

# Zero-Dose Learning Abstracts

Identify • Reach • Monitor • Measure • Advocate

Sunitha Chandrasekhar, PhD (consultant)

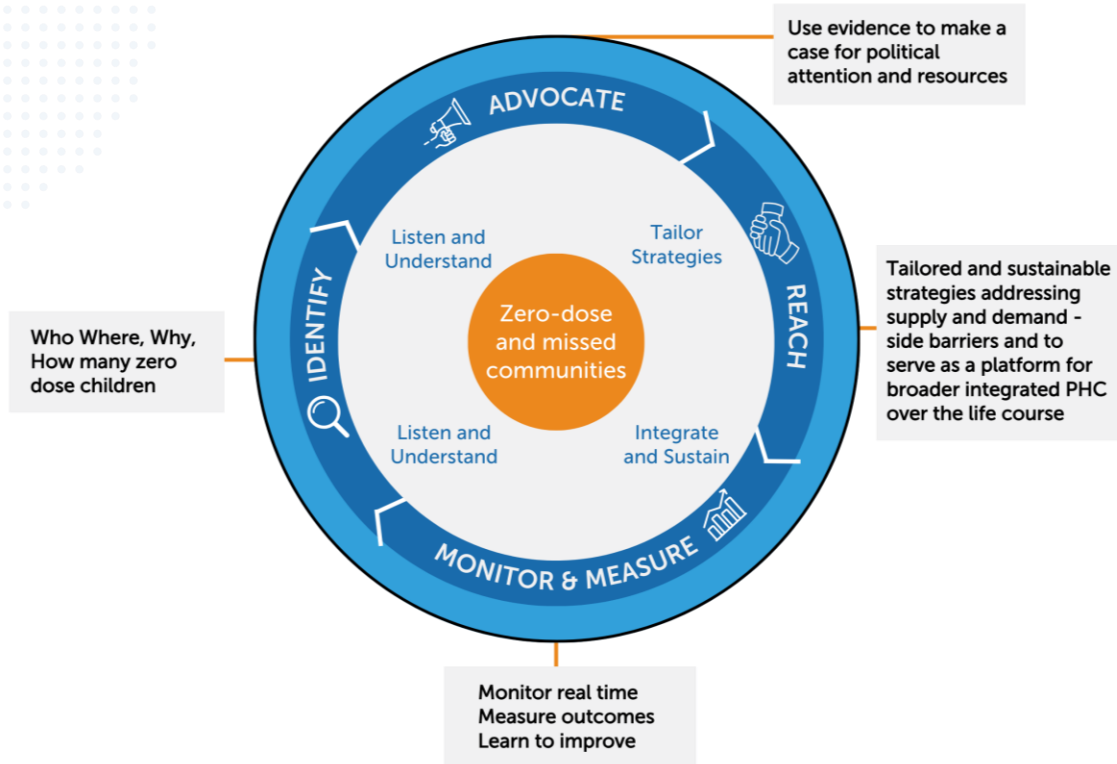
11<sup>th</sup> September 2024

ZD Learning Day, Geneva



# Identify • Reach • Monitor • Measure • Advocate

Using zero-dose strategy to strengthen equitable Primary Health Care across the life course

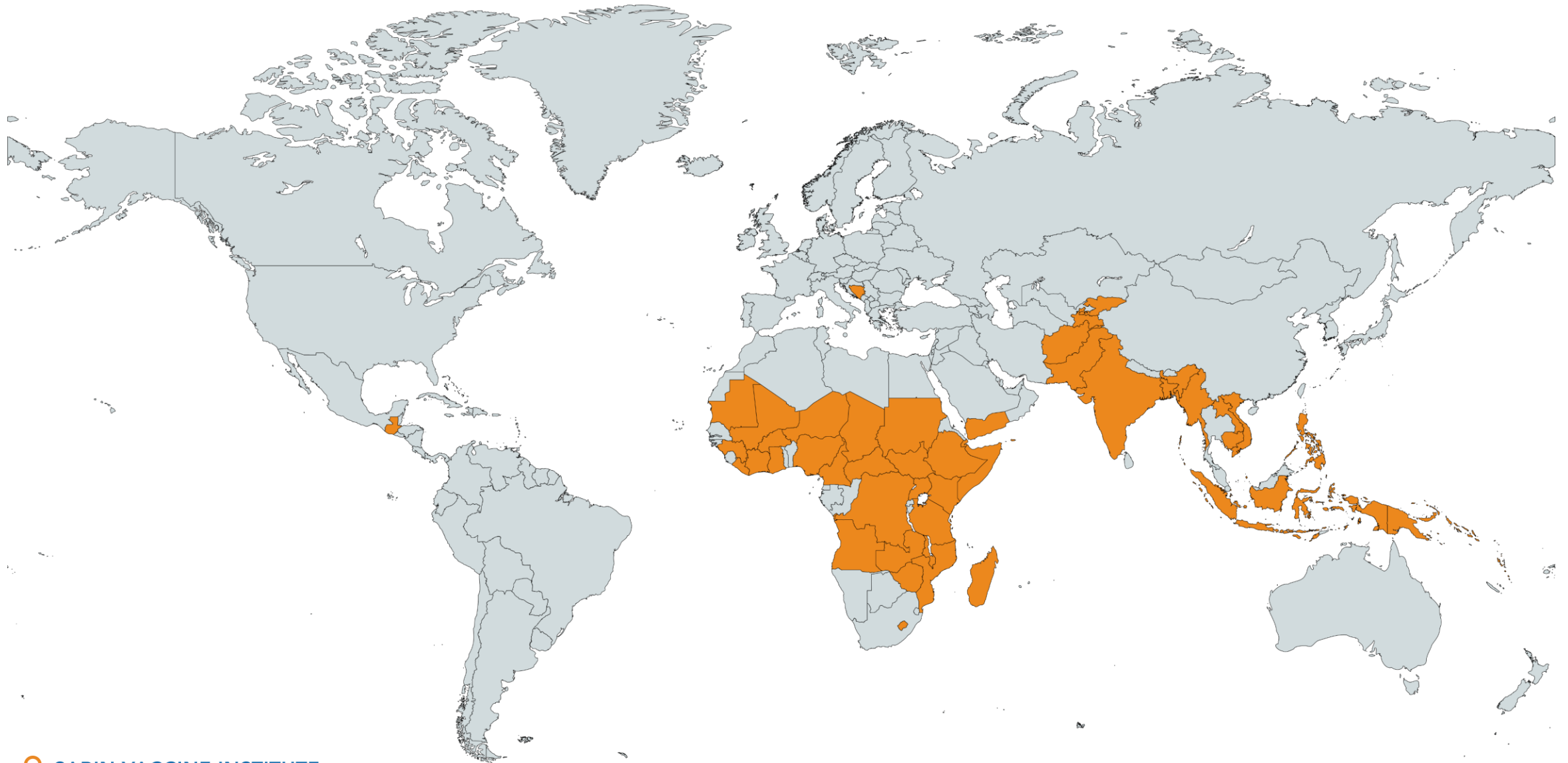


## Presentation Objectives:

Share insights on:

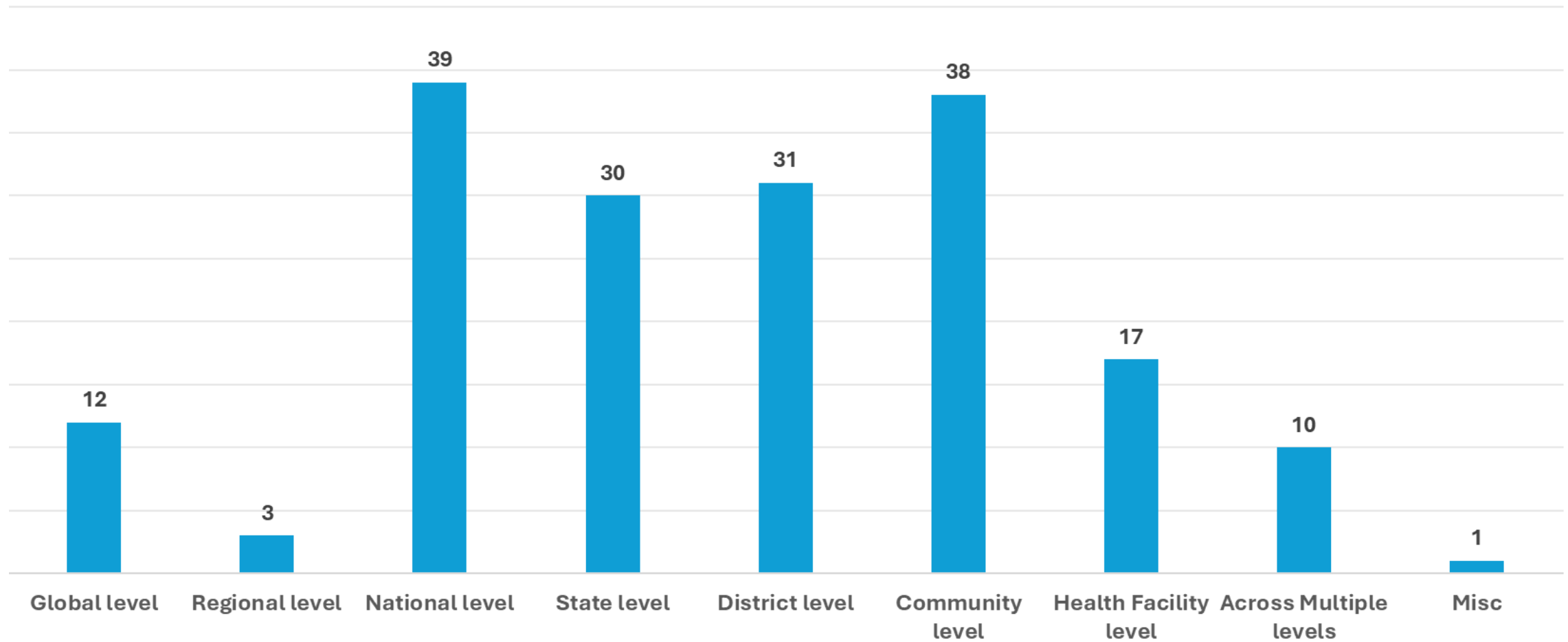
- Addressing vaccine equity
- Adaptive learnings
- Deep dive:
  - Integrated approaches
  - Gender-focused approaches
- Findings and recommendation of key themes
- Summary

# Country Heat Map

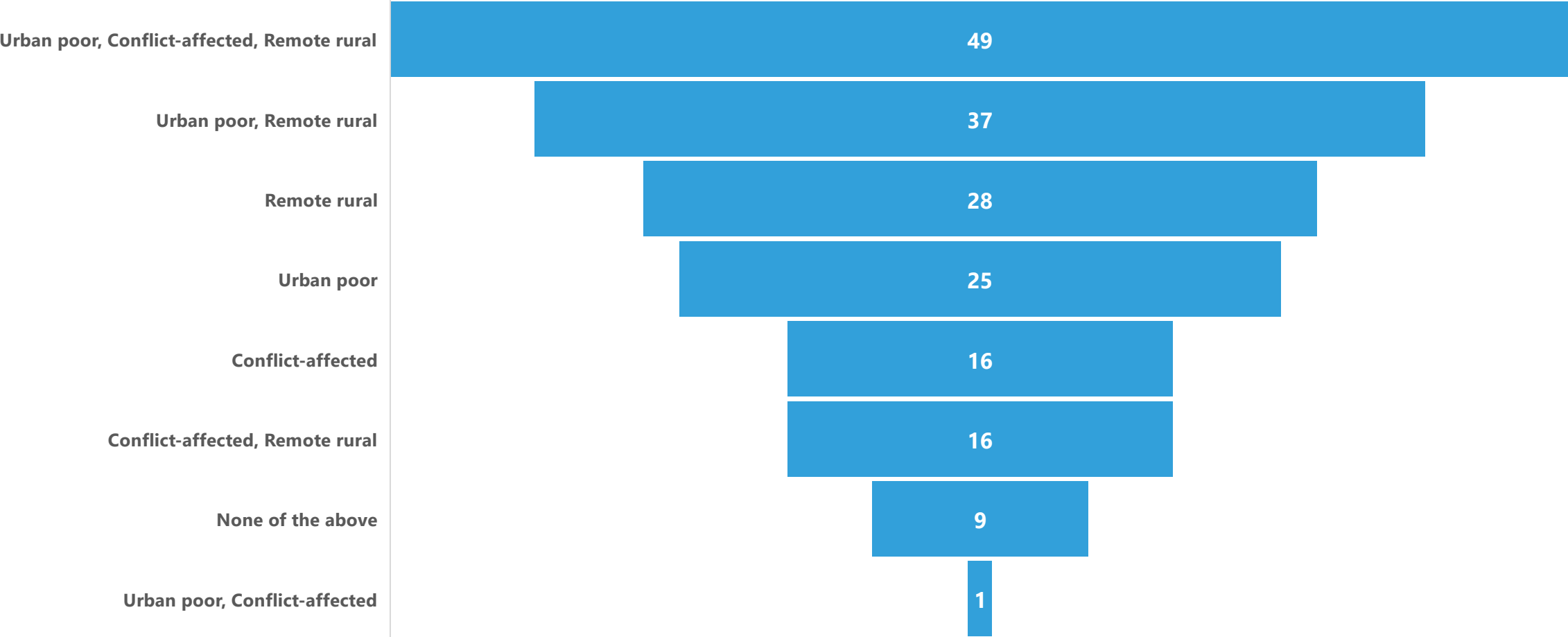


# Level of evidence generation

No. of Abstracts w.r.t Levels

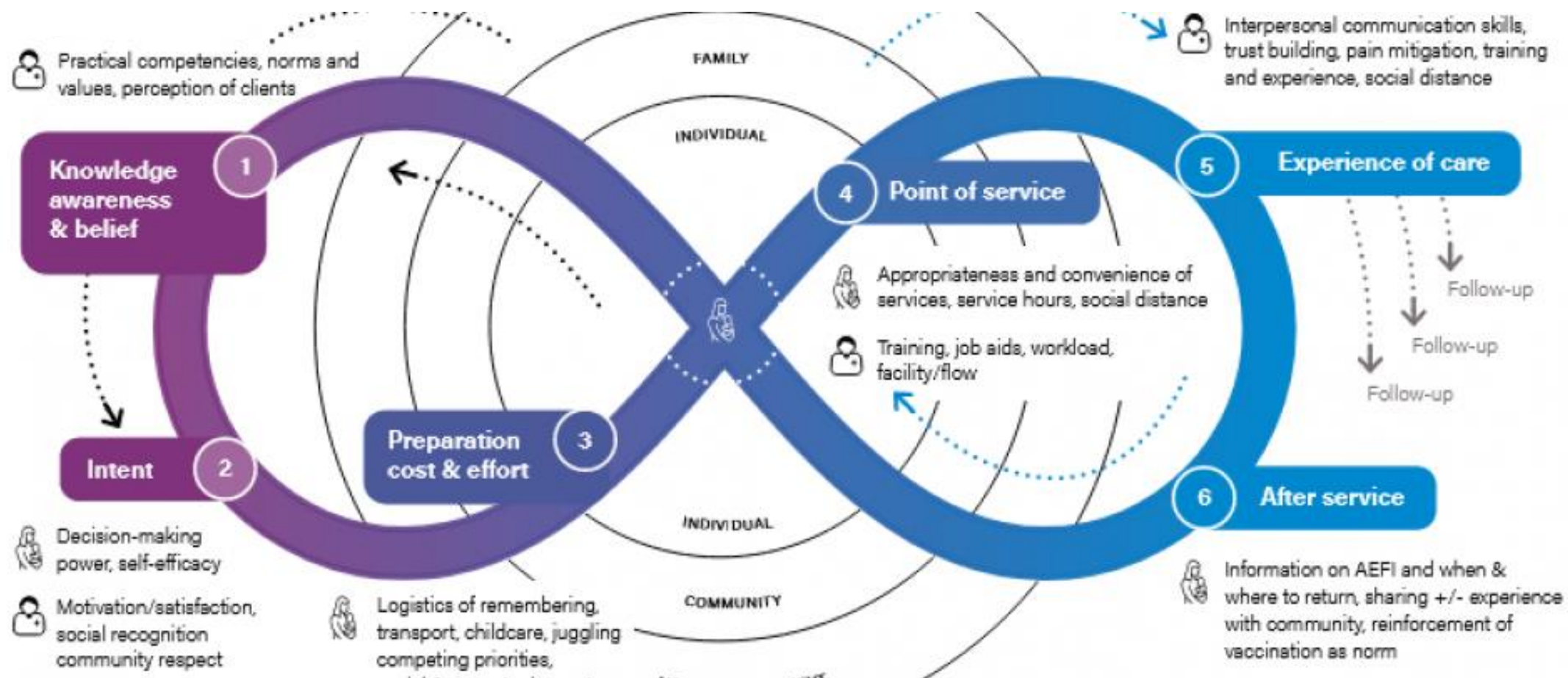


# Equity Reference Group Setting

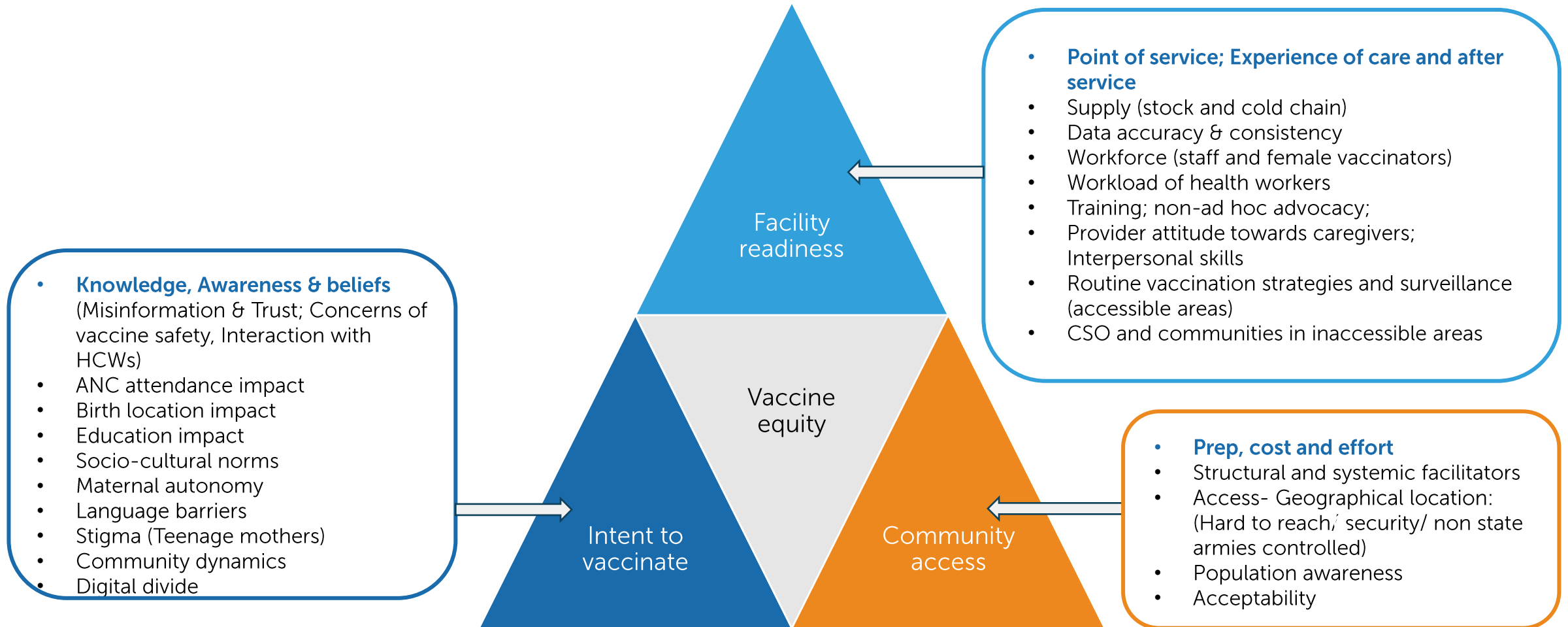




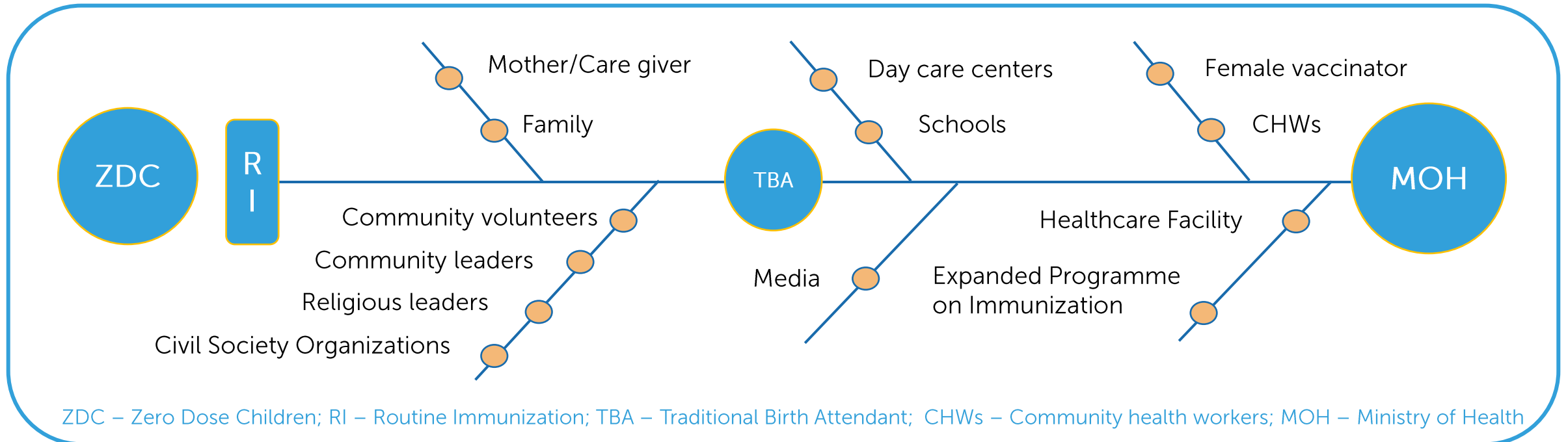
# A focal point



# Interventions to address identified barriers



# Key stakeholders identified in the abstracts

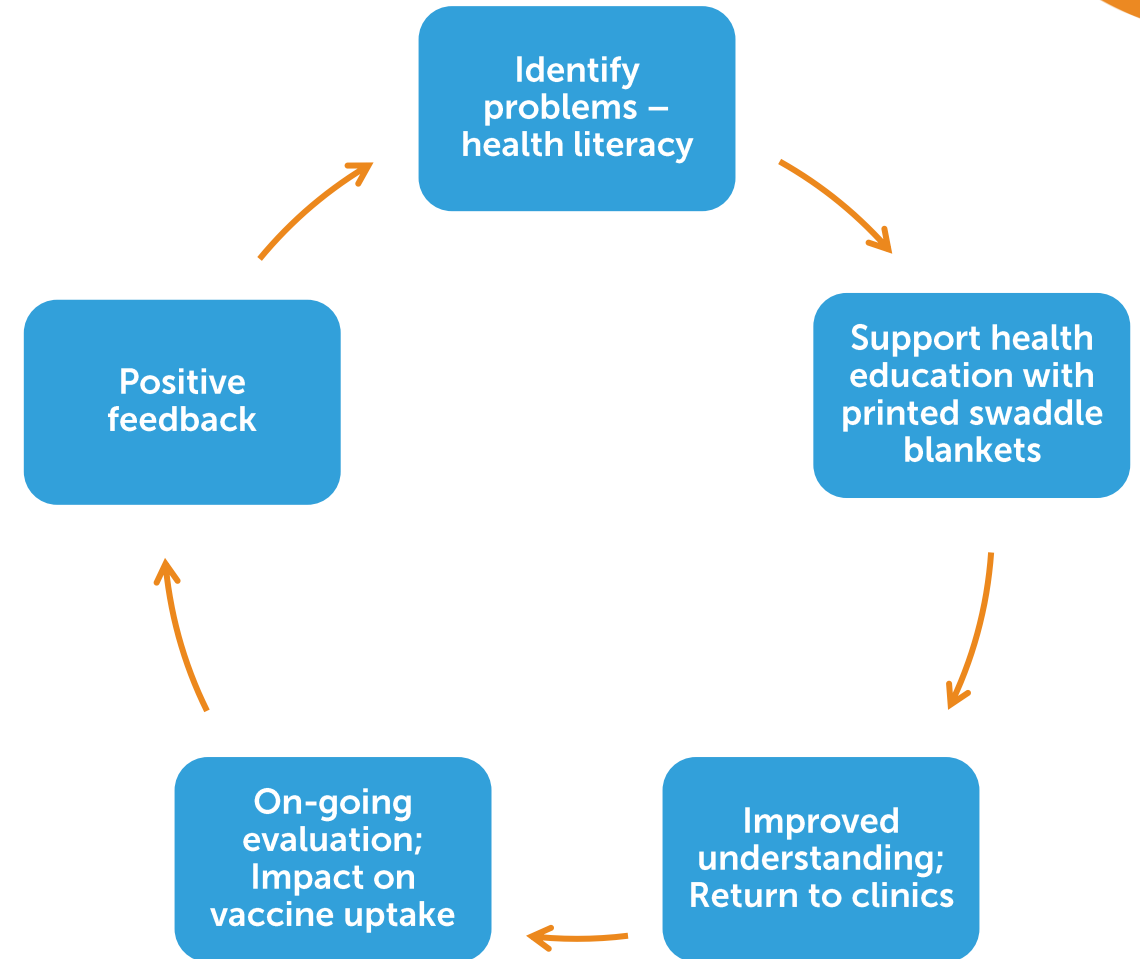


"Many mothers sought services from Traditional Birth Attendants (TBA) despite being banned by the government." Sole abstract from Uganda (**Barriers to reaching the Zero-Dose and under immunized children**) that mentioned TBA while traditional medicines continue to be provided by qualified and registered as well as unqualified and unregistered THPs who are closest and trusted the most by a vast majority of communities in LMICs.



# Adaptive learning

- **Solomon Islands** - Positive feedback and impact of Swaddle blanket with literacy-appropriate immunization messaging
- **DRC**- U Reporter platform for youth to document reasons for vaccine refusal; Web Fact checker to dispel misinformation
- **Nigeria** - Complex policies and policy restriction for Catch-up; a new Catch-up policy is under review
- **Mali** - National Centre of Immunization led the development of the Routine Immunization Strategy in Conflict Areas (RISCA), with the technical support of Dalberg and financial support from Gavi
- **Nigeria** - Situation analysis and needs assessment of the national "Basic Guide to Routine Immunization for Service Providers." Overwhelming content, limited data, and a lack of targeted guidance for zero-dose identification and outreach strategies. Training Module Enhancements have been identified



# PHC integration

## Optimizing health personnel and resources to address Missed Opportunities of Vaccination

### Multi-zero dose indicator:

- Facility delivery
- Postnatal care
- DTP
- Vitamin A supplementation
- **Half (55.6%) of ZD children** are not MZD and have at least some connection with the health system; this varies widely across countries.
- ZD efforts strengthen not only immunization systems but also primary health care systems.

### Ante-natal and post-natal visits

- Nutrition
- Vit A
- Deworming
- Growth monitoring

### Distribution from other programs

- Bed net with insecticides

### Targeted integrated outreach

- Addressing multiple health needs

**Closing equity gaps in immunization and primary care systems in Africa: Expanding vaccine zero dose by introducing the concept and indicator of 'multi-zero dose'**

# PHC Integration : Findings and recommendation

● **Somalia, Sudan, and Ethiopia:**  
Increased touchpoints with integrated approaches to overcome service delivery barriers

● **Lit Review** on ZDC - transformative progress toward the SDGs requires strategic integration into PHC systems.

● **Gavi-led ZDLH** in Nigeria: webinar series to share best practices of integrated services

● Integration enhances access and operational efficiency

**RI improves with PHC integrated approaches**

# Gender Considerations: Findings & Recommendations

## Findings

- Disproportionate vaccination responsibilities
- Non-consenting father or family head / older fathers
- Gender based violence- AEFI
- Gender digital divide
- **Review- REPORTING BIAS-** Maternal agency and education; few interventions on impact of male decision making on childhood vaccination

## Recommendations

- Implementation and impact-based gender analysis to provide evidence
- Gender-disaggregated vaccination data
- Directly engage with mothers and male members in H2H visits
- Gender-sensitive training for healthcare providers
- Research with gender-lenses

## Interventions

- Extending vaccination hours; Integrating nutritional screening services ; Storytelling for young refugee women and girls- Uganda
- Gender-responsive training for healthcare providers – Nigeria
- Gender-sensitive outreach programs – Nigeria, Pakistan, Zimbabwe
- Midwives to identify ZDC - Sudan
- Care-group mothers – Somalia; Demand generation and advocacy - Nigeria
- ASHAs drive vaccine uptake– India
- The use of female vaccinators – Somalia, Pakistan, Nigeria

# Role of Community and Recommendation

## Mali

Mama-Yeleen :  
Community-level  
Women Leaders

H2H visits; Communicate  
and monitor; educational  
talks; collect user  
feedback; Loss to follow  
up cases.

## Tanzania

Advocacy of Vaccine  
Services through  
Community Leaders

Permanent vaccine  
agenda to high-level  
council meetings;  
Constituency level and  
H2H

## Various countries

Local leaders, religious  
leaders, women and  
youth groups

Malawi, S. Sudan, Nigeria,  
Indonesia, Vietnam,  
Uganda, PNG, Pakistan,  
Ethiopia, Madagascar

## Scoping review; mixed methods study

Women's leadership in  
immunization: advancing  
the zero-dose agenda

Perceived impact of  
women leaders on  
health, organizational,  
and systems outcomes

**Contextualised culturally sensitive community engagement for sustainability and scale up**

# Promising Approaches: Digitalization

## Yemen and CAR

**HeRAMS\*** -  
Quantification of geographic access to healthcare, and the identification of difficult to reach populations

WHO's \*Health Resources and Services Availability Monitoring System

## India & Nigeria

Predictive modelling;  
Geospatial analysis

Modelling for dropout ;  
Predict coverages and determine significant structural determinants of immunization outcomes.

## Somalia, Sudan, Afghanistan, Ethiopia

Acasus based interventions

Digital monitoring; multi-source data dashboard

## Uganda, Bangladesh, and Mali

DHIS2's data for tracking and real-time reporting

Improved immunization coverage

**Recommendation:** Digital enabling environment; vaccinators using existing digital platforms to identify ZDC; Sub district level granular data; digital systems at PHC; digital identity of new born; name based tracking; gender disaggregated data; Multi source data dash boards; Digitally-enabled real-time monitoring



# Scarcity of costing information

## India's PIRI

- Incremental cost per dose delivered was USD 6.21.
- Incremental cost per zero-dose child reached was USD 82.99.

## Scoping review

**Kenya** - Cost per additional dose is USD 0.08 for a cellular phone contact intervention.

**Nicaragua** - Cost per Dose for Cash Transfer Intervention was estimated to be USD 67.

Mozambique's HPV vaccine program had a cost effectiveness analysis

## Gap

The lack of empirical evidence on specific interventions regarding context-specific, multi-sectoral implementation; Lack of well-designed studies; Contextualized studies that are difficult to benchmark

## Recommendation

Need for cost effectiveness strategy; Support cost analysis capacity building; Funding costing research; Implementation-based and innovative actionable steps are needed

# Funding Flows Information

## NIGERIA



2023 RI routine immunization budget allocation resulted in **significant funding left unspent.**

## NIGERIA



**Delayed payment** of the 2022 counterpart funding quota led to disruptions in program execution and **increased the number of zero-dose (ZD) children to 62%.**

## SUB SAHARAN AFRICAN COUNTRIES



Considerable implementation challenges even in well-resourced interventions

### Common Findings:

- Funding disparities across different regions, delays in funding allocation, and high financial costs associated with reaching underserved populations are common challenges impacting immunization programs.

### Gaps:

- Lack of consistent financial data and transparency regarding the exact costs and funding flows, particularly in evaluating the long-term sustainability of immunization programs.

### Recommendation Focus:

- Improving timely disbursement of funds and enhancing financial tracking mechanisms.

# Vaccination Catch Up

- Catch-Up Campaigns - Mozambique, Uganda, Ghana, Somalia
- Community mapping or HIS data used in catch-up instead of health facility registers – Mozambique
- Utilization of CHWs & HCWs – Mapping and social mobilization in Mozambique
- Absence of National Catch-Up Policy - Chad, Mali, Niger and Nigeria. Results in Different schedules for different ages
- Nigeria- a Catch-up Policy is at the final level of approval.
- Central African Republic, Niger, and Nigeria- vaccination over age 2 is restricted or unavailable

# AEFI : Findings and Recommendations

## Findings

**India:** Fear of minor AEFI ; Health worker's lack of knowledge on Syrup Paracetamol guidelines; Variation in the paracetamol supply at vaccination session sites

**Pakistan:** Misconceptions about the vaccine's adverse effects- fear of children falling ill or facing infertility

## Recommendations

- Improve vaccine acceptance - Co-creation sessions, targeted and consistent engagement with community leaders and household
- HRH capacity needs assessment/training and innovative delivery approaches for effective service delivery
- Address both systemic and socio-behavioral barriers to effectively address the multifaceted ZD challenges
- Community-centric active surveillance of AEFIs

# Urban Settings: Findings and Recommendations

## Findings

### **Systemic Barriers in Tanzania**

Geographic access issues, Inconsistent outreach service, Vaccine stock-outs and staff shortage, Poor facility infrastructure and follow-up on immunization schedules

### **Socioeconomic & Mobility Challenges in Ethiopia**

Competing priorities and mobility constraints, Limited public awareness and provider attitude issues, Need for integrated, multi-sectoral interventions for urban vaccine coverage

### **Service Disparities in Nigeria**

Reliance on informal networks and long service wait times

## Recommendations

### **Community-Based Outreach & Tailored Microplans**

Engagement of community leaders and health workers, Development of microplans for urban challenges, Improved tracking of zero-dose and under-vaccinated children

### **Service Integration & Women's Empowerment**

Immunization integration into broader health programs, Empowering women in health decision-making, Enhanced provider communication and defaulter tracing

### **Strengthen Health Infrastructure & Collaboration**

Improved healthcare infrastructure, staffing, and training, collaboration between healthcare workers, community leaders, and caregivers, addressing misinformation and ensuring equitable service delivery

# Humanitarian Settings: Findings & Recommendations

## Findings

**Kenya:** Inconsistent ZD definitions; poor data quality; Weak facility-community linkages and gender disparities including digital divide

**Nigeria:** Local trust and adaptive scheduling

**Sahel Region, Africa:** Humanitarian access is restricted. As of 2022, ZDC : 26% in Chad and 18% in Mali, with under-immunization rates between 9% and 40%.

## Recommendations

- GIS; Intensify diplomatic efforts to secure access for vaccination campaigns and integrated vaccination with other essential services
- Implement context-specific strategies to improve identification, support to health management teams, integration of community feedback into planning to tailor outreach effectively.
- Strengthen local partnerships for security, adapt policies to include catch-up vaccines, and invest in local health worker training



# Demand Focused: Findings and Recommendations

## Findings

**India:** Limited awareness about vaccines, particularly in populations with limited health literacy

**Nigeria:** Cultural beliefs and misinformation

**Ethiopia:** Distance to healthcare facilities

**Pakistan:** AEFI

**Bangladesh:** Lack of male engagement in family health decisions

**Kenya:** A mistrust of government-led health campaigns

## Recommendations

- Strengthening community-based education programs
- Incorporating culturally-sensitive health promotion strategies
- Improving access to immunization through mobile clinics
- Conducting awareness campaigns that specifically target misconceptions about vaccine safety
- Promoting male involvement in healthcare decision-making
- Building trust through local community leaders

# Outreach to Campaign Delivery Spectrum: Findings and Recommendations

## Findings

**Nigeria:** H2H campaigns in densely populated regions

**Bangladesh:** Limited success of outreach campaigns in reaching mobile populations such as migrant workers and their families

**Kenya:** Challenges in logistics and supply chains

**Ethiopia:** Health worker shortages

**Pakistan:** Irregular immunization campaigns and a lack of follow-up

## Recommendations

- Sustained H2H campaigns
- Developing tailored outreach strategies for mobile populations
- Strengthening the supply chain and improving logistical coordination
- Investing in the recruitment and training of additional health workers
- Introducing routine follow-up visits after immunization campaigns
  
- Health workforce crisis – 10 million by 2023; SSA-
- Climate shocks, Migration of well-trained staff,

# What the studies tell us

Digitalization, Gender Equity, Integrated PHC, Engaging Diverse Stakeholders, Community-led Interventions, Conflict and Humanitarian Settings

Digital tool effectiveness; Scalable and sustainable improvement in data quality are vital

Gaps exist in understanding and addressing gender-specific barriers to immunization

Need for models of care that integrate ZD interventions with broader primary care services

Strategies for engaging diverse stakeholders are not well-defined and may vary across different contexts.

Community-led interventions have shown initial success - limited understanding of scalability & sustainability

Under-developed strategies for reaching ZDC in conflict and humanitarian.



# Thank You!

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 **SABIN**  
VACCINE INSTITUTE

*2000 Pennsylvania Ave, NW, Suite 7000  
Washington, DC 20006  
+1 202 842 5025  
[info@sabin.org](mailto:info@sabin.org)*