Strategic Purchasing

EVIDENCE FOR DECISIONS ON HEALTH BENEFITS - ROLE OF HTA

Strategic Purchasing Meeting

WHO, Geneva, May 2017

Mohamed Gad

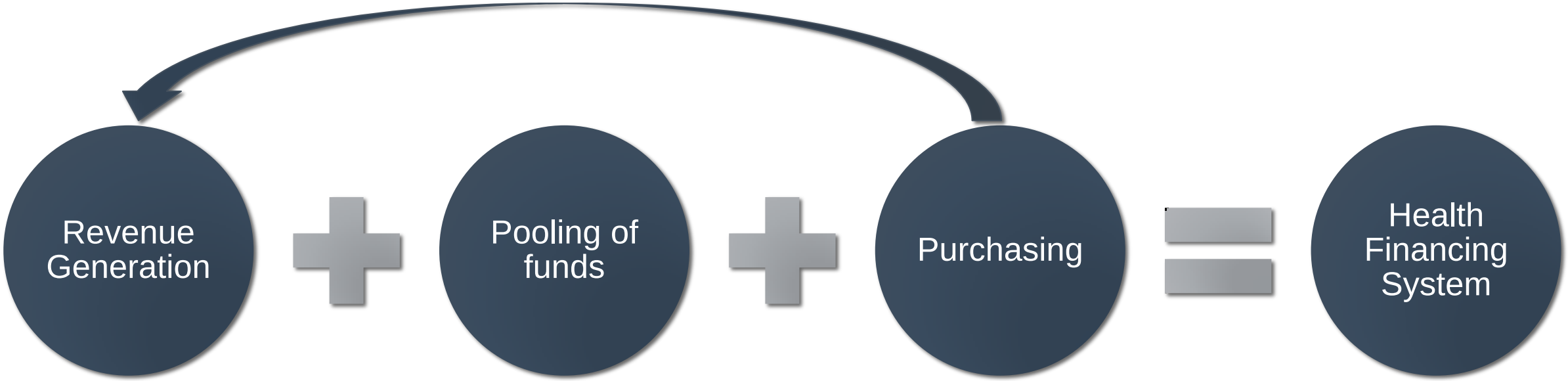
Technical Analyst- Health Economics,
Global Health and Development,
Imperial College London

www.idsihealth.org

Agenda

- Strategic purchasing- a missed focus..
- Coverage decisions & Benefits package review.
- HTA for Pricing & price negotiations.
- Linking HTA into reimbursement within payment management systems
- Institutionalization- making it work..
- Conclusions

Strategic Purchasing - A missed focus..



"Raising sufficient money for health is imperative, but just having the money will not ensure universal coverage. Nor will removing financial barriers to access through prepayment and pooling. The final requirement is to ensure resources are used efficiently."

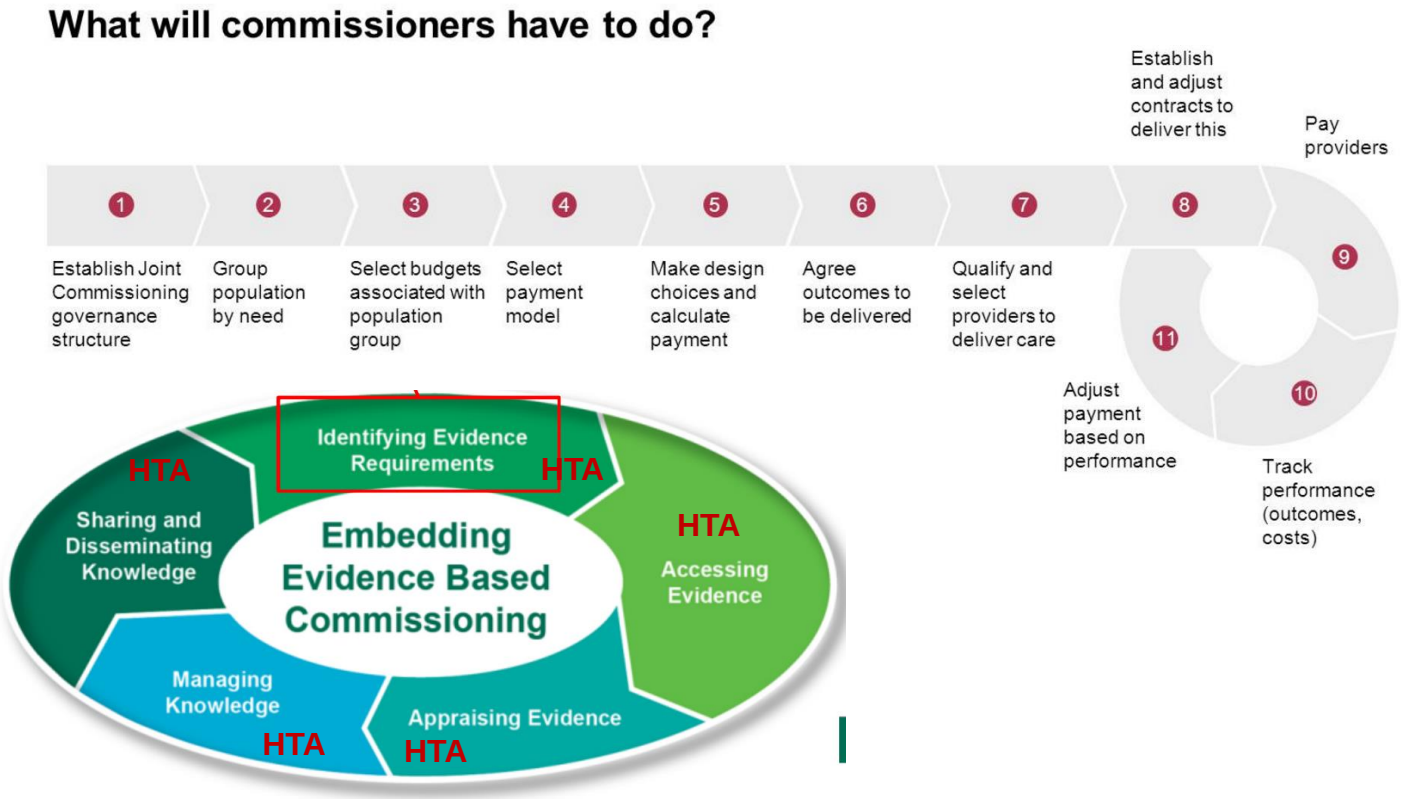
2010 World Health Report on financing for universal coverage

Evidence-informed strategic purchasing

- **Determining what to buy, from whom, how (and for how much) - HTA to**
  - identify comparative value of alternatives and determine a “value based price” based on budgetary (and other) constraints and/or growth monies available
  - design outcome/quality based indicators and performance manage through appropriate contracts

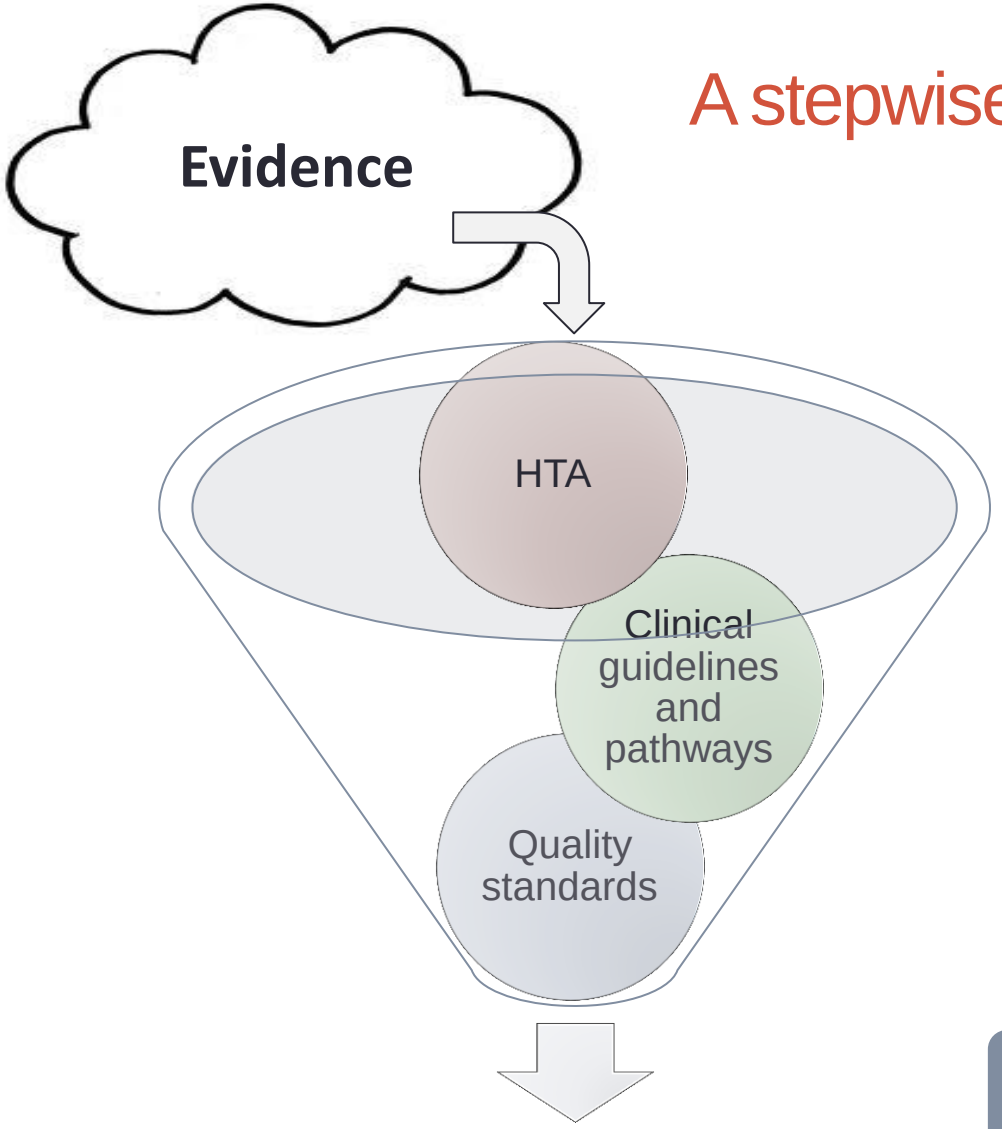
The commissioning cycle

Courtesy of The NHS Information Centre for health and social care. Full diagram available at: www.ic.nhs.uk/commissioning



HTA FOR COVERAGE DECISIONS AND PACKAGE REVIEW

A stepwise process from evidence to policy



Financial and non-financial levers for quality improvement

Health technology assessment (HTA) to compare clinical and cost-effectiveness of different interventions

Clinical guidelines (STGs) and pathways distilled from HTA and other evidence

Quality standards and indicators from evidence-based guidelines

Health benefits plans (HBPs), pay-for-performance, other levers (regulation, accreditation, education…)

Defining health benefits plan

- Minimum attributes:
  - **Total size is constrained by available funds**
  - Completely or partially constrains products and services available through health system
  - Comprises a portfolio of products and interventions
    - Not a single technology, not a vs. b
- *Not*:
- Ad hoc rationing or implicit resource allocation (using budget until $ runs out then user fees or no provision, or constraining supply capacity)
- only technical exercise, but also political, procedural, institutional, fiscal, ethical and legal undertaking
  - Informing all relevant health system functions in order to be effective

Works at different levels: political decision where to start

CVD	HIV	Diabetes	RTAs	HIV	MCH	Cancer
Primary prevention	Primary prevention	Primary prevention	Primary prevention	Primary prevention	Primary prevention	Primary prevention
Secondary prevention	Secondary prevention	Secondary prevention	Secondary prevention	Secondary prevention	Secondary prevention	Secondary prevention
Primary care	Primary care	Primary care	Primary care	Primary care	Primary care	Primary care
Secondary care	Secondary care	Secondary care	Secondary care	Secondary care	Secondary care	Secondary care
Tertiary care	Tertiary care	Tertiary care	Tertiary care	Tertiary care	Tertiary care	Tertiary care
Long term care	Long term care	Long term care	Long term care	Long term care	Long term care	Long term care
EOL care	EOL care	EOL care	EOL care	EOL care	EOL care	EOL care

Populations

- Children
- Pregnant
- Poor
- Ethnic
- Old
- Disabled
- Rural
- Employed

Interventions

- Education
- Public awareness
- Diagnostics
- Screening
- Vaccines
- Drugs
- Surgery

Pros and Cons of Explicit Plans/Lists

- All countries have some kind of mechanism to determine what set of medicines and devices they currently buy– implicitly or explicitly.

Pros of explicit lists

- improve allocative efficiency
- increase equity
- strengthen transparency and accountability of publically funded services
- make case for additional funding
- enforce implementation including through appeals and even judiciary

Cons of explicit lists

- prove technically challenging to develop and enforce (difficulty determining costs and resource use)
- limit necessary local autonomy (issues adhering to budgets)
- limit necessary local autonomy of providers in adapting patients' needs
- vulnerable to arbitrary departures from consistent decision-making, in the face of lobbying and other political pressures
- Judiciary empowered to decide

HTA FOR (STRAIGHT) PRICE NEGOTIATIONS

The case of Thailand and China

Monday 15 August 2016 Campaigns and policy

International comparisons of Health Technology Assessment

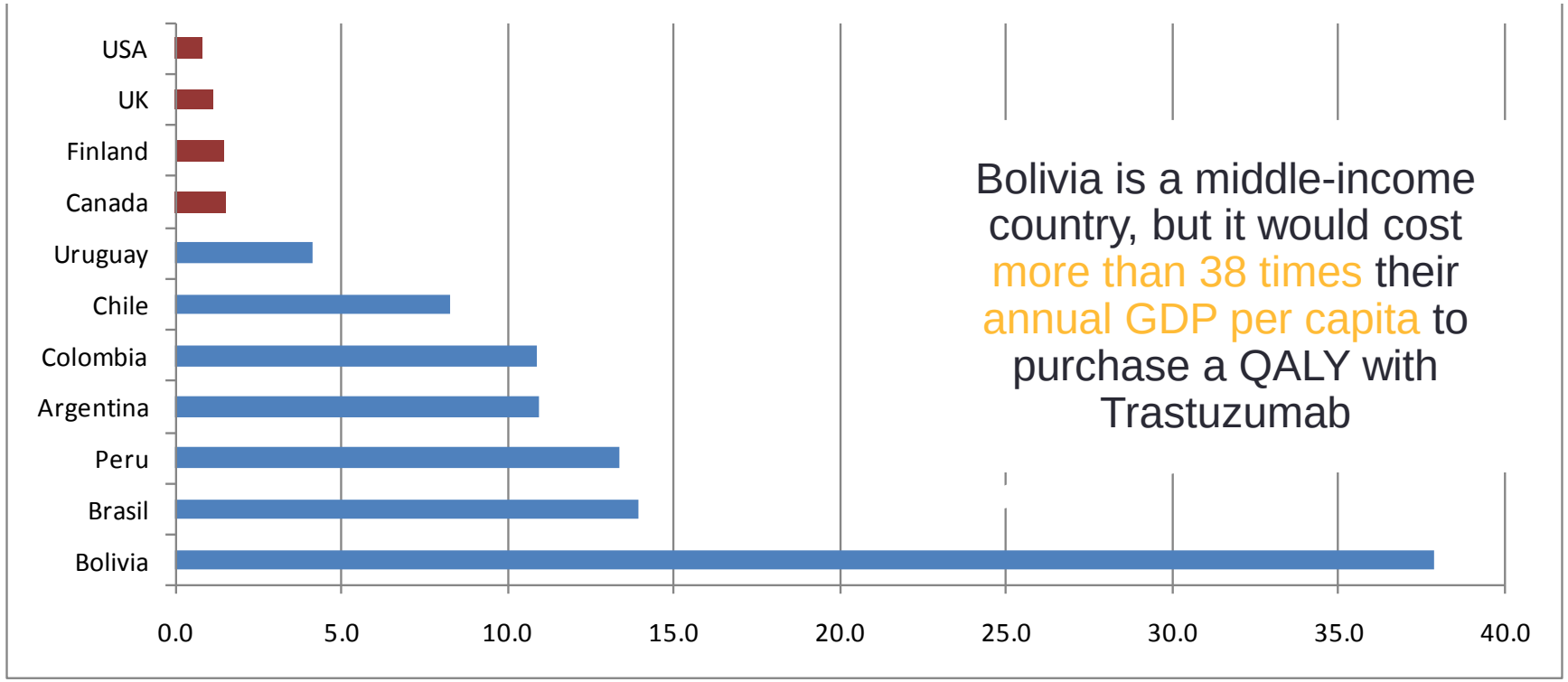
A report from Breast Cancer Now and Prostate Cancer UK

"…**more flexibility** [should] be brought into the system **to allow price negotiation**, as happens in other countries."

A new report by leading charities Breast Cancer Now and Prostate Cancer UK shows NHS cancer patients in the UK are missing out on innovative treatments being made available in some comparable countries of similar wealth.

Whereas efficacy is global, cost-effectiveness and affordability are local

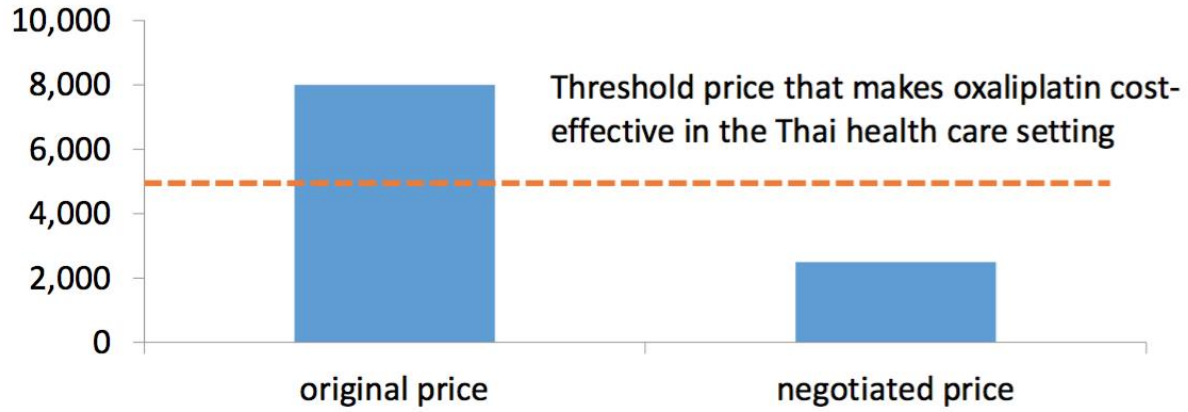
Cost-utility of Trastuzumab expressed as number of GDP per QALY



Source: Andrés Pichon-Riviere , 2013. La aplicación de la evaluación de Tecnologías de Salud y las evaluaciones económicas en la definición de los Planes de Beneficios en Latinoamérica

iDSI
Better decisions. Better health.

Threshold analysis for price of oxaliplatin



Use of HITA information in price negotiation

Medicine	Original price (THB)	Reduced price (THB)	Potential saving (THB per year)
Tenofovir	43	12	375 million
Pegylate interferon alpha-2a (180 mcg)	9,241	3,150	600 million
Oxaliplatin (injection 50 mg/25 ml)	8,000	2,500	152 million

From 2010- 2014

Using Purchasing price in 2009 as basic price

Item	Saving (Bht)
ARV Non CL	5328.59 million Bht (177.61 million USD)
ARV CL	10165.19 million Bht (353.84 million USD)
J2 and Clopidogrel	6830.37 million Bht (227.68million USD)
Flu vaccine	366.47 million Bht (8.88 million USD)

ELSEVIER

Journal of Evidence, Training and Quality in Health Care

Volume 108, Issue 7 , 2014, pages 397-404

What is the contribution of health-related evaluations to decision-making in healthcare? Experiences from 7 selected countries

main emphasis

The use of economic evaluation for the pharmaceutical industry in Thailand

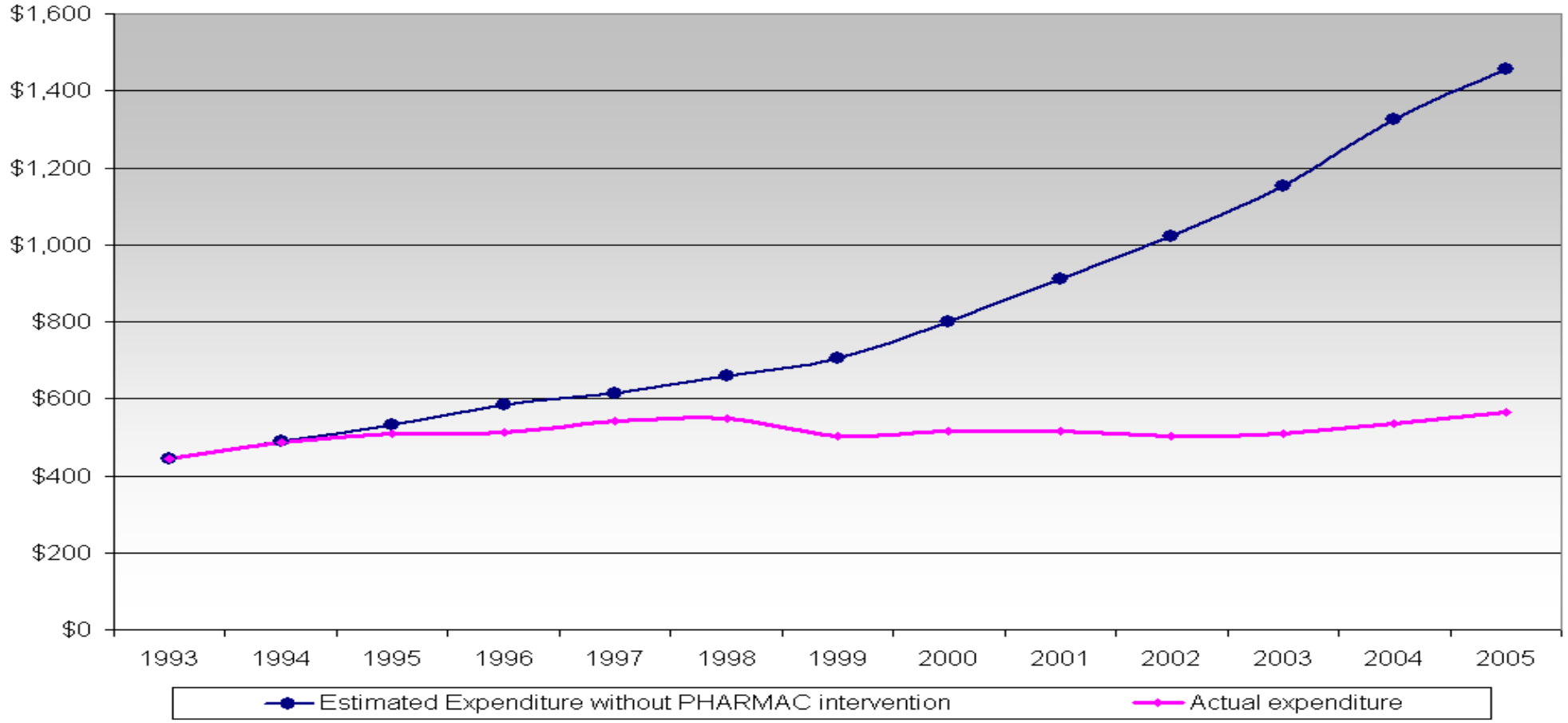
Cost-benefit assessments as an instrument for establishing the list of medicines to be reimbursed in Thailand

Yot Teerawattananon [1] ,Nattha tritasavitol [1] , , Netnapis Suchonwanich [2] ,Pritaporn Kingkaew [1]

With in 5 years implementation
Saving 768.01 million USD

NZ community pharmaceutical expenditure

Competitive tenders; open price negotiations; preferred formulary listing; a defined budget it controls and an active role in procurement = IMPACT



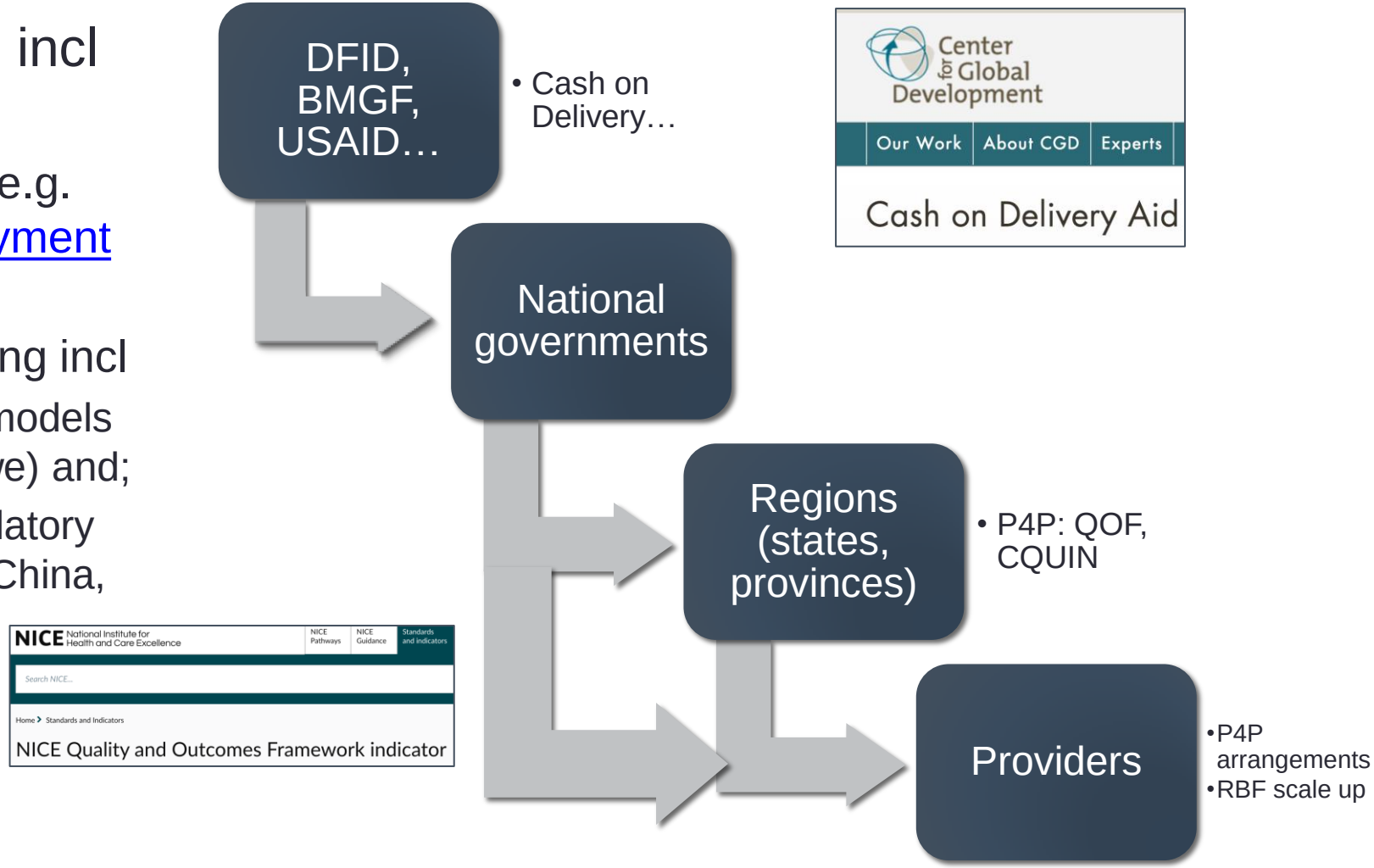
PHARMAC
Pharmaceutical Management Agency

PERFORMANCE BASED CONTRACTS AND EVIDENCE OF COSTS AND BENEFITS…

The case of Zambia/RBF and China

We need: (c) to use in contracting and performance management

- Value based contracting incl outcomes based
  - Provider payment reform (e.g. iDSI Clinical Pathways payment pilots in rural China)
  - Outcomes based contracting incl
    - Results Based Financing models (e.g. Zambia and Zimbabwe) and;
    - Quality Standards for regulatory and payment purposes in China, the UK and Mexico



Rationalising Clinical Pathways via bundled payment reform

Estimate minimum and maximum (incl. additional interventions to account for patient variation) cost based on evidence-informed clinical pathway

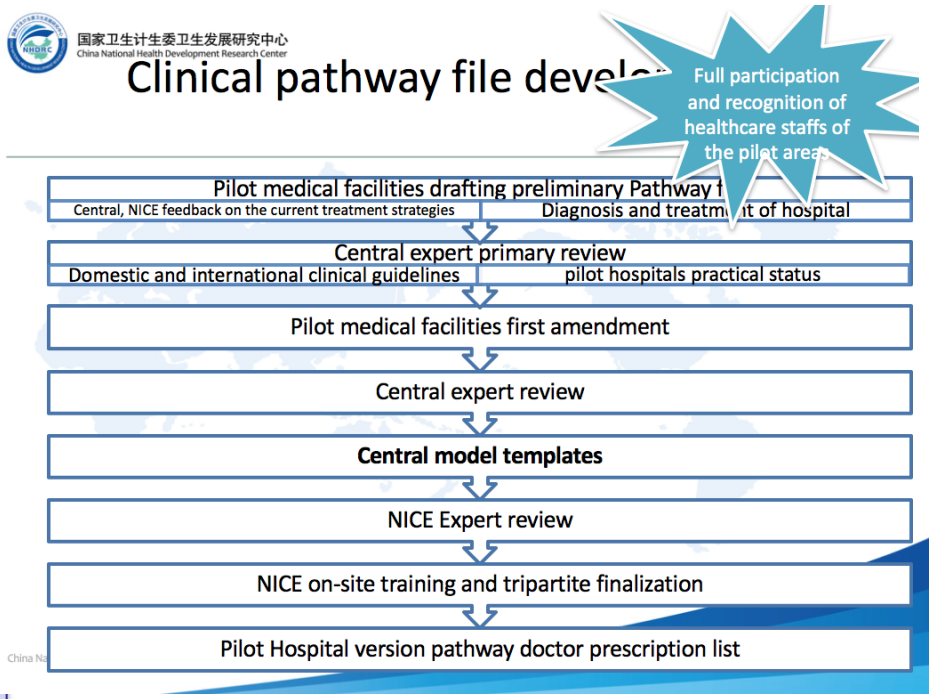
Establish cut-off for covering 80% of procedures per CP for past 3 years, based on historical data in each hospital

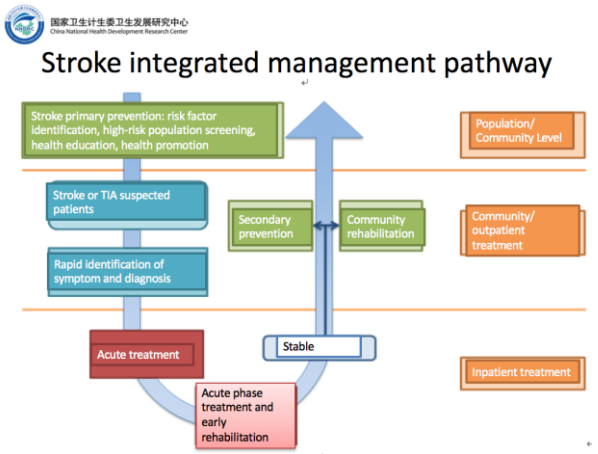
Adjust for NCMS and Urban Insurance Scheme

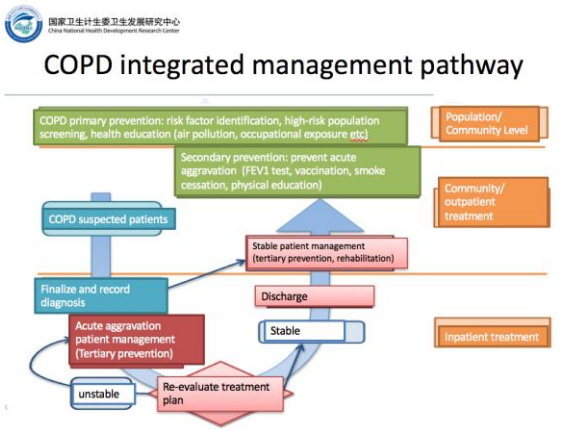
Negotiate with relevant stakeholders (professionals, administrators) to account for local costs and patient variation

Ceiling reimbursement price established
If savings: shared by hospital and doctors
OOP costs capped @ lower levels

Dataset	Type of information
NCMS	itemised information for each episode; total and drug/device/test cost; **OOP**
HIS	general patient information; LOS; total cost/drug/test cost
	Billing data: disaggregated data incl. total cost; reimbursement (to cost out CPs)
	Discharge Data : general patient info; LOS; total cost; drug cost…
Patient survey	EQ5D; patient satisfaction rates







Health Affairs

HOME | ABOUT | ARCHIVE | TOPICS | BLOGS | BRIEFS | THE

Changing Physician Incentives For Cancer Care To Reward Better Patient Outcomes Instead Of Use Of More Costly Drugs

Expand

Lee N. Newcomer[1]

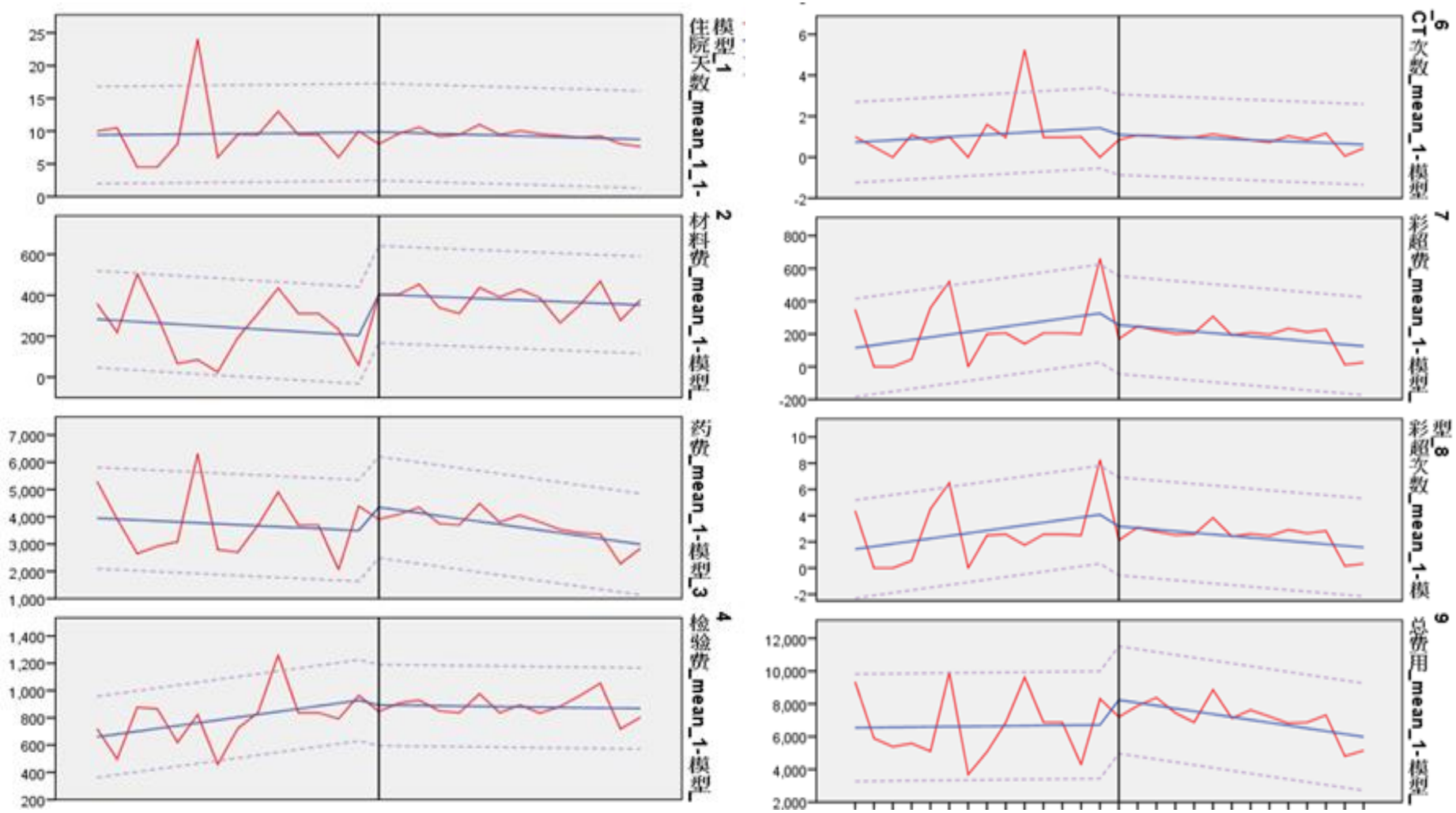
"The use of pathways has been shown to lower the drug costs of cancer therapy. Neubauer and coauthors reported **a 37 percent reduction in the drug costs for lung cancer patients using pathways developed by US Oncology**, a national oncology management organization. Other organizations using this approach with payers and physicians include Cardinal Health, Via Oncology, and New Century Health.

Pathways require an **organizational structure for rapid updating** as technology and evidence changes. The savings from the strategy are **typically one-time events**, with no additional cost reductions in the following years.

If pathways are not supported by a reimbursement schedule that pays a higher margin for generic and low-cost, effective brand-name drugs, then the physician could be biased to select high-cost drugs in his or her pathway.

Pathways do create an incentive for pharmaceutical firms to demonstrate that their drugs have major advantages in outcomes or costs, compared to those of competitors, so the drugs will be included in a pathway."

医疗行为- Before and After experience in cost variation by clinical pathway



INSTITUTIONALIZATION

Making it work!- Case example from Ghana

Selection of and reimbursement of priority medicines for hypertension- case example from Ghana

Parameters	Sources
Cost of blood pressure lowering drugs	Ghanaian prices, assumes use of cheapest drug in class at STG dose (median when range given).
Cost of coronary, stroke, heart failure and diabetes	DRG for inpatient admission, plus follow up visits, tests and drugs at NHIA tariffs. Assumes 50% of patients access services.
DALYs lost	WHO Global Burden of Disease 2010 (weights from 2004).
Mortality rates by age	WHO Global Health Observatory data repository, Ghana 2013.
Effect of drug classes	Reduced blood pressure for black patients (Brewster 2004). Relative risks of outcomes from meta-analysis of clinical trials (Ettehad et al 2016).

HTA

Health Technology Assessment (HTA) to inform decisions on cost-effectiveness in Ghana – A case for selection and reimbursement of priority medicines for hypertension

Priority setting is the process of ensuring that limited health budgets are allocated to the uses that have the greatest value to society and/or the 'health system'. [1] Optimized resource allocation for the best outcomes hinges on informed choices that consider the trade-offs between the various options. Health Technology Assessment (HTA) or Economic Evaluation (EE) is a decision support tool for priority setting.

What is Health Technology Assessment?

Health technology assessment (HTA) is the systematic evaluation of properties, effects and or impacts of health technologies and interventions. [2] More broadly, HTA is also described as a multidisciplinary field of policy analysis, which studies the medical, social, ethical, and economic implications of development, diffusion, and use of health technologies. [3]

Though there are other definitions for HTA, the cardinal features of this analytical approach include: its role as a decision support tool, its multidisciplinary nature, its strong reliance on evidence and its transparent scientific methods with the best possible rigour.

HTA is thus applicable to any intervention(s) that may be used to promote health, to prevent, diagnose or treat disease, and for rehabilitation or long-term care. Such interventions could include the use of pharmaceuticals, devices, procedures and organizational systems used in health care.

What is the justification for using HTA for priority setting in the health system in Ghana?

The Ministry of Health (MOH) is piloting the use of HTA to inform decisions on prioritisation in cost-containment and sustainability strategies of the National Health Insurance Authority (NHIA). This is being applied to the selection of medicines and development of Standard Treatment Guidelines for hypertension, a major chronic condition, which has been identified as a cost-driver under the National Health Insurance Scheme (NHIS). [4]

The application of HTA to prioritization builds on existing developments in the health system, which include the following:

1. The revised National Medicines Policy, 3rd edition, 2016 recognised the role of HTA as a tool for priority setting in Ghana with the policy objective of strengthening the science and practice of HTA in support of evidence-based reimbursement decisions for the government and the NHIS.
2. Ghana supported the HTA resolution, World Health Assembly Resolution WHA 67;23 agenda item 15.7, at the 67th World Health Assembly 2014, requiring all countries to work towards Universal Health Coverage using HTA as a tool for priority setting. [6]
3. The NHIA in 2014 conducted a stakeholder meeting on the sustainability of the NHIS and one of the items in the emergent communiqué was that the Ministry of Health should 'midwife' HTA as a priority setting tool to support sustainability of the NHIS as stated in item 3 of the communiqué [7]
4. Other countries have carried out some HTA work with beneficial outcomes and allows for knowledge brokerage, as is the case of Thailand and United Kingdom [8] [9]

What are the benefits of HTA for Ghana?

The impact of HTA on the health system hinges on optimized utilization of resources as decisions are informed by the best evidence available. Thus HTA can:

1. provide evidence for prioritisation within the NHIS as well as set priorities for the services provided under the scheme;
2. provide data from economic analysis to inform decisions on cost, cost containment strategies as well as price negotiation interventions; and
3. guide the listing and delisting of pharmaceuticals and services in-line with the Essential Medicines Lists (EMLs) and strenghten the review of Standard Treatment Guidelines (STGs) as provided by the Ministry of Health.

For further enquiries contact
Ghana National Drugs Programme (GNDP), Ministry of Health,
P. O. Box MB 582, Accra.
Tel: +233 (0)302 661 670/1 Email: gndp@ghndp.org
Website: www.ghndp.org

Bibliography

1. Office of Health Economics & NICE International. Priority setting. NICE; 2014.
2. World Health Organisation. Health Technology Assessment [Internet]. WHO Website; 2016. Available from: http://www.who.int/health-technology-assessment/about/Defining/en/
3. INAHTA. HTA Definition [Internet]. INAHTA Website; 2016. Available from: http://www.inahta.net/
4. Ministry of Health. Protocol: The development of Clinical and Cost-Effective Standard Treatments for hypertension. MOH; 2016.
5. Ministry of Health, Ghana National Drugs Programme. National Medicines Policy, 3rd Edition. Ministry of Health; 2016.
6. WHA. Ghana's statement at the 67th World Health Assembly. In: WHA67:23 agenda item 15.7 [Internet]. Geneva: WHO; 2014. Available from: who.int
7. National Health Insurance Authority. Communiqué of NHIS Stakeholders Dialogue. In: Communiqué [Internet]. Accra: NHIA; 2014. Available from: nhis.gov.gh
8. Tantivess et al. Strengthening Cost-Effectiveness Analysis in Thailand through the Establishment of the Health Intervention and Technology Assessment Program. HITAP Pharmacoeconomics; 2009.
9. NICE-UK. The NICE Way: Lessons for Social Policy and Practice from the National Institute of Health and Care Excellence. 2014.

Guiding Results:
Ghana Policy options- cost saving scenarios

Estimated costs and DALYs for a single cohort subject to policy change in year 1
Implementation for other cohorts in future years will incur additional cost savings and DALY gains/losses

	Patients changing drugs	DALYs avoided	Lifetime cost, GH₵ millions	Budget impact (vs. current practice) , GH₵ millions				
				Year 1	Year 2	Year 3	Year 4	Year 5
10% shift from ACEi/ ARB/ BB to TZD	5,762	1,358	-21.0	-0.7	-1.3	-1.2	-1.1	-1.1
10% shift from CCB to TZD	12,412	-2,414	-74.2	-2.2	-4.3	-4.1	-3.9	-3.8
10% cut in mean drug cost	0	0	-103.2	-3.1	-6.0	-5.7	-5.5	-5.2

Getting Standard Treatment Guidelines into practice

National Ghanaian **STGs** developed through multistakeholder process and covering broad disease and conditions incl. NCDs and technologies incl. pharmaceuticals, procedures and services

Quality Standards distill STGs, include auditable quality metrics concentrating on clinical practice and are informed by **HTA** and economic evaluation of underpinning new and existing technologies

Payment and IT **e-claims** systems drive implementation of STGs through Quality Standards (e.g. incentives, contractual arrangements in capitation, patient empowerment and provider education)

Conclusions

- Strategic Purchasing needs **data generation**
  - Effectiveness, Safety, Costs, PROMs Patient Reported Outcome Measures
  - clinical governance infrastructure
  - *Ex post* HTA – real time updating of comparative effectiveness and cost estimates

- Incorporating BP into a mixed payment mechanism need evidence-based **incentives** rightly positioned among relevant stakeholders:
  - Incentives created by health care payments and related performance measurement can be powerful in changing provider behaviour and health outcomes. Yet the gap between practice and potential is huge. E.g.:
    - Mostly input based budgets that have few incentives for productivity and quality: in Nigeria, PHC centers only see 1.5 patients per day on average.
    - RBF reforms are yet to switch away from fee-for-service: e.g. Zambia and Zimbabwe

- But…Challenge is to face a highly fragmented and weak financial management systems….need for better **Governance.**

- Is HTA worth investing in?
  - At a higher level, there is evidence from a previous study looking at a sample of 10 HTA programme-funded studies, that if 12% of the potential net benefit of implementing the findings of that sample of 10 studies for 1 year was realised, it would cover the cost of the HTA programme from 1993 to 2012.

Guthrie S, Hafner M, Bienkowska-Gibbs T, Wooding S. Returns on Research Funded Under the NIHR Health Technology Assessment (HTA) Programme: Economic Analysis and Case Studies (RR-666-DH). Cambridge: RAND Europe; 2015.

Thank you!

www.ldsihealth.org