ThinkWell’s work on Zero Dose costing

Flavia Moi

30th April 2024
Outline

1. Overview
2. ZD costing in Pakistan
3. ZD costing in Ethiopia
ThinkWell’s Zero Dose costing work

» Estimate the cost of reaching Zero-Dose children in three priority countries

» Our approach:
  — Partner with local institutions for implementation to strengthen costing capacity
  — Work with MOH to select interventions
  — Full & incremental costing of select interventions
  — Qualitative information to fill data gaps

» Final results will be ready by June 2025
# Focus countries

<table>
<thead>
<tr>
<th></th>
<th>Ethiopia</th>
<th>Pakistan</th>
<th>Nigeria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ZD children</strong></td>
<td>1.14 million</td>
<td>431 thousand</td>
<td>2.27 million</td>
</tr>
<tr>
<td><strong>Local partner</strong></td>
<td>Fenot Associates</td>
<td>PHC Global</td>
<td>TBD</td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td>Conducted a scoping visit at health posts, health centers and MOH; awaiting protocol approval</td>
<td>Completed extensive consultations with MOH and key stakeholders; mapped and scored ZD interventions</td>
<td>Exploring NPHCDA interest</td>
</tr>
<tr>
<td><strong>Timeline</strong></td>
<td>Data collection to start in June</td>
<td>Data collection to start in July</td>
<td>TBD</td>
</tr>
</tbody>
</table>

* WUENIC 2022 data,
ZERO DOSE COSTING IN PAKISTAN

Pakistan

Likely focus on large urban slum initiatives

Lahore (Punjab)

Karachi (Sindh)
What is being done to reach ZD children in Pakistan?

1. National Electronic Immunization Registry (NEIR)
2. Rapid cluster assessments
3. Vaccinator tracking using GIS mapping
4. 24/7 birth dose initiative
5. Leveraging polio house-to-house campaigns and National Immunization Days to identify ZD kids
6. Integrated service delivery / mobile clinics
7. Enhanced outreach activities
What is being done to reach ZD children in Pakistan?

1. National Electronic Immunization Registry (NEIR)
2. Rapid cluster assessments
3. Vaccinator tracking using GIS mapping
4. 24/7 birth dose initiative
5. Leveraging polio house-to-house campaigns and National Immunization Days to identify ZD kids
6. Integrated service delivery / mobile clinics
7. Enhanced outreach activities

Likely scope of the study
What is being done to reach ZD children in Pakistan?

1. National Electronic Immunization Registry (NEIR)
2. Rapid cluster assessments
3. Vaccinator tracking using GIS mapping
4. 24/7 birth dose initiative
5. **Leveraging polio house-to-house campaigns and National Immunization Days to identify ZD kids**
6. Integrated service delivery / mobile clinics
7. Enhanced outreach activities

- ZD data is collected during polio H2H and incorporated into microplans
- Successful “Lahore campaign”
What is being done to reach ZD children in Pakistan?

1. National Electronic Immunization Registry (NEIR)
2. Rapid cluster assessments
3. Vaccinator tracking using GIS mapping
4. 24/7 birth dose initiative
5. Leveraging polio house-to-house campaigns and National Immunization Days to identify ZD kids
6. Integrated service delivery / mobile clinics
7. Enhanced outreach activities

- Costly and mostly donor-led
- But deliver multiple services and are very effective
- Local community engagement
What is being done to reach ZD children in Pakistan?

1. National Electronic Immunization Registry (NEIR)
2. Rapid cluster assessments
3. Vaccinator tracking using GIS mapping
4. 24/7 birth dose initiative
5. Leveraging polio house-to-house campaigns and National Immunization Days to identify ZD kids
6. Integrated service delivery / mobile clinics
7. **Enhanced outreach activities**
   - Financial incentives to travel further out, with social mobilization component
   - Increased delivery volumes but **not clear how many additional children** or ZD children are reached
ZERO DOSE COSTING IN ETHIOPIA

Ethiopia

Oromia
- 1.5M ZD children
- Urban slums and agrarian woredas

Somali
- 453k ZD children
- Pastoralist communities with nomadic lifestyle

In both regions: focus on priority 1 woredas
Interventions

Headcount identifies all eligible children, and they are incorporated into microplans

- Leverage existing structures (health extension workers, health development army)
- HEW were already identifying eligible children, now with dedicated headcount form
- No additional funding for transport or for incentives for HEW—should be part of their regular outreach work
Interventions

Campaign targeting ZD children and under immunized children to catch-up on routine backslide

- 7-to-10-day **nationwide** campaign
- Ideally microplans based on headcount results, though not likely
- **Vaccine availability** current bottleneck
Interventions

- **Catch up Campaign**
- **PIRI**
- **Headcount & Microplanning**
- **Routine (static, outreach) and MHNTs**

**Periodic intensification of routine immunization targeting ZD or under-immunized populations**

- Once a month for 3 consecutive months to offer three-dose vaccine series
- May also deliver other MCH services
- Not a new intervention, but now microplans for PIRI should be based on headcount results
- Only in selected geographies
- Resource intensive
Interventions

- **Headcount & Microplanning**
- **Catch up Campaign**
- **PIRI**
- **Routine (static, outreach) and MHNTs**

**ZD children may be vaccinated through other delivery strategies**

Children identified through headcount may be referred to health facilities, regular outreach, or vaccinated by Mobile Health and Nutrition Teams (MHNTs).
Reporting

» **Headcount form** identifies children, what vaccines/doses they have received so far and causes for missing vaccinations

» Headcount output **aggregated** and **digitalized** at woreda level

» However, **no dedicated ZD register** for service delivery

» De facto, **no ZD status** on tally sheets or monthly reporting

**Right now, ZD status is lost at vaccination**
To sum up...

» Mostly **nothing new**
  — Challenge for incremental costing
  — But we have solid campaign costing methods

» **Reporting** limitations
  — Accuracy vs. data collection cost
  — Influence gov reporting

» Interventions are **interconnected** and timeline of implementation matters
  — Low-cost campaign → high cost PIRI
  — Costing a bundle of interventions or a **sequence of interventions**?
Ideal denominators

» For Microplanning and Headcount

1. Children identified
   • Cost per child identified
   • Cost per undervaccinated child identified
   • Cost per ZD child identified

2. Children identified and reached
   1. Cost per child identified and vaccinated
   2. Cost per undervaccinated child identified and vaccinated
   3. Cost per ZD child identified and vaccinated
# of interventions delivered
(to anyone, including other target pops) through PIRI or outreach or at health facilities (could include other services)

# of vaccine dose delivered
(to any child) through PIRI or outreach or at health facilities

# of children
vaccinated through PIRI or outreach or at health facilities (of any age, with any antigen)

# of undervaccinated children
defined as >1yo who received Penta1 but are missing other vaccines, vaccinated through PIRI or outreach or at health facilities

# of zero-dose children
defined as a child older than 1 year missing Penta1 vaccinated through PIRI or outreach or at health facilities

Ideal denominators

» For the campaign, PIRI, MHNTs, regular outreach and facility-based vaccination

1. Cost per zero-dose child vaccinated (penta1)
2. Cost per undervaccinated child vaccinated
3. Cost per child vaccinated
4. Cost per vaccine dose delivered
5. Cost per intervention