Prioritization
Outline

1. Prioritizing a package of services
2. Prioritizing Health Systems reforms
3. Case study discussion (in country groups)
4. Political economy of reform
1. How to think about prioritizing a package of services

A. Defining a package of services

B. Review of EML or procurement decisions

C. Addressing known cost drivers
Opportunity costs

- Spending in one area prevents spending in another
- Opportunity costs: health gains that could have been gained (or lost) from spending on an alternative intervention
- Particularly important in LMICs (high budget constraints mean high opportunity costs)
- Not making decisions at the margin!
A small example

Designing a HBP

Interventions directed to MSM

Cervical cancer first line treatment
A small example

Designing a HBP

Interventions directed to MSM

$6/DALY averted

25,591 DALYs averted

Cervical cancer first line treatment

$161,625/DALY averted

1 DALY averted
Countries have different health systems, constraints, financial capacity

Normative guidance can take you only so far

• Trastuzumab recommended by WHO for treatment of breast cancer & considered for inclusion in EML model, but modelling/review work showed it is not cost-effective in SSA (Gershon et al., 2019)
• WHO Focused Antenatal Care policy (FANC) – not implementable in Malawi (Mchenga et al., 2019) and increase in number of visits does not improve outcomes if care is poor (Benova et al., 2019).
A. Defining a package of services

- List of prioritized services financed through public pooled sources
  - Excluding direct payments
  - Priorities revealed by actions and spending choices

<table>
<thead>
<tr>
<th>Implicit Priority-Setting</th>
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</table>
| • Leads to rationing of services  
  • Leads to essential life-saving services not delivered | • Uses informed, transparent processes  
  • Openly links services to resource envelope |
Using economic evaluation

Economic evaluation is the **comparative analysis** of alternative courses of action in terms of both their **costs and consequences**.

Analysis should be conducted separately for each subgroup of patients.

Drummond, Stoddart & Torrance, 1987
## League table approach

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Cost-effectiveness US $ of 2012/DALY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood pressure management, UMIC</td>
<td>Cost-saving</td>
</tr>
<tr>
<td>Polypill for high absolute risk CVD, UMIC</td>
<td>Cost-saving</td>
</tr>
<tr>
<td>ACE inhibitor vs no medication, heart failure, with access to treatment</td>
<td>Cost-saving</td>
</tr>
<tr>
<td>Give female condom to sex workers, South Africa</td>
<td>Cost-saving</td>
</tr>
<tr>
<td>Preventive chemotherapy for onchocercias</td>
<td>9</td>
</tr>
<tr>
<td>Treat severe malaria with artesunate vs quinine</td>
<td>5</td>
</tr>
<tr>
<td>Salt reduction policy in food</td>
<td>Cost-saving to 45</td>
</tr>
<tr>
<td>Voluntary male circumcision</td>
<td>10</td>
</tr>
<tr>
<td>Add syphilis screen to HIV screen/treat, LIC</td>
<td>9</td>
</tr>
<tr>
<td>Emergency obstetric care</td>
<td>15</td>
</tr>
<tr>
<td>Pre-hospital ECG vs none, MIC</td>
<td>16</td>
</tr>
<tr>
<td>Screen/treat syphilis, LIC</td>
<td>17</td>
</tr>
<tr>
<td>Detect and treat human African trypanosomiasia</td>
<td>22–83</td>
</tr>
<tr>
<td>Treatment smear positive TB with first-line drugs, LIC</td>
<td>6–49</td>
</tr>
<tr>
<td>Cataract surgery</td>
<td>6–70</td>
</tr>
<tr>
<td>Detect and treat visceral leishmaniasia</td>
<td>18</td>
</tr>
<tr>
<td>Treat malaria with ACT, Africa</td>
<td>18–34</td>
</tr>
<tr>
<td>EMTCT Option B HIV versus no treatment, Africa</td>
<td>26</td>
</tr>
<tr>
<td>ACE inhibitor versus no medication, 3 heart failure, no access to treatment</td>
<td>28</td>
</tr>
<tr>
<td>Cleft lip and palate repair</td>
<td>9–108</td>
</tr>
<tr>
<td>Hernia repair</td>
<td>11–101</td>
</tr>
<tr>
<td>Intermittent preventive treatment malaria in infants, Africa</td>
<td>4–422</td>
</tr>
<tr>
<td>Preventive chemotherapy for trachoma</td>
<td>22–83</td>
</tr>
<tr>
<td>Intermittent preventive treatment malaria in pregnancy, Africa</td>
<td>4–591</td>
</tr>
</tbody>
</table>

Source: Horton et al. (2017)
Technologies that will be displaced offered less “value for money”. The benefit gain from the new treatment is greater than the benefit foregone through displacement. Is the benefit gain from the new treatment greater than the benefit foregone through displacement? No. Displaced technologies offered better “value for money” (the healthcare system loses “health” and efficiency).

HBP of an imaginary country where the Ministry of Health (many years ago) defined a cost-effectiveness threshold of USD 10,000 per QALY in order to consider a technology as cost-effective and allow its incorporation into the benefit plan.

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
B. Review of EML or procurement decisions

Rapid review of spending decisions for drugs and commodities, identification of outliers or quick wins

Drugs and commodities make up for a large share of healthcare spending in all countries

Recent review of procurement: spending on drugs in a couple of countries amounted to $50 billion yearly, one of the fastest growing expenditure category in many countries (Turkey, Egypt, Pakistan)
Cost-savings in the world’s largest UHC scheme

$31m health budget could be saved annually if the government implements the HTA Committee recommendations, produced with iDSI assistance.

In Oct 2018, Indonesia’s social health insurer decided to remove cetuximab and bevacizumab (source: Sida/iDSI/CHAI Health Financing meeting at the HSR 2018 Conference, Liverpool).

$31m reinvested into the health system could avert over 44,787 DALYs in the Indonesian population.

- $9 million saved from changing prescription practices and pricing of human insulin versus insulin analogue
- $8.4 million saved: cost-ineffective Cetuximab removed from the benefit package
- $14 m saved: cost-ineffective bevacizumab removed from the benefit package
- $0.5 million saved from using imatinib as first line treatment for CML in lieu of nilotinib

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Smarter procurement: price negotiation

Threshold analysis for price of oxaliplatin

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>Pegylated 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>
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</tbody>
</table>

With in 5 years implementation
Saving 768.01 million USD
C. Addressing known cost-drivers

Situation analysis might help identify areas of inefficiencies or cost drivers in your country.

Ghana example:

- CVD: morbidity, mortality, prevention and treatment costs
- Even a small shift in prescribing could save 18% of the antihypertensive expenditure
Beyond the technical...

Analytics and evidence is only part of the picture.

Consider:
- Feasibility in your local health care system
- Social acceptability
- Political economy pressures
2. Prioritizing Health Systems Reforms

Possible Reforms | Impact | Technical | Affordability | Innovations | Political
## Possible reforms

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<thead>
<tr>
<th>Possible Reforms</th>
<th>Impact</th>
<th>Technical</th>
<th>Affordability</th>
<th>Innovations</th>
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- Decentralization of hiring of staff
- Effectively exempting the poor from user fees
- Improving referral and transportation system
- Increasing operational budget at the facility/decentralized level
What is the likely impact?

• Health impact can be modeled (under certain –often strong!– assumptions)

• Also consider the cost savings (cfr. Indonesia, Ghana examples). Money can be used elsewhere.
### What are examples of modeling tools that can help with prioritization?

<table>
<thead>
<tr>
<th>Tool</th>
<th>Developers</th>
<th>Purpose</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| Lives Saved Tool (LiST)        | Johns Hopkins, Avenir Health      | Models health impact (i.e. deaths averted) of changes in MNCH+N intervention coverage                                                   | • Integrated RMCH+N impact estimation tool  
• Can be standalone or built into other more complex models                                                                                     | • Limited to RMNCH+N interventions  
• No cost-effectiveness/efficiency analysis  
• No health systems modeling                                                               |
| OneHealth Tool (OHT)           | Avenir Health, overseen by UN IAWG/WHO | Comprehensive model estimating cost and impact of health interventions and health system strengthening programs. Incorporates existing tools: MBB, LiST, FamPlan, AIM/GOALS/Resource Needs Model, WHO Stop TB, etc. | • Good for costing and modeling impact of sector-wide health strategies, with links between health interventions and health systems investments | • Less useful for single program/issue                                                                                                       |
| EQUIST 2.0                      | UNICEF                            | Analyzes bottlenecks for RMNH interventions, identifies strategies to overcome bottlenecks, and develops scenarios and cost-comparisons. Best for comparing costs of alternative strategies added into existing health systems. | • Explicit equity focus  
• Integrates cost and impact                                                                                                                  | • Not intended for costing entire health programs                                           |
Important considerations when using tools

- **Sustainability**
  - Developer – documentation, updating over time, etc.
  - User (government) – training, ownership and institutionalization
- Transparency of underlying assumptions
- Data quality and availability
- Tool = Panacea...?
Can you technically implement?

### Technical Feasibility

- **Results Based Financing**: link payments to results (quantity and quality) at the facility level to help make the user fee removal scheme effective.
- **Impact sometimes limited because**
  - payment delays
  - too many facilities to manage/verify
  - little capacity of central level to manage payments
  - little capacity at the decentralized level to manage funds
  - payment function too complex for providers to understand link between payment and results

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Is it affordable at the scale required to achieve impact?

- Cost-effective ≠ affordable!
- Investment + operational cost
  - Buildings require staff and operational budget
  - Additional HR remains on the payroll for a very long time and reduces flexibility in budget
- Can externally financed programs (e.g. incentive payments for CHWs) be taken over by the government?
Are there innovations/alternatives that are cheaper/easier?

- E-health platforms for specialist consultations (vs trying to decentralize specialists)
- E-procure system to facilitate large tenders with pharmaceutical companies (vs having every facility/district procure drugs)
- Maternity waiting homes (vs trying to provide emergency transportation) or using community taxis rather than investing in more ambulances
Is it politically feasible?

- Is there someone willing to champion the reform?
- What is political cycle? Does this win votes?
- Is there likely push back from specific interest groups?
Example: upgrade the number of facilities

- **Possible Reforms**: More quality services leads to lives saved. (Assumptions!)
- **Impact**: Procurement issues? Staff to deliver services?
- **Technical**: Upgraded facilities require higher maintenance and operational budget. Implications for enough room and flexibility in budget?
- **Affordability**: Alternatives: Upgrade fewer facilities, and invest in referrals and transportation?
- **Innovations**
- **Political**
Case Study Activity

45 minutes

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In Breakout Rooms