Guidance on Use of Gavi Support to Reach Zero Dose Children and Missed Communities

Use these guidelines to understand how Gavi funding should be used to supplement other domestic and donor funding to strengthen immunisation systems to sustainably reach zero dose children and missed communities in Gavi implementing countries.

The shared goal for the Immunisation Agenda 2030 and Gavi 5.0 is to reach every child with every vaccine. A major impact goal of the Immunisation Agenda 2030 is to reduce the number of zero dose children globally by 50% by 2030 and provide vaccines.

These guidelines describe the use of the IRMMA framework (Identify – Reach – Monitor – Measure – Advocate) to develop sustainable and country-tailored interventions for Gavi support. A Zero-Dose Analysis Card is available to provide guidance on key analyses, resources, and proposed interventions to help countries design programmes to sustainably reach every child with a full course of vaccines.

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Key audience
Immunisation programme managers, Ministry of Health Planning teams, Gavi Secretariat country teams, Alliance partners, including civil society organisations, (CSOs) and other stakeholders responsible for and supporting the delivery of immunisation in Gavi implementing countries.
1. Introduction

Equity is the organising principle of the Alliance’s 2021-2025 strategy, whose vision is ‘leaving no-one behind with immunisation.’ This will require using all Gavi funding levers to focus on finding and sustainably reaching zero-dose children and missed communities through routine immunisation within essential Primary Health Care (PHC) services to ensure that no child remains bereft of the benefit of a full course of vaccines. Zero-dose children account for more than half of vaccine preventable deaths and are key to enhancing public health outcomes. Serving zero dose children and missed communities will also require differentiated approaches suited to local contexts; interventions will need to address barriers to both service provision and service utilisation.

Immunisation now reaches more communities than most other routine health interventions, although we are still far from the goal of leaving no one behind with immunisation. Within countries, equity in accessing immunisation remains a significant issue for many children and caregivers; large numbers of children are still not reached by any routine vaccination services. Many women face gender-related barriers that make it difficult for them and their children (both boys and girls) to access immunisation. In 2020, across Gavi-implementing countries, 17.7 million children did not receive the full course of DTP-containing vaccines and, of these, over seventy-five percent (13.7 million children) did not receive even a single dose.¹ These children who received no vaccines through routine immunisation services are referred to as zero dose children and represent the most left-out and at-risk children worldwide.

Covid-19 related disruptions have resulted in a nearly 30% increase in the number of zero dose children in Gavi supported countries in 2020, creating a risk of higher child deaths, disease outbreaks, and medical impoverishment.

Thus, the challenge of reaching and fully immunising zero-dose children is urgent. Despite only accounting for 13% of the birth cohort in Gavi countries, zero-dose children comprise nearly 50% of child deaths caused by vaccine preventable diseases.² Communities with zero-dose children also have a significant number of under-immunised children: data shows a high degree of overlap between subnational areas with high numbers of zero-dose and high numbers of under-immunised children.³

Key definitions

Zero-dose children are those who have not received any routine vaccine. For operational purposes, Gavi defines zero-dose children as those who have not received a first dose of diphtheria-tetanus-pertussis containing vaccine (DTP1).

Missed communities are home to clusters of zero-dose and under-immunised children. These communities often face multiple deprivations and vulnerabilities, including socio-economic disparities and lack of access to health services, which can be further exacerbated by gender-related barriers.

Under-immunised children are those who have not received a full course of routine vaccines. For operational purposes, Gavi defines under-immunised children as those who have not received a third dose of diphtheria-tetanus-pertussis containing vaccine (DTP3).

Key Resources and References
- Zero-dose Analysis Card
- Slide set on Gavi’s Zero-dose funding guidelines, including Country examples and best practices
- Alliance database of technical resources for improving immunisation coverage and equity

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¹ WUENIC estimates 2019
² Gavi internal analysis based on WHO estimates of cause of under-5 deaths, vaccine co-coverage from DHS/MICs and WUENIC coverage data
³ Analysis of Institute for Health Metrics and Evaluation (IHME) district-level coverage estimates shows that for every 1pp increase in % zero-dose, there is a 0.6 pp increase in DTP drop-out rate on average in Gavi supported countries.
Key Shifts from Gavi 4.0 to Gavi 5.0
- Prioritising zero-dose children and missed communities as starting point for country dialogue in planning for or reprogramming Gavi investments
- A single theory of change at the country level for how all Gavi support aligns to identify and sustainably reach zero-dose children and missed communities
- Greater focus on tailored strategies to increase access to, demand and confidence in immunisation,
- A new policy designed to overcome gender barriers and increase gender equity as key enablers of reaching zero-dose children and missed communities
- A more deliberate approach to engaging a broader set of partners, including local CSOs and humanitarian actors, with a new approach for increasing engagement with civil society, community and faith-based organisations
- Increased differentiation of Gavi support and processes across country types and contexts
- More purposeful advocacy to secure political commitment to prioritise zero-dose communities and related public health and broader development gains

2. Introducing the IRMMA Framework

The IRMMA framework (Identify – Reach – Monitor – Measure – Advocate) has been developed by the Alliance to help countries adopt a structured approach to reach zero-dose children and missed communities as a pathway to equitable Primary Health Care. The framework can be used to initiate multi-stakeholder discussions on determining appropriate interventions for Gavi investments. Technical resources organized by the IRMMA framework can be found in the Alliance database of technical resources for improving immunisation coverage and equity. The approach will need to be locally adapted and tailored to the needs of each country context, depending on who and where zero-dose children are, the underlying barriers to immunisation, security situation, as well as the relative strength of the health system.

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

2.1 Identify

This step requires a clear understanding of who, where, and how many zero-dose children and communities exist and why they have been missed. Given the impact of the COVID-19 pandemic, countries may need to identify both those missed due to COVID-related disruptions and communities which were already previously not being reached. This step may include triangulation of existing subnational data, both within immunisation (e.g., polio and/or measles campaign data), MNCH, preventive health programmes, and other sectors (including nutrition and education), mapping and analysing the concentration or dispersion of zero-dose children and understanding behavioural and social drivers of under-vaccination. Furthermore, equity, gender, inclusion, protection, and/or disability-related considerations need to be accounted for by this step. Quantitative and qualitative analyses can draw from existing country data systems and community-based monitoring systems but may also require new analyses and assessments.

2.2 Reach

A coherent strategy to **sustainably reach** zero-dose children and missed communities will require jointly addressing supply side barriers (service availability and quality) and demand side barriers (vaccine confidence, service uptake, and utilisation), while applying a gender lens.

- **Service availability and quality (Supply):** community-based services have been found to improve equity. Providing services as close as possible to communities improves access and lowers barriers for poor and vulnerable households, as well as female caregivers. High-quality, reliable, and tailored service delivery strategies should be designed for missed communities, grounded in strong and integrated routine immunisation services, so that disease-specific campaigns are no longer necessary and children receive timely vaccination. Community-based services provide improved access to services when and where communities need it improving equity by addressing barriers faced by poor and vulnerable households, as well as female caregivers. Fixed-post immunisation would need to be supplemented by tailored strategies targeted at sustainably reaching zero-dose children, such as regular and reliable outreach services, mobile service delivery and periodic intensification of routine immunisation. Innovative, locally appropriate strategies should be encouraged as zero dose communities may not always be able to access services at fixed health facilities. It is important that these tailored services are delivered in a regular manner per schedules agreed with local communities so that they are predictable, reliable, and responsive and not ad-hoc or intermittent. Greater value can be derived by co-delivering other essential PHC services such as nutrition, growth monitoring, and ante/post-natal care.

<table>
<thead>
<tr>
<th>COMMON GENDER-RELATED BARRIERS TO VACCINATION</th>
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<tbody>
<tr>
<td>◼ Caregivers may lack information and awareness on the benefits of vaccination</td>
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<td>◼ Division of labour in the household may detract from fathers’ involvement with childcare duties, including vaccination</td>
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<td>◼ Low socio-economic status of caregivers or lack of women’s access to household funds may limit means to afford indirect costs of vaccination</td>
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<td>◼ Religious practices or cultural values may prevent female caregivers from seeking immunisation services from male health workers</td>
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<td>◼ Travelling long distances to health clinics may deter women, particularly younger mothers, from bringing children for immunisation due to safety and mobility issues</td>
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<td>◼ Long wait times at clinics and immunisation sites only open during working hours may conflict with caregivers working in income-generating activities</td>
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<td>◼ Negative attitudes of some health service providers may discourage caregivers from return visits to complete immunisation schedule</td>
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- **Vaccine confidence, service uptake and utilisation (Demand):** To increase community uptake of services, innovative and tailored strategies should be developed and scaled up to engage communities, harness behavioural insights and improve the service experience of caregivers to ensure services meet their needs. This will be even more important in countries where COVID-19 has increased concerns, generated new rumours and mistrust of immunisation, and thereby pushed up the number of zero-dose children. Countries should pay particular attention to addressing gender-related barriers which hinder access to immunisation or prevent mothers, who are often the primary caregivers, from bringing their children – both girls and boys – for vaccination (e.g., due to unsuitable timing or inconvenient location of immunisation services or even disrespectful behaviours on the part of service providers).

**Reach strategies should be tailored to the specific context** of different countries and communities. Approximately half of zero-dose children and missed communities live in urban settings including peri-urban settlements and urban slums, remote rural contexts, or conflict settings. The remainder live in other contexts but typically face common barriers to accessing immunisation including gender, poverty, ethnicity, socio-cultural, inclusion, protection and/or disability-related barriers. To successfully reach zero-dose children and missed communities, countries must develop gender responsive and potentially transformative strategies and interventions that are differentiated according to country context, such as immunisation coverage, concentration of zero-dose, and identified barriers to immunisation delivery (see figure below).

**Differentiation of the IRMMA across country contexts**

Across the different contexts, **new partnerships** will be essential for providing community level engagement, with increased participation of local actors, agencies, and institutions. Gavi’s new Civil Society and Community Engagement approach requires proactive and meaningful engagement of trusted influencers, faith-based, and community-based organisations, CSOs, and humanitarian agencies in planning and implementing strategies to identify and reach missed communities. After identifying zero-dose children and missed communities, interventions should aim to provide regular immunisation services so that all children receive all vaccines.
Gavi’s new Civil Society and Community Engagement Approach has identified **three key strategic priorities** for civil society and community engagement:

- Political Will and Accountability
- Community Demand
- Complimenting Public Service Delivery

These 3 priorities are supported by a crosscutting set of strategic enablers, including capacity enhancement, testing, learning and innovation.

In each of these areas, countries are encouraged to prioritise interventions corresponding to the needs and capacities of their health systems, advancing a **differentiated planning approach**. For example, countries in acute or prolonged conflict situations have different support needs and CSO collaboration may primarily involve INGOs and humanitarian agencies due to country context.

### 2.3 Monitor/ Measure and Learn

Interventions will need to be individually monitored to assess progress, review data, and allow for learning and course correction as necessary. In addition to DTP1 coverage monitoring, countries will need to assess progress through multiple indicators and data sources to determine if zero-dose communities are being correctly identified, if zero-dose children are being reached, and if interventions are truly providing the full course of vaccinations in these communities. Innovative approaches are encouraged, such as community-based monitoring systems with regular data review and use fora, implementation research, and targeted sub-national health facility and coverage surveys and assessments. For example, scaling up DHIS-2 dashboards for district-level immunisation monitoring, strengthening data triangulation, and introducing real-time campaign monitoring. The monitoring and learning plan is part of the [Application Kit](#) and can support this step.

### 2.4 Advocate

Strong political leadership is one of the most important factors in catalysing rapid progress on immunisation equity and ensuring this is maintained and scaled through domestic financing. Dedicated advocacy interventions can help create and sustain political commitment to mobilise and prioritise zero-dose children and missed communities as a platform for primary healthcare strengthening, utilising immunisation as a pathfinder for building universal primary healthcare. The advocacy approach will include wider and more sustained engagement on missed communities with government actors, partners, including civil society, faith-based and advocacy organisations as well as professional associations, and new context-specific partnerships.
3. Applying the IRMMA framework through the grant cycle

The IRMMA framework is an iterative process through the Gavi grant cycle to identify, reach, monitor, measure, and advocate for zero-dose children and missed communities. An additional preparation phase may be necessary to conduct targeted studies and/or analyse data for the Identify step in advance of the Full Portfolio Planning phase (see below). This should be factored into the FPP timelines.

In planning other activities, such as new introductions, campaigns, and product switches, the IRMMA framework provides a useful guide for considering how these activities can be leveraged to ensure missed communities are prioritised. The Gavi Vaccine Funding Guidelines provide further information.

### Applying the IRMMA Framework through the Gavi grant cycle

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<thead>
<tr>
<th>Preparation (6 mo)</th>
<th>Plan (6-months)</th>
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<tr>
<td></td>
<td>IRC Report &amp; Renew</td>
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<tr>
<td>IDENTIFY</td>
<td>REACH</td>
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<tr>
<td>Ensure key studies are done in time to inform planning</td>
<td>Identify strategies that are already working</td>
</tr>
<tr>
<td>Analyse and triangulate available data to inform strategy, identify data gaps</td>
<td>Design ToC and reach strategy and agree on which partners have comparative advantage</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Continue to update targeting and strategies as new data is available</td>
<td>Review progress and course correct</td>
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### 4. How countries can use Gavi funding levers to Reach Zero Dose Children and Missed Communities

All requests for Gavi support need to articulate clear strategies for sustainably reaching zero-dose children and missed communities with a drive to achieve equity in immunisation.

The vision for Gavi’s 2021-2025 strategy is leaving no child behind with immunisation. This means that identifying zero-dose children and missed communities, and sustainably reaching them with a full course of vaccines, is the priority for Gavi investments and should be the starting point for discussions on Gavi support. Several funding levers are available to countries for this purpose:

- **Health Systems Strengthening (HSS)** support is intended to help countries build strong, equitable, sustainable, and high-quality immunisation programmes. Funding is available for countries to extend immunisation services to regularly reach zero-dose children and communities using tailored and differentiated strategies to build a stronger primary health care platform. Countries are encouraged to work with communities to build resilient demand and to identify and address gender related barriers to immunisation. Funds also support planning and management of immunisation services and strengthening supply chains to ensure potent vaccines are reliably available for last mile delivery.
• **The Equity Accelerator Fund (EAF)** is a new dedicated fund for interventions aimed at reaching zero-dose children and missed communities including through scaling up new, innovative strategies and partnerships. Accessing the EAF is contingent on (1) a set of minimal analyses\(^5\) and (2) a demonstration of credible set of interventions to meet the intermediate ambition of zero-dose reduction by 2025 as a milestone to reaching 50% zero-dose reduction by 2030, in line with countries’ shared commitment in WHO’s Immunisation Agenda 2030. The expected quality situational analysis should answer at minimum all key analytical questions defined in the zero-dose analysis card under IDENTIFY. It should draw from both quantitative and qualitative data and can be conducted independently by using either one or a selection of tools and/or integrated into planned assessments. Detailed information, based on this situational analysis and associated approach for meeting the proposed target, is required in sections 2 and 3 of the ToC narrative template.

• **The Cold chain equipment optimization platform (CCEOP)** supports procurement of cold chain equipment (CCE) to ensure availability and potency of vaccines. CCE placement to low performing areas will extend the cold chain and drive the expansion of health clinics to improve equity; solarisation of cold chain can benefit areas not covered by the electricity grid and thus extend cold chain to remote, inaccessible areas; and system redesign can be used to drive equity in CCE distribution.

• **Vaccine introduction grants (VIG)** provide support to countries to help bridge the costs associated with effectively and equitably introducing a new vaccine. New vaccine introductions are prime opportunities to revisit and address service delivery gaps related to microplanning, systematic outreach and demand activities. Children who are benefitting from DTP3 are likely to receive new vaccines more quickly. On the other hand, zero dose children who are at a higher risk of vaccine preventable diseases but a lower capacity to access health care in case of illness are likely to continue to remain deprived. New vaccine introductions and campaigns should place equity at the centre of planning and execution, ensuring that zero dose children and missed communities are prioritised for support. VIGs can therefore help to facilitate improved planning to ensure that missed communities and zero-dose children are sustainably brought into the routine system.

• **Campaign operational costs (Ops)** support countries to complement routine immunisation by closing immunity gaps through preventive mass vaccination activities of multiple age cohorts and periodic follow-up campaigns. This helps to prevent the spread of infectious epidemic-prone diseases, such as measles, YF, meningococcal meningitis and cholera. Campaigns should be leveraged to shine a spotlight on the most vulnerable communities and bring them into the fold of routine immunisation services, given the disproportionate burden of disease in such communities and the high public health impact unlocked by extending regular vaccination to these often-missed communities. To be effective, preventive campaigns must thus ensure that persistently missed children and communities are successfully reached and facilitate their inclusion into routine immunisation service. The long-term goal is to progressively increase the length of time between follow-up campaigns (i.e., measles) and reduce the overall reliance on campaigns in general.

• **Partners’ Engagement Framework (PEF) Targeted Country Assistance (TCA)** provides technical expertise to build capacity of governments and local partners. TCA activities should prioritise efforts that help advocate, identify, reach, and fully immunise, monitor and/or measure the immunisation of zero-dose children and missed communities. Countries are strongly encouraged to engage with local partners to leverage local knowledge of zero-dose children and missed communities and design technical

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\(^5\) A list of EAF minimum analyses will be provided by your SCM.
assistance activities that are adapted to the needs and immunisation barriers faced by these communities\(^6\).

- **Private sector partnerships and innovations**: Gavi engages with corporate and philanthropic partners to secure funding and to identify, adapt, and scale products, practices, services, and technologies to support Gavi and country priorities. Countries are encouraged to explore technological and operational innovations to improve access to and utilisation of services by missed communities.\(^7\)

**Funding Considerations**

Activities proposed to reach zero-dose children and missed communities should adhere to Gavi 5.0 principles, with an understanding that **innovative and differentiated strategies** to routinely reach certain communities could come at a higher cost. **Innovative products, services and practices** are critical to reach zero-dose children and missed communities. Programme design should ensure that funds are available at the appropriate sub-national level, empowering local authorities to incur expenditure as necessary. An illustrative list of potential interventions according to the IRMMA Framework is included below. This list is taken from the **Zero-Dose Analysis card**, which contains further guidance and data sources for developing investments to find and reach zero-dose children and missed communities.

**Potential Interventions within the IRMMA Framework**

**Identify**: Continuously map and analyse where zero-dose children and missed communities are and determine the key demand, supply, service delivery, gender, socio-economic, inclusion, protection and/or disability barriers to reaching them.

- **Data collection, analysis, and interpretation** to understand **how many, who and where** are zero-dose children and **why** they are not being immunised to inform programme strategies.
- **Data Triangulation** from multiple sources: VPD surveillance, surveys, administrative data, household line lists, campaigns, and service delivery and other health data sources used by polio, nutrition, malaria, humanitarian, and primary health care programmes.
- **Conducting coverage surveys** targeted to specific information needs for missed communities in association with other preventive health/disease programs.
- **Scale-up and/or strengthen use of a Geographic Information System (GIS)** to improve target population estimation, ascertain availability and accessibility of immunisation services and sub-national targeting.
- **Secondary analysis** of existing quantitative data collected through routine systems as well as surveys.
- **Qualitative assessments/studies** to determine reasons for un- and/or under-vaccination including both supply and demand related barriers, including equity, gender, inclusion, disability, and protection, to immunisation and PHC.

\(^6\) Gavi is increasing its engagement with civil society, faith based, and community-based organisations through the new Civil Society and Community Engagement Approach.

Reach: Design and implement *tailored and sustainable approaches* to overcome supply, demand, and gender-related barriers including service delivery strategies to ensure vaccine availability in missed communities, and strategies to build awareness, trust, and demand for immunisation.

- **Service Delivery**: Deliver and implement tailored and gender responsive service delivery models, including with CSOs and private sector partnerships to address specific country/local barriers. While supplementary strategies may be required to reach missed communities in the short term, countries are encouraged to plan for more sustainable approaches such as routinised mobile, outreach or fixed post services in the medium term.
- **Tailored supply chain interventions** such as optimal SC system design to support last mile vaccine delivery, use of appropriate CCE, adapted forecasting processes, and improved management of vaccine stocks.
- **Human Resources**: Incentivise deployment of trained staff for immunisation to missed communities.
- **Health Information Systems (HIS)**: Invest in HIS strengthening interventions to support REACH approaches and strategies including data sources for service delivery (e.g., HMIS, birth registration systems), supply (e.g., eLMIS), human resources (e.g., HRIS), demand (e.g., Behavioural and Social Drivers - BeSD).
- **Demand generation**: build trust, confidence, and active demand for immunisation through involving key stakeholders in the design of behaviourally informed and gender transformative interventions for Health Care Workers, caregivers, and communities.
- **Adapting communications** to local gender dynamics, languages, and cultures.
- **Technical assistance for capacity building** in various areas including strategic use of data for decision making, capacity to manage new partnerships, and capacity to ensure community participation in planning, managing, and monitoring services.

Monitor and Measure: Monitor and measure data critical for learning and course correction, and apply lessons learned to identify the most effective approaches.

- **Strengthen programme monitoring** in missed communities to provide data on whether zero-dose children are reached by strengthening data monitoring capacity, implementing mobile/SMS technologies, strengthening HMIS and use of dashboards, and holding regular data review meetings.
- Use **existing/planned household surveys and post-campaign surveys** to adequately capture missed communities. Such surveys should be aimed at sub-national representation or targeted areas for zero dose interventions.
- **Monitor zero-dose specific activities** included in Gavi grant workplans. Innovative use of **community monitoring systems** and **geostatistical modelling** at subnational level is encouraged.
- **Identify priorities for learning** that have the greatest potential to unlock answers about effective approaches to reaching zero-dose children.
- **Use of implementation research, evaluations**, and other methods to generate evidence to inform programme policy.

Advocate: Deliberate and strategic engagement to bring zero-dose focus in PHC at global, national and sub-national level.

- Design a **targeted advocacy and engagement strategy** to engage national, subnational, humanitarian, and civil society stakeholders in the zero-dose agenda.
- Develop **advocacy planning and engagement tools** in support of the zero-dose agenda.
- Identify opportunities to **integrate the zero-dose agenda into national policies and plans**.
- Explore expanded **local partnerships and CSO engagement**.
- Mapping and mobilizing **key advocates**.