EVIDENCE FOR DECISIONS ON HEALTH BENEFITS - ROLE OF HTA

Strategic Purchasing Meeting
WHO, Geneva, May 2017

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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
“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

What will commissioners have to do?

1. Establish Joint Commissioning governance structure
2. Group population by need
3. Select budgets associated with population group
4. Select payment model
5. Make design choices and calculate payment
6. Agree outcomes to be delivered
7. Qualify and select providers to deliver care
8. Establish and adjust contracts to deliver this
9. Pay providers
10. Adjust payment based on performance
11. Track performance (outcomes, costs)
HTA FOR COVERAGE DECISIONS AND PACKAGE REVIEW
A stepwise process from evidence to policy

**Evidence**

- **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...)

Financial and non-financial levers for quality improvement
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

<table>
<thead>
<tr>
<th>CV</th>
<th>HIV</th>
<th>Diabetes</th>
<th>RTAs</th>
<th>HIV</th>
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<tbody>
<tr>
<td>Primary prevention</td>
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<td>Long term care</td>
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<td>EOL care</td>
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**Populations**
- Children
- Pregnant
- Poor
- Ethnic
- Old
- Disabled
- Rural
- Employed

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

**MCH**
- Primary prevention
- Secondary prevention
- Primary care
- Secondary care
- Tertiary care
- Long term care
- EOL care

**Cancer**
- Primary prevention
- Secondary prevention
- Primary care
- Secondary care
- Tertiary care
- Long term care
- EOL care
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
more flexibility [should] be brought into the system to allow price negotiation, as happens in other countries.
Whereas efficacy is global, cost-effectiveness and affordability are local.

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

Bolivia is a middle-income country, but it would cost more than 38 times their annual GDP per capita to purchase a QALY with Trastuzumab.

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.
From 2010-2014

Using Purchasing price in 2009 as basic price

<table>
<thead>
<tr>
<th>Item</th>
<th>Saving (Bht)</th>
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<tbody>
<tr>
<td>ARV Non CL</td>
<td>5328.59 million Bht (177.61 million USD)</td>
</tr>
<tr>
<td>ARV CL</td>
<td>10165.19 million Bht (353.84 million USD)</td>
</tr>
<tr>
<td>J2 and Clopidogrel</td>
<td>6830.37 million Bht (227.68 million USD)</td>
</tr>
<tr>
<td>Flu vaccine</td>
<td>266.47 million Bht (8.88 million USD)</td>
</tr>
</tbody>
</table>

J2 and Clopidogrel 6830.37 million Bht (227.68 million USD)

Use of HITA information in price negotiation

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Original price (THB)</th>
<th>Reduced price (THB)</th>
<th>Potential saving (THB per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenofovir</td>
<td>43</td>
<td>12</td>
<td>375 million</td>
</tr>
<tr>
<td>Pegylate interferon alpha-2a (180 mcg)</td>
<td>9,241</td>
<td>3,150</td>
<td>600 million</td>
</tr>
<tr>
<td>Oxaliplatin (injection 50 mg/25 ml)</td>
<td>8,000</td>
<td>2,500</td>
<td>152 million</td>
</tr>
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With in 5 years implementation

Saving 768.01 million USD

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, Nattha Iritasavitol, Narnpan Sansiri, Phenpan Suchonwanich, Pritporn Kingkaew
NZ community pharmaceutical expenditure

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

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

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 at lower levels

Pilot medical facilities drafting preliminary Pathway
Central, NCS feedback on the current treatment strategies
Diagnosis and treatment of hospital
Central expert primary review
Domestic and international clinical guidelines
Pilot hospitals practical status
Pilot medical facilities first amendment
Central expert review
Central model templates
NICE Expert review
NICE on-site training and tripartite finalization
Pilot Hospital version pathway doctor prescription list
Full participation and recognition of healthcare staffs of the pilot area

Stroke integrated management pathway
COPD integrated management pathway

Patient survey
EQ5D; patient satisfaction rates
“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

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of blood pressure lowering drugs</td>
<td>Ghanaian prices, assumes use of cheapest drug in class at STG dose (median when range given).</td>
</tr>
<tr>
<td>Cost of coronary, stroke, heart failure and diabetes</td>
<td>DRG for inpatient admission, plus follow up visits, tests and drugs at NHIA tariffs. Assumes 50% of patients access services.</td>
</tr>
<tr>
<td>DALYs lost</td>
<td>WHO Global Burden of Disease 2010 (weights from 2004).</td>
</tr>
<tr>
<td>Mortality rates by age</td>
<td>WHO Global Health Observatory data repository, Ghana 2013.</td>
</tr>
<tr>
<td>Effect of drug classes</td>
<td>Reduced blood pressure for black patients (Brewster 2004). Relative risks of outcomes from meta-analysis of clinical trials (Ettehad et al 2016).</td>
</tr>
</tbody>
</table>
Health Technology Assessment (HTA) to inform decisions on cost-effectiveness in Ghana – A case for selection and reimbursement of priority medicines for hypertension

What is Health Technology Assessment?

Health Technology Assessment (HTA) is a systematic evaluation of the effectiveness, safety, and economic impact of new technologies and strategies. It involves the analysis of medical, scientific, economic, and ethical implications of new treatments, procedures, and services in comparison to current options. HTA helps to guide decisions on the adoption of new technologies and is widely used in healthcare planning and policy-making.

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

The Ministry of Health (MOH) is placing the use of HTA to inform decisions on prioritization in cost-effectiveness 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 (STGs). Given the high prevalence of non-communicable diseases in Ghana, the use of HTA is critical to the sustainable financing of healthcare services. The application of HTA in prioritization builds on existing developments in the health system, which includes the following:

1. The revised National Health Insurance Scheme, 2013-2016 recognizes the role of HTA in priority setting in Ghana with the policy framework guiding the use of HTA as a tool for priority setting in the healthcare system to ensure resource allocation is aligned with the healthcare priorities.
2. Ghana supported the HTA resolution, World Health Assembly Resolution WHA67.23 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.
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 invest in HTA as a priority setting tool to support sustainability of the NHIS as stated in item 3 of the communiqué.
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.

What are the benefits of HTA for Ghana?

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

1. Provide evidence for prioritization 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 strengthen the review of Standard Treatment Guidelines (STGs) as provided by the Ministry of Health.

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

Bibliography

3. INHIA. HTA Definition [Internet]. INHIA Website: 2016. Available from: http://www.inhia.org/
6. WHA. LMICs statement at the 67th World Health Assembly. WHA67.23 agenda item 15.7 [Internet]. Geneva: WHO; 2014. Available from: www.who.int
8. Tonnesen et al. Strengthening Cost-Effectiveness Analysis in Thailand through the Establishment of the Health Intervention and Technology Assessment Program. HIIAP: 2000
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.

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

Thank you!