COVID-19 vaccine delivery: Implementation and evaluation

Use of cost evidence

Kelsey Vaughan, MSc, MPP
UNICEF Consultant
Overview of this session

- Results from MOMENTUM Routine Immunization Transformation and Equity Project – Grace Chee, JSI
- Methodology challenges in conducting COVID-19 costing studies during a pandemic – Flavia Moi, ThinkWell
- Practical challenges in conducting COVID-19 costing studies during a pandemic – Ishani Mathur, MSH
- Use of COVID-19 cost evidence for policy – Kelsey Vaughan, UNICEF
- Q&A and discussion
Overview of ongoing UNICEF costing studies

**Botswana**
- Data collection from national level and a sample (6/18) regions
- No facility-level data collection
- Mix of ingredients approach and top-down estimation
- Inclusion of staff costs:
  - Fiscal costs of all new staff that have been specifically recruited to work on COVID-19 vaccination
  - Opportunity costs of existing human resources’ time, if directly involved in vaccination

**Lesotho**
- Protocol currently undergoing clearance by MOH

<table>
<thead>
<tr>
<th>Resource type</th>
<th>Ingredient approach</th>
<th>Top-down estimation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Planning and coordination</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2  COVID-19 vaccine procurement</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3  Syringes &amp; safety boxes</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4  Training of vaccinators</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5  New purchase of regular cold chain equipment</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6  New purchase of ultra-cold chain equipment</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>7  Vaccine transport</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>8  Hand hygiene supplies</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>9  Personal protective equipment</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>10  Printed vaccination certificates</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>11  Electronic vaccination certificates</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>12  Vaccine coverage data management</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>13  Human resources for vaccine delivery</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>14  Supervision</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>15  Subsistence allowance</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>16  Transportation for outreach services</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>17  Social mobilization</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>18  Waste management of used syringes</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>19  Adverse event monitoring for immunization (AEFI)</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Use of COVID-19 cost evidence: two levels
Use of COVID-19 cost evidence at country level?

- **Possible uses of costing evidence at country level**
  - As inputs into annual planning and budgeting
  - As inputs into comprehensive multi-year planning or strategic plans
  - For advocacy for higher budgetary allocations to health and/or immunization
  - As inputs into funding applications
  - To support or inform a political decision, such as new vaccine introduction

- **There are many ongoing COVID-19 vaccination costing studies**
  - MSH, ThinkWell and UNICEF alone involved in studies in at least 10 countries: Bangladesh, Botswana, Cote D’Ivoire, Democratic Republic of Congo (DRC), Lesotho, **Madagascar**, Malawi, Mozambique, Philippines, **Vietnam**
  - Other studies: CARE, KEMRI, LSHTM, VillageReach

- **Despite efforts to conduct studies more quickly, to make evidence quickly available for future COVID-19 budgeting, time from study conception to results is still too long**
  - Many countries have already produced revised and updated NDVPs
  - Some countries starting to think about embedding COVID-19 vaccination in PHC, with different cost implications
“Simply making immunization cost evidence available will not lead to uptake at country level.”

Tips for improving use of COVID-19 cost evidence at country level

1. **Provide a clear use case**

2. **Make evidence available within windows of opportunity – have we missed it?**

3. **Consult non-health and sub-national stakeholders (for example, through microplanning at district level)**

4. **Tailor evidence and messages for different audiences – something researchers have done poorly in the past**
Use of COVID-19 cost evidence at global level

- Input into UNICEF/Harvard global model that is used for determining global fundraising targets
  - Anticipated challenges: 1) comparability between studies – methods, but also definitions of strategies, etc.; 2) cost per dose at low coverage levels may differ from higher coverage; 3) change in strategies and approach: from fixed site and outreach to high volume to integration into PHC
Use of COVID-19 cost evidence: country- and global-levels

- Results must be carefully communicated – some studies showing financial costs not very high (and lower than routine immunization)
  - Not finding huge expenditures for cold chain, social mobilization, transport, as originally expected
  - No large-scale HRH mobilization
  - Possibly related to delayed disbursement of funds? Absorption capacity?

- Message isn’t that COVID-19 vaccination is “cheap”
  - Our work indicates countries were forced to work with what they had, used virtual trainings, didn’t pay per diems or transport allowances where money was short, made use of personal vehicles, etc. – in some cases these adjustments worked well
  - In some cases resources diverted away from routine immunization or other health services to make COVID-19 vaccination possible
Questions and discussion