Setting Priorities Fairly: Sustainable policies for effective resource allocation in Africa

Introduction to HTA

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Mohamed Gad, MD, MA
Technical Analyst - Health Economics

Global Health and Development, Imperial College London
International Decision Support Initiative (iDSI)
Objectives of the pre-conference workshops

1. Provide an introduction to Health Technical Assessment (HTA) in preparation for the discussions during the main conference

2. Gain insights into the potential building blocks for institutionalising sustainable and locally relevant HTA mechanisms for priority setting

3. Facilitate interactions between key regional stakeholders
Structure of the Day

1. Introduction to Health Technology Assessment (HTA)
2. Case studies of HTA implementation across the World
3. Methods used in HTA
4. iDSI’s HTA ‘tool kit’ and the building blocks of institutionalisation
5. Current situation of HTA in Sub-Saharan Africa and its use in priority setting
6. Understanding data needs for HTA in Sub-Saharan Africa
7. Exercise on Data Sources
Presentation overview

1. Understanding the fundamental economic problem and its application to health: Why the need for HTA?
2. What is HTA?
3. Value of HTA: Experiences from across the world
4. Lessons learned from implementing HTA
5. Limitations of HTA
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1. Understanding the fundamental economic problem and its application to health: Why the need for HTA?
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What is the fundamental economic Problem...?

Scarcity:
Unlimited Wants...
...Limited Means

Choices need to be made

Healthcare, as with any market, is no exception to this fundamental problem!
Kenneth J Arrow.. The article that launched a thousand studies..

THE AMERICAN ECONOMIC REVIEW
VOLUME LIII DECEMBER 1963 NUMBER 5

UNCERTAINTY AND THE WELFARE ECONOMICS OF MEDICAL CARE

By Kenneth J. Arrow*
The Need for Priority Setting: Health systems everywhere are under pressure...

Status quo, unfair and unsustainable: Between 20-40% of the ~$8 trillion spent annually on healthcare is wasted

![Diagram showing the need for priority setting in health systems](image-url)
LMIC health systems are a crowded space of priorities and voices.

It’s time to make PrEP available to all who need it.

Bill and Melinda Gates to pay off Nigeria’s $76 million polio debt.

Where Have All the Donors Gone? Scarce Donor Funding for Non-Communicable Diseases.

USAID & Partners Announce $6 Billion to Fight NTDs.

......competing priorities often result in ad hoc resource allocation (implicit rationing).

Good Ventures Awards $6.4 Million to Results for Development to Scale Up Access to Childhood Pneumonia Treatment in Tanzania.
Health Technology Assessment is a way to help maximize health gain, and make resource allocation decisions more transparent and explicit.

“Every pound can only be spent once. If we spend it unwisely... then we risk harming other people whose care will be adversely affected...

It is vital that priority setting is an evidence-informed, procedurally fair process that defines what will be covered through universal health coverage.”

Prof David Haslam, Chair of NICE, addressing the 25th World Health Assembly, Geneva, 2014
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What is Health Technology Assessment (HTA): Systematically evaluating the impact of a health technology

What is a health technology?
A health technology is any intervention that may be used to promote health, to prevent, diagnose or treat acute or chronic disease, or for rehabilitation and palliative care.

(Definition adopted at IDSI HTA meeting March 2015, Johannesburg, SA)

What is Health Technology Assessment?
HTA is the systematic evaluation of properties, effects and/or impacts of health technologies and interventions. It covers both the direct, intended consequences of technologies and interventions and their indirect, unintended consequences (WHO)
The regulation-Assessment continuum

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<tr>
<th>Characteristics</th>
<th>Health technology regulation</th>
<th>Health technology assessment</th>
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<tr>
<td>Perspective</td>
<td>Safety and efficacy</td>
<td>Efficacy, effectiveness and appropriateness</td>
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<tr>
<td>Requirement</td>
<td>Mandatory</td>
<td>Recommendation on complex technologies</td>
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<td>Role</td>
<td>Prevent harm</td>
<td>Maximize clinical and cost effectiveness</td>
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Dimensions of HTA

- Efficacy
- Economic value
- Social acceptability
- Organisational compatibility
- Ethical considerations
5 Step-HTA process

What is the Decision problem? Topic identification and Prioritisation

Defining decision space

Analysis

How do we decide if the evidence is strong enough to support a decision? What are our recommendations?

Appraisal

Decision making

Implementation

How is the decision implemented and monitored?

What is the required analysis needed to help answer the decision problem?

What is the decision to be taken?
Ezra Klein: How do you make [...] decisions about what is and isn’t worth paying for?

Bill Gates: The way that this is talked about is, what’s a year of life worth? They call it a disability-adjusted life year (DALY). When you’re running a poor country health-care system, you can’t treat a year of life as being worth more than, say, $200, $300 or else you’ll bankrupt your health system immediately.

EK: We’re very uncomfortable putting a value on human life. The way I see our [US] health system is we’ve chosen to pay a huge premium in order to avoid these questions.

BG. Yes, someone in the society has to deal with the reality that there are finite resources and we’re making trade-offs, and be explicit about that.
“The current government system of JKN does not link the clinical and economic assessment of drugs for price negotiation and tariff setting, which can lead to cost-effective drugs not being available to providers at an affordable rate (or conversely, the reimbursement rate not accounting for the market price of this drug)... The price-quantity negotiation process should... reflect the HTAs/Economic Assessment results more broadly beyond certain high-price but low-volume top-up drugs, reflecting the affordability and cost-effectiveness thresholds that Indonesia wants to set...”
And in the USA...

“CVS Caremark is initiating a program that allows clients to exclude any drug launched at a price of greater than $100,000 per QALY from their plan. The QALY ratio is determined based on publicly available analyses from the Institute for Clinical and Economic Review (ICER), an organization skilled in the development of comparative effectiveness analyses. Medications deemed “breakthrough” therapies by the U.S. Food and Drug Administration will be excluded from this program, which will focus on expensive, “me-too” medications that are not cost effective, helping put pressure on manufacturers to reduce launch prices to a reasonable level.”

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What is already known: Evidence from the UK

“10 studies analysed provided a potential net-benefit of £3.0 billion based on a value of £20,000 per QALY, and £5.0bn based on a value of £30,000 per QALY. The cost of the HTA Programme since 1993 was £317m, with the estimated overall cost of the HTA Programme £367m. We conclude that 12 per cent of the calculated potential net benefit would cover the total cost of the HTA Programme from 1993 to 2012.”

Assumption: HTA findings are fully implemented in the NHS
Return on investment of a HTA entity: PHARMAC’s Long-term impact in New Zealand

Generated estimated savings of 2.245 Billion NZD ($1.57 Bn USD)
# HTA in Thailand: Saving more than just money

**Annual cost of HITAP: 37m Thai baht (0.007% of THE in 2010)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Impact</th>
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<tr>
<td><strong>Prevention of cervical cancer (2007)</strong></td>
<td>• Health gains: 1500 averted new cases and 750 female deaths per year</td>
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<td>• Assessed possibility of universal coverage of the HPV vaccine using cost-effectiveness analysis</td>
<td>• Cost savings: 6 million international dollars, approximating 0.02% of the total health expenditure budget in 2007</td>
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<td>• Compared multiple scenarios to conclude that the most cost-effective strategy would be improving screening accessibility rather than universal vaccination</td>
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| **New drug regimen in PMTCT of HIV (2010)** | • Health gains: 101 paediatric HIV infections averted annually |
| • Assessed value-for-money of three-ARV regimen vs. current AZT monotherapy and single dose of nevirapine | • Cost savings: 2.6 million USD over a lifetime |
| • Solved social debate regarding feasibility and value for money of a new drug regimen in PMTCT of HIV | |

Quantifying benefits: secondary prevention

Uniquely building HTA and health economics applied capacity for the long term

In Ghana, an iDSI cost-effectiveness review of hypertension drugs has equipped the government with greater negotiating powers.

A 10% price reduction, to be in line with UK generics pricing, could save over US$5.6m – enough to treat untreated patients 4x over.

The government has now endorsed an HTA strategy to ensure long-term sustainability of the insurance fund.
Quantifying benefits: reducing waste

**Uniquely building HTA and health economics applied capacity for the long term**

In Vietnam, introducing iDSI rapid HTA criteria will reduce wasteful spending in hospitals and ensure only effective medicines are available – saving 20% from the social security budget, enough to fund over 1m PHC visits.

The government is now introducing similar criteria to their PHC benefits package.
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Experience from HTA: General Lessons Learned

Evidence points to 6 contextual factors that frequently exist where HTA capacity has been developed

- Political will, leadership and legislation
- High public expenditure, Strategic Purchasing
- Good health information technology infrastructure
- Local training in HTA-related disciplines
- Effective collaboration - HTA agencies & local stakeholders
- Independence (from ODA)

Source: Chootipongchaivat et al. (2016)
Experience from HTA: General Lessons Learned

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<th>Principles</th>
<th>Examples of how bodies can adhere to these principles</th>
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<tr>
<td>Independence</td>
<td>Maintain arm’s length from government, payers, industry, professional and patient groups; Strong and enforced conflict of interest policies</td>
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<td>Transparency</td>
<td>Meetings open to the public (although this can be restricted to discussions of the evidence); All material germane to decisions placed online; Evaluation and decision criteria, and rationale for individual decisions made public</td>
</tr>
<tr>
<td>Consultation</td>
<td>Wide and genuine consultation with stakeholders; Willingness to remake decision in light of new evidence</td>
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<tr>
<td>Scientific basis</td>
<td>Strong, scientific methods and reliance on critically appraised evidence and information</td>
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<tr>
<td>Timeliness</td>
<td>Decisions made and published in reasonable timeframe</td>
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<tr>
<td>Consistency</td>
<td>The same technical and process rules applied consistently within any given priority-setting channel</td>
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<tr>
<td>Regular review</td>
<td>Regular updating of decisions and of methods, with review dates specified in final reports</td>
</tr>
<tr>
<td>Contestability</td>
<td>The decision-making process may be challenged, through legal avenues (process issues) or non-judicial appeal mechanisms (technical issues)</td>
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HTA won't answer everything (1/2)

Chronic underfunding of government budgets to health still occurs in many health systems – HTA won’t solve these issues

Figure 2: Government health prioritization and GDP per capita, 2014

Figure 1: Change in government health prioritization, % point change of median values 2000-06 and 2007-14

HTA won't answer everything (2/2)

**Data** – Meaningful economic analysis requires some degree of modelling to informing HTA processes - suffer from the constraints with every model – Accuracy of the results are highly dependent on a model structure which is relevant to the local context and the limitations of the data

**Buy-in from policy makers** - Has to be a political buy-in to actually use and implement the results of a HTA process in a meaningful way to be a success

**Determining the cost-effectiveness of an intervention** - especially for complex interventions is context specific and requires some understanding of a threshold signalling the willingness to pay of a health system

**Supply side constraints** – Health Economists are rare – and therefore limits the capacity to conduct HTA, especially in SSA
Improving the quality and efficiency of healthcare services in Ghana through HTA

International Decision Support Initiative, Imperial College London
Southampton Health Technology Assessment Centre, University of Southampton

Final report: Cost-effective care for managing hypertension in Ghana, May 2017

Kalpna Chakladar, MD, PhD
Andrew Lord, MD, PhD, MSc
Mohammed Gad, MD, MA

Thank you!
m.gad@imperial.ac.uk