Research –to- policy and practice: the case of vaccines in Uganda

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Session outline

• Background – context for research
• Methods for research
• Role of independent knowledge managers
Objectives

• Show how the following were used to drive policy and practice on immunization in Uganda
  • Evidence (study findings)
  • Independent think tanks (NITAG)
  • Close collaboration with technical and political policy makers & technocrats (MoH, Parliament and WHO/UNICEF/GAVI)
• The Context: Costs, Systems capacity, Sustainability
Growing number of antigens and more planned – the Uganda EPI

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Vaccine</th>
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<tbody>
<tr>
<td>1. Tuberculosis</td>
<td>➢ BCG</td>
</tr>
<tr>
<td>2. Poliomyelitis</td>
<td>➢ bOPV/IPV</td>
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<td>3. Whooping cough</td>
<td>➢ Pertussis (DPT-HepB + Hib)</td>
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<td>4. Diphtheria</td>
<td>➢ Diphtheria (DPT-HepB + Hib)</td>
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<tr>
<td>5. Tetanus</td>
<td>➢ Tetanus (DPT-HepB + Hib)</td>
</tr>
<tr>
<td>6. Measles</td>
<td>➢ Measles</td>
</tr>
<tr>
<td>7. Neonatal Tetanus</td>
<td>➢ Tetanus Toxoid (for WCBA)</td>
</tr>
<tr>
<td>8. Hepatitis B infection</td>
<td>➢ Hepatitis B(DPT-HepB + Hib)</td>
</tr>
<tr>
<td>9. <em>H. Influenzae</em> infxns</td>
<td>➢ Hib (DPT-HepB + Hib)</td>
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<tr>
<td>10. Cancer of cervix</td>
<td>➢ HPV vaccine</td>
</tr>
<tr>
<td>11. Pneumococcal infxns</td>
<td>➢ pneumococcal vaccine (PCV)</td>
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<tr>
<td>12. Rotavirus</td>
<td>➢ Rotavirus</td>
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New vaccine introductions

- **April 2013**: PCV
- **November 2015**: HPV
- **April 2016**: IPV
- **January 2017**: Men A campaign
- **June 2018**: Rota
- **2019**: Measles-Rubella
The study

• GAVI commissioned studies on immunization in country health systems

• **Goal:** To understand and quantify the barriers to, and the drivers of, immunization program improvement including the contribution of the Gavi Alliance.

• **Approach:** focused, forward-looking, country-driven, and in-depth monitoring and evaluation that complements other activities.

• The Gavi Full Country Evaluation (FCE) – IHME, PATH, IDRC and Makerere University
Prospective monitoring & evaluation platform

Systematic secondary data analysis with complementary primary data collection

Inputs
- Resource tracking
- Partnership analysis

Process
- Observation
- Document review
- Key Informant interviews

Outputs
- Health facility surveys
- Health Management Information System

Outcomes
- Household surveys
- Vaccine antibodies
- Small-area estimates

Impact
- PCV effectiveness

- Vaccine antibodies
- Small-area estimates
Findings
Struggling program performance

EPI Performance between Jan 2016 and August 2017 – Admin data

Coverage

Month

2016

2017

BCG
Measles
Polio3
IPV
Penta3
PCV3
TT2
Annual co-financing obligations in Uganda based on Gavi decision letters (in $US), 2013-2016
Increased co-financing obligations

Country’s response:

• MOH put any new applications for new vaccine introduction on hold in 2016. NITAG was consulted for guidance on prioritizing new vaccine introductions

• Question for NITAG: Which vaccines to prioritise?

• NITAG did more research, engaged MoH and partners including parliament
NITAG Steps in the Prioritisation Framework

- Setting purpose and objective
- Identification of prioritisation criteria
- Assessment and scoring
- Weighting
- Ranking
The NITAG recommendations

• 4 of the 5 vaccines eligible for introduction – one not enough evidence of additional value

• Ranked vaccines and recommended conditions for their introduction eg
  ➢ First provide a sustainability plan
  ➢ First strengthen the current EPI program
  ➢ First focus on epidemic prone regions (Men A belt)
  ➢ Invest in a system that generates local evidence, etc

• Presented recommendations and government took almost all (perhaps except investing in research)
Outcomes: Policy and Program response

• Government passed a law to establish an immunisation fund but issues with implementation (also roads, HIV funds etc)

• Rationalisation of vaccine introduction