

Pro-Equity Strategies to Reach Zero-Dose Children: Case Studies















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#### **Our Team**







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### Agenda





Results



Limitations and Conclusions





### Background



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### Background

**Objective:** Highlight best practices and lessons learned regarding pro-equity interventions while indicating what may be required to shift programs towards the ZD agenda.

#### 2 types of case studies:

Inductive: Countries selected based on strong implementation of interventions identified through previous evidence synthesis. Deductive: Countries identified based on steady/improving vaccine rates during COVID-19, selected to explore driving intervention(s).



#### **IRMMA Framework and Intervention Topics**



#### REACH

Leveraging women's groups (Mali) Health systems strengthening (Chad, deductive)

#### MEASURE & MONITOR N/A



### Methods





#### Methods

- Countries for **inductive** case studies were selected based on evidence gathered in prior rapid reviews of pro-equity interventions.
- **Deductive** case studies were selected based on WUENIC results and in consultation with Gavi.
- Template developed.
- In-country consultants conducted **qualitative interviews** with key informants.
- **Desk review** was conducted, prioritizing documents provided by consultants and Gavi experts.
- Findings were compiled into case studies.



### **Methods: Case Study Template**

The case study template includes specific sections with detailed instructions for completion:

Case study section	Instructions for completion
WHY	State the problem and why a solution is needed; introduce contextual information such as country/region, health system, population description. End with rationale as to why the intervention was selected.
/HAT	Describe the intervention, including level of implementation, summary of existing evidence, connection to IRMMA framework, process indicators, tools used to implement the intervention, and quotes and images.
OW	Describe how the intervention was implemented or adapted, including dates and location, steps of the activities, level of health system, key actors and their roles, and any adaptations to the intervention.
RESULTS	Describe if/how the intervention impacted the outcome(s) of interest, including quantitative and qualitative data, intermediate or impact results. Focus on vaccination rates, unexpected or unintended consequences of the intervention, and cost.
O WHAT	Describe the next steps regarding the intervention, sustainability, considerations for scale-up or adaptation, and specific considerations that might be needed to reach ZD children or missed communities.

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KEY LESSONS

enablers Summarize key barriers

Summarize key



#### **Results** Topic- and country-specific results



### **Case Study 1: Cameroon (Deductive)**

- Intervention: Periodic intensification of routine immunization (PIRI) with enhanced microplanning and communication
  - PIRI microplanning used strong communication at national and local levels.
- Results:
  - Cameroon had improved DTP3 coverage in districts where PIRI occurred.
- Lessons learned:
  - More evidence is needed on effectiveness and sustainability of microplanning.



### Case Study 2: Chad (Deductive)

#### • Intervention: Health systems strengthening

- Augmenting human resource capacity, bridging geographical gaps through transportation, and providing cold chain equipment.
- Results:
  - DTP1 increased nationally from 2019-2022, and despite challenges posed by COVID-19 in 2020, the number of DTP1 doses delivered in both priority and non-priority areas increased from 2019-2020.
- Lessons learned:
  - Systematic documentation of immunization status as well as a sustainable plan for ongoing data collection is needed, along with community ownership and engagement.



### **Case Study 3: Zambia GIS Mapping**

#### • Intervention: GIS mapping to identify and reach ZD children in Choma District

- Detailed maps created with GIS software.
- Technology, community engagement, and data analysis facilitated implementation.
- Local ownership and community engagement were instrumental for success.
- Experts supported predictive modeling.
- Results:
  - Households with children under 5 were mapped and registered, including ZD children.
  - Nearly all eligible ZD children were reached with vaccines during campaign and outreach activities.
  - Factors associated with ZD children in Choma District were identified.
- Lessons learned:
  - Scale-up requires funding, capacity building, collaboration with health authorities, and thoughtful planning.



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### **Case Study 4: DRC Microplanning**

#### • Intervention 1: GRID3 Mapping for Health (M4H) Project

- Geo-mapping and digital innovations: stakeholder engagement and creation of maps and population estimates.
- Leveraged community engagement and knowledge transfer to create and implement M4H.
- Intervention 2: Microplanning in the urban vaccination strategy in Kinshasa
  - Engagement of community and technical partner to support implementation.
- Results:
  - GRID 3: informed activities at the health zone level and national level statistics estimates.
  - Microplanning: revealed gaps and opportunities to reach missed children.
  - Vaccination coverage increased between 2017-2022 in the Mashako Plan provinces, as did other indicators related to vaccine service delivery.
- Lessons learned: Microplanning is promising, but deliberate and evidence-based scale-up is required for success.
  - GRID3 microplanning will be scaled up alongside performance and accountability frameworks.



### Case Study 5: Mali Women's Groups

- Intervention: leveraging women's groups to address the persisting high numbers of ZD children in urban areas
  - Women's groups involved in the Reach Every District (RED) strategy.
  - Technical assistance, incentives (and some associated challenges with operationalization), and engagement of local entities.
- Lessons learned:
  - For immunization programs to successfully leverage women's groups at a national level, must ensure that the groups are maintained and support at the local level, complemented with technical assistance and training.
  - Cost and available resources, current presence of groups, and community ownership and trust of groups need to be considered.



#### **Limitations and Conclusions**



#### Limitations

- Methods originally designed for inductive case studies, focusing on one intervention and corresponding experts. For deductive case studies, some challenges with identifying key interventions.
- Limited evidence on the impact of selected interventions.
- Multiple perspectives, not always in alignment.
- Methodology does not quantify the impact of interventions on reduction in ZD rates.





#### Conclusions

- Community engagement/ownership was emphasized in interventions.
- Many questions were not able to be addressed using the case study approach.
- More research is needed to understand how countries can successfully adapt and implement pro-equity interventions in varying contexts.
- ZD research learning agendas and ongoing dialogue on results and lessons learned could support this endeavor.





# **Contact Us!**

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# Thank you!

The team would like to acknowledge the following individuals who contributed to the production of these case studies: Lola Aladesanmi, Adedayo Adeyemi, Ginny Fonner, Shiraz Hassan, Theresa Hoke, Amadou Kebe, Pascale Laoukounda, Douglas Massom, Chikusela Sikazwe, Jean Claude Wema, Abel Yamba

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The TCV Campaign's Efficacy in Identifying and Reaching Zero-Dose Children – A Nepal Case Study













#### **Our Team**







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#### **EPIDEMIOLOGY OF TYPHOID IN NEPAL**

- Kathmandu, Nepal's capital, stands out as the global epicenter for enteric fever due to its alarming incidence of typhoid.
- Recent epidemiological data highlights typhoid as the third-most prevalent cause of food- and water-borne diseases in Nepal, ranking as the fourth-most common reason for hospitalization over the past three years.



### TCV in Nepal (Trial Stage)

#### 2017-18 TCV Nepal Trial Overview:

Observer-blind, individually randomized, controlled trial. <u>Location</u>: Lalitpur Metropolitan City <u>Target Age Group</u>: Children aged 9 months to 16 years

#### **Study Follow-up:**

2-year post-vaccination period. Passive surveillance utilized blood culture-confirmation for typhoid fever.

#### **Efficacy Findings:**

One-year post-vaccination showed 81.6% efficacy. Consistent results observed across various geographies and populations.





# TCV in Nepal (Catch-up Campaign Stage)

**TCV Integration into Nepal's Immunization Program (8 April - 1 May 2022):** Launched by the Govt. of Nepal. Inclusion in routine immunization for children up <u>aged 15 months to 15 years</u> (target population included <u>7,715,516 children</u>). Nationwide catch-up campaign (<u>77 districts</u>) supported by <u>GAVI, WHO, UNICEF, and other partners.</u>

Gavi Milestone: Nepal becomes the <u>fourth Gavi-supported country</u> to adopt TCV in routine immunization.

**Campaign Success:** Kathmandu, Nepal's capital, had an estimated coverage of 93.0%. Lowest coverage in Rasuwa district (77.0%) and the highest in Surkhet district (120.0%).





#### Aim

This case study aims to provide a comprehensive understanding of the TCV campaign in Nepal from the perspectives of stakeholders at various levels of the health system. It delves into the impact of introducing a new vaccine in identifying under-immunized and zero-dose children.

### Methodology



#### **Qualitative approach**

We carried out eight in-depth interviews with purposively selected key informants in Nepal. The selected stakeholders were interviewed using a semi-structured in-depth interview guide, which was developed by IIHMR-Delhi based on literature reviews to answer research questions.

The guide sought information on essential socio-demographic characteristics, role, and responsibilities of the stakeholders, information regarding implementation experience, monitoring procedures, and experiences in reaching zero-dose children.



#### Narrative review

A total of 97 articles in English were identified, of which 19 were included in this study, after excluding duplicates. Medline, Web of Science, and Scopus databases were searched for information from 2012 to 10 February 2023 regarding TCV epidemiology, trials, efficiency, cost effectiveness, and public perspectives in Nepal.

The stakeholders also provided available documentation (English and/or local language) including scheme guidelines, protocols, infographics, and fact sheets with the study team for secondary data analysis.

#### Nepal presented an opportunity to identify and reach ZD children during the vaccination introduction's catch-up



**First,** The TCV campaign employed a well-designed cascade approach, ensuring success from national to local levels in a short time span. Second, households received a campaign invitation card containing the full immunization schedule, facilitating outreach to ZD children and missed communities. <u>**Third,</u>** a unique campaign vaccination card, included a tear-off counterfoil enabling health workers to track and follow up on missed doses efficiently.</u> Last, the monitoring carried out in conjunction with the TCV campaign played a key role in detecting children with missed vaccine doses and ZD.



# **A. Multi-level training activities**

Health workers underwent training to <u>recognize children with incomplete immunizations</u>, <u>document any missed vaccines</u>, and guide them to <u>visit their designated health facility for</u> <u>catch-up vaccinations post-campaign</u>.

The training session on microplanning for the TCV campaign encompassed activities such as <u>mapping beneficiaries and resources</u>.

It also emphasized effective strategies for identifying ZD children.



**C** We gave training to health workers and also in our immunization cards, we made it a point to focus on health workers. And whenever children come for immunization, please ask if they have received all their routine vaccines or not. If not, please record their details and immediately send them for administration of those vaccines that have been missed. So that was also good in a sense that it provides an additional window to those children that have been missed." [Respondent KII4]



# **B. TCV Campaign invitation card**

By distributing immunization invitation cards to all households with children in the eligible age range, the TCV campaign effectively reached out to previously missed communities and ZD children.

This approach ensured that families were directly informed about the vaccination program and felt valued as part of the community health initiative.

The personal touch of providing invitation cards not only increased awareness but also fostered a sense of importance and inclusivity among community members, ultimately **encouraging participation and improving vaccination coverage among previously underserved populations.** 







**C** They feel that the government has given importance to them by providing invitation cards for the very special occasion." [Respondent KII2]



# **C. TCV Campaign vaccination card**

The TCV campaign in Nepal implemented a tailored approach to vaccination cards, catering to two distinct age groups: children above 2 years old and those aged 15 months to less than 24 months.

Each card was meticulously designed with a detachable counterfoil, a vital tool for health workers **to track and follow up on missed doses** during routine vaccinations. These counterfoils remained at the health facility, allowing for efficient monitoring and ensuring that no child fell through the cracks in the vaccination process.

Health workers meticulously documented any missed doses on the designated counterfoils, facilitating comprehensive documentation and enabling efficient follow-up activities to ensure the completion of all recommended doses during routine immunization sessions. This systematic approach contributed to **improved vaccination coverage and better overall health outcomes for children in Nepal.** 



## **D.** Monitoring

ZD children predominantly found in urban slums and remote areas with a focus on underserved communities, including minority groups. Higher concentration of ZD children in districts sharing international borders with China and India: <u>Special emphasis on</u> <u>monitoring ZD populations during the TCV campaign, particularly targeting marginalized</u> <u>communities.</u>

Grassroots health workers viewed monitoring as a vital approach to reaching ZD children. TCV campaign increased awareness about vaccination, contributing to the successful vaccination of ZD children.



Now we don't have zero doses in Lalitpur, for accepting that new [TCV] vaccine, all are covered by our health facility." [Responded KII6]

# 





Overcoming challenges such as diverse terrain, political and administrative difficulties, Nepal established a landmark by demonstrating that a systematic campaign is effective in identifying and addressing ZD and missed children.



Collaborative efforts across all levels of stakeholders, including media, civil society, and political commitment, played a pivotal role in the success of the campaign.



The campaign's success was enhanced by innovative approaches and the application of knowledge through comprehensive training programs.



Support from key partners, including Gavi, WHO, UNICEF, and other collaborators, served as the backbone of the campaign's success, highlighting the importance of global cooperation in achieving vaccination goals.



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## Please share your questions

in the Q&A box



### Thank you!

For more information, contact zero\_dose@jsi.com









