School of Hygiene and Tropical Medicine. Available online at: www.lshtm.ac.uk/hpu/conflict/publications/CostSharinginComplexEmergencies.pdf?section=news&wwwID=1704 , accessed 27 September 2008.
<i>Coverage</i>	<i>"Health service coverage is considered as a concept expressing the extent of interaction between the service and the people for whom it is intended, not being limited to a particular aspect of service provision, but ranging over the whole process, from resource allocation to the achievement of the desired objective".</i> Key aspects to be considered in the measurement of coverage are availability, accessibility, acceptability, contact and effectiveness.	Tanahashi, 1978.	Tanahashi T (1978). <i>Bulletin of the World Health Organization</i> , 56(2):295-303. Available online at: http://www.who.int/bulletin/en/index.html , accessed 7 May 2009.
<i>Crisis</i>	<i>"Time of danger or greater difficulty, decisive turning point."</i> Crisis describes a situation that is perceived as difficult. Its greatest value is that it implies the possibility of an insidious process that cannot be defined in time, and that even spatially can recognize different layers/levels of intensity. A crisis may not be evident, and it demands analysis to be recognized. Conceptually, it can cover both preparedness and response ("crisis management").	<i>Oxford Pocket Dictionary</i> (1992).	
<i>Data</i>	Raw material - facts and figures, not analysed. <i>"A collection of items of information."</i>	Last, 2001.	

Term	Definition	Source	Recommended reading
<i>Deflation</i>	<i>"In social accounting, removal of the effect of price inflation from expenditure amounts. This is achieved by typically dividing the expenditure amount by a price index", or deflator.</i> Deflator: <i>"An implicit or explicit price index used to distinguish between those changes in the money value of gross national product which result from a change in prices and those which result from a change in physical output."</i>	World Bank, WHO, USAID (2003). <i>Guide to producing national health accounts: with special applications for low-income and middle income countries</i> . Geneva.	Kumaranayake L (2000). The real and the nominal: making inflationary adjustments to cost and other economic data. <i>Health Policy and Planning</i> , 15:230–234.
<i>Depreciation</i>	<i>"The reduction in value of a capital asset through wear and tear."</i> Different methods of calculating depreciation take into account that the replacement cost of an asset may be much greater than its original cost, due to inflation. Depreciation is frequently forgotten in financial statements of troubled health sectors: many assets (e.g. vehicles, equipment) are donated and the budgeting time horizon is shorter than the estimated life of some of these assets (e.g. infrastructures). Additionally, since the public health sector is not profit-oriented, discounting depreciation from financial return is not a statutory requirement.	Bannock G, Brexter RE, Davis E (1998). <i>Dictionary of economics</i> . London, The Economist Books.	Walker D, Kumaranayake L (2002). Allowing for differential timing in cost analyses: discounting and annualization. <i>Health Policy and Planning</i> , 17:112–118.
<i>Disaster</i>	<i>"An occurrence disrupting the normal conditions of existence and causing a level of suffering that exceeds the capacity of adjustment of the affected community."</i> Disaster is a term describing an event. It can be defined spatially and geographically. It demands observation to produce evidence. It implies interaction of an external stressor with a human community and it carries the implicit concept of non-manageability. The term is used in the entire range of risk-reduction activities, but it is possibly the least appropriate for response.	UN Disaster Management Training Programme (1992). <i>An overview of disaster management</i> . Available online at: www.unisdr.org , accessed 30 September 2008.	
<i>Disbursement</i>	<i>"The release of funds to – or the purchase of goods or services for – a recipient; by extension, the amount thus spent. Disbursements record the actual international transfer of financial resources, or of goods or services valued at the cost to the donor. In the case of activities carried out in donor countries, such as training, administration or public awareness programmes, disbursement is taken to have occurred when the funds have been transferred to the service provider or the recipient. They may be recorded gross (the total amount disbursed over a given accounting period) or net (the gross amount less any repayments of LOAN principal or recoveries on GRANTS received during the same period)."</i>	OECD (2009). <i>Development Co-operation Report 2009</i> . Available online at: http://oberon.sourceoecd.org/vl=7289808/cl=19/nw=1/rpsv/dac09/index.htm , accessed 7 March 2009.	
<i>Discounting</i>	Adjusting for people <i>time preference</i> , i.e. the fact that people generally want to have benefits today and defer costs to tomorrow; also, but not only, to reflect that \$1 today is worth more than \$1 in the future. Discounting is necessary because for many health interventions, costs are incurred at the beginning, while benefits occur after some time. A <i>discount</i> rate is, therefore, necessary to adjust future costs and benefits into present-day values. The discount rate usually incorporates inflation.		Walker and Kumaranayake, 2002.
<i>Dutch disease</i>	The negative macroeconomic consequences induced by large increases in the income of a country. It is primarily associated with a natural resource discovery, but it can result from any large increase in foreign currency, including foreign direct investment, foreign aid or a substantial increase in natural resource prices. Its name originates from a crisis in the Netherlands in the 1960s that resulted from discoveries of vast natural gas deposits in the North Sea. The massive inflow of foreign currency provided by aid on-budget may slow down labour-intensive export activities, with an overall depressive impact on the country economy. The risk is larger when a country is in an early phase of a reform process, which may lose momentum.		Collier P (2007). <i>The bottom billion: why the poorest countries are failing and what can be done about it</i> . Oxford, Oxford University Press.
<i>Elasticity</i>	"A measure of the responsiveness of the quantity demanded of a good to a change in its price." It is usually expressed in a units-free measure: if < 1 the demand is inelastic (e.g. for emergency services, or insulin, for which people are likely to pay as much as they can). If it is > 1 the demand is elastic (e.g. health services whose consumption can be postponed, such as pap-tests, plastic surgery, etc). The poor are more likely to have an elastic demand for those services than the rich: i.e. elasticity depends, to a large extent, on the income.	Parkin M, Powell M, Matthews K (1997). <i>Economics</i> , 3rd ed. Harlow, Addison-Wesley.	

Term	Definition	Source	Recommended reading
<i>Emergency</i>	A state in which normal procedures are suspended and extraordinary measures are taken in order to avert a disaster. <i>Emergency</i> is a term describing a state. It is a managerial term, demanding decision and follow-up in terms of <i>extraordinary measures</i> . A "state of emergency" demands to "be declared" or imposed by somebody in authority, who, at a certain moment, will also lift it. Thus, it is usually defined in time and space, it requires threshold values to be recognized, and it implies rules of engagement and an exit strategy. Conceptually, it relates best to response.	Deverill P (1992). <i>SEARO Regional Strategy: Water Supply and Sanitation in Emergencies</i> . STP WHO SEARO. Available online at: www.who.or.id/eng/contents/aceh/wsh/Regional%20Strategy.pdf .	
<i>Equality and equity</i>	Value-laden concepts, difficult to operationalize and measure. Health inequities are defined as " <i>avoidable inequalities that are unfair and unjust, where inequalities refer to differences in both health experience and status between countries, regions, socio-economic groups</i> ". Health equity implies a fair distribution of both the benefits and burdens of health services among groups and individuals. <i>Horizontal equity</i> means equal treatment or equal access to health care for equal needs. <i>Vertical equity</i> is unequal treatment for unequal needs or allocating resources to take account of differences among population groups or individuals (i.e. more serious health problems require more resources than trivial ones and more disadvantaged groups/individuals require more health support, i.e. financial equity). The most common way to measure equity is to estimate utilization by using routine data of healthcare interventions (immunizations, out-patient consultation, etc) and relating them to different population groups (on geographical basis, by gender, age-groups, etc). Equity and efficiency are often at odds, and a fully equitable health system cannot be wholly efficient: choices have to be made.	Leon DA, Walt G, Gilson L (2001). International perspectives on health inequalities and policy. <i>British Medical Journal</i> , 322:591–594. Kawachi I, Subramanian S, Almeida-Filho N (2002). A glossary for health inequalities. <i>Journal of Epidemiology and Community Health</i> , 56:647–652.	Ranson K et al. (2007). <i>Promoting health equity in conflict-affected fragile states</i> . London, London School of Hygiene and Tropical Medicine. Braveman P (1998). <i>Monitoring equity in health: a policy-oriented approach in low- and middle-income countries</i> . Geneva, WHO (Equity Initiative Paper No. 3). WHO/CHS/HSS/98.1.
<i>Evaluation</i>	"Efforts aimed at determining as systemically and objectively as possible the effectiveness and impact of health-related (and other) activities in relation to objectives and taking into account the resources and facilities that have been deployed in the activities being evaluated".	Last, 2007.	
<i>Evidence</i>	"Any form of knowledge, including, but not confined to research, of sufficient quality to inform decisions."	Buse K, Mays B, Walt G. (2005). <i>Making health policy</i> . Open University Press.	
<i>Famine</i>	"The advanced stages of acute food insecurity linked with the exhaustion of coping strategies, social collapse and destitution, which is accompanied by localised health crises, increased prevalence of malnutrition and consequently elevated morbidity and mortality." "Many famines occur because of inequitable distribution rather than overall shortages of available food".	Young H, Jaspars S (2006). <i>The meaning and measurement of acute malnutrition in emergencies: a primer for decision-makers</i> . London, ODI (Network Paper Number 56. Humanitarian Policy Network). Available online at: www.odihpn.org , accessed 30 September 2008. Last, 2007.	
<i>Fiduciary risk</i>	"The risk that funds are not used for the intended purpose, do not achieve value for money, or are not properly accounted for."	DFID (2004). <i>Managing fiduciary risk when providing poverty reduction budget support</i> . DFID Briefing. Available online at: www.dfid.gov.uk , accessed 3 November 2008.	

Term	Definition	Source	Recommended reading
<i>Fiscal space</i>	"...the capacity of government to provide additional budgetary resources for a desired purpose without any prejudice to the sustainability of its financial position."	Heller PS (2006). The prospects of creating 'fiscal space' for the health sector. <i>Health Policy and Planning</i> . 21, 2:75-79.	Hay R (2003). <i>The 'fiscal space' for publicly-financed health care</i> . Oxford, Oxford Policy Institute (Policy Brief No. 4). Williams G (2006). <i>Fiscal Space and Sustainability from the Perspective of the Health Sector</i> . Chapter 4 in: <i>High Level Forum on the Health Millennium Development Goals Selected Papers 2003-2005</i> . WHO and World Bank. Available online at: http://www.who.int/mdg/publications/en/ .
<i>Foreign aid (or foreign assistance)</i>	"Financial flows, technical assistance, and commodities that are (1) designed to promote economic development and welfare as their main objective (thus excluding aid for military or other non-development purposes); and (2) are provided as either grants or subsidized loans."	Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD), quoted in Radelet, 2006	Radelet S (2006). <i>A primer on foreign aid</i> . Washington, DC, Center for Global Development (Working Paper Number 92). Available online at: www.cgdev.org , accessed 30 September 2008.
<i>Fragile states</i>	"... states that lack either the capacity, or the will (or both), to deliver core state functions for the majority of the people, including the poor. The most important functions of the state for poverty reduction are territorial control, safety and security, capacity to manage public resources, delivery of basic services, and the ability to protect and support the ways in which the poorest people sustain themselves".	Leader N, Colenso P (2005). <i>Aid instruments in fragile states</i> . London, DFID (PRDE Working Paper 5). Available online at: www.dfid.gov.uk , accessed 30 September 2008.	Wimpelmann T (2006). <i>The Aid Agencies and the Fragile States Agenda</i> . Working Paper 21. Chr. Michelsen Institute. Available online at: www.cmi.no/publications , accessed 5 April 2009.
<i>Fungibility</i>	The exchangeability of funds across competing expenditures. The presence of fungible funds limits the effectiveness of earmarking certain financing lines to specific purposes. For example, the generous support provided by donors to social sectors may permit the reduction of state funding to them, to benefit other sectors, like the army. Proponents of general budget support as the main form of aid see the fungibility of donor funds as a cornerstone of their argument. Fairly effective public expenditure management systems must be in place to make donor contributions fully fungible.		
<i>"Ghost workers"</i>	Workers included in the payroll, but not active anymore, because of death, dismissal, retirement, etc., while their salaries continue to be regularly paid. Sometimes they result from active forgery, i.e. by the introduction of fictitious entries in order to benefit of their salaries. In disrupted public sectors, "ghost workers" can attain significant proportions.		
<i>Gross domestic product (GDP)</i>	"The value of all goods and services provided in a country by residents and nonresidents without regard to their allocation among domestic and foreign claims."	WHO, 2003.	

Term	Definition	Source	Recommended reading
Harmonization	<p>"Donor harmonisation involves two or more donors moving closer together by (i) sharing information, or (ii) adopting common systems and procedures, or (iii) adopting joint working arrangements that include shared decision-making. This is distinguished from the broader definition of aid coordination, which is a process embracing both donors and partners and which should be led by partners.</p> <p>Donor harmonisation will frequently be a second-best solution compared to aid coordination led by partner countries. But harmonisation can provide a useful route to stronger, more sustainable forms of aid coordination. However, care needs to be taken to consult fully with partner countries to ensure that donor harmonisation is in the interests of partner countries. Done well, donor coordination can complement aid coordination by expanding the scope for joint working and by facilitating efficient systems and procedures."</p>	OECD-DAC (2002). <i>Reporting directives for the creditor reporting system</i> . DCD/DAC (2002) 21.	OECD. Development Co-operation Directorate (2004). <i>Harmonisation and Alignment in Fragile States</i> . Draft Report by Overseas Development Institute. DCD(2005)3.
Hazard	"A potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation. Hazards can include latent conditions that may represent future threats and can have different origins: natural (geological, hydrometeorological and biological) or induced by human processes (environmental degradation and technological hazards). Hazards can be single, sequential or combined in their origin and effects. Each hazard is characterised by its location, intensity, frequency and probability."	The UN International Strategy for Disaster Reduction (2004). <i>Terminology of disaster risk reduction</i> . Available online at: www.unisdr.org/eng/library/lib-terminology-eng%20home.htm , accessed 30 September 2008.	
Health insurance	"A contract between the insured and the insurer to the effect that in the event of specified events (determined in the insurance contract) occurring the insurer will pay compensation either to the insured person or to the health service provider. There are two major forms of health insurance. One is private health insurance, with premiums based on individual or group risks. The other is social security, whereby in principle society's risks are pooled, with contributions by individuals usually dependent on their capacity to pay."	WHO, 2003.	Hsiao WC, Shaw RP (2007). <i>Social Health Insurance for Developing Nations</i> . WBI Development Studies. The World Bank Institute.
Health Sector Reform	<p>"A movement aimed at reconfiguring health services, dominant in the 90s in the framework of the New Public Management, typically including the following components:</p> <ul style="list-style-type: none"> • Separating the roles of financing and provision and the possible introduction of a managed market • Developing alternative financing mechanisms, particularly user charges and health insurance • Decentralisation • Limiting the public sector and encouraging a greater role for the private sector • Prioritising the use of cost-effectiveness techniques" 	Collins CD, Green AT, Newell JN (2002). The relationship between disease control strategies and health system development: the case of TB. <i>Health Policy</i> , 62:141–160.	Evans RG (2000). <i>Health for all or wealth for some? Conflicting goals in health care reform</i> . In Mills A, ed. <i>Reforming health sectors</i> . London, Kegan Paul International.
Humanitarian aid	"an intervention to help people who are victims of a natural disaster or conflict meet their basic needs and rights. This includes high-priority projects that are required for survival needs, or that help re-establish the infrastructure necessary to deliver emergency assistance or reduce dependency on food aid and other emergency aid."	OCHA's Financial Tracking System (FTS), referred to in: Altinger L, Tortella V (2007). <i>The private financing of humanitarian action, 1995 – 2005</i> . HPG Background Paper. ODI. Available online at: www.odi.org.uk , accessed 1 October 2008.	
Indicator	"Variable that indicates or shows a given situation, and thus can be used to measure change."	Green A (2007). <i>An introduction to health planning for developing health systems</i> . 3rd ed. Oxford, Oxford University Press.	Lippeveld T, Sauerborn R, Bodart C, eds. (2000). <i>Design and implementation of health information systems</i> . Geneva, WHO.
Inflation	"The process whereby the general price level is rising and money is losing value. This means that more money has to be paid to buy or provide the same quantity of goods and services."	Kumaranayake, 2000.	
Internally displaced persons (IDPs)	"persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence in particular as a result of or in order to avoid the effects of armed conflicts, situations of generalized violence, violations of human rights, or natural or man-made disasters and who have not crossed an internationally recognized State border."	United Nations (1999). <i>Guiding principles on internal displacement</i> . Available online at http://ap.ohchr.org/documents/alldocs.aspx?doc_id=1160 , accessed 3 November 2008.	

Term	Definition	Source	Recommended reading
<i>International humanitarian law</i>	<i>"International humanitarian law (IHL) is comprised of international rules, established by treaty or custom, which are specifically intended to solve humanitarian problems directly arising from international or non-international armed conflicts. Its principal aims are to protect persons and property that are, or may be, affected by the conflict - e.g. civilians and prisoners of war and civilian objects - and to limit the right of the parties to a conflict to use methods and means of warfare of their choice. It is primarily the duty of states to respect and ensure respect for international humanitarian law. Other actors also play a role in IHL implementation - in particular the International Committee of the Red Cross (ICRC), which has been mandated by the international community with specific protection and assistance tasks in times of armed conflict. The United Nations and NGOs are also increasingly relying on IHL to better advocate on behalf of civilians affected by armed conflict."</i>	IASC Reference Group on Humanitarian Action and Human Rights (2002). Available online at: www.icva.ch/doc00000830.html#5 , accessed 1 October 2008.	
<i>Licensure</i>	<i>"Licensure is a process by which a governmental authority grants permission to an individual practitioner or health care organization to operate or to engage in an occupation or profession. Licensure regulations are generally established to ensure that an organization or individual meets minimum standards to protect public health and safety. Licensure to individuals is usually granted after some form of examination or proof of education and may be renewed periodically through payment of a fee and/or proof of continuing education or professional competence. Organizational licensure is granted following an on-site inspection to determine if minimum health and safety standards have been met. Maintenance of licensure is an ongoing requirement for the health care organization to continue to operate and care for patients."</i>	Rooney and Van Ostenberg, 1999.	
<i>Logical Framework Analysis (LFA)</i>	A formalized approach to planning, programming and evaluation, adopted by many agencies as aid management tool. <i>"The LFA is an important tool in project design, management and evaluation. It provides a framework for defining the project's objectives, and constructing indicators for monitoring and evaluation. LFA can be applied to projects and programmes. While it is a widely used tool, there are dangers in applying the approach too rigidly and it has been criticised for encouraging an excessively narrow and linear approach to decision-making. It should therefore be used critically and with close involvement of stakeholders."</i>	Jones S, Williams G (2002). <i>A common language for managing official development assistance: a glossary of ODA terms</i> . Oxford Policy Management.	Gaspar D (2000). Evaluating the 'Logical Framework Approach'. towards learning-oriented development evaluation. <i>Public Administration and Development</i> , 20:17–28.
<i>Marginal Cost</i>	<i>"The change in total cost that results from a unit increase in output."</i>	Parkin, Powell and Matthews, 1997.	
<i>Market Failure</i>	<i>"The failure of an unregulated market to achieve an efficient allocation of resources or to reach social goals."</i> Market failures provide the economic case for regulation and intervention of the state. Main market failures in the health field concern the asymmetry of information between patient and health professional and the uncertainty of demand, the lack of choice of provider, externalities (environmental pollution, immunization) and the presence of public goods (water fluoridation, health promotion campaigns, etc.).	Parkin, Powell and Matthews, 1997.	Donaldson C, Gerard K (1993). <i>Economics of health care financing: the visible hand</i> . Basingstoke, Palgrave Macmillan
<i>Misclassification bias</i>	<i>"The erroneous classification of an individual, a value, or an attribute into a category other than that which it should be assigned."</i>	Last, 2001.	
<i>New Public Management</i>	The dominant paradigm to reforming public sectors across the world. Usually includes <i>"deregulation of line management; conversion of civil service departments into free-standing agencies or enterprises; performance-based accountability, particularly through contracts; ... competitive mechanisms such as contracting-out and internal markets ... privatisation and downsizing."</i>	Polidano, 1999.	Polidano C (1999). <i>The new public management in developing countries</i> . Manchester, Institute for Development Policy and Management. University of Manchester (Public Policy and Management Working Paper no. 13).

Term	Definition	Source	Recommended reading
<i>On-/Off-budget funding</i>	Term denoting the capture (or lack of it) of some funds by the budget process, usually of the recipient government. The funds considered as on- or off-budget may be conceded by international assistance, but may also be internal revenues, as user charges or fines. The term is often used loosely. In fact, additional funds may be inscribed on-budget in one phase of the cycle, and remain off-budget in another one. To study the issue properly, the whole budget cycle must be monitored.		
<i>Opportunity cost</i>	<i>"The value of the next best alternative forgone as a result of the decision made."</i>	Wonderling D, Gruen R, Black N (2005). <i>Introduction to health economics</i> . Maidenhead, Open University Press.	
<i>Outlier</i>	<i>"An observation that differs so much from the rest of the observations in a series that it appears not to belong in the same distribution"</i>	Last, 2007.	
<i>Performance-based payment (PBP)</i>	The "transfer of money or material goods conditional upon taking a measurable action or achieving a predetermined performance target".	Eichler (2006). <i>Can "Pay-for-Performance" increase utilization by the poor and improve the quality of health services?</i> Center for Global Development. Available online at: http://www.cgdev.org .	
<i>Pledge</i>	<i>"A binding promise or agreement to do or forbear"</i> . In this context the promise or agreement to give a grant or loan.	Merriam-Webster's online dictionary.	
<i>Precision</i>	<i>"The quality of being sharply defined through exact detail."</i>	Last, 2001.	
<i>Programme aid</i>	<i>"An umbrella term covering a range of interventions including budget support, debt relief and balance of payments support. Programme aid grants donate foreign exchange to support a higher level of expenditure. Funds are accounted for against import spending (balance of payments) or against domestic public expenditure (government budget)."</i> <ul style="list-style-type: none"> • Key characteristics are: • channelled directly to partner governments • uses local accounting systems • not linked to specific project activities • quick disbursing." 	DFID (2002). <i>DFID Workshop Handbook on Direct Budget Support and SWAps</i> .	
<i>Project aid</i>	"Project aid is understood as earmarking of expenditures to specific activities or a discrete set of activities for which coherent objectives and outputs and the inputs required to achieve them are defined."	Foster M, Leavy J (2001). <i>The choice of financial aid instruments</i> . London, Centre for Aid and Public Expenditure, ODI (Working Paper 158).	
<i>Proxy</i>	<i>"Indicator of something which is, by its complex nature, inherently unmeasurable."</i>	Green, 2007.	
<i>Purchasing power parity (PPP)</i>	<i>"A doctrine which asserts that a unit of currency should be able to buy the same bundle of goods in all countries. The validity of this proposition depends on several restrictive assumptions: the most important are that all goods are homogeneous and traded, there are no transactions costs or capital flows or impediments to trade and that there is full employment and price flexibility."</i> <p>The PPP technique converts economic figures in International Dollars, which inside each country should have the same purchasing power of one US\$ in the United States. The accuracy of the conversion depends on the underlying statistical price information, which in complex political emergencies is usually poor. Also, as in aid-dependent settings many transactions are made in US\$, preferring I\$ to US\$ is questionable.</p>	WHO, 2003.	
<i>Random error</i>	<i>"..the portion of variation in a measurement that has no apparent connection to any other measurement or variable, generally regarded as due to chance"</i> .	Last, 2001.	

Term	Definition	Source	Recommended reading
<i>Recall bias</i>	[It is due to] "differences in accuracy or completeness of recall to memory of past events or experiences".	Last, 2001.	
<i>Recurrent expenditure / cost</i>	Costs that refer to inputs which last less than one year and are regularly purchased (e.g. salaries, medicines, fuel, electricity, in-service training, etc).		
<i>Refugee</i>	Person who "owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, unwilling to return to it".	United Nations High Commissioner for Refugees (2006). <i>Collection of international instruments and other legal texts concerning refugees and others of concern to UNHCR</i> . Geneva.	
<i>Regulation</i>	"... the imposition of external constraints upon the behavior of an individual or an organization. As such, it is the exercise of authority by some entity over those individuals or organizations, forcing a change from their preferred behavior. Thus, a key element of regulation (as against direct military-style command-and-control) is that the individual or organization to be regulated must be structurally capable of at least some degree of autonomous or independent decision-making. Otherwise, there is no preferred behavior to change."	Saltman, 2002.	Saltman RB (2002). Regulating incentives: the past and present role of the state in health care systems. <i>Social Science and Medicine</i> , 54:1677–1684.
<i>Resilience</i>	"The capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organizing itself to increase its capacity for learning from past disasters for better future protection and to improve risk reduction measures."	The UN International Strategy for Disaster Reduction, 2004.	
<i>Risk</i>	"The probability that an event will occur." Not to be confused with hazard (see definition above). A risk is the product of hazard and vulnerability.	Last, 2007.	
<i>Sampling bias</i>	"Systematic error due to the study of a non-random sample of a population."	Last, 2001.	
<i>Sensitivity analysis</i>	"A 'what-if' type of analysis to determine the sensitivity of the outcomes to changes in parameters. If a small change in a parameter results in relatively large changes in the outcomes, the outcomes are said to be sensitive to that parameter."	International Monetary Fund (2007). <i>Manual on fiscal transparency</i> . Washington, DC.	
<i>Shorthand</i>	"Indication of something which one could in theory measure, but measuring which would be very costly."	Green, 2007.	
<i>Shadow alignment</i>	"Shadow alignment is a state-avoiding approach but one that is 'future-proof'. It does not give an authority or government control over resources, but does use structures, institutions or systems which are parallel but compatible with existing or potential organisation of the state. It aims to avoid creating a diversionary institutional legacy that can undermine or impede the development of a more accountable and legitimate future relationship between the people and their governments."	Sondorp E et al. (2004). <i>Achieving the health millennium development goals In difficult partnerships</i> . Background document for the High-level Forum on the Health MDGs. DFID Health Systems Resource Centre.	
<i>Shadow prices</i>	"Prices that have been adjusted for various reasons, including donations, distorted exchange rates, subsidies, to yield an economic cost that better reflects the value of a given good."	Creese A and Parker D, eds. (1994). <i>Cost analysis in primary health care: a training manual for programme managers</i> . WHO. Available online at www.who.int , accessed 1 October 2008.	
<i>Silent (or forgotten) emergency</i>	"A crisis situation that overwhelms the capacity of a society to cope by using its resources alone, where the level of response, including political, humanitarian, multilateral and press is insufficient to meet the level of immediate humanitarian need."	Jefferys A (2002). Giving voice to silent emergencies. <i>Humanitarian Exchange</i> , 20:2–4.	

Term	Definition	Source	Recommended reading
<i>Standard</i>	"An established and accepted basis for comparison, a technical specification, results or findings from a recognized study." In public health in emergencies, a standard is often the result of consensus among experts.	Last, 2007.	
<i>Structural adjustment</i>	"The structural adjustment policies adopted by the International Monetary Fund (IMF) and the World Bank since the 1980s have the paramount aim to enhance the external viability of the adjusting countries and the stability of the international financial system, and are consistent with the overarching liberal ideology that drives globalisation processes in the financial and trade sectors. The macroeconomic objectives, advocated by the IMF involve devaluation, public spending reduction, tax increases, and tighter monetary policy. The World Bank's policies, which followed the IMF measures, involve reducing the role of the state, for example through privatisation and opening up of the economy."	Bettcher D, Lee K (2002). Globalisation and public health. <i>Journal of Epidemiology & Community Health</i> , 56:8–17.	Center for global development (2007). Does the IMF constrain Health spending In poor countries? Evidence and an agenda for action. Report of the working group on IMF programs and health spending.
<i>Survey</i>	"An investigation in which information is collected systematically but often without a formal research design to test a hypothesis."	Last, 2007.	
<i>Survival bias</i>	In a severe crisis with very high mortality, death removes individuals that otherwise would have been included in a survey, whose results therefore underestimate the pattern under study. For instance, a nutrition survey might return misleading estimates, because many malnourished children had already died.		Differences in accuracy or completeness of recall to memory of prior events or experience
<i>Sustainability</i>	"The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time."	OECD-DAC Working Party on Aid Evaluation (2002). <i>Glossary of key terms in evaluation and results-based management</i> . Available online at: www.undp.org , accessed 1 October 2008.	
<i>Technical (or Operational) Efficiency</i>	"Maximising output for a given set of physical inputs, or minimizing the physical inputs required to produce a given output."	Hensher, 2001.	Hensher, 2001.
<i>Transaction costs</i>	"Any use of resources required to negotiate and enforce agreements, including the cost of information needed to facilitate a bargaining strategy, the time spent haggling, and the costs of preventing cheating by the parties to the bargain."	Cotter in: Eatwell J, Milgate M, Newman P, eds. (1989). <i>Allocation, information and markets</i> . New York, Norton (New Palgrave series).	
<i>Transition</i>	"The period between the immediate aftermath of crisis and the restoration of pre-crisis conditions (recovery) or their improvement to a satisfactory level (development)".	Joint Meeting of the Executive Boards of UNDP / UNFPA, UNICEF and WFP, January 2006.	
<i>Validity</i>	"The degree to which a measurement measures what it purports to measure."	Last, 2001.	
<i>Vulnerability</i>	"The conditions determined by physical, social, attitudinal, economic, and environmental factors or processes that increase the susceptibility of a community to the impact of hazards."	The UN International Strategy for Disaster Reduction, 2004.	

Recommended reading on selected health sectors in crisis

The introductory notes that follow are designed to help practitioners and analysts who start studying certain conflict-affected health sectors. After a brief introduction and a review of key issues to be kept in mind during the study, a set of selected documents is presented with short comments. The prospective student of one of these health sectors should be able to penetrate its broad features within a few days of scrutiny of the proposed documents.

Each country set comes from the vetting of a vast array of materials. The documents have been selected in order to assemble for each health sector a reading set of manageable size, good quality and a broad range of perspectives. Each set covers several years, to provide indications of change over time. Some of the countries included in this collection passed through a severe crisis in the past, like Cambodia and Mozambique, but their study is considered of great value for the comprehension of events taking place in other settings. Other countries are still engulfed in serious troubles.

Each health sector can be studied in isolation. Nevertheless, policy threads linking health sectors across countries may be followed by studying several country sets. For instance, the operational health district concept was developed in the Democratic Republic of the Congo (then Zaïre) in the 1980s, to be introduced as a guiding planning and management instrument in Cambodia after the war. In turn, the pilots of the contracting approach carried out in Cambodia in the 1990s led to its adoption on a large scale in Afghanistan. By 2008, South Sudan intended to follow Afghanistan on contracting, and the Democratic Republic of the Congo was also considering this approach.

These reading sets have been developed as training materials. Introductory notes to other disrupted health sectors will be progressively added to this chapter, as documents of relevant content and adequate level are found.

Countries/territories included so far:

1. *Afghanistan*
2. *Cambodia*
3. *Democratic Republic of the Congo*
4. *Liberia*
5. *Mozambique*
6. *The occupied Palestinian territory*
7. *South Sudan*
8. *Uganda*

1. AFGHANISTAN

Background

The recent turbulent history of Afghanistan is well known. Since the 1970s, the country has been embroiled in war. First it became a cold war battlefield, then was torn apart by warlords, later was controlled by the Taliban, and after 2001 was invaded by a Western coalition. As per 2009, the grip of the central government on large portions of the country remained tenuous, with precarious security conditions in most areas. Over time, Afghanistan has cyclically shifted between the status of silent and noisy emergency, according to the political calculations of Western donors. After the 2001 turnaround, the country was flooded with aid.

The oldest document included in this reading set was written in 2002, when the health sector was in tatters. Resource levels were extremely low. The infrastructure was derelict, and the workforce under-skilled and distorted. Severe urban and hospital biases compounded matters. Health services were provided by NGOs, vertical programmes, and private operators, in a policy and regulatory vacuum. Public management systems were rudimentary. Only a minority of the population had access to health services of questionable quality.

With strong donor support, a new model of healthcare delivery, based on the split between purchaser and provider of services, was introduced. A Basic Package of Health Services was designed and costed. Contracting of services was adopted on a large scale through schemes financed by major donors. A strong grant contract and management unit was created within the Ministry of Health. Important research institutions were tasked with monitoring progress.

By 2006, most districts were served by contracted non-state healthcare providers. The bold approach adopted by the Afghan health sector was considered by other countries recovering from protracted conflict as an appealing model to follow. Because of their international significance, the Afghan health developments and their implications must be studied in depth.

Issues to be considered in the study of the Afghan health sector

- Contracting has been at the centre of the Afghan health recovery process, and hailed as the main factor behind the rapid expansion of health services in previously not served areas. Its role should be critically appraised, and contextualized. However, other factors playing an essential role in boosting health service development should be considered. The dependency of the introduced reforms on strong and sustained donor support must also be assessed. See *Annex 7* of this manual on contracting.
- The delivery of the Basic Package of Health Services has been costed at below US\$ 5 per head per year. Given the difficult terrain and precarious security conditions, this figure has generated some scepticism. Additionally, the definition of health service coverage adopted in Afghanistan seems debatable. See *Annex 6b* on cost analysis.
- Most policy decisions were made in haste in 2002, in the absence of a solid information base. Crucial issues may have been neglected by the policy process. Some systemic distortions are still affecting health sector development, and call for serious attention. To foster a productive policy discussion, the issues in need of further study should be identified.
- In light of deteriorating security conditions and precarious governance, the progress registered in the health sector might be doomed. The formulation of contingency strategies, in order to protect the health sector in case of further decline, seems opportune.

- The Afghan health recovery process provides lessons for other war-torn health sectors. The contextual elements of such experience should be disentangled from those that are likely to hold for other countries. The preconditions to be met in order to apply the Afghan model to other health sectors in transition should be spelled out.

Essential reading

A concise description of the main problems affecting the health sector after the fall of the Taliban is given in **Pavignani E, Modol X, Colombo A (2002). *Afghanistan health sector profile 2002: a contribution to the debate on health sector recovery*. Geneva, WHO**. Available online at: www.aims.org.af/services/sectoral/health/health_sector_profile_aug_02.pdf, accessed 30 September 2008. This report may be considered as the rough baseline, against which later developments can be assessed.

Strong L, Wali A, Sondorp E (2005). *Health policy in Afghanistan: two years of rapid change: a review of the process from 2001 to 2003*. London, London School of Hygiene and Tropical Medicine. Available online at: www.lshtm.ac.uk/hpu/conflict/files/publications/file_33.pdf, accessed 30 September 2008. A detailed study of the health policy formulation process, drawn from participant observation over a protracted period of time.

Bousquet C (2005). *Health sector review in Afghanistan (2001-2006). Linking Relief, Rehabilitation and Development Programme (LRRD)*. Available online at: www.urd.org/fr/activites/recherche/fichiers/LRRD/Health/Health_Sector_Review.pdf, accessed 30 September 2008. A comprehensive overview of the health sector, discussing the progress registered over the period, alongside some of the issues still waiting to be addressed.

A sombre analysis of political and security aspects, and of their impact on humanitarian operations is provided by **Donini A (2006). *Humanitarian agenda 2015: Afghanistan country study*. Medford, MA, Feinstein International Center at Tufts University (Briefing Paper)**. Available online at: <https://wikis.uit.tufts.edu/confluence/display/FIC/Humanitarian+Agenda+2015--Afghanistan+Country+Study>, accessed 30 September 2008. According to Donini, the deteriorating environment is fuelling considerable disillusionment among ordinary citizens, and raises uncomfortable questions about the outcome of the war, as well as the true motives behind the conspicuous Western engagement in Afghanistan.

Additional reading

Bower H (2002). *Reconstructing Afghanistan's health system: are lessons being learned from the past?* [MSc. Dissertation]. London, London School of Hygiene and Tropical Medicine. Whether policy actors in Afghanistan have taken stock of lessons learned in other crises, such as Cambodia, Kosovo, Mozambique and Uganda, as recommended by the author, is open to debate.

Michael M, Corbett M, Mola G (2005). *The road to health and the road to Afghanistan: joint UNHCR/WHO evaluation of health and health programmes for Afghan refugees in Pakistan*. Geneva, UNHCR. Available online at: www.unhcr.org/publ/RESEARCH/425e6b572.pdf, accessed 30 September 2008.

Palmer N et al. (2006). *Contracting out health services in fragile states. British Medical Journal*. 332:718–721. Available online at: www.bmj.com/cgi/reprint/332/7543/718. Short review of the issue, with specific reference to Afghanistan.

Waldman R, Strong L and Wali A (2006). *Afghanistan's health system since 2001: condition Improved, prognosis cautiously optimistic*. Kabul, Afghanistan Research and Evaluation Unit Briefing Paper Series. Available online at: www.areu.org.af, accessed 30 September 2008.

See also in this manual the following *True Stories* related to Afghanistan:

True Story No 3. Understanding the evolution of the Afghan health sector, in Module 3.

True Story No 9. The transaction costs of coordination: negotiating a standard salary policy in Afghanistan, 2002–2003, in Module 5.

True Story No 16. The true composition of the health network in Afghanistan, in Module 9.

2. CAMBODIA

Background

At the beginning of the 1990s, Cambodia emerged from more than twenty years of war with painful scars, a dilapidated infrastructure, a precarious political settlement, limited sovereignty and a heavy dependence on aid. Poverty was prevalent. The pre-conflict health sector, based on urban-hospital care combined with vertical programmes, was enormously damaged during the 1970s, and particularly by the Khmer Rouge. The pro-Vietnamese regime (1979–1989) partially restored it. Western donors kept aid taps shut until the Vietnamese withdrawal, and the placement of the country under the United Nations Transitional Authority. Subsequently, international assistance grew from US\$ 17 million in 1989 to US\$ 317 in 1993.

International agencies, mistrustful of Cambodian authorities, dominated the policy arena. Foreign NGOs moved in en masse, playing a major role in the provision of health services. A variety of experiments in health service delivery, whose results later influenced health policies introduced in other countries, was promoted. As in other health sectors affected by protracted conflict, a policy vacuum gave way to fragmented, inefficient, poor-quality and unsustainable health service delivery. From 1989 onwards, a broad agreement about the need, as well as the opportunity, of reforming the health sector emerged among international agencies.

The *Health Coverage Plan* (HCP), launched in 1996, was inspired by the health district model developed in Sub-Saharan Africa in the 1980s. The basic functional unit of the restructured health sector was the operational health district, which was expected to operate 10–20 health centres referring to a district hospital. Size and composition of the health network, staffing patterns and workloads, content of care at different levels, were all rationally planned, according to efficiency and effectiveness criteria. 65 health districts were operationally redefined, on the basis of size, population, distances, etc. They did not overlap with the existing 164 administrative districts. The MoH was restructured, with emphasis on the management of vertical programmes and regulatory action on the whole health sector.

Meanwhile, Cambodia moved on, progressively stabilizing its torn social fabric. Despite remarkable improvements, Cambodia remains among the poorest countries in South-East Asia. Its health status indicators are still worse than those of most of its neighbours. Now the transition from war to peace may be considered as concluded, and the changes occurred in this health sector must be analysed and understood.

Issues to be considered in the study of the Cambodian health sector

- The appropriateness of the HCP as a recovery strategy, in the conditions prevailing in Cambodia at the end of the war, and given existing political, resource and capacity constraints, must be assessed.
- A decade was spent implementing the HCP. A broad assessment of this effort should be attempted, in terms of main achievements, shortcomings and unplanned changes.
- The detected shortcomings should be clearly identified, whether caused by flaws in the design of the plan, or resulting from poor implementation, or caused by factors outside the control of health actors.
- Alongside the issues addressed by the HCP, other overlooked – or inadequately dealt with – problems should be recognized. For instance, the growing role played by private (formal and informal) healthcare providers must be understood.
- The Cambodian recovery experience provides lessons for other war-torn health sectors. The contextual elements of such experience should be disentangled from those that are likely to be valid for other countries. The opportunity of launching

an ambitious planning cycle, along the lines of the HCP, in a country now facing a situation similar to Cambodia at the beginning of the 1990s, should be critically appraised.

Essential reading

A published study of the Cambodian health sector during the war and after it is provided by: **Lanjouw S, Macrae J, Zwi A (1999). *Rehabilitating health services in Cambodia: the challenge of coordination in political emergencies. *Health Policy and Planning*, 14:229–242.*** The approaches adopted in different phases to improve coordination among the many players active in the health arena are discussed with some detail in this article.

Ministry of Health, Cambodia (2001). *Joint health sector review report. Phnom Penh.* A comprehensive, detailed and perceptive portrait of the Cambodian health sector, taken at the end of the transition period. The sound analysis presented in this report introduces the difficult policy decisions faced by stakeholders. A high-quality product.

Hill PS (2004). *International health policy: a study of words and power. [PhD Dissertation]. Brussels, Vrije Universiteit Brussel.* A thorough investigation of the field, offering several lessons drawn from the study of real-life processes. The Cambodian transition from war to peace is dealt with particular subtlety and richness of insights.

A report useful to follow the evolution of the Cambodian health sector, as it has moved away from the conflict era, is **Lane C (2007). *Scaling up for better health in Cambodia: a Country Case Study for the World Health Organization in follow-up to the High-Level Forum on the Health Millennium Development Goals. Geneva, World Health Organization and Ministry of Health, Cambodia. WHO/HDS/2007.1.*** Available online at: www.hlfhealthmdgs.org/documents.asp, accessed 22 March 2009. While progress has been registered on many accounts, some fundamental problems persist, or have grown in their severity.

Additional reading

Hill PS (2007), in *Change and complexity: the operational district in Cambodia*. (See full reference on page 254), shows how an appropriate conceptual tool (in this case complexity theory) may sharpen our understanding of over three decades of dramatic changes occurred in the evolution of the health sector.

On the Cambodian recovery process, see also *Annex 12. The reconstruction of disrupted health sectors*, in this manual. Additionally, *Exercise 6 in Module 15* discusses important aspects of the Cambodian health sector.

3. Democratic Republic of the Congo

Background

The Democratic Republic of the Congo (former Zaïre) has been in crisis since long before the start of the conflict in 1998. Legendary levels of mismanagement and corruption led to economic decline and contraction of public revenues. The predatory elite in power lost interest in administering the state and therefore in providing social services, reducing public spending to minimal levels and encouraging their de-regulated privatization. The war, fought by many foreign armies alongside Congolese formations, devastated the country, exacting the highest death toll ever recorded after the end of World War Two.

The health sector, which in the 1970s had been at the forefront of the PHC movement, bore the full brunt of the crisis, surviving only thanks to external support. Under such duress, the health sector demonstrated remarkable resilience, adapting to the conditions created by the conflict. The health sector seems severely wounded, but alive, and at least in the discourse of some actors, on its way to a difficult recovery.

The uneasy peace established in 2002 has ushered in a slow transition. The foundations of a functioning state administration are being laid down, the domestic economy is growing, internal revenues are increasing, albeit from a very low starting point, while budget allocations to health services have expanded from previously negligible levels. International partners are supportive of Congolese efforts.

Several documents have been prepared with the purpose of guiding the Congolese transition. The available information on the health sector enables a policy discussion of a certain depth. If many of the obstacles on the way to recovery are recognized with some clarity, their severity remains daunting. In 2006, the Ministry of Health (MoH) issued a *Health System Strengthening Strategy*, received favourably by partners. International agencies, too, are active in the health policy arena. While the MoH and its closest supporters envision for the future health sector the revitalization of time-honoured approaches, influential outsiders lobby for radical change. The fragmentation of health services is severe.

Issues to be considered in the study of the Congolese health sector

- Congolese health cadres of the old generation are still proud of the achievements of the health sector in the 1970s, attained despite an unfavourable national environment. The factors behind the decline registered in the 1980s and 1990s, general as well as specific to the health field, should be identified.
- The strategy formulated by the MoH in 2006 should be assessed, and its value as a tool to inform the actions of stakeholders during the transition from war to peace appraised. The applicability of the proposed measures in the prevailing Congolese conditions must be verified. Steps to strengthen or complement the strategy, and ensure adhesion to it of key actors, should be identified.
- The commercialization of healthcare delivery is recognized as one of the crucial problems to be addressed in the revamping of the health sector. The identification of realistic measures to deal with this entrenched problem of extreme gravity, usually resilient to correction, is needed.
- Given the size and diversity of the Democratic Republic of the Congo, and the inadequacy of its internal communications, recovery will certainly be uneven. Several recovery processes will take place at different paces, possibly pointing to different directions. A strategy should be conceived, aimed at managing this spontaneous trend.

Essential reading

World Bank (2005). *Democratic Republic of Congo – Health, nutrition and population: country status report*. Also available in French, as: *Banque Mondiale. Santé et pauvreté en République Démocratique du Congo: analyse et cadre stratégique de lutte contre la pauvreté*. Available online at: www-wds.worldbank.org, accessed 30 September 2008. Comprehensive overview of the health field, taken when the crisis had bottomed, and the first signals of improvement were recognized. Useful also to understand the position of the World Bank in the recovery process.

République Démocratique du Congo. Ministère de la Santé. Secrétariat Général (2006). *Stratégie de renforcement du système de santé*. The official position of the MoH, and a widely-discussed document. Formally endorsed by the donor community.

Essential to grasp in full the severity of the effects of the Congolese conflict is Coghlan B et al. (2006). *Mortality in the Democratic Republic of Congo: a nationwide survey*. *Lancet*, 367: 44–51. Available online at: www.globalpolicy.org/security/issues/congo/2006/0107survey.pdf, accessed 30 September 2008.

An updated situation analysis, suggesting that amid crushing difficulties recovery is under way, is World Bank (2008). *Democratic Republic of Congo. Public Expenditure Review. Chapter 5 Health Sector. Report No 42167-ZR*. Available online at: http://www-wds.worldbank.org/external/default/WDSCContentServer/WDSP/IB/2008/06/27/000333038_20080627071453/Rendered/PDF/421670ER0P10151osed0June025020080ZR.pdf, accessed 5 March 2009.

Additional reading

Porignon D et al. (1994). *Problématique du secteur santé au Zaïre: vers une nouvelle stratégie de coopération*. Brussels, Belgian Administration for Development Cooperation, 1–145. Useful to understand the characteristics of the health sector before the war, and the serious problems existing at the time.

von Schreeb J, Michael M (2004). *Joint assessment of health status and health system among crisis affected populations in the Democratic Republic of Congo (DRC) and the humanitarian health sector strategy for DRC*. Geneva, World Health Organization.

Ministère du Plan, Ministère de la Santé et Macro International Inc (2008). *République Démocratique du Congo. Enquête démographique et de santé 2007*. Kinshasa. Available online at: www.measuredhs.com/pubs/pdf/FR208/FR208.pdf, accessed 30 September 2008.

See also in this manual:

True Story no 19. Responding to the collapse of drug supply systems in the Democratic Republic of the Congo, in Module 11; and

Exercise 3. Projecting aid to the health sector, in order to reach some set targets in Module 15.

4. LIBERIA

Background

After a long and devastating civil war, Liberia is enjoying a period of peace and stability, under the watch of a legitimate government backed by a UN peace-keeping operation. The Liberian economy is recovering, thanks to investments in physical infrastructure, donor inflows and a gradual improvement in security in rural areas. External assistance is increasing from rather low levels.

The country has suffered immensely, in its physical assets as well as in its social fabric. Per capita GDP (in 2005 prices) declined by 87%, from US\$1,269 in 1980 to US\$163 in 2005. In 2007, three fourths of the population lived below the poverty line on less than US\$1 a day. Unemployment is rife. Massive population displacement in rural areas during the war boosted urbanization. The South-Eastern region remains the least developed.

Years of mismanagement have left Liberia with a huge external debt burden, which is slowly being restructured. Total government expenditure is increasing, although it remains diminutive. External dependency is heavy. Recovering from such a protracted crisis entails huge investments in infrastructures, human capital and governance.

The health sector

Health care delivery is fragmented and uneven, heavily dependent on donor-funded vertical programs, international NGOs and faith-based organisations. Many health facilities struggle to attain acceptable performance levels, and need robust infrastructural interventions. The hospital component of the health sector is under-sized and technically inadequate. The health workforce is under-skilled. The distribution of trained health workers is grossly imbalanced in favour of urban areas; qualified professionals are scarce. Many health workers hold sub-standard qualifications.

Management systems are dysfunctional. Management skills are in severe shortage. Decentralization has been chosen by the new government as a key driver of reconstruction. External assistance to health is large and growing, but concentrated on few vertical interventions. Private contributions to health care financing might be substantial, despite the ban on user fees introduced by the new government.

The Ministry of Health and Social Welfare (MoHSW) has worked hard to lead the recovery process. In 2007, it has issued a National Health Policy and a National Health Plan. The Basic Package of Health Services formulated by the MoHSW is considered as the core instrument to foster a balanced recovery of PHC provision. Attention has been given also to human resource development and to the pharmaceutical area, which have both been studied in some detail, with the goal of designing specific recovery plans.

Issues to be considered in the study of the Liberian health sector

- Health sector recovery in Liberia has so far registered consistent progress. Identifying the main factors behind such a progress is needed in view of understanding it.
- Considering the challenges faced by the health sector and the lessons learnt from already-completed health recovery processes, which obstacles and pitfalls might undermine the Liberian one?
- Liberian health authorities have in 2006-7 successfully managed to gain the support of previously sceptical donors. What factors might be behind such a shift in donor stance?

- The Liberian health sector recovery process remains heavily dependent on external financial and technical support. In which way this dependency should be considered by national and foreign decision-makers?
- The array of crucial and pressing issues to be addressed by policy-makers in the Liberian health sector is vast. To put the recovery process on firmer grounds, some priorities among many should be selected and addressed first.

Essential reading

United Nations and World Bank (2004). *Liberia joint needs assessment. Sector working paper. Health and nutrition.* The first appraisal of the situation at the end of the conflict, with a proposed interim recovery strategy.

Msuya C, Sondorp E (2005). *Liberia Interagency Health Evaluation Report.* A concise situation analysis prepared as humanitarian operations were winding down, and issues related to transition and recovery started to be discussed by concerned actors.

Government of Liberia. Ministry of Health and Social Welfare (2007). *National health policy. National Health Plan 2007-2011.* Monrovia. Available online at: www.liberiamohsw.org. The two main documents produced by Liberian health authorities, and endorsed by many development partners.

Liberia Institute of Statistics and Geo-Information Services et al (2008). *Liberia demographic and health survey 2007.* Monrovia and Calverton. Available online at: www.measuredhs.com. Detailed portrait of the health situation, with a few surprises included.

Canavan A et al. (2008). *Annex 5. Liberia case study. In: Post-conflict health sectors: the myth and reality of funding gaps.* Commissioned by the Health and Fragile States Network. Completed in collaboration with the Royal Tropical Institute Amsterdam. Insightful study, which may be read as an updated complement to the national health policy and plan, written one year before.

Additional reading

Schowengerdt A, Spiegel P, Spielberg F (1998). *Health interventions in complex emergencies: a case study of Liberia.* New Orleans, LA, Complex Emergency Response and Transition Initiative. Available online at: www.certi.org. Eloquent picture of the devastation brought by the conflict, the health problems caused by it, and the difficulty of tackling them in such a ravaged environment.

Hoffman D (2004). *The civilian target in Sierra Leone and Liberia: political power, military strategy, and humanitarian intervention.* *African Affairs*, 103, 211–226. Fascinating exploration of the perverse ground-level logics behind this protracted regional conflict.

Osmond B, O'Connell A, Bunting R (2007). *Review of the Pharmaceuticals area and Preparation of a Mid-term Pharmaceuticals Policy and Implementation Plan for the Ministry of Health & Social Welfare, Liberia.* Interesting appraisal of the severe problems affecting the pharmaceutical management field, with concrete proposals to address them in the mid-term.

Chand S, Coffman R (2008). *How soon can donors exit from post-conflict states?* Washington, DC, Center for Global Development (Working paper 141). Available online at: www.cgdev.org, accessed 14 September 2008. Valuable study of the timeframe needed to achieve financial self-sufficiency in selected post-conflict states, including Liberia.

See also in this manual *Exercise 10. Assessing a post-conflict plan to strengthen human resources for health* in Module 15.

5. MOZAMBIQUE

Background

Since the 1960s, Mozambique has gone through incessant change. The archaic Portuguese rule, which isolated the country from the outside world, was overcome through a long liberation war. Ill-judged and poorly applied economic and social policies, adopted by the nationalist government at Independence in 1975, quickly led to paralysis and bankruptcy. The vicious civil war sponsored by *apartheid* South Africa dealt the final blow to the young country. By the mid-1980s, Mozambique was considered the poorest country in the world. A resolute shift to free-market policies in 1987 changed the position of Mozambique on the international map: Western donors flocked in with substantial resources, providing a support that lasts to these days.

Protracted negotiations between government and rebels, facilitated by the transition to majority rule in South Africa, culminated in the 1992 peace agreement, which ushered a period of internal stability and orderly politics. A few years later, the economy started to grow at breakneck pace, and has not decelerated since. Mozambique remains the ultimate donor darling. According to the Economist Intelligence Unit, “... donors have a relationship of reverse dependency on Mozambique, because of their need to demonstrate success in Africa.” Internal fragility notwithstanding, the success of the country in moving from barefoot recipient of world charity to a paragon of stability and economic progress is remarkable.

Change and adaptation to change seem therefore the defining characteristic of Mozambique. Continuity is, however, the other side of the coin. The ruling élite have remained the same since Independence, while colonial laws, procedures and traditions still prevail in the state administration. Conservatism and risk aversion have marked the post-war recovery process.

The health sector

After 1975, the health sector was permeated by the ideals of Alma Ata. Primary Health Care was adopted as guiding policy and pursued on a grand scale, despite crushing capacity and resource constraints. The early gains in health service delivery were reversed by economic collapse and war destruction. Guided by a comprehensive recovery strategy and buoyed by donor investments, with peace health sector development started again.

Post-conflict achievements were impressive indeed. The under-skilled workforce was restructured, while the healthcare network was rehabilitated and expanded. A rational pharmaceutical policy was enforced with remarkable success. Novel ways to manage external resources were explored. Aid instruments now internationally considered as best practice were tested and perfected. These efforts produced a doubling of health service coverage, and a reduction of internal imbalances in service access. In the 1990s, health in Mozambique was considered as a lab for many developments, to be closely watched.

The health sector has now stabilized, as has the country itself: long-delayed reforms are talked about rather than adopted by cautious health authorities. Meanwhile, the “rational” priorities set by health planners have been bypassed by the HIV/AIDS epidemic. Enormous external resources have flowed into the health sector, attracting a new wave of foreign and indigenous NGOs. Privatization has quietly progressed. The health sector has lost coherence and sense of direction. Its future profile is hard to decipher.

Issues to be considered in the study of the Mozambican health sector

- Strengths and weaknesses of the recovery strategy adopted towards the end of the war to guide the health sector through the transition period. To what degree does the present health sector match the vision sketched by the post-war recovery strategy?
- Coherence between the stated adoption of PHC as guiding policy and empirical findings. To what extent has priority-setting been influenced by PHC?
- Donors have given generous and sustained support to the Mozambican health sector. What factors played and still play a role in attracting such a support? Are donor political and financial backing justified by the actual performance of the health sector?
- Thanks to donor generosity and the improving fiscal position of the Treasury, financing levels have progressively increased, to reach sizeable proportions. What impact on healthcare delivery, and on overall efficiency, has improved funding had?
- Formally, the Mozambican health sector remains predominantly public. What patterns of private healthcare provision are emerging? What is the likely future outlook of the public–private mix?
- The Mozambican recovery experience provides lessons for other war-torn health sectors. Which elements of such experience look as contextual, and which are transferable to other countries?

Essential reading

Recommended reading to every practitioner involved in a health recovery process is **Noormahomed AR, Segall M (1994). *The public health sector in Mozambique: a post-war strategy for rehabilitation and sustained development*. Geneva, World Health Organization (Macroeconomics, health and development series; no. 14).** Available online at: http://whqlibdoc.who.int/hq/1994/WHO_ICO_MESD.14.pdf, accessed 30 September 2008.

Ministry of Health (1998). *Mozambique health sector profile*. Maputo. A low-cost production, which offers a snapshot of the health sector mid-way through recovery.

Pavignani E, Colombo A (2001). *Providing health services in countries disrupted by civil wars: a comparative analysis of Mozambique and Angola 1975–2000*. Geneva, World Health Organization. Available online at: www.who.int/disasters/repo/14052.pdf, accessed 30 September 2008. An exploration of the diverging evolution of the health sectors of two war-torn countries.

The evolution of the Mozambican health sector, as it has moved away from the conflict era, can be studied in **Ministry of Planning and Finance & Ministry of Health (2002). *Health sector expenditure review*. Maputo**, or alternatively in **World Bank (2004). *Mozambique health country status report*. Washington, DC.**

Additional reading

The evolution of emergency-oriented aid management tools, as the sector moved from a war to peace context, the emergence of new ones, the obstacles met, the enabling factors and the results achieved are covered in: **Pavignani E, Durão JR (1999). Managing external resources in Mozambique: building new aid relationships on shifting sands? *Health Policy and Planning*, 14:243–253.**

See also in this manual:

True Story no 2. Population figures in Mozambique, in Module 2.

True Story no 13. Sector budget support to provincial recurrent expenditure in Mozambique in the 1990s, in Module 8.

True Story no 18. Drug donations to Mozambique in 2000, in Module 11.

True Story no 20. Estimating the cost of revamping the health sector in Mozambique, in Module 12.

Annex 10. Restructuring the workforce in a post-conflict health sector. Mozambique 1990-2002.

Annex 12. The reconstruction of disrupted health sectors.

6. THE OCCUPIED PALESTINIAN TERRITORY / WEST BANK AND GAZA

Background

The tortured history of Palestine has gained international attention since the end of World War II. The 1948 conflict, which led to the expulsion of a large portion of the Palestinian population, ushered a sequence of wars and uprisings that implicated the whole Middle East and conditioned the geo-political calculations of the great powers, vastly exceeding the strategic, economic and demographic importance of this contested land.

After sixty years of violence and sufferings, a settlement is as distant as ever. About half ethnic Palestinians, either settled abroad or within the West Bank and Gaza Strip, are recognized as refugees. The people living within the occupied territories have to cope daily with uncertain national and legal rights, Israeli heavy-handed controls and retaliations, a dependent and constrained economy, dysfunctional institutions and internal political struggles. Most factors contribute to frustrate the pursuit of Palestinian statehood. As argued by the International Crisis Group (2007), *“The occupied territories have the dubious distinction of having become a failed state before even becoming a state”*.

The prolonged predicament of Palestinians has attracted enormous external resources, which have sustained the establishment of a public administration, the delivery of social services, and the growth of civil-society organizations within the occupied territories. External dependency has grown accordingly, in financial as well as political terms. Western support to Palestinians, however, has fluctuated in goals, modalities and volumes, subordinated to the political agendas of donor governments, and often unrelated to events on the ground and the well-being of recipients.

The health sector

“Historical events during the past century have had a profound influence on the characteristics of the health system emerging today. Years of colonization and military occupation have shaped the capacity of the health system and defined its main actors”. (Giacaman, Abdul-Rahim and Wick, 2003).

The health sector has grown in the absence of a clear development direction. Health services of comparatively high cost and inadequate quality have multiplied in a policy, planning and regulatory vacuum. The health sector is territorially, institutionally, organizationally and culturally fragmented. Many organizations occupy an overcrowded space. Inefficiencies are crippling and widespread, with rising costs. Overlaps and under-use of resources are commonplace. The health workforce has expanded ominously, and keeps growing, inflating the salary bill and in turn eating up other expenditures. Structural reform is as needed as it is blocked, and considered by many actors as impracticable.

Decades of severe aid dependency have left a clear mark on health service delivery. Service standards are set at levels unaffordable in relation to internal revenues. High-tech medical care models are adopted without questioning their appropriateness and efficacy in the Palestinian context. The health sector is designed to remain aid-dependent for decades to come, even if the political impasse is overcome.

A large portion of health services is provided by NGOs and private for-profit operators, in the absence of a sector-wide policy framework. This important section of the health sector absorbs a significant but poorly-quantified share of external assistance, and employs a large portion of the workforce. For their part, donors use NGO channels according to convenience, as when they need to bypass the Palestinian National Authority because of political expediency.

Issues to be considered in the study of the Palestinian health sector

- The substantial aid provided over time to Palestinians appears as a paragon of inconsistency, inefficiency and ineffectiveness. The impact of these flawed aid relationships on healthcare delivery must be explored in depth.
- Most analyses of the Palestinian health sector stress the enormous political and security constraints that shape it, and undermine its functioning. However, some of the identified flaws might in principle be addressed even in the present forbidding context. The major distortions susceptible of correction must be identified and realistic measures conceived.
- Thanks to many good-quality analytical studies carried out over time, the systemic flaws that affect the Palestinian health sector are well understood. This understanding has nonetheless failed to trigger consequent corrective measures. The reasons behind this impasse must be identified. Consequently, ways to overcome the existing stumbling blocks have to be explored.
- The Palestinian health sector is genuinely pluralistic. Exploiting in full the existing diversity calls for the identification of the strengths and weaknesses of the different actors, and of effective mechanisms to foster a productive collaboration.
- Palestinians registered as refugees in the West Bank and Gaza, Syria, Jordan and Lebanon are entitled to use health services provided by UNRWA, a UN agency specifically created in 1949 to assist them. Health care for Palestinians has therefore a regional dimension, which must be fully appreciated.

Essential reading

Giacaman R, Abdul-Rahim HF, Wick L (2003). Health sector reform in the Occupied Palestinian Territories (OPT): targeting the forest or the trees? *Health Policy and Planning*, 18:59–67. This article provides a concise overview of the evolution of the health sector since colonial times, and discusses the meaning, opportunity and feasibility of a health sector reform in the Palestinian present unique political context.

DFID (2005). *West Bank and Gaza health sector expenditure review*. Oxford, Oxford Policy Management. Excellent analysis of the health sector, which clearly singled out its main problems. Unfortunately this study did not enjoy the circulation it deserved.

Mataria A et al (2009). The health-care system: an assessment and reform agenda. *The Lancet*. Published Online March 5, 2009 DOI:10.1016/S0140-6736(09)60111-2, accessed 5 March 2009. Updated, lucid analysis of the dire conditions of the Palestinian health sector, and of the factors that lead to such a deep crisis. This paper belongs to the series *Health in the Occupied Palestinian Territory*, which includes also other four articles and various comments.

World Bank (2009). West Bank and Gaza. Health Policy Report. *Reforming Prudently Under Pressure: Health Financing Reform and the Rationalization of Public Sector Health Expenditures*. Available online at www.worldbank.org/ps, accessed 4 August 2009. Updated and frank analysis of a financial situation of increasing gravity. Only extraordinary measures, mostly impracticable in the current political context, might tackle the ills of the health sector.

Additional reading

Sayigh Y (2007). **Inducing a failed state in Palestine.** *Survival*, 49:7–40. Plenty of insights into the intricacies of the political situation, and of the flawed responses adopted by the international community.

For a detailed exploration of the intricate political process, see the reports produced by the International Crisis Group (all available online at www.crisisgroup.org), including the quoted **International Crisis Group (2007).** *After Mecca: engaging Hamas.* **Middle East Report N°62.**

See also in this manual *True Story no 21. The saga of the Palestinian health sector review 2003–2007*, in *Module 13*.

7. SOUTH SUDAN

Background

The signing in 2005 of a peace agreement between the federal government in Khartoum and the Sudan People's Liberation Army/Movement (SPLA/M) provided an uneasy peace, marked by tensions and relapses to violence, and by concomitant crises elsewhere in Sudan. The SPLA/M started implanting the basic elements of an autonomous government for South Sudan. Meanwhile, garrison towns previously controlled by Khartoum were brought under the unified administration.

South Sudan is one of the poorest regions in the world. Its climate is harsh. Roads, communications and the basic economic infrastructure are primitive. Seasonal floods impede transport and restrain physical investment. Education levels are dismally low. The northern part of South Sudan is less developed than the rest, but has substantive oil reserves.

The health status is dramatically poor. Most tropical diseases show record levels of transmission. Rudimentary health services are provided by a multitude of international agencies and NGOs. Service delivery costs are high, due to logistic constraints and operational fragmentation. The existing health infrastructure is grossly inadequate. Access to health care is limited, particularly in the northern part of the region.

Newly-appointed health authorities are struggling to lay the foundations of a unified health system. Several policy and planning documents have been drafted in rapid sequence. But progress is hampered by crushing capacity constraints. Most skilled health cadres are expatriates. Management systems are absent, or in their infancy. The available information is inadequate, although improving. Donors have pledged sizeable funds to support the recovery of the Southern Sudanese health sector, but their absorption has so far been poor.

Issues to be considered in the study of the Southern Sudanese health sector

- The policy documents prepared after the peace agreement by Southern Sudanese health authorities (with extensive external support) have remained in draft form, or are inadequately implemented. The technical meaning, operational value, and cost of concentrating efforts on policy papers at the beginning of a transition from war to peace should be appraised. The Southern Sudanese picture should be compared with other transitions in this respect.
- Most documents single out the absolute lack of indigenous capacity as the key constraint to be addressed in order to build a functioning health sector. Are the existing plans adequately factoring in this issue? What time horizon could be envisioned for a programme designed to overcome this constraint?
- Given donor generosity and oil revenues, the health sector should in principle attain rather adequate financing levels. What strategy could be adopted to tap available funds, and future expanded ones, in light of existing absorption constraints?
- Integrating into a coherent health sector two mutually segregated portions – the rural one controlled by the SPLA/M and the urban one previously administered by the Khartoum government – poses special challenges. The technical and political aspects of this integration should be assessed, and ways to address this sensitive process identified.
- The World Bank has rolled out a large “*Health Umbrella Programme*”, which foresees the massive contracting out of health service delivery. Does this strategy look appropriate, given the Southern Sudanese context? What are its implications? And what are the alternatives?

Essential Reading

Erasmus V, Nkoroi I (2002). *Report on cost sharing in selected counties of the New Sudan*. Health Secretariat of the New Sudan and International Rescue Committee. Useful to understand the operational environment in which NGOs delivered health services before the peace agreement. By studying a controversial issue, the report depicts some of the constraints and dilemmas faced by policy-makers and healthcare providers in such difficult settings.

Health Secretariat of the New Sudan (2004). *Laying the grounds for the recovery of the health sector in a post-conflict Southern Sudan*. Second Draft. Developed at the beginning of 2004, when the peace agreement for Sudan seemed imminent and stakeholders started exploring the health implications of the political deal, which was in fact signed one year later. The main findings, goals and rationale of this strategy paper were later absorbed in the multi-donor Joint Needs Assessment, finalized by the end of 2004.

New Sudan Centre for Statistics and Evaluation, in association with UNICEF (2004). *Towards a baseline: best estimates of social indicators for Southern Sudan*. Available online at: www.reliefweb.int/library/documents/2004/splm-sud-31may.pdf, accessed 30 September 2008.

Rietveld C, Waldman R (2006). *Health in fragile states. Country case study: Southern Sudan*. Arlington, VA, Basic Support for Institutionalizing Child Survival (BASICS) for USAID. Available online at: www.basics.org, accessed 30 September 2008.

Additional Reading

A refreshingly frank and at times caustic discussion of the relief environment of Southern Sudan, and of its structural distortions is given by African Rights (1995). *Imposing empowerment? Aid and civil institutions in Southern Sudan*. London. (Discussion Paper No. 7).

Michael M (2005). *Basic package of health services for Southern Sudan*. (Draft). A comprehensive description of the basic health services to be provided, complemented by remarks about operational implications, potential developments and likely pitfalls. Useful also as a model for other health sectors considering the formulation of a basic package.

The Republic of Sudan. Government of Southern Sudan. Ministry of Health. Directorate of Human Resource Development (2006). *A human resource assessment of the health sector in Southern Sudan: situation analysis*. The first detailed review of the workforce, as it resulted after the peace agreement, from the merging of the two segregated health systems. The situation is described in all its gravity, and concrete recommendations are sequentially put forward.

On Southern Sudan, see also in this manual *Annex 11. Mapping actors and activities in the Southern Sudanese pharmaceutical area*, and the related *Exercise 11* in *Module 15*.

8. UGANDA

Background

Uganda was one of the first African newly-independent countries to plunge into catastrophe. Between 1971 and 1986, coups, dictatorships, disastrous military adventures, quarrelsome and inept civilian governments, rigged elections, mismanagement, corruption and violent repression conspired to destroy the country. The long ordeal ended when a rebel group took power in 1986, and managed to pacify most of the country, putting in place a functioning administration. Uganda has thereafter enjoyed two decades of stability, economic growth and development, and is considered by many as one of the rare African success stories.

Set strikingly apart from the national healing process, a brutal war erupted in the northern Acholi districts in 1987. By 2005, more than 90% of the population of the three districts lived in squalid camps for IDPs. Since June 2006, peace talks between the government and the LRA are under way. The situation in North Uganda has significantly improved. As of September 2008, many IDPs went back to their homes. The local economy was slowly recovering, despite a still derelict infrastructure. But for many people survival depended heavily on external aid. A final peace agreement has not yet been reached. The old North/South divide has been perpetuated by this 20-year crisis. True peace will only come through the alleviation of the Northern political and social marginalization.

Uganda appears a peaceful, developing country, with inside it a devastated northern region. The old North/South divide is strengthened by this enduring crisis. The external assistance provided to Uganda is accordingly split between its development and emergency arms.

The health sector

The recovery of the health system was geared at reconstructing and consolidating what existed before 1971. A national health policy was produced only in the second half of the 1990s. Important measures followed, like the identification of a minimum healthcare package, the introduction of health sub-districts, the government provision of funds to private not-for-profit (PNFP) healthcare providers, the adoption of a sector-wide approach and, in 2001, the abolition of user fees in all government health facilities. Recently, many donors went back to funding specific projects, because of a decreased confidence in the Government and in its Ministry of Health.

In stark contrast with the improving performance of the national health system, healthcare provision in the war-affected North remained precarious. During the war, access to services dropped in rural areas, while urban health facilities were engulfed by increasing patient loads. This situation has not yet been redressed. Crude, infant, child and maternal mortality indicators are worse in the North (and especially in the Acholi Region) than in the rest of the country. From 2000, after years of neglect and denial, the situation in North Uganda started to attract national and international attention. Many donors and NGOs flocked to the North. Their monitoring and coordination proved problematic, if at all possible.

The health sector reflects the split separating the rest of Uganda from its violence-stricken North, with separated policy discourses, actors, and approaches. Available analyses reinforce the division, showing features hardly suggestive of belonging within the same country.

Issues to be considered in the study of the Ugandan health sector

- Compare the situation and the health service performance in the North with the rest of the country. What are the main factors behind such a stark divide?

- The role of donors in shaping policies, expenditure patterns, distribution of human resources and service delivery, and the evolution of such a role over time. Is the Ugandan government in the driving seat in Kampala? And in violence-stricken North?
- Consider the progress registered at national level with the harmonization and alignment of external assistance, and compare it with the fragmented situation in the North. Is this difference an inherent consequence of emergency interventions, which cannot be corrected? What measures can be introduced to improve the picture?
- Even with peace ensured, the health service gap between the ravaged North and the rest of the country will remain large. How to reduce the existing disadvantage in a long-term perspective? What medium-term recovery interventions could be envisaged to start filling this gap?
- What lessons can be drawn from the divided Ugandan health sector, which can be useful for other countries with confined crises?

Essential reading

A classic and influential report is **Macrae J, Zwi AB, Birungi H (1994). *A healthy peace? Rehabilitation and development of the health sector in a 'post'-conflict situation: the case of Uganda*. London, London School of Hygiene and Tropical Medicine.** The recovery of the health system after 1986, and its long-term outcome, are critically appraised.

Kirunga Tashobya C, Ssengooba F, Oliveira Cruz V, eds. (2006). *Health systems reforms in Uganda: processes and outputs*, London, Health Systems Development Programme, London School of Hygiene and Tropical Medicine. Particularly Chapters 1 and 7. A comprehensive study of the impressive progress registered in peaceful Uganda over the years, in terms of coverage, equity, and efficiency. Revealingly silent about the humanitarian crisis in the North.

Rowley E, Altaras R, Huff K (2006). *Health in fragile states. Country case study: Northern Uganda*, Arlington, VA, BASICS for USAID. Concise analysis of the crisis, and of the political aspects of healthcare provision in such a context, from a donor perspective.

Additional reading

Okuonzi SA, Macrae J (1995). Whose policy is it anyway? International and national influence on health policy development in Uganda. *Health Policy and Planning*, 10:122–132. One of the first papers to point to the dire reality of health policy-making in weak countries. The gained insights are relevant well beyond the specific Ugandan context.

Macrae J, Zwi AB, Gilson L (1996). A triple burden for health sector reform: 'post'-conflict rehabilitation in Uganda. *Social Science and Medicine*, 42:1095–1108. This paper condenses the findings of Macrae, Zwi and Birungi (1994), and discusses the implications of such study for countries emerging from protracted turmoil.

World Health Organization (2005). *Health and mortality survey among internally displaced persons in Gulu, Kitgum and Pader Districts, Northern Uganda.* Available online at: www.who.int/hac/crises/uga/sitreps/Ugandamortsurvey.pdf. A controversial survey, which highlighted the severe conditions prevailing in the war-affected North, to the displeasure of the Government. These findings were later confirmed by an independent assessment.

On the Ugandan recovery process, see *Annex 12. The reconstruction of disrupted health sectors*, in this manual.

True Story No 14. Spontaneous development of healthcare provision in a war-affected district, relates also to Northern Uganda.

Module 15

Exercises

Introduction

This module proposes exercises intended to encourage the reader to deepen her/his understanding of the issues covered by the manual. Ideally, after studying each thematic module, the reader should complete the related exercise(s). This work can be done individually, or in a small group if fellow students are available. Triangulating by e-mail with colleagues interested in the study of the same issues may greatly help sharpening the analysis, and make the effort demanded by each exercise more enjoyable.

The exercises presented in this module try to capture the variety of issues and approaches that analysing a disrupted health sector entails. Most exercises are based on original materials produced in actual health sectors in crisis. A mix of quantitative and qualitative approaches is used throughout the module, to reflect the work that an analyst needs to realize to reach an adequate understanding of the health systems under study. Some exercises aim at familiarizing the reader with analytical tools presented in the manual, and at extracting valuable meaning from them.

The user of this manual should not be scared by the complexity of some of these exercises. We recognize that they are challenging. This is due to the complexity of the situations that must be studied. In many cases, simplifying the exercises would betray the issues they are supposed to simulate. The difficulty of the exercises roughly increases as the reader proceeds through the module.

Each exercise is followed by its feedback, which offers what the authors of this manual consider as satisfactory answers. Given the nature of the issues covered by the exercises, a measure of subjectivity colours these answers, which are not always exclusive. We have suggested documents that will clarify the discussed problems, and support the proposed answers. The user of the manual may conceive other valid answers to the questions posed by the exercises.

The reader willing to discuss further the issues raised by the exercises may contact the authors of the manual directly, writing to:

enricopavignani@hotmail.com and colombo@who.int.

Note: for some terms used in the exercises, the reader should refer to the *Glossary* included in *Module 14*.

A taste of the issues studied in the manual**Exercise 1**

These multiple-choice questions are presented here as a small sample of the issues that are discussed in detail in the manual. The reader may go through the questions to broadly assess her/his familiarity with this study field. Additionally, in the feedback to this exercise the reader is given pointers to relevant sections of the manual, in order to study aspects touched by the questions. A thorough reading of *Module 1* will help the prospective reader understand the architecture of the manual, and plan her/his study path across the modules.

For each question, choose the best single answer, by circling the corresponding letter (A, B, C, D or E).

1. Examine the following sentence: *“The objective of improving the access of refugees to primary health care will be achieved through increased funding of NGO outreach activities”*. Does this sentence refer to an example of:
 - A. An official policy
 - B. A contingency plan
 - C. A strategy
 - D. A benchmark
 - E. A project
2. All the features below, except one, are common to current complex emergencies. Identify which one is NOT A COMMON characteristic:
 - A. Increased mortality
 - B. High levels of violence against civilians
 - C. High food insecurity
 - D. High number of battle-deaths
 - E. Large population displacement
3. Which one of the following desirable characteristics of health information is THE LEAST IMPORTANT in a crisis context?
 - A. Precision
 - B. Timeliness
 - C. Accuracy/validity
 - D. Cost
 - E. Relevance
4. In a country affected by a protracted crisis, which, among the following, is not an appropriate information source?
 - A. Household surveys, like the *Demographic and Health Survey*, or the *Multiple Indicators Cluster Survey*
 - B. Surveillance systems
 - C. Academic journals
 - D. Civil registration systems
5. Consider the following (true) sentence:

“The Angolan hospital network is oversized and concentrated in large towns. It absorbs a large proportion of available resources.” Given such a picture, which one of the remarks listed below is CORRECT?

 - A. The Angolan hospital network suffers from a severe resource shortage.
 - B. Existing hospitals should be rehabilitated and fitted with state-of-the-art equipment.

Exercise 1

- C. The Angolan health sector suffers from a severe allocative inefficiency.
 - D. Large hospitals are necessarily the main providers of health care in urban settings.
6. Decide which of the following sentences is TRUE.
During a protracted conflict:
- A. The health workforce tends to contract, due to violence, disease, famine and outward migration.
 - B. The proportion of internal health expenditure absorbed by salaries tends to increase.
 - C. There is a large influx of health workers from the diaspora.
 - D. Staffing patterns at PHC level tend to improve.
7. The relationships between protracted conflict and HIV transmission has been studied in several countries. Available evidence suggests that:
- A. Protracted conflict consistently accelerates HIV transmission.
 - B. HIV transmission is faster within the poorest population groups.
 - C. In most protracted conflicts HIV prevalence is lower than expected.
 - D. In most protracted conflicts HIV prevalence is higher than expected.
8. In the 1990s, the levels of health expenditure per capita per year of Afghanistan, the Democratic Republic of the Congo, Somalia and Southern Sudan were surprisingly similar. They fell within one of the following ranges:
- A. Below 10 US\$ per capita per year
 - B. 10–20 US\$
 - C. 21–30 US\$
 - D. 31–40 US\$
 - E. Above 40 US\$
9. Drugs donations are commonplace in crisis contexts. Which one of the following statements holds TRUE in most disrupted health sectors?
- A. Drugs donations are a vital component of an emergency response, and should be encouraged.
 - B. Without adequate controls, the negative effects of drugs donations are likely to offset their benefits.
 - C. No major effort should be devoted to regulate drugs donations, because their weight is usually marginal.
 - D. Recent research has highlighted the positive effects of drugs donations on healthcare provision in crisis-affected health sectors. Thus, international agencies are actively trying to promote them.
10. Which one of the following statements is TRUE?
In a complex emergency in a low-income country,
- A. user fees do not have a negative impact on equity.
 - B. the coverage of health insurance is limited.
 - C. private health spending represents an insignificant proportion of total spending.
 - D. government spending is redirected to capital expenditure.

Exercise 1

11. Which one of the following sentences is TRUE?
- Under-five mortality is an indicator.
 - Under-five mortality rate is an indicator.
 - Under-five mortality is lower than infant mortality.
 - The emergency threshold for under-five mortality is 1 death per 10,000 per day.
12. Consider the following summary definitions of a small/basic health centre. Which one would you choose as clear-cut criterion to classify as such a health facility in a poor, distressed health sector?
- A health facility staffed by one community health worker and a traditional birth attendant, supplied by a ration kit of essential medicines.
 - A health facility staffed by one medical doctor, four nurses, two midwives and one lab technician, offering basic emergency care, inpatient care for acute medical conditions, and mother and child health care.
 - A health facility staffed by one medical assistant, one or two nurses and one midwife, offering outpatient curative and mother and child health care (including immunizations).
 - A health facility of 100–150 square metres of covered surface, with a few beds, continuous electricity supply and running water.
13. Many countries at the end of a protracted period of turmoil decide to move towards decentralization. Which one of the following statements is TRUE?
- There is a wealth of evidence showing the benefits of decentralization in health sectors in transition.
 - A decentralized state administration, by taking decision-making closer to the service delivery point, will improve the efficiency and the effectiveness of healthcare provision.
 - After many years of international experimentation, the technical elements of decentralization are well understood. Health sectors emerging from crisis will benefit from adopting them straightforwardly.
 - Despite official endorsement, decentralization has not progressed as expected in most health sectors recovering from conflict.
14. Examine the following table on the aid given to countries in post-conflict.

Country	Population (million)	GDP per capita per year (current US\$)	Aid per capita per year (current US\$)	Aid as % GDP
Bosnia & Herzegovina	3.7	987	247	25%
Cambodia	11.4	269	30	11%
Timor-Leste	0.8	341	209	61%
Mozambique	15.8	166	67	40%
Nicaragua	4.2	425	147	35%
Rwanda	7.5	226	59	26%
West Bank & Gaza	2.5	1,433	213	15%

Note: Annual average for first five years following the conflict.

Adapted from Rohland K, Cliffe S (2002). *The East Timor reconstruction program: successes, problems and tradeoffs*. Washington, DC, The World Bank (CPR Working Papers. No. 2).

Exercise 1

One of the following remarks is WRONG: find it.

- A. Aid allocations to countries take into due account the size of the population of the country in transition.
- B. The differences in aid per capita do not seem to be related to the intensity of need for reconstruction.
- C. The strategic interests of donors are an important determinant of the volume of aid.
- D. Crises geographically close to donor countries are likely to receive more aid than distant ones.

Exercise 1 Feedback

Feedback to Exercise 1

Question 1. C. A strategy is about HOW, or the course of action for achieving the set objectives. In this case, the expansion of NGO outreach activities is the option chosen for an increased access of refugees to PHC.

Question 2. D. After the end of the Cold War, the vast majority of complex emergencies have been characterized by violence against civilians; rare are the examples of fighting between armies or armed groups. All the other features are constantly found in protracted complex emergencies. See *Module 4*.

Question 3. A. In a crisis, information should help the managers to make the best decision in the given context. The exact quantification of indicators is not so essential as the other attributes of information listed in the question: *timeliness* is important, mainly in an acute crisis; *accuracy* is key to choosing the best option and reducing errors; *cost* (including the opportunity cost) is critical in a context of increased needs and limited resources; and *relevance* is key to focus the efforts in data collection and analysis on the pieces of information that are the most important for the priority needs to be addressed. Note that some people use *precision* and *accuracy* as synonymous words, but their meaning is different in a critical if subtle way. See *Module 2*.

Question 4. D. In countries in crisis, and in most low-income countries, civil registration systems are non-existent or they have very limited coverage. All the other options listed in the question, including journals, can be better sources, although all require a careful scrutiny of the provided information. See *Module 2*.

Exercise 1 Feedback

Question 5. C. The fact that urban hospitals absorb a large share of resources implies that only limited funds are available for the other categories of facilities that offer health care to different groups of the population, for example in rural areas. This sort of distortion is called *allocative inefficiency*: the whole population receives smaller benefits in this case than if available resources had been distributed in a different, more efficient way. See *Module 7*.

Question 6. B. Because of the overall paralysis of the health systems and insecurity, most recurrent expenditures are not incurred (e.g. outreach activities, maintenance of infrastructure and equipment, referral, etc.). Also, financial squeezes tend to disproportionately affect other expenses. As a result, the proportion of salaries tends to increase. Health workers are often targeted by violence, but the impact on the size of the whole workforce is not significant in most cases. Losses are often offset by accelerated training. A large influx of diaspora health professionals during the crisis and/or in the post-conflict transition has never been reported. Staffing patterns tend to worsen, with most qualified PHC staff moving to secure areas or abroad. See *Module 10*.

Question 7. C. Some recent studies have shown that HIV prevalence in countries affected by crisis is much lower than expected. Different explanations can be put forward: some population groups may become segregated and isolated, with limited mobility and accessibility; widespread killings and forced displacement may diminish the incidence of infections; there is little evidence that large-scale sexual violence has resulted in a change in the prevalence of HIV in the population as a whole. See *Annex 4*.

Question 8. A. For a discussion of health expenditure levels and their implication on healthcare delivery, see *Module 6*.

Question 9. B. Negative effects include: medicines which are not included in the national formulary, medicines expired or close to expiration, medicines with instructions in a foreign language, etc. Large donations of medicines require time and effort for selecting those that are useful. The cost of disposing of those that are useless or harmful may be high. See *Module 11*.

Question 10. B. Health insurance requires that individuals/households pre-pay a premium that goes into a collective pool from which health services are paid. In a crisis, the proportion of the population that can pay a regular premium is limited and consists mainly of civil servants or employees of the formal sector. See *Module 6*.

Question 11. B.

Question 12. C. Establishing operational criteria for classifying health facilities is important not only for analytical purposes, but also to guide allocative decisions. See *Module 9* and *Exercise 9* in this module.

Question 13. D. Decentralization requires the transfer of authority, competence and resources to local level and, therefore, needs careful preparation. What often happens in countries emerging from a crisis is that authority is transferred to the periphery, without adequate support to improve competence in management and administration and without sufficient resources. See *Module 8*.

Question 14. A. As donors tend to apportion aid to countries, small-population recipients benefit disproportionately. Countries with large populations may receive big allocations that, once expressed in per capita terms, look much less impressive.

Exercise 2 Choosing indicators to monitor the recovery of the Somali health sector

You belong to a team that has formulated a 5-year programme aimed at supporting the transition from war to peace of the Somali health sector. The programme has been discussed with many stakeholders, having so far received positive feedback. As a final step in the formulation process, your team must select a set of relevant indicators, which will help participants in monitoring progress over the life of the programme.

The chosen indicators must be:

- Relevant to the Somali context and to the interventions proposed by the recovery programme
- Collectable in the given conditions
- Sensitive to change within the programme time span
- Systemic in nature, in order to help studying the evolution of the whole health sector.

To carry out the exercise, you will have to use the document *Somalia Health Transition Strategy 2006*, which is a condensed version of a real-life programme proposal, formulated in 2006 in the context of the Somalia Post-Conflict Needs Assessment. *You must read this short report before starting the exercise.*

Background reading that may help you in choosing the most appropriate indicators is: Bodart C, Shresta L (2000). Identifying information needs and indicators. Chapter 4 in: Lippeveld T, Sauerborn R, Bodart C, eds. *Design and implementation of health information systems*. Geneva, WHO.

1st part of the exercise

To discuss the choice of indicators with partners, a round table has been convened. Most important stakeholders have attended it, showing the utmost interest. Participants have put forward a variety of suggestions. *You have to consider each suggestion, and decide whether to follow the received advice, or conversely to explain why you don't.* The main suggestions are the following:

- a. *As impact is the crucial aspect of any programme to be measured, health status indicators like infant and maternal mortality should take precedence over everything else.*

Agree ☐

Disagree ☐

Explain why:

- b. *In order to clearly relate interventions to outputs, the programme should choose definite targets and pursue them over its life. The Millennium Development Goals (MDGs) are the most useful targets in this sense, and should guide the implementation of the programme.* **Exercise 2**

Agree ☐

Disagree ☐

Explain why:

- c. *As in such a fluid context we expect significant systemic changes over the programme's life, monitoring trends is more instructive than considering single-point figures.*

Agree ☐

Disagree ☐

Explain why:

- d. *Given its status of global priority, HIV/AIDS should be given adequate prominence.*

Agree ☐

Disagree ☐

Explain why:

Exercise 2 e. *In light of the unreliability of population data and the lack of data collected through random-sampling surveys, coverage figures should be avoided. Absolute output figures should be preferred instead.*

Agree ☐

Disagree ☐

Explain why:

f. *Beyond national and/or regional aggregate figures, attention must be paid to differences in service uptake across regions. Monitoring internal disparities will become increasingly important as security improves and health services are taken to areas previously deprived of them, or as other areas become accessible.*

Agree ☐

Disagree ☐

Explain why:

g. *The list of indicators chosen to monitor the transition programme must be short. Three to five well-chosen indicators are sufficient to achieve this goal.*

Agree ☐

Disagree ☐

Explain why:

2nd part of Exercise 2**Exercise 2**

You have to choose monitoring indicators for one (or more, if you wish) of the following key areas:

- Financing
- Infrastructures and equipment
- Human resources
- Pharmaceuticals
- Health service delivery and management systems.

You will have to be very selective, choosing maximally three indicators for each area. You are encouraged to comment the indicators you have chosen, clarifying for each of them:

- why you recommend its selection,
- the way and the source(s) from which it will have to be collected,
- the frequency of collection, and
- (if any) the caveats to be kept in mind in interpreting it.

1st part of the exercise**Feedback
Exercise 2**

- a. **Disagree.** Retrospective indicators of health status are not very sensitive to changes induced by a system's strengthening programme. In any case, they should not be used for direct comparisons, or causal attribution. Maternal mortality ratios are particularly inappropriate. To study this issue further, see World Health Organization and UNICEF (1997).
- b. **Disagree.** The 5-year programme under study is largely about investing in systems, which only in the very long run will affect the MDGs. Within five years, no major changes due to the programme in MDG-related indicators should be expected, and in any case disentangling programme effects from other ones will be impossible. No meaningful monitoring of the programme's success is possible using the MDGs, as suggested. Also, to express progress when ignoring the baseline, as is the case in Somalia, is clearly meaningless.
- c. **Agree.** Precisely because most baselines are unknown, single-point figures are not helpful to monitor an investment programme. But trends may show whether the programme is heading in the right direction, and prompt corrective measures if needed.
- d. **Disagree.** Due to the huge amount of money poured in by Global Health Initiatives, HIV/AIDS received disproportionate attention. As NGOs and UN agencies raise large portions of their funding from these sources, they are keen to keep HIV/AIDS as prominent as possible. The same can be said for the polio eradication campaign. See Capobianco and Naidu (2008), who found that almost half of the external support given to the health sector in 2006 went to these "priorities". Of course, neither are true priorities on epidemiological grounds. HIV prevalence in Somalia is unknown, but considered low.

Feedback Exercise 2

e. **Agree.** After completing the formulation of this transition programme, political arguments about population data have continued. A serious demographer studied the issue (Jarabi, 2007) and proposed sensible figures, but they were rejected by zonal health authorities. Thus, reliance on absolute figures for monitoring purposes seems reasonable until population data become available and are accepted by the concerned administrations. *See Grappling with population data in Module 4.*

f. **Agree.** The existence on huge variations across zones and regions and over time has been pointed out by involved actors. Given worsening security conditions, interventions have to be directed where it is possible. In practice, it means to privilege Somaliland, regardless of its desirability in respect of health needs.

Note: The word “zones” is used to refer to Somaliland, Puntland and the Centre-South. “Regions” refer to clusters of districts, usually with a few hundred thousand population, or less. This is an arbitrary convention, but important in light of existing political sensitivities.

g. **Don’t agree.** A comprehensive, complex programme, aiming at strengthening the whole health sector, cannot be adequately monitored with only a few indicators. A parsimonious mix of indicators must cover most aspects – inputs, process and outputs – in key areas like financing, infrastructure, human resources, medicines and service delivery. In total, 12–15 well-chosen indicators may be sufficient to properly monitor the transition programme.

2nd part of the exercise

The following table presents indicators to be considered, with remarks and excerpts from the original transition programme report. As the programme evolves, its monitoring will become more structured and sophisticated. The chosen indicators will have to be refined, and new indicators may have to be added.

Area	Indicator	Remarks/excerpts from the original report (in italics)
Financing	Total health spending, by public/private sources, level of care and zone/region, followed over time	<i>Health spending is likely to increase slowly during the first two years, even in the presence of conspicuous donor funding, because of the existing absorptive and implementation constraints. A fully-fledged recovery package, to be launched towards the end of the transition period, is likely to demand a total resource envelope near to or above US\$ 15 per capita. The health information management system has to improve remarkably to generate such information.</i>
	Proportion of donor funding provided un-earmarked, over time	<i>The quality of the available funding matters as much as its quantity. As funding of this kind is now negligible, progress in this area would suggest increasing donor confidence.</i>
	Proportion of donor funding allocated to general health services, over time	Key aspect in light of the dominance of vertical programmes identified by Capobianco and Naidu (2008).
Infrastructures	Total investment, by level, zone/region and ownership	<i>To study health facilities, the existing information must be strengthened and expanded. The ratios of health facilities to served population will have to wait for better census data (before they can be used for monitoring and planning purposes).</i>
	Number of functioning health facilities, by level, zone/region and ownership, over time	In order to choose clear-cut operational criteria for classifying health facilities, see Exercise 9.

Feedback
Exercise 2

Area	Indicator	Remarks/excerpts from the original report (in italics)
Human resources	Composition of the workforce, by category and gender, over time	<i>Recognized categories should decrease in number and become standard. The proportion of health workers belonging to non-standard ones should progressively decrease. The number of cadres whose skills are now scarce should start to increase.</i>
	Resources allocated to training activities	<i>An increase from the present low levels would suggest that financing bodies recognize the centrality of this area for health sector recovery.</i>
	Training throughput	Indicator of training efficiency.
	Deployment, staffing patterns and workloads, over time	<i>The direction these indicators take during the 5-year programme will provide clues about personnel management practices and the incentives at play.</i>
Pharmaceuticals	Average prices paid by different procurement arrangements, for a basket of selected drugs	Critical to identify better performers and attain sector-wide savings.
	Availability of tracer essential medicines at the service delivery point	<i>Putting in place the basic elements of a purchasing and supply system is comparatively easy. Regulating the pharmaceutical area, and ensuring rational prescription, as well as patient compliance, are far more challenging goals, particularly in the commoditized Somali context.</i>
	Wastage along the supply chain	
	Patterns of prescription	
Health service	Service outputs: outpatient contacts, immunizations, attended deliveries, inpatient bed-days, by public/private providers	<i>Service consumption is expected to expand slowly, as resource levels increase, funding becomes more predictable, supply is strengthened, and security improves. During the first two years of the programme, service growth will be caused mainly by increased consumption at the already-existing delivery points. Later, once new facilities open, existing ones are revamped, and additional services are added, service growth would come from new areas and communities. Whatever is the baseline eventually established and the target chosen, an annual growth of 5% of services volumes in the first two years and of about 10% afterwards would suggest very good progress.</i>
	Differences in service uptake across zones and regions	<i>Monitoring internal imbalances will become increasingly important as security improves and health services are taken to areas previously deprived of them.</i>

References

- Capobianco E, Naidu V (2008). *A review of health sector aid financing to Somalia (2000–2006)*. Washington, DC, The World Bank (WB Working Paper No. 142).
- Jarabi BO (2007). *Review of various population estimates for Somaliland, Puntland and South-Central Somalia*. Report of the independent consultancy mission. Final draft.
- World Health Organization and UNICEF (1997). *The sisterhood method for estimating maternal mortality: guidance notes for potential users*. Geneva. WHO/RHT/97.28. UNICEF/EPP/97.1.

See also *Annex 13* in this manual for further insights on the Somali health sector.

Exercise 3 Projecting aid to the health sector, in order to reach some set targets

The table below shows selected indicators for the Democratic Republic of the Congo, directly or indirectly related to health. The source is WHO, National Health Accounts, modified for this exercise. All presented data refer to 2006.

Indicator	Value
1. Gross domestic product (GDP) in US\$	8,543,000,000
2. Average GDP growth, forecasted for 2006–2010	4%
3. General Government expenditure as % of GDP	22%
4. Total internal health expenditure (TIHE), as % of GDP	4.3%
5. General Government health expenditure (GGHE) as % of TIHE	37.1
6. Private health expenditure (PvHE), as % of TIHE	62.9
7. Government health budget execution (expenditure, as % of budgeted allocations)	50
8. GGHE as % of General Government expenditure	7.2
9. External resources for health as % of TIHE	28.8
10. Total internal health expenditure per capita at exchange rate (\$)	6.06
11. Government health expenditure per capita at exchange rate (\$)	2.25
12. Total population	60,644,000
13. Annual population growth	2.4%

For the sake of this exercise, let us suppose that the Government of the Democratic Republic of the Congo has made the commitment to allocate 15% of its budget to the health sector in 2010. This has been announced at a major coordination meeting, where the Ministry of Health has appealed to donor agencies to fill the gap between public internal allocations and financing needs. Some donor officials have made preliminary statements supportive of the proposed financing framework.

The Ministry of Health has also projected that around US\$ 25 per capita will be needed in 2010 (excluding private out-of-pocket expenditure) to sustain the public health sector. As the only health economist in town, you are asked to review the whole issue, and advise the Ministry of Health and development partners about it.

1. *Consider the Government commitment to allocate 15% of its 2010 budget to health. Is this target realistic? Is it desirable from the perspective of the whole public sector?*

Answer:

2. *Consider the estimated financial needs of US\$ 25 per capita. Given the presented data, is the projected expenditure of US\$ 25 per capita realistic?*

Answer:

3. *Based on the available information and using the appropriate indicators, **Exercise 3** calculate:*

- a. *What would be the Government expenditure on health per capita in 2010, if the 15% target is attained;*

Answer:

- b. *What would be the gap, in US\$ per capita, to be filled by external assistance, in order to meet the \$25 target in 2010.*

Answer:

4. *Translate the per-capita figures considered so far into absolute expenditure amounts (in US\$):*

- *Total GGHE (if the 15% target were attained)*
- *Total PvHE*
- *External health expenditure (if the US\$ 25 target were attained).*

Consider again question 1 and 2, in light of these totals. What would be the level of external dependency attained in 2010 by the health sector?

Answer:

5. *Assume that the same US\$ 25 target is proposed by the MoH to donors in Timor-Leste, with a population close to one million. What in your view could be their likely reaction?*

Answer:

Note: For the sake of simplicity, assume that government expenditure as a % of GDP remains constant over the period, as does the relative weight of internal public and private expenditure. In reality, changes in some expenditure parameters impact on the others, so we should expect these shares to change over the period, too.

Feedback Exercise 3

1. The 15% target was endorsed at a major African conference in Abuja in 2001. It enjoys wide currency, being seen by many policy-makers as a working target, but almost no country is close to attaining it. Given competing and equally vital expenditures across the public sector, lower allocations to health by most ministries of finance are understandable. In the case of the Democratic Republic of the Congo, attaining this target would entail doubling the internal public share to health over a very short time span. A target of 9–10% of general government expenditure looks as more realistic, and sustainable in the long run. Additionally, an expanded funding set at this level would more easily be absorbed.
2. The 2006 level of donor support, at US\$ 1.74 per capita, was much lower than the target of \$25 per capita per year. That donors manage to expand their support to the health sector several times over only four years looks utterly unrealistic. The absorption of such large external funds would also be problematic. Rapid funding expansions like the proposed one tend to promote wastage, particularly in disrupted contexts, where financial management capacity is poor.
3. At the forecasted annual growth rate of 4%, GDP in 2010 would be close to US\$ 10 billion. Maintaining the 2006 Government expenditure share of GDP of 22%, and increasing the allocation to health to 15%, would give US\$ 4.9 per capita (using the projected 2010 population of 66.7 million). The shortfall to reach the projected US\$ 25 per capita per year would therefore be = $US\$ 25 - US\$ 4.9 = US\$ 20.1$.
4. *Total GGHE* (if the 15% target were attained): US\$ 330 million.
Total PvHE: US\$ 559 million.
External health expenditure (if the US\$ 25 target were attained): US\$ 1340 million.

The obtained totals are huge sums, unlikely to be shouldered by the Congolese Treasury and by donors as well. The existing serious absorption constraints have already been mentioned.

In case the proposed targets were attained, external assistance would cover a whopping 60% of total health expenditure. The Congolese health sector would become one of the most dependent in the world.
5. It could be positive. After all, many small-population countries all over the world enjoy comparable or higher levels of donor support. As donor allocative decisions are conditioned by government-to-government considerations, small countries are disproportionately benefited.

Summarizing the findings of a mortality survey Exercise 4

The crisis in Darfur, Sudan, started in 2003 but its origins are remote: recurrent droughts, demographic pressure on the land, state neglect and repercussions from other regional conflicts exacerbated the already precarious situation and fuelled the grievance of opposition groups. With a large proportion of its population displaced, Darfur became the theatre of the largest humanitarian operation in the world.

A mortality survey conducted in 2004 by WHO and the European Programme for Intervention Epidemiology Training concluded that the crude mortality rate in North Darfur, West Darfur and one IDP camp in South Darfur were all above the emergency threshold (1 death/10,000/day). These findings and the subsequent calculation of the excess mortality toll caused a fierce dispute: in the sensitive political environment of that period, the Government of Sudan rejected the findings.

One year later, the UN Humanitarian Coordinator commissioned a second survey, with the same methodology, to gauge the impact of the overall humanitarian operation and bring some evidence and clarity to an issue poisoned by political positions. Avoiding the previous political controversies and bringing together national and international actors required, therefore, a sustained diplomatic effort, a technically sound study design, large resources and a long preparation.

One of the authors of this manual was the coordinator of this survey: let's assume that you were part of his team.

The key findings of the survey are summarized in the executive summary and table below. After having read the summary and analysed the table, *prepare no more than 3 bullet points with the key messages for the UN Humanitarian Coordinator*, who will deliver a press release to the public (journalists, donor representatives, etc.).

Given the sensitivities of the Darfur crisis, you need to exert extreme caution to prevent any misinterpretation and manipulation of the survey findings. Keep in mind that the audience consists of non-public health specialists and that clarity of language and parsimony are as important as is the content.

The interested reader may wish to consult the original survey report, from which this exercise is drawn:

WHO and Federal Ministry of Health (FMoH) Sudan (2005). *Mortality survey among internally displaced persons and other affected populations in Greater Darfur, Sudan*. Available online at: www.emro.who.int/sudan/pdf/CMS%20Darfur%202005%20final%20report_11%2010%2005.pdf, accessed 16 September 2008.

To gain further insights about survey methods and interpretation of survey findings, recommended reading is:

Checchi F, Roberts L (2005). *Interpreting and using mortality data in humanitarian emergencies: a primer for non-epidemiologists*. London, ODI (Humanitarian Practice Network Paper No. 52). Available online at: www.odihpn.org, accessed 16 September 2008.

Mortality survey, Darfur 2005.

Executive summary (adapted from the original report)

The crisis in Darfur was described in 2004 as the worst humanitarian situation in the world. As of July 2005, around 3.3 million people – or 50% of the total population – have been estimated in need of humanitarian assistance. The international response, slow at the beginning of the crisis, gained momentum in 2004, when Darfur started drawing political attention, with increasing pledges of the donor community, growing numbers of humanitarian workers, and an overall good accessibility to humanitarian aid. Half of the health requirements were funded midway into 2005.

Exercise 4 In spite of the improvements, the situation is considered precarious, in terms of bad agricultural perspectives for the next planting season and exhausted coping mechanisms of the population.

Objectives and methods

This survey was commissioned by the UN Humanitarian Coordinator and jointly conducted by WHO, the Federal MoH and State MoH of the three states composing the Darfur region, in partnership with the UN agencies and NGOs. Funding was provided by USAID and DFID. The protocol of the study was submitted to an inclusive peer-review. The Centre for Research on the Epidemiology of Disasters (CRED) provided substantial support in data analysis and report writing.

The **main objective** of the survey was to estimate the mortality between November 2004 and end of May 2005 in the three states, among: IDPs living in accessible camps, IDPs living outside camps, and affected communities in accessible areas. More specifically, the survey aimed to:

- I. describe demographic characteristics of the study populations;
- II. estimate crude and under-five mortality rates (CMR and U5 MR) during the recall period;
- III. analyse changes in mortality between the present and the previous survey;
- IV. analyse differences in mortality between the different groups;
- V. identify the major self-reported causes of death;
- VI. describe basic food, non-food aid and service availability; and
- VII. obtain baseline mortality estimates for calibrating the existing surveillance system.

The survey used a retrospective approach, based on two-stage cluster sampling. Three separate surveys were conducted in each State, each targeting one of the defined study populations. The clusters were randomly allocated from OCHA lists of aid beneficiaries in accessible areas. The second sampling stage used the standard WHO cluster methodology. A total of 90 clusters of 20 households each was included in North and West Darfur, while security prevented the completion of the survey in the South. Data were collected anonymously by teams of interviewers with the supervision of both national and international staff, using a structured pre-piloted questionnaire in Arabic. Data included deaths, births, migration in/out during the study period, demographic characteristics and availability of basic goods and services. Data were analysed separately for each State and study population, and jointly for the three groups in each state, after weighting for stratum population size. For South Darfur, only data referring to IDPs in the camps are presented.

Main findings

With the exception of U5 (under-five) children in IDP camps in the South, mortality rates are all below the emergency thresholds (CMR: 1 per 10,000 per day; U5 MR: 2 per 10,000 day); however, several 95% confidence intervals of the rates include the emergency thresholds. The decrease in mortality among IDPs from the previous WHO-EPIET survey has been substantial. Even if a direct comparison cannot be established due to the different recall periods and some methodological differences, mortality declined by a factor of almost two in North Darfur and of around three in the West and the South, indicating a positive impact of humanitarian response. Injuries in the North and diarrhoea in the West represent the major self-reported causes of death. More detailed findings are presented in the following table and in the relevant chapter of the full report.

Summary of main findings

Exercise 4

	North	West	South
Sampled populations			
IDPs in camps	3,961	3,597	3,188
IDPs outside camps	3,570	3,120	–
Affected residents	5,024	3,815	–
Mortality			
CMR per 10,000 per day (95% CI)			
IDPs in camps	0.8 (0.5–1.0)	0.8 (0.5–1.2)	0.8 (0.6–1.2)
IDPs outside camps	0.9 (0.6–1.3)	0.5 (0.3–0.8)	–
Affected residents	0.8 (0.5–1.1)	0.4 (0.3–0.6)	–
Overall, three groups together	0.8 (0.6–1.0)	0.6 (0.5–0.8)	–
U5 MR per 10,000 per day (95% CI)			
IDPs in camps	1.5 (0.9–2.4)	1.0 (0.5–1.7)	2.6 (1.6–3.9)
IDPs outside camps	1.8 (0.8–3.4)	0.8 (0.5–1.4)	–
Affected residents	1.1 (0.7–1.7)	0.7 (0.2–1.7)	–
Overall, three groups together	1.5 (1.0–2.1)	0.9 (0.6–1.3)	–
Three main self-reported causes of death, all ages (%) *			
IDPs in camps	Watery diarrhoea (25%) Meningitis (16%) Malaria (12%)	Bloody diarrhoea (27%) Watery diarrhoea (20%) Injuries (11%)	Watery diarrhoea (16%) Injuries (14%) Bloody diarrhoea (9%)
IDPs outside camps	Watery diarrhoea, malnutrition (7%)	Bloody diarrhoea (27%) Watery diarrhoea (20%) Meningitis, ARI (6%)	–
Affected residents	Injuries (55%) Watery diarrhoea (9%) Bloody diarrhoea, Malaria (5%)	Watery diarrhoea (19%) Bloody diarrhoea (10%) Meningitis (10%)	–
Access to protected sources of water, % **			
IDPs in camps	95%	61%	72%
IDPs outside camps	46%	49%	–
Affected residents	32%	45%	–
Food aid, received, % ***			
IDPs in camps	81%	86%	71%
IDPs outside camps	64%	52%	–
Affected residents	47%	73%	–

* Excluding others.

** Protected: piped systems, bladder tanks and hand pump.

*** During the month preceding the interview.

Feedback PRESS RELEASE (from the original text)**Exercise 4**

“‘Mortality in Darfur has declined but the health of the people remains extremely fragile’ concludes the new region wide mortality survey undertaken by the Ministry of Health, UN agencies and NGO partners under technical guidance by WHO and commissioned by the UN Humanitarian Co-ordinator, Manuel da Silva.

Over 70 people, many of whom were trained epidemiologists from Sudan and other nations of the world worked in the field from mid May to mid June. 3100 families, totalling about 26,000 people in the three states of Darfur, were interviewed. The survey examined mortality among displaced in camps, displaced outside camps and residents affected by the conflict between mid November and end of May.

Crude mortality rate was around 0.8/10.000/day in all three population groups in Darfur that is below the international crisis threshold (1 death/10.000/day).

Applying these rates to the crises affected populations (residents, displaced in and out of camps), about 33.000 people died in the last six month. This mortality does not exceed the expected in similar crisis situations.

Injury was an important cause of death in North Darfur accounting for nearly a third of the total deaths. This matches with the observed demographic gap among 15–35 year old males in this State.

In West Darfur nearly half the children died of diarrhoea, which is a preventable condition.

The report also points out that there was a meningitis outbreak in North and West Darfur which was not picked up by the Early warning system, showing that disease surveillance need to be strengthened.

Deaths due to malaria could rise as the rainy season is approaching and preparedness for malaria control needs to be stepped up urgently. Preventable causes of death such as diarrhoea needs consolidation and expansion of water and sanitation interventions.

Deaths due to measles were relatively low due to the successful measles vaccination campaign carried out last year. The next campaign, planned for July, should be implemented without fail to avoid any preventable death due to measles.

In conclusion,¹

- the survey confirms a decline in mortality in the recent months compared to the previous period.*
- However it is crucial to maintain the momentum in the gains made by the humanitarian community and the government as the health situation in Darfur will remain fragile especially in view of the approaching rainy season.*
- Major progress has been made by the humanitarian community and the GOS in Darfur. We must not allow the situation to slide back.”*

The overall positive findings diffused any major political problem. However, it was decided not to calculate the excess mortality, in order to avoid controversies. In addition, the survey report was posted in the web, but never published.

¹ Note: the three bullet points closing this quotation (not bulleted in the original press release) may be considered as adequate feedback to the exercise.

Critical analysis of the *Interim Health Policy Guidelines for Kosova 1999*

Exercise 5

Most ministries of health across the world consider the issuing of a formal health policy as their core duty and prerogative. Health authorities of countries in crisis as well have felt compelled to formulate health policy documents. Any policy document must be thoroughly scrutinized, along several dimensions: *relevance, clarity, depth, realism, comprehensiveness and operational usefulness*.

For this exercise, the *Interim Health Policy Guidelines for Kosova* formulated in 1999 has been selected. It is a well-known example of a health policy conceived in haste, in the midst of dramatic changes and in an uncertain legal and institutional context. Also, it represents the boldest attempt ever documented at carrying out a radical (“big-bang”) health sector reform at the end of a protracted crisis. The document is available online at: www.who.int/disasters/repo/5635.doc (accessed 22 November 2008).

Background. The 1999 conflict, by ending Serbian rule and placing Kosovo under a UN interim administration, ushered a period of rapid change in the former Yugoslavian province. The sudden inflow of outsiders and external resources, the expected transition to a market economy integrated into Western Europe, and the dire inheritance of years of neglect and civil strife created a propitious environment for radical initiatives.

The health sector was in severe disarray. Its public component was derelict, whereas the parallel services developed by the Albanian opposition had badly suffered during the war. Most qualified ethnic Serbian health workers had left. The health sector was changing under the disparate actions of multiple players acting in isolation. Kosovo was flooded with donors and NGOs, many of them not equipped to deal with the tasks of supporting a recovery process. Many agencies, concerned about accessing aid funding and prone to work in isolation from each other, showed an opportunistic behaviour. Without a health policy put in place early in the transition, the health sector would evolve incoherently, inequitably and unsustainably. *“Speed was felt to be of the essence, as donor programming was underway, and a prime objective was to influence donor relief programming to ensure that it would potentially contribute to development and reform of the health sector”* (Schuey et al., 2003).

Within a few months after the end of the war, Interim Health Policy Guidelines were formulated and introduced. The rationale for the reform package proposed by the new policy was compelling. The old health system was considered beyond repair, and in any case outdated, inefficient and unsustainable. Pushing reforms consistent with Western European models was seen as a logical step forward. Donor assistance had expanded the resources available to implement the proposed reforms. And the political transition would weaken the resistance of interest groups to change. In the view of reform enthusiasts, such a unique opportunity could not be missed.

Moving ahead with such speed had its own drawbacks. The information base was inadequate, whereas local participation was forcibly limited. The unclear political, legislative and financial prospects of the province compounded matters. Furthermore, local capacity to manage the reform process was insufficient. Critics feared that the reform package was too much, too early for Kosovo.

To know more about health policy developments in Kosovo, see:

Campbell J, Percival V, Zwi A (2003). Ministerial challenges: post-conflict, post-election issues in Kosovo’s health sector. *European Journal of Public Health*, 13:177–181.

Ministry of Health (2004). *Health and health care of Kosovo*.

Shuey DA et al. (2003). Planning for health sector reform in post-conflict situations: Kosovo 1999–2000. *Health Policy*, 63:299–310.

Exercise 5 1. First, thoroughly read the *Interim Health Policy Guidelines for Kosova*.2. Now, consider *Part I. Background*.

- a. Are the main characteristics of the health sector adequately described?

Answer:

- b. Are the causes of the described problems discussed?

Answer:

- c. Are you able to identify key aspects about which the analysis is silent, or insufficient?

Answer:

3. Consider the *policy contents*, sketched in *Parts II-V*.

- a. Describe in concise terms the key features of the reform package proposed by the health policy guidelines.

Answer:

- b. What are in your view the main implicit and explicit assumptions behind the health policy guidelines?

Answer:

- c. Highlight the main strengths of the health policy under discussion.

Answer:

- d. Highlight the main shortcomings of the health policy under discussion. **Exercise 5**

Answer:

4. Discussion

- a. The health policy foresees an improvement in many aspects of healthcare provision, which is likely to entail expanded resources and increased capacity. What is the policy saying in relation to these two crucial aspects?

Answer:

- b. Put yourself in the position of a decision-maker engaged in the Kosovar health sector (for instance an NGO manager). How useful will the health policy document be in guiding your choices?

Answer:

- c. Are you able to foresee the main obstacles likely to be faced by decision-makers intent on implementing these policy guidelines?

Answer:

- d. Concluding the analysis, try to foresee what happened to this health policy after its formulation.

Answer:

Feedback Exercise 5

2a: No. This short section does not provide the reader with an adequate understanding of the main characteristics of the health sector. Thus, the policy prescriptions that follow lack a solid justification.

2b: No. Not even the conflict and its effects on the health system are sufficiently described. The ethnic tensions that subsequently poisoned health system development are overlooked.

2c: For instance, key issues like financing sources and levels, projected expenditures, management systems and human resources are omitted. Some details are given later in the document (see *Section V*). A clearer structure, whereby the analysis precedes policy prescriptions (which logically proceed from it) would have made the document more convincing.

3a: This quote taken from Shuey et al. (2003), summarizes very well the reform package.

“Eight key features of the proposed health system organisation were highlighted in the guidelines. While several of these implied significant health system change, they were all felt to be within the normative range for health services in Europe and reforms in former socialist countries. The key features were:

1) A more decentralised approach to primary health care based on developing family medicine teams. This was a shift from an emphasis on specialist care through urban polyclinics and was consistent with reforms in several former socialist countries.

2) Specialist care was to be provided by hospital-based or affiliated specialists upon referral from primary care. This implied an end to a two-tier system of hospital and outpatient specialists.

3) Catchment areas based on population would determine the size and location of facilities and services. This implied that some facilities might be closed or limited, always an area of controversy.

4) Financing would need to remain within the limits of resources likely to be available from within Kosovo in the foreseeable future. This implied no expansion of services, even though the influx of donor funds made expansion possible.

5) Public provision of services was to predominate.

6) Private practice was to be allowed, governed by proposals regarding the establishment of clear regulations, including private practice for public employees. Regulated private practice was considered the best option to avoid under the table payments, a problem common in health systems with limited public sector funds, including many parts of the former socialist world.

7) An essential drugs programme and regulatory agency was to be introduced with an emphasis on efficacy, efficiency, and evidence-based prescribing. This implied changes in prescribing practice and regulation of the mushrooming private pharmacy sector.

8) *The health system in both provision and employment was to be non-discriminatory.*"

Feedback Exercise 5

3b: Main assumptions seem to include the following:

- Peace, stability and uncontested political leadership, in order to introduce and consolidate the proposed sweeping health policy package;
- Adequate and sustained donor funding, to shoulder the proposed investments and the running expenses of the reformed health system;
- A critical mass of indigenous actors committed to the health sector reform package;
- No significant organized resistance from quarters opposing the reform.

3c: The Kosovar health policy guidelines were rationally compelling, and aligned on mainstream European models. As such, they exerted an understandable appeal on indigenous actors eager to close the gap with Europe as quickly as possible. Efficiency-oriented measures were fully justified in light of the wasteful and ineffective health system that the reform intended to restructure.

3d: The health policy guidelines set the bar at an unrealistically high level, maybe depositing too much faith on the positive climate generated by the newly-found self-rule. This looks like a generous and well-intentioned effort, inadequately thought-through and negotiated with its key constituencies, and not backed by solid implementing capacity. Kosovars participated only partially in the design of the reform package, and endorsed it only to a degree.

4a: Very little. Omitting an explicit estimate of the cost of the reform process weakened its implementation. How better to address capacity constraints is also inadequately discussed.

4b: The policy reform platform gives enough elements to the decision-maker committed to its broad implementation. Additional details are needed to fine-tune implementing decisions. However, the reform package omits prioritizing within its main components, which will leave the decision-maker wondering where cuts should be applied, if funding or capacity shortfalls impose them.

4c: Resistance of a public unacquainted to the new healthcare delivery model, strong opposition from the medical and hospital lobby, funding shortfalls, difficulty of regulating private healthcare provision.

4d: The following quotation, taken from Ministry of Health (2004), neatly synthesizes the outcome of the reform process.

"Success of the Reform

The Kosovo health care reform tries to change many things:

Attitudes, habits and training of the health care professionals;

Orientation and organization of the health care system;

Management structures and practices; and

Management tools such as information systems and medical records.

This would be a tall order under any circumstances. It is a very tall order in a post-conflict, poor society. How well did Kosovo's fledgling Ministry of Health do?

A general verdict – familiar from many similar contexts – is that the reform was most successful where it tried to change external factors such as organization

Feedback Exercise 5

and training. It was least successful where it tried to change behaviour and attitudes.

Organizational Success? *The reform has helped Kosovo to streamline her health care system all the way from the small punctas through the main family health centres to the Pristina University Hospital. The main groups of health workers have modern job descriptions. The training of family doctors and health care managers is in full swing. New primary care patient records are in use and key components of a new management information system are ready. Earlier vertical structures are now an integral part of the health care system. Most health facilities have been refurbished and re-equipped. The public and the professionals are slowly beginning to accept primary care.*

Attitudinal Failure? *The attitudinal and behavioural side of the reform leaves much to be desired. Some municipalities do not understand their responsibility for primary care. Municipal primary health positions are often political prizes. Family medicine gets only lip service. Still handmaidens of the doctors, the family nurses cannot use their newly acquired skills. True teamwork is rare. Hospital doctors look askance at primary care. Primary care is still a “prescribe and refer” revolving door to hospital care in spite of efforts to introduce a referral system. The doctors are fleeing from family medicine to the clinical specialties. Working in the public sector is for many doctors a necessary evil until they have enough expertise or capital to establish a private practice. For the established clinical specialists, it is an opportunity to divert the wealthiest patients from the public sector to their private practices. Greed and corruption occur.”*

The results of the reform process are mixed. Key reform elements effectively introduced include the establishment of family medicine capacity, the formulation of new job descriptions and training programmes, the respect of budget constraints in recurrent expenditure, the restoration of many health facilities.

Other elements of the reform package have lagged behind. The unregulated privatization of health care has progressed. Private out-of-pocket financing is prevalent. Hospitals remain prominent providers of care. The bloated workforce has not been downsized. Support staff remain in excess. The devolution of the responsibility for primary care delivery to municipalities has registered little progress. The health system remains inequitable and inefficient. Donors have been generous as expected, but their funds have been released slowly and through intermediaries. Health services have become more ethnically separated. Underlying political and ethnic tensions have hampered the implementation of the reforms.

Following information clues

Exercise 6

This short exercise aims at encouraging the analysis of comparative tables, and at spotting odd findings. Then, preliminary explanations must be conceived, and further data sought and analysed, to confirm or reject the initial hypotheses. The exercise intends also to show how aggregate data may suggest the existence of crucial patterns inadequately highlighted by the available literature. The exercise does not imply any familiarity with the countries from which these data are drawn.

1. First, look thoroughly at *Table 1*, which presents key indicators for South-East Asian countries. Which country presents an unexpected pattern? And which is the pattern to be investigated because of its negative implications?

Table 1. Health spending and health status indicators in South-East Asia

Country	Health spending per capita (US\$)	Infant mortality rate	Under-five mortality rate	Maternal mortality ratio	Male life expectancy at birth
Cambodia (2005)	37	66	83	472	60
Indonesia (2003)	22	31	41	230	65
Lao PDR (2003)	9	82	91	650	58
Thailand (2003)	69	23	26	44	67
Viet Nam (2003)	22	19	23	130	68

Answer:

2. Now, try to list possible causes of the unexpected finding that you identified, in order of probability (maximum three explanations).

Answer:

- Exercise 6** 3. *Table 2* complements the first one. Do these data support any of the conjectures you formulated in step 2?

Table 2. Cambodia 2005. Source of first treatment for respondents reporting illness or injury in last 30 days

Source	Percentage
Did not seek treatment	8.5
Public sector	21.6
Private sector	48.2
Non-medical (mainly informal) sector	20.8
Other	0.8
Total	100

Answer:

4. In your view, what factors could explain the low utilization of public facilities shown above?

Answer:

5. Now, look at *Table 3* and decide whether its data are consistent with your interpretation of the previous ones.

Table 3. Cambodia 2005. Health financing sources

Government recurrent expenditure per capita	US\$ 4.0
Donor-financed per capita	US\$ 8.3
Out-of-pocket per capita	US\$ 24.9
Total per capita	US\$ 37.1
Total	US\$ 512 million
Percentage of GDP	8.3%

Answer:

6. Try to figure out why in Cambodia the large consumption of private health care translates into such poor health status. **Exercise 6**

Answer:

7. In your view, is the characteristic pattern that you identified unique to Cambodia, or does it suggest a more general pattern? Have you witnessed a similar characteristic elsewhere?

Answer:

8. What should/could be realistically done to address this glaring discrepancy between health spending and health status?

Answer:

The interested reader will enjoy the following report, from which these tables are drawn (with slight modifications): WHO (2007). *Scaling up for better health in Cambodia: a country case study for the Royal Government of the Kingdom of Cambodia/World Health Organization/Post-High-Level Forum on the Health Millennium Development Goals*. WHO/HDS/2007.1. Available online at: www.hlfhealthmdgs.org/documents.asp, accessed 22 March 2009.

On Cambodia, see also in this manual *Annex 12: The reconstruction of disrupted health sectors* and *Recommended reading on selected health sectors in crisis in Module 14*.

Feedback to Exercise 6

1. Cambodia presents very poor health status indicators, against fairly high health spending per capita. Indonesia and Viet Nam spend much less but achieve better health. Health status in Cambodia looks not much better than in Lao, where total per capita spending on health is only US\$ 9.
2. Possible explanations:
 - a. The identified characteristic might be spurious, as often found in “league tables”, because of poor data, different/unreliable sources, inconsistent collection criteria, etc. Before accepting this finding as trustworthy, additional data must be scrutinized, to verify whether the main finding has to be upheld, and to explain it.
 - b. The Cambodian health sector might suffer from serious allocative or technical inefficiencies, which jeopardize healthcare delivery. In other words, a lot of the money spent could end up squandered.
 - c. The health status of Cambodians might be poor due to factors unrelated to health services, which would justify higher health spending. A quick look at economic figures, such as GDP per capita, could help check whether this explanation deserves serious consideration.
3. The dominant role played by private health providers explains to a certain degree the reported high health spending.
4. Inadequate access to public healthcare facilities might explain their reduced utilization. In fact, public health expenditure in Cambodia is skewed towards urban tertiary facilities and administration. Financial barriers and low quality of care may also be plausible explanations.
5. Health financing looks privatized as markedly as healthcare provision. High out-of-pocket expenditure suggests also a grossly inequitable consumption of health care. Left to its own devices, a commercialized healthcare market leads to health spending inflation. Notice that public (budget plus donors) expenditure reaches US\$ 12, level which would cover large-scale preventive activities with a potential dramatic impact on health status.
6. If the quality of health care is poor, no health-status improvements can be expected, particularly if most provided health services are curative. A “mystery”² survey showed that 56% of consultations with private providers were potentially hazardous! As shown in *Table 2*, a large share of healthcare provision can be informal, which seriously affects quality.
7. The discussed pattern is certainly not unique to Cambodia. Lebanon, a post-conflict middle-income country, presents a similar pattern, at a higher spending level. Other countries, like Angola, are likely to suffer from similar flaws, but available data might fail to show clear patterns. An important lesson to be retained is that private financing and provision are frequently bigger than expected. Available data tend to downplay their magnitude. The prevailing policy discourse between government and donors, both public stakeholders, tends to marginalize this crucial issue, or pays only lip service to it.
8. Correcting such a worrisome situation is forbiddingly difficult, and achievable only after sustained efforts. First of all, government and donors should realize the degree of privatization reached by the health sector, and focus their attention on this issue. According to the presented data, in Cambodia out-of-control privatization looks as the foremost healthcare issue, to be given centre stage in policy debates.

2 A “mystery” survey is carried out by evaluators who present themselves as patients looking for health care, and collect information about the formulated diagnosis and the prescribed treatment.

Second, resolute efforts should be applied to strengthen those PHC services with the highest beneficial impact on health status. Third, the government should invest in realistic regulatory provisions, which provide positive incentives to competent and well-intentioned private providers. Fourth, public health expenditure should be restructured, in such a way that access to performing public and private not-for-profit health facilities is enhanced, particularly at the periphery.

Feedback to Exercise 6

Final remark: The recovering Cambodian health sector received large investments aimed at building an effective, efficient, equitable and sustainable public healthcare delivery system. After two decades of strenuous, state-of-the-art experimentation, backed by international assistance, the health sector differs remarkably from the shape intended for it. Powerful underlying forces, poorly understood by public actors and therefore not explicitly counteracted, prevailed. Other health sectors emerging from protracted disruption should take notice of this negative lesson.

Exercise 7 Considering pros and cons of contracting out healthcare provision

Annex 7, in the module on *Analysing patterns of healthcare provision*, introduces the reader to the contracting-out model, with special focus on its application in crisis and post-conflict contexts.

One of the referenced articles³ looks at the experience of contracting out in Afghanistan, where this approach has been applied on a large scale. The authors of the article present a table that summarizes the arguments in favour and against contracting out. We have removed from the table below the arguments in favour and left those that are against it. You have to complete the table with at least 3 points that you believe militate for this approach.

Arguments for and against contracting

For	Against
	Competition may not exist, especially in low-income countries where there may be no alternative providers
	Contracts may be difficult to specify and monitor
	Management costs may wipe out efficiency gains
	Contracting may fragment the health systems
	Governments with weak capacity to deliver services may also be weak in a stewardship role

3 Palmer N et al. (2006). Contracting out health services in fragile states. *British Medical Journal*, 332:718–721.

The table below, derived from the original article, presents 5 points in favour of the contracting out approach.

Feedback Exercise 7

Arguments for and against contracting

For	Against
Allows a greater focus on measurable results	Competition may not exist, especially in low-income countries where there may be no alternative providers
Increases managerial autonomy	Contracts may be difficult to specify and monitor
Draws on private sector expertise	Management costs may wipe out efficiency gains
Increases effectiveness and efficiency through competition. Allows governments to focus on other roles such as planning, standard setting, financing, and regulation	Contracting may fragment the health systems
Allows for rapid expansion of health services	Governments with weak capacity to deliver services may also be weak in a stewardship role

You can also consider these additional points:

- It may improve standardization of the delivered services around a common package;
- It may improve transparency in the negotiation of contracts and attribution of grants;
- It may induce higher cost-awareness;
- It may improve coordination of service providers;
- It may encourage the adoption of innovative approaches and technologies, by stimulating competition among providers.

Remember, however, that this service delivery model is not inherently good or bad, as often stated by its advocates or critics: it is the way it is designed and managed and the context (mainly the capacity of country health authorities) that determine its effectiveness and efficiency during implementation.

Exercise 8 Explaining mortality changes in an African rural hospital

The real-life data presented in the table below were collected in a first-level referral hospital in the Democratic Republic of the Congo. The table presents intra-hospital mortality, disaggregated by the time of death: the first 24 hours after admission, or thereafter, and by semester: January–June and July–December 2008. The hospital was supported by an international NGO that provided direct technical assistance in the delivery of health care, supplied medicines and consumables, provided incentives to local staff and supported the referral of patients. Health care was free of payment. The NGO left in June 2008 and a new NGO was progressively taking over assistance, but with a less-resourced programme. User fees have been re-established, but at a subsidized level.

	January – June 2008	July – December 2008
Intra-hospital mortality < 24 hours	1.8%	3.5%
Intra-hospital mortality > 24 hours	3.6%	3.5%

1. What is the mortality pattern?

Answer:

2. If you have identified a pattern, please provide all plausible explanations that you are able to think of.

Answer:

1. Early mortality (within 24 hours after admission) has almost doubled, contrary to late mortality, which remained stable. Early mortality is related to acute conditions and largely depends on timely presentation and effective emergency care. Late mortality depends also on the nature and severity of the main diseases affecting the served population.
2. Possible explanations to be investigated:
- Patients seek health care at the hospital later, with more severe conditions, because they are aware of the existing financial barriers and of the departure of the first NGO's strong technical staff. They may have also sought care in the informal sector, before attending the hospital.
 - The technical capacity of the staff to deal with acute conditions may have declined since the first NGO left.
 - Transports for referral may have been affected by the NGO withdrawal.

Note: in many cases, a combination of factors is at play.

Feedback Exercise 8

Exercise 9 Choosing summary functional criteria to classify health facilities

In countries in crisis, classifying health facilities in homogeneous categories is usually difficult. For instance, some under-performing hospitals may be classified as health centres, while lower-level health facilities may have expanded their functions to match hospitals. Poor reporting combines with inadequate supervision to blur the picture. Sticking to the official rank of the health facility, perhaps determined decades before, would misrepresent its actual service-delivery role. This flaw would produce serious consequences in terms of planning and resource allocation.

This exercise consists of identifying minimum and robust functional criteria for classifying rural health facilities in a poor African sub-Saharan country. Match each health facility of the left-hand side of the table with a minimum set of criteria chosen from the list on the right-hand side of the table, and provide justification for your choice whenever you feel necessary. Be as clear-cut as possible.

You should refer to settings you are familiar with. Note that in different health sectors the terms used to denote health facilities differ. In your choices, give precedence to what prevails in the field, instead of to what should be available according to official statements. Also, note that the criteria chosen for a lower-rank health facility hold usually also for a larger one. In each specific context, the eventual choice will to a large degree depend on the data provided by the health management information system.

Health facility	Criterion/Availability
a. First-referral hospital	1. Functioning ambulance 2. At least one medical assistant/clinical officer 3. Permanent cold-chain 4. 24-hour emergency services
b. Large health centre	5. 24-hour emergency surgical services 6. At least one resident medical doctor 7. (Basic) laboratory 8. Maternity ward
c. Small health centre	9. In-patient ward(s) 10. Telephone 11. Running water 12. Regular drug supply
d. Health post / dispensary / basic clinic	13. Regular reporting (by the health facility) 14. At least one health professional 15. ...

Use the following table for your answers. Add remarks, if needed, to qualify/explain your choices.

Health facility	Criteria	Remarks
a. First-referral hospital	1.	
	2.	
	3.	
	4.	
	5.	
b. Large health centre	1.	
	2.	
	3.	
c. Small health centre	1.	
	2.	
	3.	
d. Health post/ dispensary/ basic clinic	1.	
	2.	
	3.	

Feedback Exercise 9

Possible working criteria are suggested and commented below:

Health facility	Criteria	Remarks
a. First-referral hospital	1. At least one resident medical doctor	
	2. Laboratory	
	3. 24-hour emergency surgical service	In most settings ensured by non-specialists
	4. In-patient wards	A 24-hour nursing shift is usually needed to ensure proper functioning
	5. Ambulance	In many situations, this criterion is not satisfied
b. Large health centre	1. In-patient ward	Often with few beds. Nursing staff levels help assessing the adequacy of this service
	2. 24-hour emergency service	Mainly related to acute medical conditions
	3. Basic laboratory	Mainly microscopy
c. Small health centre	1. At least one medical assistant / clinical officer	In many health sectors, a health professional of lower rank may be acceptable
	2. Permanent cold-chain	The intermittent availability of immunizations should not be considered as adequate for this level
	3. Maternity ward with midwife	Traditional birth attendants should not be considered as professional midwives
d. Health post/dispensary/basic clinic	1. At least one health professional	In some health sectors, a community health worker is considered as acceptable
	2. Regular drug supply	Frequently ensured by ration kits of essential drugs
	3. Regular reporting	All too often, non-reporting health facilities are misleadingly considered as functioning

Note: to simplify the table, criteria chosen for one given level are not repeated for the level above it. Thus, a "large health centre" would need to feature "permanent cold chain" and "maternity ward with midwife" alongside the specific criteria presented for it.

Assessing a post-conflict plan to strengthen human resources for health

Exercise 10

After a long and devastating civil war, Liberia enjoys a period of peace and stability, under the watch of a legitimate government backed by a UN peace-keeping operation. The country has suffered immensely, in its physical assets as well as in its social fabric. Recovering from such a protracted crisis entails huge investments in infrastructures, human capital and governance. So far, the new government has gained the respect of the international community. External assistance is therefore increasing.

The Ministry of Health and Social Welfare (MoHSW) has worked hard to lead the recovery process. In 2007, it has issued a *National Health Policy* and a *National Health Plan*. Within this framework, the Ministry has also produced an *Emergency Human Resources for Health Plan 2007–2011*, which is the focus of this exercise, available online at www.liberiamohsw.org (accessed 6 April 2009).

Basic data on Liberia, updated to 2007

Surface = 111,000 square kms.

Population = 3.2 M, density = 30 inhabitants/square km. Unevenly distributed: 4 out of 15 counties accounting for 70% of the total population (some areas are very scarcely populated).

Population growth = 2.4% per year; the population will be 3.6 M in 2011.

0–18 years group = 54%, under 5 years = 15%, over 65 years = 3%.

GDP per capita declined from US\$ 1269 in 1980 to US\$ 163 in 2005.

Government health expenditure about US\$ 3 per capita, equivalent to 7% of total Government expenditure.

75% of people living on less than US\$ 1 per day.

Health situation (according to a survey of 7500 households, 2007)

Total fertility rate = 5.2; % of women using contraception = 11%

Antenatal care coverage = 79%; deliveries assisted by skilled health professionals = 46% (37% in health facilities)

Maternal mortality ratio = 994/100,000

Children 12–23 months fully vaccinated = 39%, with no vaccination at all = 12%.

Nutritional status: 39% of children stunted, 7% wasted, 20% underweight. Breast feeding practices are good.

Most frequent diseases: malaria, ARI, diarrhoea, worms, skin infections.

Infant mortality rate = 71 per 1000 live births per year.

Under-five mortality rate = 110 per 1000 per year.

These mortality rates refer to the 5-year span before the survey; in the period 10–14 years before they were respectively 139 and 220/1000. This spectacular halving of infant and child mortality rates in a 10-year period probably reflects the end of the civil war.

HIV prevalence = 1.5% (much lower than the 5.7% estimated in 2006, from sentinel sites biased towards urban areas).

Exercise 10

HR situation (selected data from a rapid assessment [RA] carried out in 2007)

Health network = 18 Hospitals, 50 Health centres, 286 Clinics, 9 Training institutions.

Total workforce around 5000; 4000 of them are on the Government payroll (1400 of them are under-skilled, 1600 are administrative and ancillary staff).

See the table below for selected categories of health staff.

Staff deployment: one county (Montserrado, where the capital Monrovia is located) with 30% of the personnel. The county ratios of health workers/population range from 1/773 to 1/8309 (ratio 1: 11)

Salaries are very low. Few women hold management positions.

Some other problems identified by the RA:

- few high-level cadres. Need of intensive and sustained retraining and upgrading;
- heterogeneous training, qualifications, employment arrangements;
- poorly trained "by a multitude of small, disconnected institutions and initiatives".

By the end of 2007 the MoHSW issued an *Emergency HR for health plan, 2007–2011*, with the scope of "stipulating staffing targets of the 10 major categories of health personnel". This was done taking into consideration:

- current functioning facilities,
- the Basic Package of Health Services formulated by the MoHSW,
- the WHO staffing model (2004),
- annual population growth (2.4%),
- current available staff and staffing level (from the RA),
- likely attrition of the workforce (not computed yet, but reckoned beyond the "physiological causes" like retirement, disease, death, etc. There is concern of internal siphoning from the public to the private sub-sector and migration abroad. Some skilled professionals may also return),
- output from training programmes,
- the economic situation of the country. GDP growth is forecast at 2.6%; Government budget allocations to health are assumed to grow in absolute terms, as well as in proportion of total Government expenditure.

For the John Fitzgerald Kennedy Teaching Hospital in Monrovia some additional criteria were adopted in order to quantify the staff in need.

The following table presents the active health workers in 2007 according to the RA, alongside 2011 projected targets, for selected categories.

Category of Personnel	Existing in 2007	Projected to 2011	Remarks
Medical Doctors	186	210	The 2007 figure substantially diverges from the one provided by the Liberia Medical Board, which lists 122 doctors, 87 of them nationals. Out of 122, 51 (42%) work for the MoHSW, and 71 (58%) practice privately or are employed by NGOs.

Exercise 10

Category of Personnel	Existing in 2007	Projected to 2011	Remarks
Physician Assistants	236	496	No details about these health workers are provided by the HR Plan.
Registered Nurses	454	567	
Certified Midwives	297	659	
Nurse Aides	1091	564	
Pharmacy Personnel	31	192	Includes pharmacists, pharmacy and dispensary technicians.
Laboratory Personnel	149	537	Includes laboratory technicians and assistants.
Radiology Personnel	22	60	

Questions:

1. Was a rapid assessment an appropriate procedure to get a baseline for HR information in the Liberian context? Comment on this, stressing alternatives (if any).

Answer:

2. Consider the criteria adopted to quantify the staffing needs for 2011. Have any important criteria been overlooked?

Answer:

3. The emergency plan estimates that the doctor requirements for Liberia in 2011 would stand at 236. This will give a ratio doctor to population of around 15,000, against the present one of 1/26,000 [Ghana = 1/10,000; Gambia = 1/8,000; Uganda = 1/20,000; the WB recommends for Sub-Saharan Africa a ratio = 1/2500]. Some HRD guidelines suggest that in stable health sectors, 25% of the doctors should be specialists. The Emergency Plan opted for 15%.

- a. Comment on these targets. Beyond medical doctors to population ratios, which other criteria should be considered when setting targets for this category?

Answer:

Exercise 10

- b. Are there other implications from the figure of 236 doctors projected to 2011 by the emergency plan?

Answer:

4. The *Emergency HRH Plan* envisions a doubling of the strength of *Physician Assistants* over five years. Comment on the appropriateness of such a target and on its feasibility, in the Liberian context.

Answer:

5. The *Emergency HRH Plan* envisions a large expansion of the ranks of the midwives, projected to grow from 297 in 2006 to 674 in 2011. Assess the soundness of this target, relating it to the present and future workload of this category, in terms of attended deliveries.

Answer:

6. Looking at the figures provided above (referring to some health categories), there could be some problems with training programmes (particularly with pre-service training).

- a. In which categories will these problems be more serious?

Answer:

- b. Any suggestion about ways of overcoming them?

Answer:

1. The rapid assessment exercise was an appropriate choice, provided it was carefully prepared, with clear, tested guidelines and trained surveyors, and rigorously carried out in the field. Too often, rapid assessments turn out to be messy processes producing unreliable findings. See *True Story No 5* for the eloquent example of Iraq.

Feedback Exercise 10

An alternative approach, particularly suitable in a small country like Liberia, is the study of health workers staffing a sample of health facilities, and from the findings of such a study to infer the characteristics of the whole workforce, and consequently the corrective interventions needed to restructure it. Of course, the sample must be chosen so as to be representative of the whole situation. Another consideration to be kept in mind is that the HR situation described by the *Emergency Plan* is fairly typical of post-conflict, poor health sectors. Studying the experience earned elsewhere might greatly help decision-makers.

2. The post-conflict expansion of the healthcare network, with new and rehabilitated health facilities added to those functioning in 2007, seems to have been neglected by the projections. Even without an expansion in the number of health facilities, existing ones might increase their service loads (and maybe increase their staffing needs) because of easier access and better supply. Also, no attention was paid to private health providers, as potential employers of health workers. If the private sub-sector is expected to thrive in the post-conflict period, allowance for additional health workers should be made in the training projections, particularly for those categories more demanded by the market, like pharmacists.
- 3a. The targets proposed by the *Emergency HRH Plan* are fairly modest, hence realistic in the dire conditions in which the Liberian health sector finds itself. This modesty of aims contrasts with most recovery plans, which adopted ambitious normative staffing criteria totally disconnected from field realities, and (predictably) failed to attain them.

Population ratios are useful for long-term planning purposes. In the short term, however, staffing needs, largely determined by the existing infrastructure, take precedence. A health sector with a small and mainly derelict hospital component, like the Liberian one, needs a limited number of medical doctors and hospital nurses.
- 3b. As the duration of the training of doctors exceeds the 5-year time span of the *HR Emergency Plan*, most measures introduced by it in this field will manifest their effects after 2011. Thus, reaching the 2011 target set by the plan is likely to imply the hiring of expatriate medical doctors.
4. A mid-level clinical cadre like the *Physician Assistant* looks as ideally suited for a health sector with a small hospital component, and many PHC-care facilities to be staffed. The low population density in most counties reinforces the rationale for expanding this category. Providing quality training for atypical cadres, like the *Physician Assistant*, is a challenge in most health sectors, due to the shortage of training capacity devoted to it. Before satisfactory results are registered, a substantial investment in training might be needed.

5. The projected 2011 population of 3.6 million will generate between 140,000 and 150,000 births in that year. Supposing that 70% of expected deliveries are attended by trained midwives, and that their average workload is one delivery per working day (totalling about 220 over one year), less than 500 midwives will be needed in 2011. Even after adding a 10–15% of these cadres in management

**Feedback
Exercise 10**

and training positions, the target proposed by the *HR Emergency Plan* looks too generous, and could be trimmed down.

This discrepancy between staffing needs based on staffing norms and on projected workloads is commonplace. Whenever possible, workloads should be preferred as planning criteria. Unfortunately, as the information needed to estimate them is often not available, planners have to fall back on staffing norms, with their inherent rigidity and tendency to overestimate staffing needs.

- 6a. In small countries such as Liberia, health categories required in reduced numbers, as in the case of pharmacy, x-ray, physiotherapy and mental health, are difficult and expensive to train. Establishing specialist training capacity to carry out only a few courses is certainly inefficient and often ineffective, due to inadequate quality of training.
- 6b. Sending candidates abroad is an option, provided measures to ensure their return after completing their training are taken. Another way to deal with this problem is to negotiate joint ventures with other small countries, so that Liberia offers training programmes in only one or two of these disciplines to indigenous as well as foreign trainees, while neighbours (like Sierra Leone) do the same for other programmes.

Drawing inferences from the map of a crisis-affected pharmaceutical area

Exercise 11

Analyse the situation prevailing in the Southern Sudanese pharmaceutical area in 2006, presented in *Annex 11*. In particular, try to cover the following aspects:

1. Main shortcomings affecting the pharmaceutical area, in terms of effectiveness, efficiency and equity.
2. Main aspects neglected or inadequately covered, deserving further study. The list of selected indicators presented in the module might assist in identifying the areas that should be urgently studied. Choose 3–4 indicators to be computed a.s.a.p. to further our understanding of the pharmaceutical area. In your choice, consider the cost of collecting the indicators, as well as their intrinsic interest.
3. Main stakeholders active in the pharmaceutical area, whose actions may have a decisive impact on it. With whom should preliminary discussions aimed at strengthening the pharmaceutical area start?
4. Actions to be taken without delay, to start the long-term restructuring of the pharmaceutical area. In identifying the most pressing actions, factor in the work needed to kick-start each one, as well as the time-lag expected before the first results materialize.
5. Consider the approach adopted in the Democratic Republic of the Congo, of decentralized, autonomous competitive distribution, supported by centralized procurement, as presented in the *True Story No 19*. Might this model provide inspiration for policy-makers in Southern Sudan? Which steps might be taken to verify the potential of the Congolese model in the Southern Sudanese environment?
6. Main risks likely to undermine progress in the short- and medium-term. For clarity, divide risks into a) *general* ones, related to the political, economic and security environment, and b) risks *specific* to the pharmaceutical area.
7. Main opportunities existing in the Southern Sudanese pharmaceutical area.

Feedback Exercise 11 The following remarks briefly suggest how the points raised by the exercise might be developed. A fully worked-out exercise would certainly provide detailed answers, and perhaps would highlight some dilemmas, or issues impossible to address within the limited available information.

1. The pharmaceutical area is fragmented. No comprehensive overview of the field has been carried out. Many supply schemes of medium and small size are operated by a multitude of participants. No policy enforcement, planning and regulation mechanisms are in place. The pharmaceutical policy formulated by the MoH of Southern Sudan might fall short of expectations and true needs. Operations are likely to be ineffective and inefficient, although a proper assessment of these aspects has never been carried out. Knowledge is limited. The way forward has still to be negotiated among stakeholders.
2. The pharmaceutical area must be comprehensively studied, starting with collecting key indicators, like total expenditure on pharmaceuticals, value for money of the purchased drugs, distribution and availability of medicines across Southern Sudan. The mapping of actors and activities should be updated and completed, trying to document better the role of private actors (apparently of marginal importance in 2006, but likely to grow as the context stabilizes). Given their strength, vertical programmes must be studied in detail.
3. The main stakeholders appear to be the Ministry of Health of the Government of Southern Sudan, the Federal Ministry of Health (but its role might shrink quickly), the World Bank, UNICEF, the Global Fund against AIDS, Malaria and Tuberculosis, USAID and Pharmaciens sans Frontières. The MSF family and the Red Cross might reduce their involvement as the humanitarian situation improves.
4. Urgent actions include: a) formulating and introducing a list of essential medicines and standard treatment guidelines; b) establishing an effective coordination mechanism in the pharmaceutical area; c) documenting financing mechanisms, in view of rationalizing them; d) strengthening and expanding existing procurement arrangements (if feasible and desirable) or introducing a new one if needed; and e) reviewing existing supply and storage systems in order to streamline them.
5. Southern Sudan and the Democratic Republic of the Congo share many characteristics: a long history of violence, absence of the state in many peripheral areas, extremely poor infrastructure, severe underfunding of the health sector, and heavy reliance on NGOs and charities for health service delivery. However, the Democratic Republic of the Congo comes out better in terms of indigenous expertise and organization of health services. Also, information and knowledge are stronger in the Democratic Republic of the Congo than in Southern Sudan.

These considerations suggest that putting in place a performing management mechanism in the latter might be even more challenging than in the former. Having said that, many of the features of the schemes piloted in the Democratic Republic of the Congo look in principle adapted to Southern Sudan. To verify whether that model is applicable to Southern Sudan, a thorough field study of the Congolese experience might be carried out by a team of Southern Sudanese expert stakeholders. Then, a provincial autonomous depot in line with the Congolese model might be piloted. Its performance would have to be assessed after 2–3 years of operation. The approach should be replicated according to the findings (if these are found as unambiguously positive).

6. General risks include a relapse to violence; poor governance and corruption; economic stagnation; inadequate investment in communications and transport; and insufficient financing of health expenditure. Risks specific to the pharmaceutical area are its neglect by decision-makers, the introduction of

inappropriate foreign/international models, reluctance of participants to adhere to a common agenda for change, and inadequate capacity that thwarts progress. **Feedback Exercise 11**

7. Opportunities.

- a. Introducing a rational drugs policy in the vacuum existing in Southern Sudan might be made easier by the weakness of vested interests. This opportunity holds especially in the regulatory field, where lean, modern, adapted provisions may be introduced afresh.
- b. The modest weight of hospitals and of the medical profession offers a chance of formulating a balanced, rational list of essential medicines and of enforcing its utilization (the first step towards the launching of a rational drug use programme) across Southern Sudan.
- c. Some procurement and distribution systems are already in place and work reasonably well. They have to be considered in the design of the future pharmaceutical area.

Exercise 12 Drawing general lessons from documented health recovery processes

The setting is a poor country emerging from twenty years of civil war, where a peace agreement has recently been reached by parties exhausted by the long conflict. A respected retired hospital doctor, not affiliated to any warring group, has been appointed as Minister of Health. He is an experienced, no-nonsense person, genuinely committed to helping the health sector to recover from total disruption. You were chosen as his senior policy adviser, due to the experience about recovery processes you have gained elsewhere.

Step 1: First, have a thorough look at *Annex 12*, which presents three condensed country case studies of well-documented health recovery processes. If you wish, consider also the case study of Kosovo, summarized in *True Story No. 7* and studied in *Exercise 5* in this module. You may also draw from your own experience.

Step 2: Try to distil from the analysis of these health sectors in transition a few lessons that, *due to their general validity*, should be considered by the Minister of Health you are advising. Formulate the lessons you intend to stress in clear, concise terms.

Feedback Crucial lessons likely to hold also for most countries emerging from protracted crisis are the following:

Exercise 12

- Trying to rebuild the health sector along pre-conflict lines, without considering the deep changes induced by the crisis, is a mistaken approach.
- Entrenched distortions do not heal spontaneously. They have to be addressed proactively and in a long-term perspective. Neglected aspects may grow out of control during the recovery process, inflicting severe damage to the health sector.
- Long-suffering health systems are poor reformers. Their recovery must be gently, patiently – but firmly – nursed, within a comprehensive strategy.
- Short-term solutions have the nasty propensity to evolve into long-term problems.
- A narrow technical approach to recovery, which does not pay adequate attention to the political, economic and institutional context, is likely to run into serious difficulties.
- Without credible resource forecasts and cost estimates, policy discussions are devoid of content. As the resources made available for recovery will certainly fall short of existing needs, hard allocative choices are required.

Summarizing complex system-wide information for decision-makers

Exercise 13

You belong to the team that, over months of analytical work, have assembled the matrix presented in *Annex 13*, which sketches the main features of the Somali health sector. For the sake of the exercise, let us suppose that in an unexpected political turnaround, a peace deal has been struck among various factions and a transitional government has been created.

You are informed that the new Minister of Health has convened a meeting with you, scheduled for tomorrow morning. You have never met the Honourable Minister, because he has lived abroad for more than one decade, practising as a cardiologist, and only recently has returned. The secretary of the Minister tells you that the meeting will be short, because of many competing events scheduled for the same day. You decide to write a short note for the Minister, in which you must condense the messages you consider essential to convey to somebody poorly acquainted with the Somali health sector, but who will have soon to take important decisions about it.

Task 1: WRITE A ONE-PAGE PORTRAIT OF THE SOMALI HEALTH SECTOR, which covers the following topics:

- *The political, military, economic and administrative environment in which health service delivery takes place;*
- *Main systemic distortions affecting the health sector;*
- *Recognizable trends;*
- *Main risks and opportunities;*
- *Resource and capacity constraints, present and future;*
- *Key pressing measures, to be taken as soon as possible;*
- *Key long-term measures, to be thoroughly studied and progressively introduced.*

After the meeting (short as predicted and interrupted by several phone calls) with the Honourable Minister, you are informed that a large team of donor officials and consultants is arriving, with the goal of appraising the situation created by the recent peace deal. The incoming team is headed by the World Bank, and includes among other agencies the European Commission, USAID, DFID, UNICEF and WHO. While most of the components of the team are politicians and senior managers, some health experts are also included.

Later on, the secretary of the Minister of Health calls you, to inform that he has found your one-page brief useful, and intends to use its contents for a meeting with the donor team, scheduled for the following day. You are asked to prepare a presentation for the Minister.

Task 2: PREPARE A POWERPOINT PRESENTATION of maximum fifteen slides, to be given by a speaker only partially familiar with the issues under discussion⁴. The targeted audience is largely composed of financially powerful donor officials, more concerned with political and funding issues than with technical and operational ones.

To carry out Tasks 1 and 2, you may wish to consult some documentation in addition to the one included in *Annex 13*, starting with the condensed report you already used to complete *Exercise 2*.

Note: while the first task is mainly about presenting a clear, concise, comprehensive technical picture, the second one is about communicating selected messages, formulated in terms accessible to non-health decision-makers.

⁴ You should consider the use of the Powerpoint *Notes Page* facility, with which remarks, caveats and tips can be brought to the attention of the speaker, without being seen by the audience.

Feedback Exercise 13 A concise portrait of the Somali health sector

Somalia has been affected by violence since its implosion in 1991. While two weak state administrations have emerged in Northern Somalia, the Central-Southern region remains in turmoil. Countless attempts at negotiating a political settlement have failed. Political and military events have recently aggravated an already precarious situation.

The health space is a patchwork of disparate elements, grown bottom-up in the absence of a general framework. Insecurity, financial and operational fragmentation, inefficiencies, and poor technical and managerial skills contribute to undermining health service delivery. Access to publicly-provided health care, mainly delivered by international agencies and NGOs, is limited. The low uptake of the offered care further reduces coverage. Quality of care is poor and referral capacity is virtually absent.

Alongside a frail public sector, private healthcare provision thrives, selling services of questionable quality. The boundaries between public and private healthcare provision are blurred. Dangerous practices are left unchecked. Health care has become commoditized and deregulated, governed by customer preferences and buying capacity, rather than technical criteria. The private component of the health sector seems dominant, both in terms of financing and provision.

The health field offers poor returns upon investment, both for donors, who are behind most publicly-provided services, and households, who shoulder the cost of private health care. Healthcare delivery seems to have reached a sort of equilibrium at dismal efficiency and effectiveness levels, from where it is unlikely to depart spontaneously. The main risk is the persistence of the present situation. The flip side of the described fragmentation is pluralism, initiative, adaptation and innovation, which can be productively tapped.

Domestic public health financing is negligible. Western aid to health increased from US\$ 3 in 2000 to US\$ 7 per capita in 2006. Disease control programmes absorbed almost half of donor funding for health. Once funds provided by other donors, remittances and out-of-pocket expenditure are taken into account, total per capita financing might be in the range of \$12 to \$20. These fairly high funding levels contrast with the poor performance of the health sector. The dominance of vertical programmes, fragmented and erratic aid flows, the proliferation of small-scale, short-term interventions, security- and logistics-related costs, commercialized healthcare provision, and absent stewardship explain to a large degree this state of affairs. The scope for efficiency gains is enormous.

Lifting the health sector outside of the trap where it fell long ago calls for the application of many measures consistent with a broad, long-term strategic framework. *Key pressing measures* include: a) improving system-wide information collection and analysis, in order to enable informed decision-making; b) rolling out the Essential Package of Health Services to cover an increasing proportion of the population; c) reducing the massive wastage of external resources by introducing effective aid management tools; d) identifying ways to collaborate productively with private healthcare providers.

Long-term measures must address the mentioned fundamental distortions that affect the health sector. Human resource development is paramount. Making drug procurement, management and utilization more effective and efficient is another cornerstone. Rehabilitating and rationalizing the derelict healthcare network represents a third key area in which to invest effort, capacity and capital. Health financing and expenditure (both external and domestic) badly need to be reformed. Sound management practice must be nurtured. Finally, the present regulatory vacuum must be addressed by introducing meaningful incentives for healthcare providers. These giant endeavours will succeed only if external and internal stakeholders strengthen their dialogue and strike productive long-term partnerships.

Note: Feedback to task 2 is not included due to space limitations.

Preparing an introductory note to a health sector in crisis **Exercise 14**

This is the final exercise of the module, and is supposed to be done towards the end of the study programme. The reader who has patiently gone through the whole manual and digested its contents should be by now familiar with disrupted health sectors and the related documentation. This exercise is a sort of graduation test: preparing an introduction to a health sector in crisis, ideally for a junior colleague. If carried out satisfactorily, this final task will say something about the proficiency attained by the user of the manual, after completing its study.

Step 1: Read again the foreword to the country introductory notes, *Recommended reading on selected health sectors in crisis*, included at the end of *Module 14*. Look thoroughly at some of these introductory notes.

Step 2: Choose a disrupted health sector you are familiar with, or one you intend to study in some detail, and collect the documents related to it that you manage to find. Prepare a list of references.

Step 3: Select a few valuable documents deserving to be presented as *Essential reading* on the health sector that you are studying. List any other interesting documents under *Additional reading*. Be critically selective, discarding flawed or irrelevant materials.

Step 4: After completing the selection of essential and additional reading, ask yourself a few questions:

- a. Once considered together, are the selected documents providing a fairly comprehensive picture of the studied health sector?
- b. Are they allowing the reader to grasp the broad features of the country's underlying crisis?
- c. Are they offering useful elements to understand the evolution of the health sector over time?
- d. Are they providing different, perhaps conflicting readings of the situation? A diversity of perspectives may greatly enhance the understanding of the chosen health sector.
- e. Is the picture of the health sector coming out of the selected documents interesting? Is it coherent? Is it offering lessons to be considered by decision-makers in the same country or elsewhere?

If some of the answers you gave to these questions are unsatisfactory, you should look for additional, stronger materials. Or, if the chosen health sector has not been adequately studied, you should move to another better-documented country.

Step 5: Now, select critical issues to be considered in the study of the chosen health sector, towards which you intend to draw the attention of the reader. Describe them in a concise way. Be selective: in any health sector, multiple issues compete for prominence. Key issues risk to get overlooked, due to the existing competition.

Step 6: Add a few introductory words to the references you have selected, to help the reader understand what the related document is about, and its comparative merits.

Step 7: Finally, ask a senior health systems analyst to appraise the introductory note you have prepared, and give feedback to you in order to improve it.

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