

# Closing the gap: transforming health workforce challenges into solutions



Credit: Gavi/2024/Jjumba Martin

Reaching zero-dose children – those who have not received any routine vaccines – represents a critical global health challenge with a majority living in fragile and conflict-affected settings, remote rural areas, and urban slums. While multiple factors contribute to zero-dose status, insufficient investment in human resources for health (HRH) stands out as a fundamental barrier that affects every aspect of immunisation service delivery, from identification and outreach to service provision and follow-up. The human resource challenge in immunisation extends beyond simple workforce shortages to encompass issues of distribution, training, retention and effective deployment of health workers across diverse contexts.

◀ Rebecca Kwaga and Lillian Namirembe heading out to the Makindye Division in Kampala, Uganda for a community health outreach activity.

## The workforce challenge

The health workforce crisis undermines global efforts to reach zero-dose children through a fundamental workforce shortage affecting Gavi-supported countries. The World Health Organization (WHO) estimates a deficit of 10 million health workers by 2030, mostly in low- and middle-income countries. The crisis hits rural areas hardest, where health worker density drops to one third of urban levels – precisely where zero-dose children are most concentrated. Inadequate training leaves workers unprepared for immunisation complexities, whilst turnover rates exceeding 20% annually create

constant retraining needs. Community health workers (CHWs), crucial for reaching unreached populations, often work unpaid, leading to unsustainable dropout rates and service disruption. Without robust supervision systems, remaining workers operate in isolation, struggling with data quality, defaulter tracking and community resistance.

This crisis compromises service quality, accessibility, and acceptability, creating systematic barriers that keep zero-dose children unreached.

Availability	Accessibility	Acceptability	Quality
<ul style="list-style-type: none"> <li>Health worker numbers fall drastically short across all cadres</li> <li>Skill gaps undermine service delivery, particularly in supply chain management</li> <li>Rural areas face acute shortages whilst urban centres remain oversupplied</li> <li>Technical assistance fees create brain drain from EPI teams</li> <li>Traditional EPI structures cannot handle growing programme complexities</li> <li>High turnover devastates continuity, particularly in hard-to-reach areas</li> </ul>	<ul style="list-style-type: none"> <li>Workforce distribution creates inequities across regions and populations</li> <li>Remote communities receive sporadic services due to transport barriers and workforce gaps</li> <li>CHWs bear personal transport costs, limiting reach and effectiveness</li> <li>Under-served community groups remain excluded from routine service delivery</li> </ul>	<ul style="list-style-type: none"> <li>Health services clash with community cultural beliefs, reducing uptake</li> <li>Gender mismatches prevent access where households require female providers</li> <li>External workers face community mistrust, undermining programme credibility</li> <li>Poor communication fuels misinformation and vaccine hesitancy</li> <li>Linguistic barriers compound service rejection</li> </ul>	<ul style="list-style-type: none"> <li>Training inconsistencies compromise clinical standards and competence</li> <li>Partners limit skill transfer, creating dependency rather than capacity</li> <li>Supervision and mentoring systems remain inadequate</li> <li>Leadership and accountability skills gaps cripple effectiveness</li> <li>Career advancement stagnates at EPI and PHC levels</li> <li>Safety threats and overwhelming workloads burden health workers</li> </ul>



Outreach team at Walaag 1 IDP camp in Somalia stands ready to identify and vaccinate zero-dose children.

Credit: Gavi/2024/Mohamed Abdihakim Ali

### Game-changing Human Resources for Health solutions

Five evidence-based solutions address human resource challenges in immunisation by strengthening existing capacity whilst building sustainable systems. Task shifting and task sharing redistribute responsibilities from clinical staff to trained community workers, extending geographical reach. Digital platforms streamline workforce deployment through electronic registries and mobile applications that reduce administrative burdens. Performance-based incentives

motivate workers through financial rewards or recognition tied to zero-dose targets. Integrated service delivery combines immunisation with nutrition and maternal health services, creating multiple contact points whilst improving efficiency. Community engagement mobilises local leaders and religious figures to support formal workers and overcome vaccine acceptance barriers. These solutions create comprehensive frameworks for strengthening immunisation systems.

Solution	Country example	Intervention	Results
<b>Task-shifting and task-sharing</b>	<b>Malawi:</b> Health Surveillance Assistants	Trained 11,000 assistants to deliver immunisations alongside nurses through 6-month programmes	Coverage rose from 64% to 95% (2016-2019); reduced clinic workloads 40%; cut child mortality 28%
<b>Digital health solutions</b>	<b>United Republic of Tanzania:</b> ImmReg Electronic Registry	Deployed digital tracking across 5,000 facilities in 26 regions with automated defaulter lists	Cut recording time 60%; improved data accuracy from 45% to 89%; boosted coverage 18%; identified 450,000 missed children
<b>Performance-based incentives</b>	<b>Rwanda:</b> Community Health Worker Financing	Paid 45,000 community health cooperatives through mobile payments for verified immunisation targets	Coverage rose from 91% to 98% (2017–2020); reduced zero-dose children 65%; improved retention to 95%
<b>Integrated service delivery</b>	<b>Kenya:</b> Community Case Management Plus	Community volunteers delivered immunisation with nutrition, malaria treatment and monitoring in 15 counties	Coverage increased 22%; identified 180,000 malnourished children; cut under-5 mortality 19%
<b>Community engagement</b>	<b>Afghanistan:</b> Health Shuras	Trained 12,000 religious leaders and elders across 34 provinces for dialogue sessions	Acceptance rose from 58% to 84% (2017–2020); rural coverage increased 35%

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