Marginal Budgeting for Bottlenecks (Sri Lanka example)

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Introduction

- an analytical tool for evidence based policy, planning, costing and budgeting at country and district level.

- The tool helps to:
  - plan and forecast the potential cost and impact of scaling up of high impact health, nutrition, malaria and HIV/Aids interventions, to remove health system constraints towards increasing the intake, coverage and quality
  - prepare results-oriented national health strategic plans, expenditure programs and health budgets, and

- results are very context dependent: uses local costs and constraints, plus locally chosen interventions, and applies best available evidence to estimate impacts

- Does not tell users what to do: its strength is in helping stimulate discussions to maximize the impact of new funding.
MBB Structure

1. SETUP

2. INPUTS

3. POLICES
4. STRATEGY
5. BUDGETS

6. OUTPUTS
Setup

- Selection of Languages
- Selection of years and time period
- Comparing Scenarios
- Compare Groups
- Phasing over
- Default database is used in the absence of local data
Inputs (types of data)

- **Demographics data** such as population disaggregated by age groups
- **Epidemiology data** such as morbidity, mortality, etc.
- **Health systems** such as infrastructure, man power, time and distance to travel
- **Health Interventions** such as child and new born care
- **Coverage** such as immunization, AN care coverage
- **Macro economics** such as GDP, inflation rate
<table>
<thead>
<tr>
<th>3 Service Deli Modes</th>
<th>12 Sub Packages</th>
<th>12 Tracers</th>
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</thead>
<tbody>
<tr>
<td><strong>Family-oriented, community-based services</strong> (Health services that families and communities can provide/practice by themselves or with limited inputs)</td>
<td>Family preventive/WASH services</td>
<td>Insecticide Treated bed nets</td>
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<td></td>
<td>Family neonatal care</td>
<td>Clean Delivery and Cord care</td>
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<td></td>
<td>Infant and child feeding</td>
<td>Breast feeding for 0-5 months</td>
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<td>Community management of common illnesses</td>
<td>ORS/ORT</td>
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<td><strong>Population oriented schedulable services</strong> (Mainly preventive care services delivered to a target group with schedule, and/or providing through outreach facilities)</td>
<td>Preventive care for adolescent girls &amp; women</td>
<td>Family Planning</td>
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<td></td>
<td>Preventive pregnancy care</td>
<td>Antenatal Care</td>
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<td></td>
<td>HIV/AIDS prevention &amp; care</td>
<td>PMTCT</td>
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<td></td>
<td>Preventive infant &amp; child care</td>
<td>Measles Immunization</td>
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<td><strong>Individual oriented clinical services</strong> (Services provided by trained healthcare professionals in a healthcare facility)</td>
<td>Clinical primary level skilled maternal &amp; neonatal care</td>
<td>Normal Delivery for skilled Attendant</td>
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<td>Clinical management of illnesses at primary level</td>
<td>Antibiotics for Pneumonia</td>
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<td></td>
<td>Clinical first referral illness management</td>
<td>Basic Emergency Obstetric Care</td>
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<td></td>
<td>Clinical second referral illness management</td>
<td>Comprehensive Emergency Obstetric Care</td>
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Identification of Bottlenecks (Tanahashi’s Model)

Effective coverage - quality

Adequate coverage - continuity

Utilisation – 1rst contact with health services

Accessibility – physical access to services

Accessibility – to human resources

Availability – critical inputs to health system

Target Population

From Tanahashi T. Bulletin of the World Health Organization, 1978, 56 (2)
Sub package 1.4; Community Management of common illness

ORT/ORS (Sri Lanka)

- COMMODITIES: % villages with ORS/ORT
- HUMAN RES: % villages with sufficient CHWs
- ACCESS: % villages with access to ORS
- UTILISATION: More fluid/ORT
- CONTINUITY: More fluid/ORT + Food
- EFFECTIVE COV: Zinc
3.2. Mana: of illness at Primary Level

Management of Pneumonia

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Commodities</td>
<td>70%</td>
</tr>
<tr>
<td>Human Resources</td>
<td>70%</td>
</tr>
<tr>
<td>Access</td>
<td>60%</td>
</tr>
<tr>
<td>Utilisation</td>
<td>50%</td>
</tr>
<tr>
<td>Continuity</td>
<td>40%</td>
</tr>
<tr>
<td>Effective Cov.</td>
<td>20%</td>
</tr>
</tbody>
</table>

- Commodities: % health facilities with no Essential Meds stock-out
- Human RES: % PHC facilities with sufficient professionals
- Access: % families living near health facility
- Utilisation: % 0-59 mos w/pneumonia taken to trained provider
- Continuity: % 0-59 mos ARI/fever cases Tx w/antibiotics by trained worker
- Effective Cov: % 0-59 mos. Pneumonia cases treated rationally by trained medical officer on time
Policies

• Policies sheet built the same way as inputs sheet
• Policies for interventions, health coverage and economic can be amended between scenarios or groups
Strategies

• Analysis of bottlenecks as well as strategies identification is a participatory process which pinpointing possible causes and proposing operational strategies/solutions to overcome the identified bottlenecks.

• These strategies may focus on existing plans or may go further to consider new strategic interventions whose costs and impact may be simulated and compared to an existing strategies.
Budget

• Strategies which come up from the discussion will require to open budget items for those activities

• It also required to classify into national strategic plan, MTEF and national chartered of accounts
Output (Costs and Impacts)

Progress towards MDGs and Additional Cost per Capita

- **Community**
  - $6.40
  - $7.84
  - $13.73

- **Facility-based**
  - $0.00
  - $2.00
  - $4.00

- **Combined**
  - $14.00

**Decrease in Mortality/ Progress (%)**
- Anaemia
- Reduction of Low Birth weight
- IMR reduction
- NNMR reduction
- MMR reduction
- 1 in Lifetime Risk of Dying
- Reduction of Malaria Incidence in U5
- Reduction in AIDS mortality
- Reduction of HIV/AIDS Incidence
- Reduction of HIV/AIDS prevalence
- Reduction in TB Mortality
- Household water treatment - Coverage gap reached
- Access to improved water source

**Cost per capita per year in US$**

- $0.00
- $10.00
- $12.00
- $14.00
- $16.00
Other Outputs

• Additional cost gap
• Cost breakdown
  – Programs
  – Funding sources (govt, UNs, Bilateral, OOP)
  – National strategic plan and etc.
• Human resources needs
• Impact