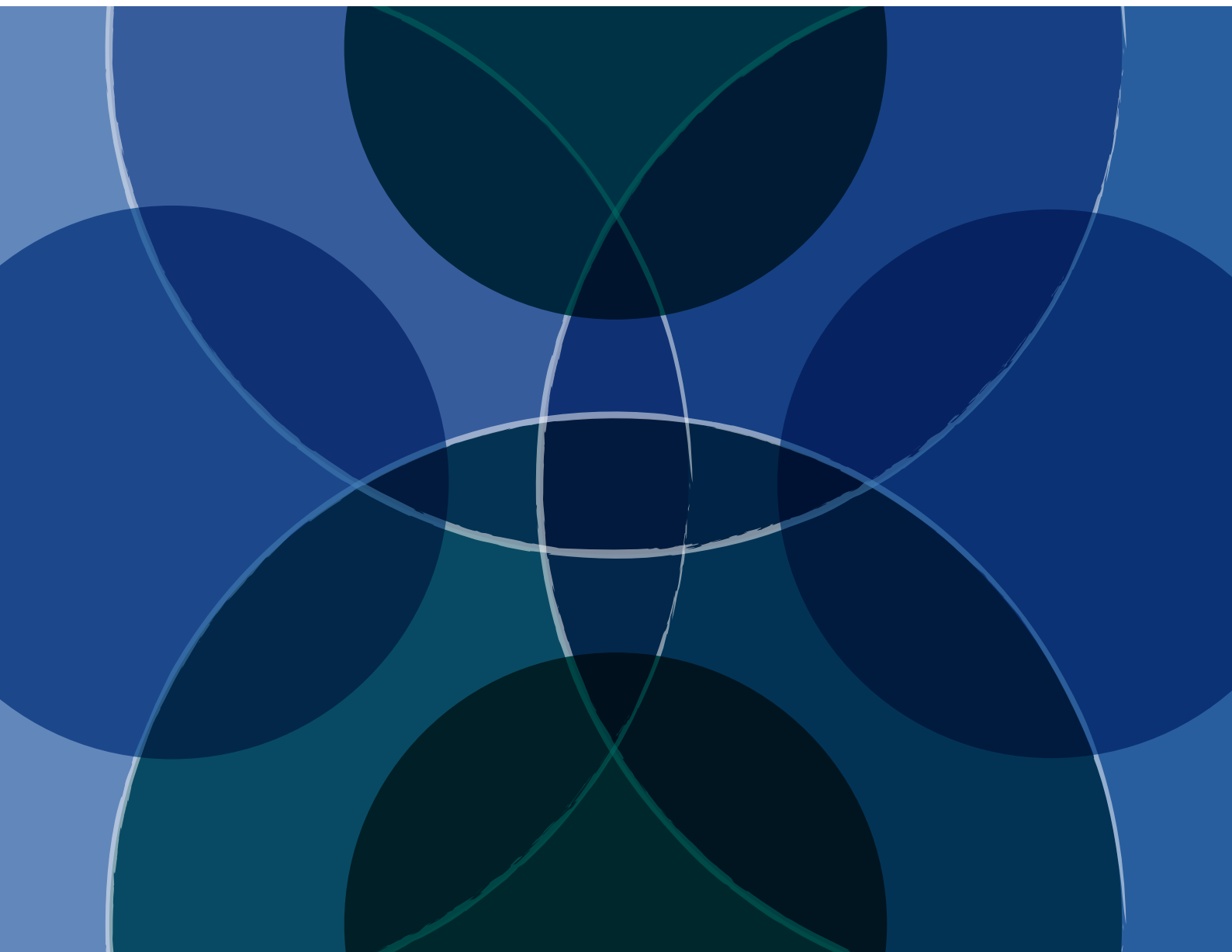
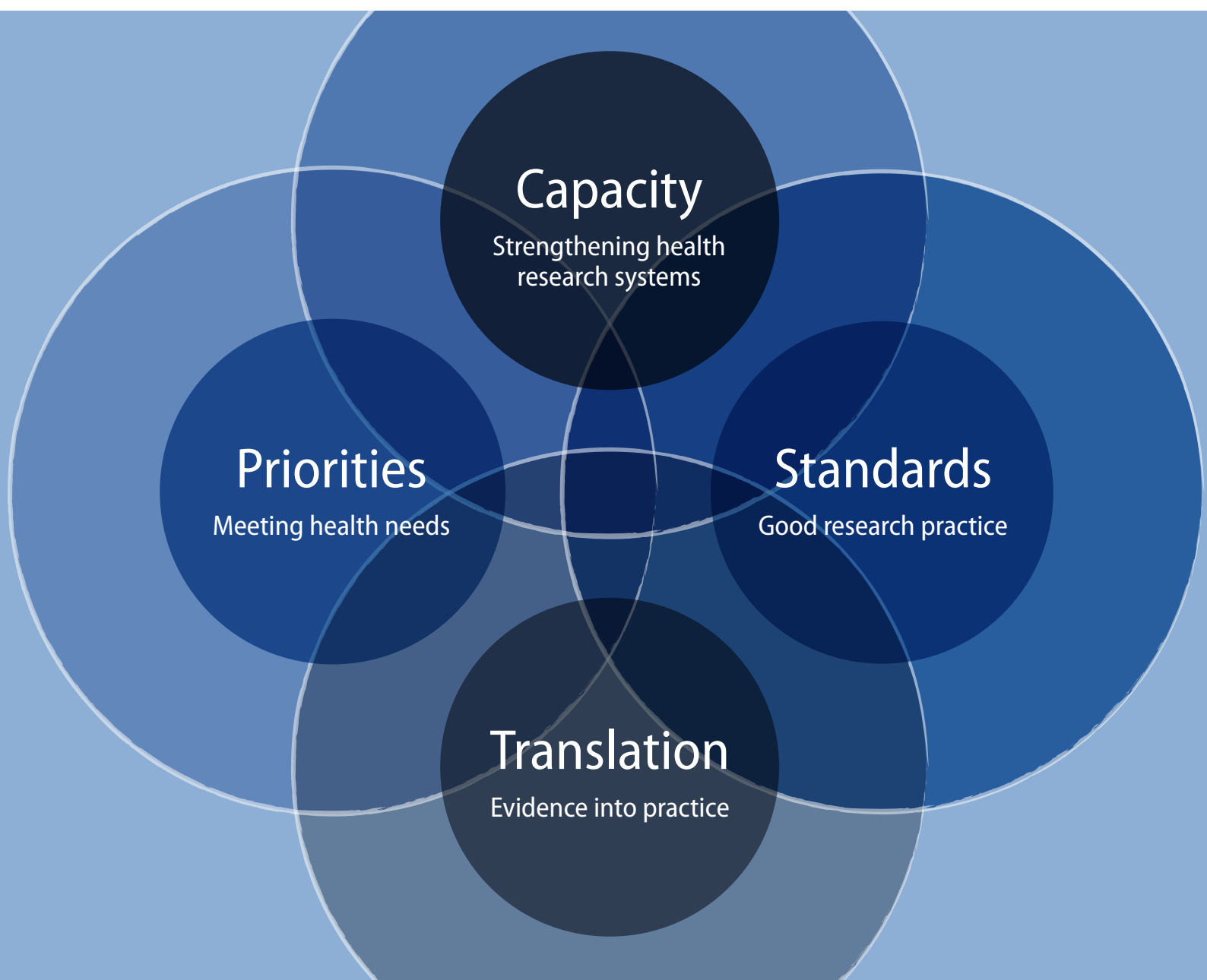


The WHO strategy on research for health



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Organization

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1. Introduction

High-quality research is essential for the World Health Organization (WHO) to achieve its constitutional objective, namely “the attainment by all peoples of the highest possible level of health”. Research and the evidence that research yields are critical elements for improving global health and health equity, as well as economic development.

WHO has long given high priority to research. The fundamental importance of research for WHO is identified in Article 2 of the Organization’s Constitution: “to promote and conduct research in the field of health”. In 1959, the first Advisory Committee on Medical Research was established and regional advisory committees were to follow. Renamed the Advisory Committee on Health Research in 1986, the committee continues to convene global experts for the purpose of advising WHO on its research policies. Research concerns have appeared frequently on the agendas of World Health Assemblies.

WHO’s strategy on research for health, approved by the Sixty-third World Health Assembly in May 2010, is based on the premise that policies and practices in support of health worldwide should be grounded in the best scientific knowledge. The strategy’s mission is that all partners should work together to harness science, technology and broader knowledge in order to produce research-based evidence and tools for improving global health.

The WHO strategy builds on a number of WHO’s core features: neutrality and independence; global membership; unique and extensive experience in international public health; a global normative role; commitment to evidence; an ability to convene government representatives, scientific experts and other stakeholders; and a regionalized structure that facilitates cooperation with countries. Decision-making is to be guided by the principles of quality, impact and inclusiveness in order to achieve the strategy goals that cut across national, regional and global levels, and across all parts of WHO.

A plan is to be drawn up for implementing the strategy over a 10-year period. The strategy has already served as a framework for formulating workplans for the WHO regions, some of which are developing their own regional research strategies, and it is being incorporated into operational arrangements and workplans for WHO headquarters. In discussion with WHO Member States, implementation plans will also be integrated into country cooperation strategies. In addition, the strategy has been used to inform the creation of specific research agendas, including those on influenza, child health (in support of Millennium Development Goal 4), tuberculosis and human immunodeficiency virus (HIV) in resource-limited settings, radiation risk assessment in medical exposures, and the prevention and control of noncommunicable diseases.

As this publication was being prepared, research priorities were being mapped and tools for good research practice were being developed. Data on research associated with WHO during the period 2006–2009 are being made available



through a research portal to facilitate coordination and management of research in WHO. A public access policy for WHO is being developed to expand the dissemination and use of WHO publications. In addition, a code of good research practice will strengthen and improve the quality of research practice within WHO.

The WHO strategy on research for health took several years to prepare and builds on more than half a century of expertise in global public health research in WHO. Chapter 2 explains how the strategy was developed and outlines the intensive consultation process that took place. Chapter 3 provides a summary of the strategy and draws attention to its main features. Chapter 4 contains the text of the strategy itself, as approved by the 193 Member States of WHO. The annexes contain the text of WHO governing body resolutions that are relevant to the strategy, as well as the statements of international meetings on research for health.

As the strategy is phased in and the actions to achieve its goals get under way, an evaluation framework will guide the monitoring of those actions and the evaluation of the strategy's impact. Regular reports will be submitted to WHO and to the World Health Assembly.

2. How the WHO strategy on research for health was developed

The WHO strategy on research for health was unanimously approved by all 193 Member States of WHO at the Sixty-third World Health Assembly in 2010. The strategy was the result of a number of resolutions and recommendations from WHO's governing bodies over the previous five years, as well as an intensive two-year consultation period.

In preparation for the strategy, a questionnaire survey of research activities was completed by all WHO headquarters departments associated with research plus two of the major WHO collaborating centres. For this exercise, the term "research" was taken to cover both primary and secondary research – including fieldwork, laboratory studies, clinical trials, synthesizing of existing data to develop guidelines and standards, meta-analyses and commissioned reviews. The findings showed that research in WHO focuses predominantly on secondary and commissioned research with an emphasis on health systems, policy and advocacy.

The strategy approval process

The momentum for the current WHO strategy on research for health originated at the Ministerial Summit on Health Research in Mexico City in November 2004. At this summit, health ministers and other participants from 58 countries stressed that health policy, public health and health service delivery should be based on "reliable evidence derived from high quality research". Emphasizing that research results must be published to make them accessible, the summit called on all stakeholders to strengthen or establish "activities to communicate, improve access to, and promote the use of reliable, relevant, unbiased, and timely health information". (See Annex 1 for the *Mexico Statement on Health Research*.)

When they received a report about the summit in May 2005, delegates to the Fifty-eighth World Health Assembly called on WHO Member States, the global scientific community and WHO itself to promote research and the "transfer of knowledge". Among its requests to WHO, the Assembly's resolution (WHA58.34) asked for an assessment of WHO's internal resources, expertise and activities in the area of health research "with a view to developing a position paper on WHO's role and responsibilities in the area of health research". (Annex 2 contains World Health Assembly resolution WHA58.34.)

The assessment was duly carried out and was submitted to the Advisory Committee on Health Research, which held its forty-fifth session in November 2005. In January 2006 the 117th session of the WHO Executive Board received both a position paper on "WHO's role and responsibilities in health research"¹

1 Document EB117/14.

and a report from the Advisory Committee on Health Research,² which commented on the paper.

Subsequently a report containing the main points of the position paper, together with a proposed resolution from the Executive Board, was submitted to the Fifty-ninth World Health Assembly in May 2006.³ Delegates to that Assembly made a variety of comments and suggestions on the topic and referred it back to the 119th session of the WHO Executive Board, which was held in January 2007. At its 119th session the Executive Board adopted an amended draft resolution that recommended adoption of a resolution by the Sixtieth World Health Assembly.

In May 2007 the Sixtieth World Health Assembly adopted resolution WHA60.15 on WHO's role and responsibilities in health research (see Annex 3). That resolution asked the Director-General to submit to the Sixty-second World Health Assembly two years later "a strategy for the management and organization of research activities within WHO", and to convene a ministerial conference on health research in Bamako, Mali, in November 2008.

The requested strategy was duly drawn up by the process described below. In addition, together with five other partners,⁴ WHO organized the Global Ministerial Forum on Research for Health in Bamako from 17 to 19 November 2008.

At its 124th session in January 2009, the WHO Executive Board reviewed the draft WHO strategy on research for health, proposed a number of amendments, and recommended the adoption of the amended draft by the Sixty-second World Health Assembly. In May 2009, the Sixty-second World Health Assembly was cut short due to pressures on ministers of health and other delegates in view of the expanding H1N1 influenza pandemic at that time. Thus, Assembly delegates decided to postpone discussion of the agenda item on WHO's role and responsibilities in health research until the Sixty-third World Health Assembly in 2010.

In May 2010, the Sixty-third World Health Assembly received the draft strategy as an annex to document A63/22. The strategy was endorsed by the Assembly in resolution WHA63.21 (see Annex 4). The final approved strategy is available in World Health Organization official records WHA63/2010/REC/1 Annex 7, page 119.⁵

The strategy development process

The development of the WHO strategy on research for health was based on guidance from previous World health Assembly resolutions, a historical

2 Document EB117/37.

3 Document A60/23.

4 Government of Mali, United Nations Educational, Scientific and Cultural Organization, World Bank, Global Forum for Health Research, Council on Health Research for Development.

5 See: http://apps.who.int/gb/or/e/e_wha63r1.html

review of research in WHO, and a comprehensive survey and analysis both of current research activities within the Organization and of WHO's role in the wider context of global health research.⁶ As requested by the World Health Assembly in resolution WHA61.21, the development of the strategy reflected, where appropriate, the global strategy and plan of action on public health, innovation and intellectual property. In particular, the WHO strategy on research for health was the result of an intensive process of consultation.

The consultation process was guided by an independent External Reference Group. This comprised representatives of governments, nongovernmental organizations, research funders, researchers, civil society and industry. The Advisory Committee on Health Research provided further independent advice on, and support for, the strategy development process.

The strategy planning team additionally aimed to make sure not only that the strategy addressed all the necessary issues but also that it made a difference. The team believed that change was needed in the role of research within WHO as well as in the role of WHO in research outside the Organization. It was felt that the strategy process could help bring about that change.

Phase 1: identifying what should be included in the strategy

The focus during this phase was on gathering different views and experiences of research in WHO, and of WHO in research, in order to identify issues that the strategy should address, plus possible ways forward.⁷ The aim was to develop a strategy that would have wide support and that would be readily followed up and implemented by different groups and stakeholders.

From March 2007 to September 2008 WHO's Secretariat contacted more than 100 relevant stakeholders and partners (governments, nongovernmental organizations, funding agencies for research and development, research institutes, civil society and industry) for their views on research at WHO. The exercise aimed to identify areas of success, changes that were needed and future priorities for research. Stakeholders' comments were posted on a dedicated web site and integrated into successive working drafts of the strategy.

6 Terry RF and van der Rijt T (2010). *Health Research Policy and Systems*; 8:25. Available at: <http://www.health-policy-systems.com/content/8/1/25>

7 For the purposes of the strategy, "research" is defined as the development of knowledge with the aim of understanding health challenges and mounting an improved response to them. This definition covers the full spectrum of research, which spans five generic areas of activity: measuring the problem; understanding its cause(s); elaborating solutions; translating the solutions or evidence into policy, practice and products; and evaluating the effectiveness of solutions.

The term "research for health" reflects the fact that improving health outcomes requires the involvement of many sectors and disciplines. As identified in the work of the Global Forum for Health Research, it is research that seeks to understand the impact on health of policies, programmes, processes, actions or events originating in any sector; to assist in developing interventions that will help prevent or mitigate that impact; and to contribute to the achievement of the Millennium Development Goals, health equity and better health for all.

Within WHO, in addition to ongoing discussions, specific consultative meetings were organized with each of WHO's six regional offices, with technical departments at WHO headquarters and with the advisory and governing bodies of WHO's research programmes. In July 2008, a questionnaire was sent to all WHO staff seeking their comments on the draft strategy. More than 300 WHO staff, including those in country offices, provided input to the strategy.

With all groups, whether within WHO or outside, the focus was on listening carefully to experience and different perspectives and distilling the key points that should be included in the strategy. All workshops were recorded and all reports were made public.

It was decided not to start by preparing a draft text of the strategy and then offering it for consultation. Rather, the starting point was to listen to accounts and case studies of success in research. The questions used in discussions both inside and outside WHO were as follows:

- What, for you, are successful examples of research in WHO and of the involvement of WHO in research?
- How do you define "success" in research?
- What do these examples tell us about successful research, the common themes involved and the conditions necessary to support it?
- In the light of the examples of successful research, what key issues need to be addressed in the strategy?
- What do you want the strategy to say?
- How can you contribute to the successful development of research in WHO and of WHO in research?

The emphasis on WHO's successful involvement in research was intended to keep the discussions practical, focusing attention on possibilities rather than on problems and obstacles. It was also intended to lead to examination of how positive examples could be extended or developed.

A notable aspect of the process was the style of conversation that took place. An effort was made to generate an active dialogue about the strategy and to promote an exchange of experience and ideas. Workshop-style meetings were held, with participants in both plenary sessions and small working groups. Rather than having participants give prepared contributions, meetings were highly interactive, with everyone encouraged to participate. Participants were asked to give immediate reactions to issues raised by the facilitators and to build on lines of thinking suggested by colleagues.

After each meeting or session, a recording of the key points and main themes was played back to participants, both to check the accuracy of what had been heard and to stimulate further comment and reflection. In this way a picture was gradually built up of the common themes and points of difference. The records of discussions were neither opinion polls nor scientific analyses; rather, they represented an effort to map an unfolding conversation and, step by step, to move the discussion forward.

Phase 2: developing the draft strategy

In phase 2, from May to November 2008, a text was developed and implementation was discussed with the groups and individuals that had contributed to phase 1.

In July 2008 a seven-person drafting group worked on a basic text for discussion. The aim was to produce a draft that captured the main ideas and proposals that had been put forward during phase 1 and to articulate them in a way that satisfied both internal and external groups. The process of drafting and frequent review and revision involved the External Reference Group, the Advisory Committee on Health Research and WHO staff at both regional and headquarters levels. Comments made were recorded and were considered in the preparation of later drafts.

In discussions between August and October 2008, groups were asked if they supported the proposed strategy. A questionnaire addressed to WHO staff and to meetings of the External Reference Group and the Advisory Committee on Health Research showed overwhelming support for the strategy.

As the draft strategy was developed, a series of workshops and discussions was held about how it could be implemented. This was important both for generating ideas for implementation and for increasing endorsement of the strategy.

As the development process continued, virtual (online) meetings and telephone conferences became increasingly important. This permitted groups both within and outside WHO to work together to develop ideas and, in phase 2, to comment on and make suggestions about the draft text. A file-sharing site was also set up to share information about the strategy, including drafts, and to post the reports of meetings. During phase 2, the developing draft was sent out to all participants for comments.

The External Reference Group met in Geneva in May and October 2008, as well as participating in frequent e-mail exchanges throughout 2008 and online meetings in July and September. The global Advisory Committee on Health Research focused on the research strategy at its meetings in November 2007, and March and October 2008. Two online sessions of the committee were held in July 2008.

As the strategy was being developed, it was discussed at the three preparatory meetings for the 2008 Global Ministerial Forum in Bamako, Mali. In the final draft of the *Bamako Call to Action on Research for Health*, multilateral agencies, WHO Member States and partners were called on “to ensure that WHO streamlines the architecture and governance of its research activities and effectively implements in unison both the strategy on research for health and the Global strategy and plan of action on public health, innovation, and intellectual property” (see Annex 5).

In December 2008 the draft WHO strategy on research for health was finalized for submission to the 124th session of the WHO Executive Board in January 2009, and from there to the Sixty-second and Sixty-third World Health Assemblies.

3. Summary of the WHO strategy on research for health

Introduction

The WHO strategy on research for health represents international recognition that global improvements in health are dependent on quality research that is approached from a global perspective. The strategy shows not only how WHO's involvement in health research will be strengthened but also how global research standards are to be improved and national capacity for research strengthened. It acknowledges that health policies and practices globally should be informed by the best research evidence.

The introduction to the strategy states that investments in health research are generally not sufficient and that research is often not focused on priority health problems. At the same time research often does not reflect best practices in terms of ethical review and public accountability. Therefore, the strategy says, research for health should be organized and managed in a systematic and comprehensive manner, and efforts to improve health should be based on evidence from research. The strategy calls on WHO, its Member States and other partners to work together to produce evidence and tools for improving health.

The guiding principles of the strategy are quality (i.e. research that is ethical, expertly reviewed, efficient, effective, accessible to all, and carefully monitored and evaluated), impact (i.e. research with the greatest potential to improve global health security, accelerate health-related development, redress health inequities and help attain the Millennium Development Goals), and inclusiveness (i.e. partnership, a multisectoral approach, the participation of communities and civil society in the research process).

The strategy has five interrelated goals:

- **Organization** (strengthening of the research culture in WHO so that the Organization can lead by example);
- **Priorities** (focusing research globally on priority health needs);
- **Capacity** (helping to strengthen national systems for health research);
- **Standards** (promoting good practice in research, with WHO setting norms and standards);
- **Translation** (strengthening links between health research and health policy and practice).

Organization goal

The Organization goal is to strengthen the research culture across WHO. The strategy states that WHO needs to change radically the way it works in order to keep pace with a changing research environment and communicate better its own research activities.

A number of obstacles were identified during the consultation process, including the lack of a common vision for health research, the lack of coordination of WHO's research activities, the lack of a dedicated budget to support research, and inconsistency in using evidence as the basis of policies, programmes, and global norms and standards. The expectation is that obstacles such as these can be overcome by improving the quality, impact and inclusiveness of research practices. WHO's programmes will be supported by the best available research evidence, and WHO-related research activities will be conducted in accordance with a code of good research practice.

Actions for achieving the Organization goal include:

- keeping abreast of developments in knowledge management, keeping in touch with the global research community and raising resources to support the strategy;
- developing a code of good research practice for WHO staff and improving staff competence in research;
- strengthening ethical standards and peer review, using evidence to develop guidelines, and reviewing existing policies in the light of new evidence;
- developing an open-access repository of the results of all WHO-related research;
- reviewing arrangements for working with partners, and seeking partners from all sectors that impact on research for health;
- improving communication on research and on the global strategy.

Priorities goal

The priorities goal is to champion research on priority health needs. WHO's roles include helping to identify research priorities and mobilizing the response. The range of health challenges is wide, and agreeing on priorities is not always easy.

Recent years have seen an increase in research for health in support of the Millennium Development Goals and other global initiatives involving not only governments but also civil society, philanthropic bodies and industry. At the same time, countries have their own health priorities that may be influenced by different social, political and environmental settings. The priorities goal includes efforts to align national research capacity with the global research environment and the sources of research funding. WHO is to make greater use of its power to convene governments and global bodies in support of research for health in neglected areas. Where research capacity is low, WHO will promote collaboration between countries.

Actions for achieving the priorities goal include:

- synthesizing data on gaps in national and global research on health and health systems;
- convening consultations to identify the priorities and funding for research on health;

- reporting on global priorities and resources for research;
- developing research agendas for priority areas;
- advocating support for research on global priorities;
- improving the coherence of WHO's research activities by reviewing research agendas, including criteria for initiating, adjusting and ending research programmes.

Capacity goal

The capacity goal is to support the development of national health research systems. The strategy states that active national health research systems speed up the achievement of health goals. However, such health research systems are underresourced and poorly managed in many places and health information systems are also often lacking.

The strategy says that these deficiencies are due to lack of appreciation of the value of health research at political level, lack of sustained efforts to build national research systems, and the fact that fragmented research efforts by external bodies often do not strengthen national capacity. WHO is expected to foster regional and global networks for collaboration between researchers and research institutions in low-, middle- and high-income countries. The coordination of activities to build research capacity will also need to be improved throughout WHO.

Actions for achieving the capacity goal include:

- strengthening advocacy both for research and for national health research systems;
- developing tools and guidelines to strengthen national capacity in the four main functions of national health research systems (stewardship, financing, creating and sustaining resources, and synthesizing and using knowledge);
- promoting the development of health information systems;
- developing standardized indicators for the performance of national health research systems, for global progress in capacity strengthening and for evaluating the effectiveness of capacity building;
- facilitating technical assistance to national health research systems;
- building institutional capacity to report and share good practice through networks;
- aligning WHO's research programmes and activities with country efforts to build research capacity.

Standards goal

One of WHO's core functions is to set international norms, standards and guidelines. The strategy aims for internationally agreed norms and standards for research, and thus the standards goal is to promote good research practice through global agreement on good practices, scientific benchmarks, ethical

guidelines and accountability. Norms, standards and guidelines related to research are intended to improve the quality of research and improve access to information, thus also building public confidence in research.

There is a need for clear criteria for deciding when and how WHO should work on a new standard or guideline, and who should be involved. There is also a need to improve compliance with existing research standards – especially those concerned with ethics, clinical trial registration, and laboratory biosafety and biosecurity. Additionally, criteria are needed regarding the use of evidence that cannot be generated using conventional research approaches such as randomized trials.

Actions for achieving the standards goal include:

- developing a systematic method for selecting, developing, adopting and evaluating new norms and standards in line with health research priorities;
- developing norms and standards for best practice in the management of research (e.g. ethical and expert review, reporting of research findings, sharing research data, registration of clinical trials and the use of evidence for policy development);
- facilitating publicly accessible registries of clinical trials;
- technical cooperation to help countries to adapt and implement norms and standards for research, and monitor subsequent compliance.

Translation goal

The translation goal is to strengthen links between research, policy and practice. The strategy states that policy and practice should be informed by evidence generated by research. However, evidence often fails to inform policy and practice, and research often does not respond to policy needs. WHO aims to facilitate collaborative links between researchers and those who use research evidence, including policy-makers.

“Research translation” – the process by which the evidence produced by research is translated into policy, practice and product development – is seen as a priority area for study. In addition, improved methods are required for communicating health information and evidence to different target audiences. WHO has already contributed to the research translation process through a number of projects, such as the Evidence-Informed Policy Networks initiative, the Health InterNetwork Access to Research Initiative and the International Clinical Trials Registry Platform. The Organization will advocate greater allocation of resources for study of the research translation area in order to make quality data more accessible and facilitate dialogue between policy-makers and health sector workers.

Barriers to be overcome include the lack of standards in health informatics, problems of affordability and language, and copyright restrictions on the use of research data and materials.

Actions for achieving the translation goal include:

- identifying promising research translation activities and promoting their use;
- promoting effective models of technology transfer;
- promoting and evaluating platforms for research translation;
- working towards international standards on health informatics for research;
- developing and improving ways to provide research summaries and guidance to policy-makers, health professionals and the general public;
- encouraging and enhancing ways to promote greater access to research results;
- defining WHO's position on open access to research, and advocating maximum availability of health-related research findings that are freely accessible in the public domain.

Implementation

WHO's *Eleventh General Programme of Work 2006–2015* sets out a global health agenda and the Organization's medium-term strategic plan 2008–2013 outlines 13 strategic objectives. The strategy on research for health will be implemented by WHO, working with its Member States and partners, in support of the global agenda and the strategic objectives. For WHO's regional offices, the strategy sets out a framework to guide regional research strategies. The plans will build on research activities already under way in more than 34 WHO programmes, alliances and networks.

To ensure that the strategy is successfully implemented, WHO will need to improve strategic and operational efficiency across its research activities. Possible ways of doing this may include thematic groups in areas such as research capacity building and knowledge management. WHO will also need to collaborate not only with existing research partnerships but also with research partners in industry, civil society, foundations and academia.

The strategy makes recommendations for improving the research competencies of WHO staff through measures such as continued learning and changes to the recruitment and evaluation processes. Once implemented, the code of good research practice will provide a common approach and a set of minimum standards for the research activities of WHO staff. The WHO strategy also aims to improve the quality of research outputs by influencing the way in which resources are spent.

Evaluation

An evaluation framework has been developed that will enable the elements of the research strategy to be monitored and the impact of implementation to be evaluated.

The strategy's ultimate impact should be improvements in health and health equity; however, identifying the contribution of the strategy to achieving wider health impacts is a major challenge. The evaluation framework focuses on

impacts that can be evaluated prospectively. Indicators have been developed for each input, output, outcome and impact, and new indicators can be added after implementation has begun.

Reports on progress of the implementation of the strategy will be submitted every two years to the World Health Assembly and to WHO's Director-General, and there will also be regular public reports.

4. The WHO strategy on research for health

Context and rationale

Research, global health and WHO

1. The WHO strategy on research for health⁸ sets out how to strengthen WHO's involvement in research for health and the consequent role of research within WHO. It recognizes that research is central to progress in global health and identifies ways in which the Secretariat can work with Member States and partners to harness science, technology and broader knowledge in order to produce research evidence and tools for improving health outcomes.

2. In all Member States increasing demands are being placed on research to provide opportunities for resolving current and emerging health problems. In meeting the challenge of resolving priority problems across the spectrum of public health – whether it be tackling diseases of poverty, responding to the global epidemiological transition to chronic diseases, ensuring that mothers have access to safe delivery practices or preparing for global threats to health security – research is indispensable.

3. In a global environment of competing demands for limited resources, it is especially important that health policies and practices should be informed by the best research evidence. The fundamental importance of research for WHO is identified in Article 2 of the Constitution of the World Health Organization; further, in the *Eleventh General Programme of Work 2006–2015*, the harnessing of knowledge, science and technology is highlighted as one of seven priority areas.

4. The Eleventh General Programme provides a global health agenda for the Organization, its Member States and the international community; however, although the value of research is widely recognized, exploiting research optimally to resolve priority health problems is not a straightforward matter. The complex nature of the health problems confronting societies, the rapid advances in knowledge and technologies related to health, the shifting expectations and concerns of the public in respect of research, and changes in the organization and management of research within and across countries, are among the many factors that must be taken into account.

5. Importantly, much progress has been made in recent decades. In parallel to the growing importance attached to health globally, attention is increasingly being focused by the broader research community on the health problems of the poor and disadvantaged. Significant research efforts, involving public–private partnerships and other innovative mechanisms, are being concentrated on neglected diseases in order to stimulate the development of vaccines, drugs and diagnostics where market forces alone are insufficient. Likewise, shared vulnerability to global infectious threats such as severe acute

8 As approved by World Health Assembly resolution WHA63.21 in May 2010 (see Annex 4).

respiratory syndrome and avian influenza has mobilized global research efforts in support of enhancing capacity for preparedness and response in the areas of surveillance, rapid diagnostics and development of vaccines and medicines.

6. In addition to this progress, there is growing awareness that research systems are not responding optimally to the diverse demands that they face. Investments in health research are insufficient; further, they are not appropriately directed towards tackling priority health problems. In addition, when complex challenges are being met, such as tackling food insecurity or the effects of climate change, there has been a failure to draw on resources available for research in other sectors. Low-income countries are faced with a diverse range of donor-driven research agendas that often weaken national priorities, and many countries are facing significant challenges in training and retaining researchers.

7. Work in support of the ethical review and public accountability of research is not keeping pace with best practices. The opportunity of creating a shared framework for storing and sharing research data, tools and materials has not been seized with the same energy in the area of health as it has in other scientific fields, and policy-makers are neither contributing to research priorities nor using evidence to inform their decisions.

8. In view of the rapid changes taking place in public health and research, there is an urgent need for a systematic and comprehensive approach to organizing and managing research for health. This strategy seeks to define WHO's role in satisfying that need.

WHO's role in research for health

9. The *Eleventh General Programme of Work* identifies six core functions of WHO, one of which is: "shaping the research agenda and stimulating the generation, translation and dissemination of valuable knowledge". The other five functions – which involve providing leadership, setting norms and standards, articulating evidence-based policy options, providing technical support and monitoring the health situation – all require strong research competencies among the staff of the Secretariat.

Definitions and concepts

10. The term "research for health" reflects the fact that improving health outcomes requires the involvement of many sectors and disciplines. As identified in the work of the Global Forum for Health Research, research of this type seeks to perform the functions of understanding the impact on health of policies, programmes, processes, actions or events originating in any sector; of assisting in developing interventions that will help to prevent or mitigate that impact; and of contributing to the achievement of the Millennium Development Goals, health equity and better health for all. Research for health covers the full spectrum of research, which spans the following five generic areas of activity:

- measuring the magnitude and distribution of the health problem;⁹
- understanding the diverse causes or the determinants of the problem, whether they are due to biological, behavioural, social or environmental factors;
- developing solutions or interventions that will help to prevent or mitigate the problem;
- implementing or delivering solutions through policies and programmes;
- evaluating the impact of these solutions on the level and distribution of the problem.

11. The strategy also draws on a systematic framework for health research systems, as presented in the *Bulletin of the World Health Organization* in 2003.¹⁰ In this framework four core functions are defined for research systems, namely stewardship; financing; creating and sustaining the research workforce and infrastructure; and producing, synthesizing and using knowledge.

Development of the draft WHO strategy on research for health

12. In resolution WHA60.15 the Health Assembly requested the Director-General to develop a strategy for the management and organization of research activities within WHO. This represents an opportunity for the Organization to (a) review and revitalize the role of research within WHO; (b) improve its support to Member States in building health research capacity; (c) strengthen its advocacy of the importance of research for health; and (d) better communicate its involvement in research for health.

13. The WHO strategy on research for health was developed by the Secretariat by means of an 18-month consultative process. The process involved staff at headquarters and regional and country offices, as well as key partners (including funding bodies, the private sector, the research community and nongovernmental organizations). An External Reference Group provided extensive comments on successive drafts of the strategy, as did the Advisory Committee on Health Research.

14. Aware that a realistic, forward-looking strategy requires an informed understanding of past successes and failures and current realities, development of the strategy was also informed, inter alia, by:

- a historical review of research at WHO;¹¹
- previous Health Assembly resolutions on research;

9 The term “health problem” is used in this strategy to refer to a major cause of ill-health or health inequity, whether actual or prospective. It includes the following: diseases such as HIV/AIDS or mental illness; risks to health such as obesity, poverty or climate change; and obstacles to effective systems performance, such as unsafe care or inequitable financing of health services.

10 *Bulletin of the World Health Organization*, 2003, 81(11): 815–820.

11 *Research and the World Health Organization. A history of the Advisory Committee on Health Research 1959–1999*. World Health Organization, Geneva 2010.

- a comprehensive survey and analysis of current research activities across the 34 departments of the Secretariat and the special research programmes and centres.¹²

As requested by the Health Assembly in resolution WHA61.21, attention was given to ensuring that the development of WHO's research strategy reflected, as appropriate, the global strategy and plan of action on public health, innovation and intellectual property.

WHO strategy on research for health

Research in the service of health

15. This comprehensive, Organization-wide strategy will underpin all the Secretariat's work.

16. The **vision** for the strategy is that decisions and actions to improve health and enhance health equity are grounded in evidence from research. The **mission** of the strategy is for the Secretariat, Member States and partners to work together to harness science, technology and broader knowledge in order to produce research-based evidence and tools for improving health.

17. The strategy reflects WHO's diverse roles and responsibilities in respect of research for health: the Organization works to provide stewardship and advocacy, convene funders, catalyse change and build capacity; and it acts as a communicator, producer and user of research.

18. The strategy calls for changes in order to improve capacity to access and make use of existing research findings; and in order to better understand, and mobilize support for, the research needed for improving health and health outcomes.

19. In the strategy it is also recognized that achieving health goals requires a more effective involvement on the part of WHO with the broader global research community and funders of research, and with sectors other than health.

Guiding principles

20. The WHO strategy on research for health is grounded in three principles that will guide achievement of the goals and the realization of the vision:

- **Quality.** WHO commits itself to high-quality research that is ethical, expertly reviewed, efficient, effective, accessible to all, and carefully monitored and evaluated.
- **Impact.** WHO gives priority to research and innovation that has the greatest potential to improve global health security, accelerate

12 Terry RF and van der Rijt T (2010). *Health Research Policy and Systems*; 8:25. Available at: <http://www.health-policy-systems.com/content/8/1/25>

health-related development, redress health inequities and help to attain the Millennium Development Goals.

- **Inclusiveness.** The Secretariat undertakes to work in partnership with Member States and stakeholders, to take a multisectoral approach to research for health, and to support and promote the participation of communities and civil society in the research process.

Goals

21. Five interrelated goals have been defined to enable WHO to achieve the vision of the strategy.

- **Organization.** This involves the strengthening of the research culture across WHO.
- **Priorities.** This concerns the reinforcement of research (at national, regional and global levels, and within WHO) in response to priority health needs.
- **Capacity.** This relates to the provision of support to the strengthening of national systems for health research.
- **Standards.** This concerns the promotion of good practice in research, drawing on WHO's core function of setting norms and standards.
- **Translation.** This involves the strengthening of links between the policy, practice and products of research.

22. WHO needs to show it can lead by example, which is why the **Organization** goal is the foundation of the strategy. It is an essential part of the other four goals, defining the Secretariat's interactions with Member States and partners in the activities for achieving each goal.

23. The current global health situation is complex and characterized by an array of new and existing health challenges, many of which call for greater efforts in the area of research. Given the competing needs of the different areas of research, it is essential not only to mobilize sufficient resources for research but also to ensure their careful distribution. WHO's roles, in respect of the **priorities** goal, are as follows: to offer assistance in identifying, in a timely manner, priorities for research for health, especially those that can benefit the poorest members of society; and to mobilize all stakeholders in order to provide an effective response.

24. Strengthening Member States' national systems research in support of health – the **capacity** goal – is essential for improving health delivery, health security and health outcomes. Efforts to attain this goal need to focus on institutional capacity building in order to develop the necessary human resources and physical infrastructure for conducting research. Attention must also be directed towards satisfying the need for policy leadership, financing and standards for research.

25. No country is self-sufficient in its research capacity, so Member States need to be able to share research outputs. Effective and equitable sharing requires internationally agreed norms and standards for research; with this in mind, the

standards goal concerns the promotion of good practice in research by means of work to establish agreements on good practices, scientific benchmarks, ethical guidelines and accountability mechanisms. The achievement of this goal is essential for winning public support and confidence.

26. Finally, if the ultimate objective of research for health is to improve health outcomes, the generation of knowledge alone is not sufficient: knowledge has to be harnessed in order to inform policy and practice and develop products. In establishing the **translation** goal, WHO aims to facilitate a more productive interface between researchers and those who use evidence, including policy-makers and practitioners at national, regional and global levels.

27. A summary of the outputs generated in achieving each goal is shown in Table 1.

Table 1. Summary of outputs for the WHO strategy on research for health

Biennial report to the Health Assembly, indicating: • progress in implementing and evaluating the research strategy and related expenditures (Organization goal)¹ • global progress in strengthening national health research systems as measured using standardized indicators at the country level (priorities goal) • the adaptation/adoption of norms and standards by Member States and the results of audits examining adherence to them (standards goal)
Biennial report to the Director-General, indicating: • the processes, coverage and impact of: – WHO’s revised recruitment procedures and incentives, and the Organization’s training programme on research and research use (Organization goal) – WHO’s ethical review committees (standards goal) – WHO’s guideline review committee (standards goal) – WHO’s programme review committee (Organization goal) • implementation of WHO’s code of good research practice, including the results of periodic audits of WHO research practices (Organization goal) • whether, and if so, by what means, improvements have been made in the mechanisms by which WHO acts as a research partner (Organization goal) • research agendas with which WHO is directly involved, or for which it is acting as an advocate, their continued appropriateness for WHO, and their coherence as a whole within WHO (priorities goal) • WHO’s advocacy efforts related to national health research systems (capacity goal) • the number of country cooperation strategies that involve multipartner technical cooperation to support the strengthening of national health research systems (capacity goal) • alignments across the efforts to build research capacity with which WHO is affiliated (capacity goal)

Norms and standards

- norms and standards for research (standards goal)
- WHO's code of good research practice (Organization goal)
- guidelines for building national capacity in respect of the four main functions of national health research systems (capacity goal)

Public reports and resources

- public report every four years (co-published with partners) on global research priorities, comprehensive research agendas for each priority, and the alignment of financial and human resources with these agendas (priorities goal)
- biennial public report on research at WHO (Organization goal)
- public report on WHO's position on open access to research outputs and on mechanisms to record research outputs that are not currently being recorded elsewhere (translation goal)
- reports on lessons learnt from efforts to build research capacity, including evaluations of the effectiveness of particular approaches using standardized indicators (capacity goal)
- reports on the lessons learnt from using different interventions to support policy and practice in Member States, based on the best available research evidence, using different models of technology transfer and of research translation platforms (translation goal)
- publicly accessible research registry for all research with which WHO is affiliated (Organization goal)
- publicly accessible clinical trials registries (standards goal)
- up-to-date, optimally packaged evidence summaries that are context sensitive, and guidance in areas of public health need (translation goal)

Organization goal

28. The Organization goal is to strengthen the research culture across WHO.

The challenge

29. Consultations undertaken in developing the strategy generated a clear message, from both within the Organization and beyond, that WHO needs to undertake a major change in behaviour in order to keep pace with the evolving research environment and communicate better the nature of its own research activities.

30. The internal obstacles that WHO must overcome, identified during the consultation process, include:

- the lack of a common, well-articulated vision for research for health;
- the fragmented and uncoordinated nature of research activities across the Organization;
- the inconsistent use of evidence in establishing policies, programmes, and global norms and standards;

- the absence of standards of research practice for staff producing and using research;
- the insufficient number of staff with appropriate research skills and an adequate understanding of research;
- the lack of a dedicated budget to support research activities;
- the bureaucratic and financial arrangements that many research partners find awkward;
- the lack of sufficient incentives and encouragement to ensure that staff are involved and that they improve their competencies in research or research-related activities.

31. The activities related to the Organization goal will tackle these obstacles by improving research practices in accordance with the strategy's three principles: quality, impact and inclusiveness. The aim is for WHO to have effective governance mechanisms for supporting the production, dissemination and use of research evidence both within the Organization and beyond.

32. WHO's guidance and programmes will therefore need to be informed by the best available research evidence. Further, the research activities with which WHO is affiliated will need to be aligned with a code of good research practice. A general understanding will also be required, both within WHO and beyond, of the central role played by research evidence in the Organization's activities and of the broader role of the Organization in research.

Actions to achieve the goal

33. Working with Member States and partners, the Secretariat will:

- (a) establish appropriate structures for keeping abreast of latest developments in knowledge management, interaction with the global research community, and leading, managing and coordinating research within WHO, and for maintaining accountability for such research; and secure the resources needed to support the implementation and evaluation of this strategy;
- (b) develop and implement a WHO code of good research practice for those of its staff involved with research and the use of evidence;
- (c) strengthen existing mechanisms for good research practice, including:
 - (i) ethical and peer review structures and procedures;
 - (ii) the appropriate use of evidence to inform the development of guidelines;
 - (iii) the regular review of core policies and programmes in the light of new evidence;
- (d) enhance the research-related competencies of relevant professional staff by applying designated criteria in their recruitment, by providing on-the-job training, and by identifying incentives for good research performance that are linked to regular evaluations;

- (e) improve the management and coordination of WHO-affiliated research, and develop a publicly accessible repository for all such research in order to improve access to the knowledge thus derived;
- (f) improve performance in research partnerships by:
 - (i) reviewing financial, legal and administrative processes for working with partners;
 - (ii) seeking contacts with a broader network of partners across all sectors that influence research for health;
- (g) improve communication – both throughout the Secretariat and with Member States, partners and the public – regarding WHO's involvement in research, submitting regular reports, including reports on the monitoring and evaluation of this strategy.

Expected results

34. Achievement of this goal should produce the results described below:

- WHO Secretariat staff who understand, value and use evidence better in planning, implementing and evaluating programmes and activities, and in setting norms and standards;
- WHO-supported research that systematically adheres to the Organization's code of good research practice and is subject to scientific and, where appropriate, ethical review; guidelines and recommendations that are systematically evidence based, and articles that are systematically peer reviewed;
- clear communication of WHO's role in research and of the role of research within WHO;
- general recognition that WHO is a credible, evidence-based organization; a leader in supporting or performing high-quality research; a champion of the need for research; and an effective partner in facilitating high-quality research at global, regional and country levels;
- the allocation by WHO of sufficient resources to support core functions necessary for the implementation of the strategy;
- translation of the most up-to-date knowledge and evidence into advice, norms and guidelines by the WHO Secretariat.

Priorities goal

35. The priorities goal is to champion research that addresses priority health needs.

The challenge

36. Each country has a responsibility to develop its own agenda for research in order to respond to the health needs important to its population within its own social, political and environmental setting. In addition, there are present and emerging health challenges that must be met through national and

cross-country research. Such challenges include preparing for and responding to pandemics, gaining an understanding of the impact of climate change, and developing new drugs, vaccines and diagnostics for widespread diseases such as malaria, HIV/AIDS and tuberculosis.

37. However, agreeing on research priorities for improving health and taking action to pursue them remains a significant challenge. The obstacles responsible for this include imbalances in national research priorities, the historical inequity in the distribution of global research funding (with only 10% of financing for global health research allocated to health problems that affect 90% of the world's population) and the difficulty of making the case for financing research in the face of competing priorities.

38. In recent years, however, the mobilization in support of the Millennium Development Goals and the recognition that good health is a foundation of development have encouraged an impressive upsurge in research for global health. Diverse stakeholders – including governments, civil society, philanthropic bodies and industry – have mobilized significant resources through numerous public–private partnerships and multilateral research initiatives. The Health Assembly has adopted the global strategy and the agreed parts of the action plan on public health, innovation and intellectual property rights. This instrument places emphasis on identifying research and development priorities for tackling diseases of poverty, and identifies the relevant global financing mechanisms.

39. National research capacity needs to be aligned with a complex global environment and the existence of diverse sources of funding for research.

40. Throughout the consultations for this strategy, the Secretariat, working with Member States, donors and key stakeholders, was consistently requested to make greater use of its convening power in order to draw attention to research for health in neglected areas, and to build consensus and catalyse new actions in support of such research.

41. When research capacity is low, WHO is expected to promote collaboration across countries and within regions in order to create a more effective research effort in response to shared health challenges. In such circumstances, as in the past, WHO will develop special programmes for research in order to stimulate activity, leverage resources and encourage innovation.

Actions to achieve the goal

42. Working with Member States and partners, the Secretariat will:

- (a) ensure that mechanisms are in place for synthesizing data on gaps in research relating to current health- and health system-related challenges at national and global levels;
- (b) convene high-level consultations to identify, and build consensus on, the priorities to include in global agendas for research for health and the financing necessary for implementing the relevant activities;

- (c) produce a report every four years on global priorities for research with an assessment of the alignment of financial and human resources with research agendas;
- (d) develop comprehensive research agendas for specific priority areas and develop plans for mobilizing the necessary resources;
- (e) advocate support for research areas, research groups and institutions that are working to close critical gaps in research agendas in support of global research priorities;
- (f) improve the coherence of WHO's research activities by establishing mechanisms for the periodic review of the portfolio of research agendas, including decision criteria to guide decision-making concerning the initiation, adjustment and winding down of programmes.

Expected results

43. Achievement of this goal should produce the results described below:

- greater awareness of, and action on, research priorities at a national level;
- greater awareness of, and action on, research priorities at regional and global levels;
- improved cooperation and coordination among research funders and other key partners to align global resources so that priority needs for research for health can be met;
- more robust agendas for research on specific priority areas that are facilitated by WHO, and greater coherence and clarity concerning WHO's involvement therein.

Capacity goal

44. The capacity goal is to support the development of robust national health research systems.

The challenge

45. Robust and vibrant national health research systems in all countries are critical for accelerating the achievement of national and global health goals, namely better health, improved health equity, and fairer, safer and more efficient health systems.

46. There has long been an understanding of the basic prerequisites for health research systems, namely clear national research policy, leadership, a capable research workforce, adequate financing, priority-setting mechanisms, strong regulatory frameworks and structures (including ethical oversight), well-equipped research institutions, and effective information systems and dissemination plans. Nevertheless, in many countries, particularly low- and middle-income countries, health research systems remain seriously underresourced and poorly managed, and health information systems are often absent or inadequate.

47. Such deficiencies are evidence of the following: an insufficient appreciation at a political level of the value of research in accelerating health improvement and development; the general absence of coordinated and sustained efforts to build national research systems; and the inability of fragmented research efforts driven by external actors to align themselves with strategies for strengthening national capacities.

48. In consultations for the development of this strategy, the strengthening of national systems for health research and the monitoring of their performance were deemed top priorities for WHO, as part of its key role of providing greater and more visible leadership.

49. WHO needs to foster collaboration between researchers and research institutions in low-, middle- and high-income countries through regional and global networks.

50. The coordination of activities to build research capacity will also need to be improved throughout the Organization. Such activities will need to be aligned with the priorities identified in Member States, and WHO will need to encourage a similar alignment on the part of other actors.

Actions to achieve the goal

51. Working with Member States and partners, the Secretariat will:

- (a) strengthen its advocacy in support of both research and the development of robust national systems for research for health;
- (b) develop tools and guidelines for strengthening national capacity in the four main functions of national systems for research for health (stewardship; financing; creating and sustaining resources; and producing, synthesizing and using knowledge);
- (c) continue to promote the development of the comprehensive systems for health information that are necessary in order to support national research priorities;
- (d) develop and use standardized indicators in order to enable self-reporting of the performance of national health research systems; monitor global progress in strengthening capacity; and evaluate the effectiveness of particular approaches to capacity building;
- (e) facilitate technical assistance to support the strengthening of national systems for health research;
- (f) build institutional capacity to report and share good practice, by facilitating regional and global networks, and with the involvement of WHO collaborating centres;
- (g) maximize the impact of efforts in Member States to build research capacity by improving the alignment of such initiatives across WHO's research programmes and activities.

Expected results

52. Achievement of this goal should produce the results described below:

- greater investment in research for health by countries and other actors;
- the existence in all countries, especially low- and middle-income ones, of national research strategies that articulate clear research priorities, credible capacity-building programmes and explicit terms of engagement for external stakeholders;
- the alignment of external stakeholders' research investments with national research strategies;
- the development and use of WHO guidelines on research capacity building, including indicators for measuring progress;
- progress reports on national research capacity and activities made every two or three years by the Secretariat through WHO's governing bodies and information databases;
- networks of researchers and communities of practice that actively exchange experiences and identify good practices in the area of capacity building for research;
- higher-quality, better-coordinated research activities through the alignment with country needs of WHO's efforts to build national research capacity.

Standards goal

53. The standards goal is to promote good research practice.

The challenge

54. Setting international norms, standards and guidelines is one of WHO's core functions, and an activity that the Organization is uniquely placed to perform. The norms, standards and guidelines related to research are applied to govern, manage and improve the quality of research; to address inefficiencies in the research process; and to improve access to information. They are essential to maintaining public trust, confidence and participation in research.

55. Member States, international organizations, stakeholders and the public expect WHO to do more to promote best practices in research. There is also an increasing demand for more accountability and transparency in the conduct of research.

56. One challenge is to develop a methodology that is rigorous, systematic and transparent, with clear criteria for deciding when WHO should work on a new standard or guideline, how that standard or guideline should be developed, and which stakeholders need to be involved. Such a methodology will need to accommodate differences in social and cultural contexts while protecting the rights and welfare of all participants in the research process.

57. Another challenge is to improve the implementation of, and compliance with, existing research standards. The standards concerned include those

related to ethics, ethics review committees and clinical trial registration, and laboratory biosafety and biosecurity. Although WHO cannot enforce compliance with standards (except, where applicable, for its own staff), it has an influential role to play in accelerating progress towards the development and adoption of global standards for best practices in research.

58. There is also a need to establish acceptable criteria for the use, for example in the development of guidelines, of evidence that could not be generated using conventional research approaches such as randomized trials.

Actions to achieve the goal

59. Working with Member States and partners, the Secretariat will:

- (a) develop a systematic method for selecting, developing, adopting and evaluating new standards and norms in line with priorities in research for health;
- (b) develop, in line with the guiding principles of this strategy, norms and standards for best practice in the management of research to cover, for example, ethical and expert review and the accreditation of ethical review committees; the reporting of research findings; the sharing of research data, tools and materials; the registration of clinical trials; and the use of evidence in the development of policy, practice and products;
- (c) continue to facilitate the development of, and set standards for, publicly accessible registries of clinical trials;
- (d) engage in technical cooperation with Member States in order to enable them to adapt and implement norms and standards for research, and monitor subsequent adherence and compliance.

Expected results

60. Achievement of this goal should produce the results described below:

- strengthened public support for and trust in health and medical research;
- implementation by WHO of an improved method for selecting, developing, adopting and evaluating norms and standards related to research;
- improved quality, efficiency, transparency, accountability and equity in the research process as a result of greater awareness, acceptance and implementation of standards for the management of research, and compliance therewith;
- improved acceptance of, and compliance with, ethical principles in the conduct of research, and the establishment of standards for accreditation of ethics committees;
- adoption by all countries of the registration of clinical trials according to WHO standards.

Translation goal

61. The translation goal is to strengthen links between research, policy and practice.

The challenge

62. Consultations for the development of this strategy revealed both the extent to which evidence fails to inform policy and practice, and the degree to which the research agenda fails to respond to policy needs. Referred to as “research translation”, the dynamic interface that links research with policy, practice and product development is increasingly seen as a priority area for research. In addition, new and improved methods are required for communicating health information and evidence effectively to different target audiences across multiple sectors, levels and languages.

63. A significant barrier to achieving this goal is the global inequality of access – in respect of research – to data, tools, materials and literature, which may arise due to restrictions placed on their reuse through the application of copyright and intellectual property. There are various standards that exist for information systems and interoperability but few that are consistently applied in the area of public health informatics.

64. WHO, with its reach into countries and contacts with researchers, policy-makers, practitioners and civil society, can play a unique role in advocating greater allocation of resources in support of research into this knowledge interface. WHO needs to facilitate access to quality data, consolidated evidence and authoritative health information and guidelines in order to support the dialogue between policy-makers and public health implementers. One WHO-led initiative, the Evidence-Informed Policy Networks initiative, is beginning to provide an approach to meeting these challenges.

65. WHO has contributed to improvements in this area through initiatives such as the Health InterNetwork Access to Research Initiative and the Reproductive Health Library, through the creation of the International Clinical Trials Registry Platform, and by allowing public access to the Organization's databases. However, access to research continues to be limited by a range of factors – including the lack of standards in health informatics, and problems of affordability and language – and the Organization needs to do more to involve itself fully with the open access movement.

Actions to achieve the goal

66. Working with Member States and partners, the Secretariat will:

- (a) identify promising translation activities through evaluation, and promote their use to support decision-making based on the best available research evidence;
- (b) promote the use of effective models of technology transfer and the evaluation of promising models in order to support the timely creation of new products and services in Member States;
- (c) promote and evaluate platforms for translating research in support of translation capacity and evidence-informed policy-making in Member States;

- (d) work towards the creation of, and compliance with, international standards on health informatics for research;
- (e) develop, strengthen and evaluate mechanisms for the systematic elaboration of evidence summaries and guidance for citizens, patients, clinicians, managers and policy-makers in Member States, ensuring that such mechanisms are adapted for the target audience and regularly updated, and that their impact is evaluated;
- (f) systematically analyse barriers and encourage the creation of mechanisms to promote greater access to research results, or the enhancement of existing ones;
- (g) adopt and articulate a WHO position on open access to research outputs, and support the creation and utilization of databanks, repositories and other mechanisms for maximizing the availability of health-related research findings that are freely accessible in the public domain.

Expected results

67. Achievement of this goal should produce the results described below:

- a situation in which decision-makers act as informed consumers of research, using available evidence and knowledge more effectively, creating evidence-informed policy and translating that policy into practice and products;
- establishment of institutional mechanisms for recording, and sharing lessons learnt from, research focused on the demand for research and the way evidence is used in policy and practice at country level;
- performance of research activities in order to understand the translation of evidence into policy and practice and the recognition of the important contribution that such research can make to research for health;
- creation and broad application of internationally agreed standards for the collection, storing and sharing of health informatics, tools and data;
- establishment of comprehensive repositories that include WHO's research literature and are well stocked, regularly updated and well used;
- development of existing repositories of systematic reviews, or the establishment of new ones, in order to meet the priority health needs of low- and middle-income countries;
- easy access on the part of both producers and users of research to reliable, relevant, appropriate and timely information that is provided in a format and language they understand;
- researchers who are more responsive to the demand side, including to the health-related research questions of policy-makers (in health and other sectors), practitioners and civil society;
- a more prominent role played by WHO in identifying effective health interventions and strategies, and in promoting their implementation in Member States.

Implementation

68. The Eleventh General Programme of Work 2006–2015 provides the WHO Secretariat, Member States and the international community with a global health agenda that stems from an analysis of the current global health situation. After setting the broader global health agenda, the General Programme of Work then describes WHO's comparative advantages, its core functions, the main challenges it faces and its priorities for the future. These priorities are further developed in the six-year Medium term strategic plan 2008–2013, which defines 13 strategic objectives for the Secretariat and Member States.

69. The Secretariat will work with Member States and partners to plan the implementation of the WHO strategy on research for health in support of the Medium-term strategic plan within the Eleventh General Programme of Work.

70. For the regional offices, the WHO strategy on research for health sets out a framework to guide the formulation of future regional research strategies.

71. The implementation plans will be realistic and will define clear roles, responsibilities, resources required, outcomes and impacts within a timetable as indicated in the evaluation framework. The plans will build on the research activities already under way in more than 34 WHO programmes, alliances and networks in support of the strategy's goals.

72. A plan for implementing the strategy will be incorporated into the Organization's operational arrangements and workplans and, in discussion with Member States, integrated into country cooperation strategies.

73. A report on progress will be submitted to the Health Assembly on a biennial basis, with the first report scheduled for 2012.

Critical issues in implementation

Governance within WHO

74. In order to ensure successful implementation of the strategy, the Organization will need to develop appropriate mechanisms for improving strategic and operational efficiency across the WHO portfolio of research activities. One possible mechanism would involve the creation of thematic groups working across the Organization in areas such as research capacity building and knowledge management. Such new mechanisms will be complemented by a thorough review and, where appropriate, revitalization of existing mechanisms. This will include a review of the role of technical and advisory committees, and a possible reconsideration of the role of the Advisory Committee on Health Research, both globally and in the regions.

Working with partners

75. In implementing the strategy, the Secretariat will also need to collaborate effectively with the dedicated research partnerships to which WHO is linked, but which are characterized by independent governance. The partnerships

concerned include the following: the Alliance for Health Policy and Systems Research; the UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction; the Initiative for Vaccine Research; the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases; the Council on Health Research for Development; and the Global Forum for Health Research. During the implementation process, the value of providing such partnerships with a governance structure that is more aligned, or even shared, with that of the WHO research strategy will be examined; modifications will be made to existing relationships in line with the actions for achieving specific goals.

76. In addition to collaborating with existing partnerships, in implementing the new strategy WHO is expected to work more effectively with key research partners, including industry, civil society, foundations and academia.

Staffing

77. The strategy's success will be largely contingent upon the efforts of WHO technical staff across the Organization. The Organization goal of the strategy provides several recommendations related to improving the research competencies of WHO staff through strengthened support for research, continued learning and changes to the recruitment and evaluation processes as appropriate. Particular attention will need to be paid to identifying the appropriate response for staff at country level. Once implemented, the code of good research practice will provide a common approach and a set of minimum standards for the research activities of staff wherever they are working. Staff will also be needed for ensuring the effective performance of functions related to cross-cutting thematic groups, ethical and guidelines review, standard setting and communications.

Funding

78. About 80% of the budget for conducting or commissioning research directed through programmes at headquarters (about US\$ 200 million per biennium) is financed through voluntary contributions. The WHO strategy on research for health aims to improve the quality of research outputs by influencing the way in which these resources are spent, rather than by increasing the level of financing.

79. Nevertheless, implementation of this strategy (and of the global strategy and plan of action on public health, innovation and intellectual property) requires an adequately resourced central secretariat responsible for, among other things, cross-cutting themes, communications and evaluation. The funding of the secretariat's activities will require core budget support, as funds from either the specific research activities of WHO departments or from voluntary contributions are unlikely to be available. The amount of money to support the secretariat function is modest, representing less than 5% of total research expenditure per biennium. Resources for these core functions will be fully budgeted in the Programme budget 2010–2011.

Evaluation

Overview

80. Evaluation is an integral part of the WHO strategy on research for health, and an evaluation framework has been developed in order to provide an impact-focused approach for assessing the achievement of the strategy's vision, mission and goals. A report providing details of the framework is available upon request.

81. More specifically, the framework will provide an approach for:

- monitoring implementation of the elements of the research strategy;
- evaluating the impact of the changes brought about by implementation of the strategy.

82. The evaluation framework for the WHO strategy on research for health covers both its implementation and its constituent elements, namely, the principles, goals, actions and expected results.

83. The framework has been developed in line with best practices in evaluation; it will:

- be focused on the shared goals and activities of the Secretariat, Member States and partners, as outlined by the research strategy;
- give a balanced picture of progress towards realizing the shared vision for the Secretariat, Member States and partners;
- be efficient, utilizing existing indicators and mechanisms wherever possible to minimize the reporting burdens of the Secretariat, Member States and partners.

Structure of the evaluation framework

84. The evaluation framework organizes the elements of the WHO strategy on research for health into inputs/activities, outputs, outcomes and impacts (known as a "logic model"); it also defines indicators to be tracked for each of these components (see below).

85. Although the strategy's ultimate impact should be improvements in health and health equity (such as those articulated in the Millennium Development Goals), identifying the contribution of research for health generally, and of the strategy in particular, in achieving wider health impacts represents a major challenge. Given the difficulties associated with predicting circumstances in which case studies of health impact would be feasible, the evaluation framework model focuses on impacts that can be evaluated prospectively. The framework can be expanded further to include new indicators of health impact after the implementation phase has started.

Monitoring progress

86. One or more indicators have been developed for each input/activity, output, outcome and impact. Table 2 provides a list of indicators, which is for illustrative purposes only.¹³

Table 2. List of indicators

Impact • percentage of priority health needs for which up-to-date systematic reviews of the research literature were made available within one year of the need being identified (priorities goal) • percentage of a random sample of clinicians in Member States who achieve a nationally defined target for adherence to select high-quality, locally applicable recommendations (translation goal)
Outcomes • percentage, within a random sample, of WHO's guidelines that are aligned with the best available research evidence (Organization goal) • percentage of Member States (specifically, their principal delegates at the Health Assembly) that report general satisfaction with the nature of technical cooperation received in support of their national health research system (capacity goal)
Outputs • biennial report on progress in strengthening national health research systems submitted to the Health Assembly (capacity goal) • norms and standards for research published (standards goal)
Inputs/activities • at least 5% of WHO's combined core and voluntary budgets allocated in support of research at WHO, including dedicated funds for the implementation and evaluation of the research strategy in the current biennium (Organization goal) • percentage of Member States whose priority-setting processes have been drawn on to inform priorities in research for health (priorities goal)

87. Although indicators available through existing mechanisms have been identified wherever appropriate, new indicators to improve monitoring of selected elements of the research for health agenda have been proposed, where necessary. These new indicators generally concern outcome- and impact-related measures, which are directly linked to the goals of the strategy. A full description of these indicators and proposed mechanisms for monitoring implementation is presented separately in the full evaluation framework.

¹³ A full list of indicators will be provided in the document presenting the full evaluation framework.



88. As suggested by the grouping of outputs in Table 1 above, the proposed reporting structures are of four types: governance-related indicators (to be compiled into a biennial report to the Health Assembly); management-related indicators (to be compiled into a biennial report to the Director-General); indicators for norms and standards; and indicators for other public reports and resources. All reports will be publicly available on WHO's web site.

Annexes

Annex 1: The Mexico Statement on Health Research

Knowledge for better health: strengthening health systems

FROM THE MINISTERIAL SUMMIT ON HEALTH RESEARCH

MEXICO CITY, NOVEMBER 16–20, 2004

We the Ministers of Health* and other participants from 58 countries

RECOGNIZE THAT:

1. There remain serious obstacles to achieve the Millennium Development Goals (MDGs) in many low and middle income countries.
2. Strong national health systems are needed to deliver health care interventions to achieve the health-related MDGs; to address other communicable and noncommunicable diseases, sexual and reproductive health, injuries, violence, and mental ill health; and to improve health and health equity.
3. Research has a crucial but under-recognized part to play in strengthening health systems, improving the equitable distribution of high quality health services, and advancing human development.
4. Research is an essential component of strong health systems for informed and knowledgeable action to improve people's health and accelerate the rate of global, regional, and national development.
5. High quality research is facilitated if each country has a strong, transparent, and sustainable national health research system, defined as the people, institutions, and activities whose primary purpose is to generate relevant knowledge adhering to high ethical standards, which can be used to improve the health status of populations in an equitable way.
6. Health policy, public health, and service delivery should be based on reliable evidence derived from high quality research. Research evidence comes from various sources, including those that illuminate personal and cultural values and differences, draw on the needs of patients and providers, and measure the benefits and potential risks of health interventions. Ignoring research evidence is harmful to individuals and populations, and wastes resources.
7. The findings of high quality research should be not only accessible to decision makers but also communicated in ways that effectively inform policy, public health, and health care decision making. Research results

must be published, documented in internationally accessible registers and archives, and synthesized through systematic reviews. These actions can help to inform decisions about support for new research and to build public confidence in science.

8. Biomedical and social science research contribute greatly to our understanding about the prevention, diagnosis, and treatment of a wide range of diseases. But crucial research aimed at strengthening public health and health systems has been neglected and under-funded. There should be a balanced and comprehensive research strategy that is inclusive of all relevant investigative approaches.
9. Health systems would be better able to deal with current global health challenges if existing interventions were adequately adopted and more effective interventions were developed for neglected diseases. Encouraging and supporting national, regional, and global product development and public-private partnerships, including partnership initiatives with developing countries, could contribute to fulfilling this need.

CONSCIOUS OF THE NEED TO:

1. Re-affirm the culture and practice of high quality research, knowledge generation, and its application as critical to (i) the attainment of health targets within the MDGs; (ii) the performance of health systems, including expanding the capacity of human resources for health; (iii) the vitality of a country's socio-economic development; and (iv) the achievement of health equity.
2. Strengthen evidence-based evaluation of the consequences of health and other policies and practices at national, regional, and local levels.
3. Address the social determinants of health, including those related to gender, income, education, ability, conflict and ethnicity.
4. Involve and inform users of evidence to create demand for research and to foster participation in the research process.
5. Strengthen national health research systems by building relevant capacity, developing capable leadership, providing essential monitoring and evaluation tools, improving capacity for ethical review of research, and putting in place necessary ethical standards and regulations for population health, health services, and clinical research.
6. Promote access to reliable, relevant, and up-to-date evidence on the effects of interventions, based on systematic reviews of the totality of available research findings.
7. Identify under-funded areas of research, such as on health systems and public health, where increased resources and leadership would accelerate the achievement of critical health goals.

8. Emphasize that research is a global endeavour based on the sharing of knowledge and information.
9. Build and strengthen public trust and confidence in science.

CALL FOR ACTION BY:

1. *National governments* to commit to fund the necessary health research to ensure vibrant health systems and reduce inequity and social injustice.**
2. *National governments* to establish and implement a national health research policy.
3. *National governments* to promote activities to strengthen national health research systems, including the creation of informed decision makers, priority setting, research management, monitoring performance, adopting standards and regulations for high quality research and its ethical oversight, and ensuring community, nongovernmental organization, and patient participation in research governance.
4. *National governments* to establish sustainable programmes to support evidence-based public health and health care delivery systems, and evidence-based health related policies.
5. *National governments, WHO secretariat, and the international community* to support networking of national research agencies in conducting collaborative research to address global health priorities.
6. *Funders of health research* to support a substantive and sustainable programme of health systems research aligned with priority country needs.
7. *All major stakeholders*, facilitated by *WHO secretariat*, to establish a platform linking a network of international clinical trials registers to ensure a single point of access and the unambiguous identification of trials.
8. *All major stakeholders* to strengthen or to establish activities to communicate, improve access to, and promote the use of reliable, relevant, unbiased, and timely health information.
9. *The international health research community* to ensure broad support for national, regional, and global partnerships, including public-private partnerships, to accelerate the development of essential drugs, vaccines, and diagnostics, and to ensure the equitable delivery of these interventions.
10. *WHO secretariat* to report progress on the Mexico Statement at the UN Millennium Development Goals Summit in 2005, at a conference on health systems in 2006, and at the next Ministerial Summit on health research in 2008; and to convene a ministerial level international conference on research into human resources for health.

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- * Named Ministers or ministerial representatives to come.
 - ** For example, the Commission on Health Research for Development in 1990 recommended that “developing countries should invest at least 2% of national health expenditures in research and research capacity strengthening, and at least 5% of project and program aid for the health sector from development aid agencies should be earmarked for research and research capacity strengthening”. WHO should consider allocating a proportion of its country budgets to support high-quality health systems research.

Annex 2: World Health Assembly resolution WHA58.34

WHA58.34 Ministerial Summit on Health Research

The Fifty-eighth World Health Assembly,

Having considered the *Mexico Statement on Health Research* resulting from the Ministerial Summit on Health Research convened by the Director-General of WHO and the Government of Mexico (Mexico City, 16–20 November 2004) and the report of the Secretariat;¹

Acknowledging that high-quality research, and the generation and application of knowledge are critical for achieving the internationally agreed health-related development goals, including those contained in the United Nations Millennium Declaration, improving the performance of health systems, advancing human development, and attaining equity in health;

Recognizing the need to strengthen evidence-based evaluation of the consequences of health and other policies and practices impacting on health at national, regional, and local levels;

Reaffirming the need to create demand for research and to foster participation in the research process;

Sensitive to the need to strengthen national health-research systems by building relevant capacity, developing capable leadership, providing essential monitoring and evaluation tools, improving capacity for ethical review of research, and determining necessary ethical standards and regulations for population health, health care, and clinical research;

Committed to promoting access to reliable, relevant, and up-to-date evidence on the effects of interventions, based on systematic review of the totality of available research findings, and taking into account existing models;

Conscious of the need to identify relatively underfunded areas of research, such as health systems and public health, where increased resources and leadership would accelerate the achievement of internationally agreed health-related development goals;

Emphasizing that research is a global endeavour based on the sharing of knowledge and information and conducted according to appropriate national ethical guidelines and standards,

1. ACKNOWLEDGES the *Mexico Statement on Health Research* resulting from the Ministerial Summit on Health Research (Mexico City, 16–20 November 2004);

1 Document A58/22.

2. URGES Member States:

- (1) to consider implementing the recommendation made by the Commission on Health Research for Development in 1990 that “developing countries should invest at least 2% of national health expenditures in research and research capacity strengthening, and at least 5% of project and program aid for the health sector from development aid agencies should be earmarked for research and research capacity strengthening”;²
- (2) to establish and implement or strengthen a national health-research policy with appropriate political support and to allocate adequate funding and human resources for health-systems research;
- (3) to encourage collaboration with other partners in health research so as to facilitate the conduct of such research within their health systems;
- (4) to promote activities to strengthen national health-research systems, including improvement of the knowledge base for making decisions, setting priorities, managing research, monitoring performance, and adopting standards and regulations for high-quality research and its ethical oversight, and ensure participation in such activities of the community, nongovernmental organizations, and patients;
- (5) to establish or strengthen mechanisms to transfer knowledge in support of evidence-based public health and health-care delivery systems, and evidence-based health-related policies;
- (6) to support, together with WHO and the global scientific community, networking of national research agencies and other stakeholders with a view to conducting collaborative research in order to address global health priorities;
- (7) to encourage public debate on the ethical dimension and societal implications of health research among researchers, practitioners, patients and representatives of civil society and the private sector and to encourage transparency on research results and on possible conflicts of interest;

3. CALLS UPON the global scientific community, international partners, the private sector, civil society, and other relevant stakeholders, as appropriate:

- (1) to provide support for a substantive and sustainable programme of health-systems research aligned with priority country needs and aimed at achieving the internationally agreed health-related development goals, including those contained in the United Nations Millennium Declaration;
- (2) to establish a voluntary platform to link clinical trials registers in order to ensure a single point of access and the unambiguous identification of

² Commission on Health Research for Development. *Health research: essential link to equity in development*. New York, Oxford University Press, 1990.

trials with a view to enhancing access to information by patients, families, patient groups and others;

- (3) to strengthen or establish the transfer of knowledge in order to communicate, improve access to, and promote use of, reliable, relevant, unbiased, and timely health information;
- (4) to provide support for national, regional, and global research partnerships, including public-private partnerships, to accelerate the development of essential medicines, vaccines, and diagnostics, and mechanisms for their equitable delivery;
- (5) to recognize the need to involve the relevant authorities in the Member States concerned in the initial planning of health-research projects;
- (6) to support, together with Member States and the WHO Secretariat, networking of national research agencies and other stakeholders to the greatest extent possible as a means of identifying and conducting collaborative research that would address global health priorities;

4. REQUESTS the Director-General:

- (1) to undertake an assessment of WHO's internal resources, expertise and activities in the area of health research, with a view to developing a position paper on WHO's role and responsibilities in the area of health research, and to report through the Executive Board to the Fifty-ninth World Health Assembly;
- (2) to engage in consultation with interested stakeholders on creation of a programme on health-systems research geared to providing support to Member States to accelerate achievement of internationally agreed health-related development goals, including those contained in the United Nations Millennium Declaration;
- (3) to pursue with interested partners the development of a voluntary platform to link clinical trials registers;
- (4) to assist in the development of more effective mechanisms to bridge the divide between ways in which knowledge is generated and ways in which it is used, including the transformation of health-research findings into policy and practice;
- (5) to consider the possibility, with other interested stakeholders, of convening an international conference on research into human resources for health, and to consider convening the next ministerial-level meeting on health research in 2008;
- (6) to ensure that meetings open to all Member States on health research organized by WHO that are characterized as summits or as ministerial summits are first approved by the Health Assembly.

(Ninth plenary meeting, 25 May 2005)

Annex 3: World Health Assembly resolution WHA60.15

WHA60.15 WHO's role and responsibilities in health research

The Sixtieth World Health Assembly,

Recalling resolution WHA58.34 on the Ministerial Summit on Health Research;

Having considered the report on WHO's role and responsibilities in health research;¹

Acknowledging the critical role of the entire spectrum of health and medical research in improving human health;

Recognizing that research into poverty and inequity in health is limited, and that the ensuing evidence is important to guide policy in order to minimize gaps;

Reaffirming that research to strengthen health systems is fundamental for achieving internationally agreed health-related development goals, including those contained in the United Nations Millennium Declaration;

Recognizing that a wide gap exists between developed and developing countries in the capacity for health research, that it may hamper efforts to achieve better health results, and that it may contribute to worsening the brain drain;

Noting in particular the work of IARC, the WHO Centre for Health Development, the UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases, and the UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction;

Convinced that research findings and data derived from effective health-information systems should be used to inform decisions on the delivery of interventions to those who need them most;

Mindful that the Organization should lead by example in the use of research findings to inform decisions about health;

Reaffirming the role of WHO's cosponsored research programmes in support of neglected areas of research relevant to poor and disadvantaged populations, particularly poverty-related diseases, tuberculosis, malaria and AIDS, and recognizing the contributions of WHO to strengthening research capacity;

1 Document A60/23.

Committed to ensuring ethical standards in the conduct of health research supported by the Organization;

Recognizing the need to evaluate progress in health research since 2004 and to discuss the future needs of all Member States with regard to the promotion of evidence-based health research and policies,

1. URGES Member States:

- (1) to consider implementing the recommendation made by the Commission on Health Research for Development in 1990 that “developing countries should invest at least 2% of national health expenditures in research and research capacity strengthening, and at least 5% of project and programme aid for the health sector from development aid agencies should be earmarked for research and research capacity strengthening”;²
- (2) to consider the development and strengthening of resource-tracking tools in order to monitor expenditure on health research from government and donor sources, and to disseminate relevant research findings to policy-makers, civil-society entities and the general public;
- (3) to integrate research in the mainstream of national programme activities and plans, and to promote wider access to research findings;
- (4) to strengthen the capacity of national and institutional ethics committees that review health-research proposals, as appropriate;
- (5) to draw up or strengthen health-research policies and health-research legislative documents, as appropriate;
- (6) to create a sustained training programme for research managers and to facilitate a cadre of trained professionals to manage health research, where necessary;
- (7) to improve the career management of researchers who do not necessarily come under the authority of the ministry responsible for research, as appropriate;
- (8) to consider strengthening national research capacities in the following complementary areas: generation of new knowledge, human and financial resources, research institutes and use of research findings in policy decisions, and to foster national and international networks for research collaboration;
- (9) to develop and strengthen a participatory mechanism, as appropriate, for all stakeholders in order to prioritize the health-research agenda on the basis of dynamic changes in health systems, disease burden, and emerging health-related issues.

² In *Commission on Health Research for Development. Health research: essential link to equity in development*. New York, Oxford University Press, 1990.

2. CALLS UPON the health-research community, other international organizations, the private sector, civil society and other concerned stakeholders to provide strong, sustained support to research activities across the entire spectrum of health, medical and behavioural research, especially research into communicable diseases and poverty and inequity in health, with the participation of communities and in keeping with national priorities, and to maintain support of activities that promote the use of research findings to inform policy, practice and public opinion;

3. REQUESTS the Director-General:

- (1) to promote and advocate research in neglected areas of importance for better health, in particular on diseases that disproportionately affect developing countries and for poor and disadvantaged groups;
- (2) to strengthen the culture of research for evidence-based decision-making in the Organization and to ensure that research informs its technical activities;
- (3) to develop a reporting system on WHO's activities in health research;
- (4) to improve significantly coordination of relevant research activities, including integration of research into disease control and prevention, and to designate one focal point within the Organization who has the overview of all WHO's research activities;
- (5) to review the use of research evidence for major policy decisions and recommendations within WHO;
- (6) to establish transparent mechanisms for prioritization of research activities and projects within WHO, including independent peer-review mechanisms, and selection criteria such as relevance and scientific quality;
- (7) to establish standard procedures and mechanisms for the conduct of research and use of findings by the Organization, including registration of its research proposals in a publicly accessible database, peer review of proposals, and dissemination of findings;
- (8) to advise Member States, when requested, on ways to organize systems for research for better health;
- (9) to promote better access to relevant research findings, including by supporting the movement towards open access to scientific journals;
- (10) to provide support to Member States in order to develop capacities for health-systems and health-policy research, where necessary;
- (11) to provide technical support to Member States for strengthening the capacity of national and institutional health-research ethics committees, reviewing complex research protocols, and drafting national health policies and health-research legislative documents;

- (12) to identify and implement mechanisms to provide better support to countries and regions in recognizing and maximizing health research as a key factor in the development of health systems, in particular in developing countries;
- (13) to formulate simple priority-setting strategies for health research for use by national governments, where appropriate;
- (14) to institute appropriate systems and mechanisms for greater interaction and convergence among researchers and users of relevant research in order to improve use of research findings and to enhance framing of health policy;
- (15) to provide capacity-building opportunities in health economics, assessment of health technology, economic impact of disease, and costing of various interventions so that a country may optimize its health-system delivery;
- (16) to build up capacity in order to monitor and report to Member States on total expenditure on health research by country and region, by public and donor sources, and by type of expenditure;
- (17) to submit to the Sixty-second World Health Assembly a strategy for the management and organization of research activities within WHO;
- (18) to convene a ministerial conference on health research, open to all Member States, in Bamako, November 2008.

(Eleventh plenary meeting, 23 May 2007)

Annex 4: World Health Assembly resolution WHA63.21

WHA63.21 WHO's role and responsibilities in health research¹

The Sixty-third World Health Assembly,

Having considered the draft of the WHO strategy on research for health;²

Recalling resolution WHA58.34 on the Ministerial Summit on Health Research and resolution WHA60.15 on WHO's role and responsibilities in health research;

Recognizing the contribution of research to the development of solutions to health problems and the advancement of health worldwide;

Aware that, in a rapidly changing world facing significant environmental, demographic, social and economic challenges, research will be increasingly essential for clarifying the nature and scope of health problems, and for identifying effective life-saving interventions and strategies;

Realizing the increasingly multidisciplinary and intersectoral nature of research for health improvement;

Affirming the roles and responsibilities of WHO, as the leading global health organization, in health research;

Recognizing the need to strengthen the capacity of the public sector in health research;

Acknowledging that research activities in the private and public sectors can be mutually supportive and complementary in improving health globally;

Conscious of the need to strengthen the conduct, management and coordination of WHO's activities in health research;

Cognizant of the need to better communicate WHO's research activities and results, especially to its Member States and partners;

Noting the references to research for health in resolution WHA61.21 on the Global strategy and plan of action on public health, innovation and intellectual property and relevant conclusions and recommendations of the WHO Commission on Social Determinants for Health;

Taking into account the outcomes of the Global Ministerial Forum on Research for Health (Bamako, 17–19 November 2008),

1 For financial and administrative implications for the Secretariat of this resolution, see document A63/22 Add.1.

2 Document A63/22.

1. ENDORSES the WHO strategy on research for health;

2. URGES Member States:

- (1) to recognize the importance of research for improving health and health equity and to adopt and implement policies for research for health that are aligned with national health plans, that include the participation of all relevant sectors, public and private, that align external support around mutual priorities, and that strengthen key national institutions;
- (2) to consider drawing on the WHO strategy on research for health according to their own national circumstances and contexts, and as part of their overall policies on health and health research;
- (3) to strengthen national health research systems by improving the leadership and management of research for health, focusing on national needs, establishing effective institutional mechanisms for research, using evidence in health policy development, and harmonizing and coordinating national and external support (including that of WHO);
- (4) to establish, as necessary and appropriate, governance mechanisms for research for health, to ensure rigorous application of good research norms and standards, including protection for human subjects involved in research, and to promote an open dialogue between policy-makers and researchers on national health needs, capacities and constraints;
- (5) to improve the collection of reliable health information and data and to maximize, where appropriate, their free and unrestricted availability in the public domain;
- (6) to promote intersectoral collaboration and high-quality research in order to produce the evidence necessary for ensuring that policies adopted in all sectors contribute to improving health and health equity;
- (7) to initiate or strengthen intercountry collaboration with the aim of obtaining efficiencies of scale in research through the sharing of experiences, best practices and resources, the pooling of training and procurement mechanisms, and the use of common, standardized evaluation methods for research;
- (8) to consider, where appropriate, establishment of regional collaborating mechanisms, such as centres of excellence, in order to facilitate access by Member States to the necessary research and expertise to meet health challenges;
- (9) to continue to pursue financing of research for health as articulated in resolution WHA58.34 on the Ministerial Summit on Health Research;

3. INVITES Member States, the health research community, international organizations, supporters of research, the private sector, civil society and other concerned stakeholders:

- (1) to provide support to the Secretariat in implementing the WHO strategy on research for health and in monitoring and evaluating its effectiveness;
- (2) to collaborate with the Secretariat, within the framework of the strategy, in identifying priorities for research for health, in developing guidelines relating to research for health and in the collection of health information and data;
- (3) to assist the Secretariat and WHO's research partners in mobilizing enhanced resources for the identified global priorities for research for health;
- (4) to pay particular attention to the research needs of low-income countries, notably in areas such as technology transfer, research workforce, and infrastructure development and the determinants of health particularly where this will contribute to the achievement of the Millennium Development Goals, health equity and better health for all and to collaborate with WHO's Member States and the Secretariat to better align and coordinate the global health research architecture and its governance through the rationalization of existing global health research partnerships, to improve coherence and impact, and to increase efficiencies and equity;
- (5) to support, where appropriate, technical cooperation among developing countries in research for health;

4. REQUESTS the Director-General:

- (1) to provide leadership in identifying global priorities for research for health;
- (2) to implement the WHO strategy on research for health within the Organization at all levels and with partners, and in line with the references to research for health in the Global strategy and plan of action on public health, innovation and intellectual property;
- (3) to improve the quality of research within the Organization;
- (4) to provide adequate core resources in proposed programme budgets for the implementation of the WHO strategy on research for health;
- (5) to ensure that the highest norms and standards of good research are upheld within WHO, including technical, ethical and methodological aspects and the translation into practice, use and dissemination of results and to review and align the architecture and governance of the Organization's research activities and partnerships;

- (6) to provide support to Member States, upon request and as resources permit, in taking relevant actions to strengthen national health research systems and intersectoral collaborations, including capacity building in order to create a sustainable critical mass of health systems and health policy researchers in developing countries;
- (7) to strengthen the role of WHO collaborating centres as a well-established, effective mechanism for cooperation between the Organization and countries in the field of research for health;
- (8) to report to the Sixty-fifth World Health Assembly on the implementation of this resolution, through the Executive Board.

(Eighth plenary meeting, 21 May 2010)

Annex 5: The Bamako Call to Action

THE BAMAKO CALL TO ACTION ON RESEARCH FOR HEALTH

Strengthening research for health, development, and equity

FROM THE GLOBAL MINISTERIAL FORUM ON RESEARCH FOR HEALTH

BAMAKO, MALI, NOVEMBER 17–19, 2008

We the Ministers and representatives of ministries of health, science and technology, education, foreign affairs, and international cooperation from 53 countries,¹

Following regional consultations on research for health in Algiers, Bangkok, Copenhagen, Rio de Janeiro, and Tehran,

Gathered in Bamako 17–19 November 2008 hosted by the Government of Mali.

WE RECOGNIZE THAT

1. We must continue to build on and sustain the progress made since the Mexico Ministerial Summit on Health Research in 2004;
2. Research and innovation have been and will be increasingly essential to find solutions to health problems, address predictable and unpredictable threats to human security, alleviate poverty, and accelerate development;
3. The global research for health agenda should be determined by national and regional agendas and priorities, with due attention to gender and equity considerations;
4. Greater equity in research for health is needed: only a small proportion of global spending on research addresses the health challenges that disproportionately affect the poor, marginalized, and disadvantaged;
5. The nature of research and innovation for health improvement, especially in the context of the United Nations Millennium Development Goals, is not sufficiently inter-disciplinary and inter-sectoral; there is a need to mobilize all relevant sectors (public, private, civil society) to work together in effective and equitable partnerships to find needed solutions;

¹ Algeria, Angola, Bahrain, Benin, Brazil, Burkina Faso, Cameroon, Canada, Cape Verde, Chad, Congo, Denmark, France, Guinea Bissau, Indonesia, Iran, Iraq, Ireland, Japan, Libya, Malawi, Mali, Mauritania, Mexico, Morocco, Namibia, Nepal, Netherlands, Nigeria, Norway, Paraguay, Philippines, Poland, Portugal, Rwanda, Senegal, Seychelles, Sierra Leone, South Africa, Sri Lanka, Sudan, Sweden, Switzerland, United Republic of Tanzania, Thailand, Timor Leste, Trinidad and Tobago, Tunisia, Uganda, United Arab Emirates, United Kingdom, United States and Zimbabwe

6. There is often misalignment between funders, governments, and other organizations in relation to research for health;
7. Strong national commitment to science education at all levels of the education system is critical to success in research for health and to the advancement of societies;
8. Funding for research for health, especially in low- and middle-income countries, is difficult to secure, but there are considerable societal returns available as a result of that investment. This is especially true in times of economic crisis; now is the time to invest in research for health;
9. There are ongoing international efforts in the areas of public health, innovation, and intellectual property, which need to be fully implemented in order to ensure more equitable access to interventions.

**GUIDED BY THE BAMAKO PRINCIPLES OF LEADERSHIP,
ENGAGEMENT, AND ACCOUNTABILITY,**

WE CALL FOR ACTION BY

National governments

1. To give priority to the development of policies for research and innovation for health, especially related to primary health care, in order to secure ownership and control of their research for health agendas;
2. To allocate at least 2% of budgets of ministries of health to research;
3. To improve capacity in institutions, ministries, and throughout systems for the implementation of research policies, including: identifying national research priorities; responding in a timely way to unpredictable health threats; providing a conducive environment for development of a strong research culture; ensuring technology transfer; improving education and training of researchers; integrating research for health within health systems; translating research into action; and evaluating the impact of research for health;
4. To develop, set, and enforce standards, regulations, and best practices for fair, accountable, and transparent research processes, including those related to ethical review and conduct, product development and manufacturing, quality and safety of patient care, the registration and results reporting of clinical trials, and open and equitable access to research data, tools, and information;
5. To promote knowledge translation and exchange through the application of effective and safe interventions, evidence-informed policies, policy-informed research, and publication and effective dissemination of research results, including to the public, taking into consideration the diversity of languages and advances in information technology;

6. To develop mechanisms and tools to enable effective inter-sectoral, inter-ministerial, and inter-country research collaboration and coordination to address complex health challenges;
7. To strengthen the efficient collection, storage, and sharing of reliable health information and data according to international standards, to ensure utilization of the existing bodies of knowledge, and to develop skills for local data analysis and its use in policy development, planning, monitoring, and evaluation;
8. To strengthen research capacity and build a critical mass of young researchers by developing and including curricula on research methods and research ethics, especially but not exclusively for students of health sciences; and to stress the importance of scientific research in secondary and tertiary levels of education;

Appropriate institutions at the regional level

9. To assist countries through international collaboration and where there is an identified need to build and strengthen research for health capacity;
10. To work through regional alliances to advocate for research, establish networks of researchers and regional centres of excellence, ensure coherent and sustainable funding, improve education and career opportunities in research and research management, and strengthen harmonization of regulation and ethical conduct;

All partners and stakeholders

11. To harness the potential of research by drawing on new sciences, emerging technologies, and social and technological innovations to address priority health challenges;
12. To implement the recommendations of the WHO Task Force on Scaling Up Research and Learning on Health Systems: namely, 1) mobilize around a high-profile agenda of research and learning to improve the performance of health systems; 2) engage policy makers and practitioners in shaping the research agenda, and using evidence to inform decision-making; 3) strengthen country capacity for health systems research backed up by effective regional and global support; 4) increase financing for health systems research and learning;
13. To implement the recommendations from the WHO Commission on the Social Determinants of Health, especially those related to health equity;
14. To promote and share the discovery and development of, and access to, products and technologies addressing neglected and emerging diseases which disproportionately affect low- and middle-income countries;
15. To ensure civil society and community participation in the entire research process, from priority setting to the implementation and evaluation of

policies, programmes, and interventions; and to support civil society in advocacy to key decision-makers, including politicians, for increased investment in and commitment to research for health;

Funders of research and innovation, and international development agencies

16. To better align and harmonize their funding and programmes to country research and innovation for health plans and strategies, in line with the Paris Declaration on Aid Effectiveness;
17. To better align, coordinate, and harmonize the global health research architecture and its governance through the rationalization of existing organizations, to improve coherence and impact, and to increase efficiencies and equity;
18. To invest at least 5% of development assistance funds earmarked for the health sector in research, including support to knowledge translation and evaluation as part of the research process, and to pursue innovative financing mechanisms for research for health;
19. To increase and sustain support for national research and innovation systems for health – in particular research institutions – in low- and middle-income countries, and to ensure support for ongoing initiatives developed in response to the Mexico Statement;

Multilateral agencies, together with Member States and partners

20. To ensure that WHO streamlines the architecture and governance of its research activities and effectively implements in unison both the strategy on research for health and the Global strategy and plan of action on public health, innovation, and intellectual property;
21. To promote research for health within UNESCO as an important inter-sectoral issue in capacity building and in policy advice provided to governments in education, the sciences, culture, and communication;
22. To urge the World Bank Group and regional development banks to deepen and expand their research for health activities as part of their economic and operational research programmes, with particular emphasis on health systems research and innovation, and national science and technology capacity building;
23. To evaluate the effectiveness and value of the four-yearly ministerial fora prior to convening a further high-level inter-sectoral forum to discuss global research for health priorities;
24. To explore the feasibility of establishing November 18 each year as a World Day of Research for Health.



**World Health
Organization**

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