KEY STRATEGIES FOR BRIDGING THE EQUITY GAP FOR IMMUNIZATION IN ETHIOPIA

Improving Data Use to Achieve More Equitable Service Delivery



Lisa Oot

Ethiopia's Reaching Every District (RED) strategy has markedly increased access to immunization services since the turn of the millennium. However, overall gains mask significant gaps in access to services in certain areas, including communities in the pastoralist regions. Shortfalls in equity are complicated further by inaccurate administrative data on immunization, which makes it challenging to see the true extent of equity gaps, and develop and monitor programs to address them, without using additional data sources. Despite administrative immunization data showing very high coverage, increased case reports and widespread outbreaks from vaccine-preventable diseases are not unusual in many parts of the country. Health managers and practitioners often question the accuracy of reported administrative coverage, but have no other means by which to routinely assess the performance and functionality of the immunization system. Large-scale coverage surveys, such as national Demographic and Health Surveys, are infrequent, and do not provide estimates below the regional level. Improving access and equity in Ethiopia's Expanded Program on Immigration (EPI) will require increased effort to implement longer- and shorter-term measures to strengthen and improve the collection, accuracy, analysis and use of data.

AT A GLANCE

Strategies to Improve the Quality & Use of Immunization Data

- Prioritize efforts to improve data quality at all levels of the system. Effective use of bad data is challenging!
- Address data quality at the point of generation. Empower health workers at the facility level to use their own data to improve service delivery and build accountability for data quality.
- Involve the community to help provide actual counts of the target population for the microplan and improve the accuracy of immunization coverage reporting.
- Integrate QI approaches into standard national tools (i.e., immunization microplanning) to improve planning and monitoring of immunization services.
- Use data from supportive supervision visits (with checklists and tools) to improve provider capacity and track program progress.

JSI's RED-QI strategy uses multiple approaches to improve the quality and equity of immunization services from the bottom up in the six regions where it has operated.[1] This brief[2] focuses on activities to improve the quality and use of data in immunization programs.

JSI'S APPROACH

Data quality and use are two sides of the same coin; one begets the other.[3] High-quality data are essential for immunization programs. As a data-intensive public health service, immunization is an apt case study for the generation, quality, and use of data to inform decision-making and guide programmatic improvements to reach all populations. JSI's RED-QI approach sought to strengthen data use by incorporating use of different types of data collated from a variety of sources.

Improving data collection, review, and use: Because the FMOH recognizes data quality as a priority in health information, the UI-FHS project focused on building both **capacity** for and **ownership** of practices to improve immunization data—starting in facilities, where data are generated. To that end, JSI provided technical assistance to build the basis and understanding of the essence of data collection and use. Over the course of the project, the RED-QI approach helped immunization managers and health care workers (HCWs) to increasingly integrate regular collection, review, and use of data into the management and delivery of immunization services.

Establishing data use as a practice is a long-term process that requires iterative support. Because data quality is a chronic and multifaceted challenge, JSI recommended use of various data-gathering approaches (triangulation, process indicators, headcounts for estimating populations), as well as supportive practices, such as establishing (or reviving) routine staff meetings to facilitate regular data use.

Using data and QI tools for local solutions: JSI trained woreda managers and HCWs to incorporate QI tools and processes within their immunization activities. Upon returning to their facilities, trainees established a facility-based quality improvement team (QIT), often by revitalizing an existing group, comprising of HCWs and respected community members. The QITs used available resources—including knowledge of community members and

> "Nobody used to count. We had no idea what the [dropout] rate was… Two years ago children were just immunized without a plan and if they defaulted nobody traced them."
>
> – Health center staff

RECOMMENDATIONS

JSI's layered approach, combining capacity building, community engagement, and improved data collection and use, resulted in significant improvements in using data to monitor the true performance of immunization activities. However, data use is a work in progress. Continued improvement and full equity in immunization will require several actions at multiple levels of the health care system.

Strengthen use of data at each level of the health system to improve program implementation, enabling context-specific actions. Reinforce high-quality data at the point of generation; and build in mechanisms, such as supportive supervision visits, to routinely provide coaching on data quality. Conduct data analyses monthly and review multiple data sources to mitigate data quality gaps and improve interpretation and use of program data.

Expand use of the **bottom-up microplanning process**, with its focus on community engagement and use of data to design and implement immunization service delivery. Explore scaling alternative means to estimating target populations in each setting (e.g., head counts, registry data, clan leader estimates, SIA data, etc.).

Overhaul the integrated supportive supervision (ISS) process. Currently, the minimum required indicators for immunization are coverage and dropout rates—the same indicators that are available in DHIS2. Immunization components of ISS should include key process indicators, offer prompts for supervisors to support health workers with on-the-job-training, and outline simple data use steps that can be taken in the preparation and follow-up stages. ISS and on-the-job training should focus on building health workers' skills in analyzing and using their own data. Digitization of ISS could facilitate systematic use of ISS process indicators, but is not a prerequisite to change.

1 Afar, Benishangul-Gumuz, Gambella, Southern Nations, Nationalities, and Peoples' Region (SNNPR), Somali, and Tigray (project closed operations in Tigray June 2017).

2 This brief is one of four briefs on JSI's experience implementing the RED-QI approach to improve immunization equity in Ethiopia. For more information, please visit uifhs.jsi.com to see a summary, plus other briefs on community partnership and capacity building.

3 Immunization Data: Evidence for Action. A Realist Review of What Works to Improve Data Use for Immunization, Evidence from Low- and Middle-Income Countries. Seattle: PATH; Washington, DC: PAHO; 2019.

regular interactive meetings—to develop solutions to local problems and monitor the outcomes. Using approaches such as community mapping (critical for identifying target populations), vaccination session planning, and microplanning, the QITs used data and community knowledge to develop action plans for solving barriers to full immunization coverage within their catchment area. The knowledge and experience that community members contributed helped mitigate common challenges such as tracing defaulters and ensuring attendance at outreach sessions.

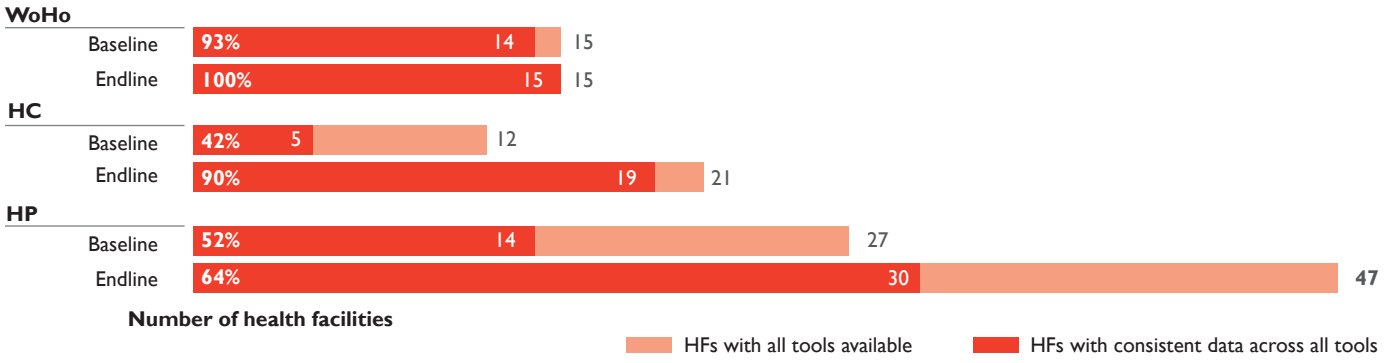
RESULTS

JSI's experience improving data use and quality as an in-built approach within all its technical assistance indicated several findings:

- *Reinforcing good practices for data quality through supportive supervision:* Supportive supervision provided an opportunity for HCWs and their supervisors to compare data across various reporting tools, identify and troubleshoot errors or data inconsistencies, and discuss key actions to take based on their data. In an assessment of facilities in 18 districts, comparison of baseline and endline data show that there was a marked increase in the number of health facilities reporting concordant data across three major immunization reporting tools (EPI register/family folder, monitoring chart, and monthly report), indicating improved data quality (see Figure 1). This improvement suggests that the support and reinforcement offered during routine supervision can help HCWs to take greater accountability for their own data.

- *Demonstrating the value of analysis tools:* Woreda managers especially valued project-supplied tools that facilitated data analysis. For example, JSI developed an Excel tool for RED categorization based on the World Health Organization's system for classifying access to and use of immunization services. Based on inputs describing immunization coverage, the tool automatically places facilities within the woreda into four categories showing the degree of coverage. This enables users to quickly identify facilities needing support, determine what actions should be taken, and develop a course for following up. In a review of supportive supervision data from 84 woredas that received three or more supervisory visits, the use of the RED Categorization tool increased from 51% to 79%, denoting growing appreciation of the value of good data for improved program management.

Figure 1. Facilities with All Reporting Tools Available and Consistent Pentavalent3 Data Across All Tools



Source: UI-FHS Summative Evaluation

About the UI-FHS Project

Strengthening Immunization Systems

IN ETHIOPIA

JSI's 10-year (2011–2021) Universal Immunization through Improving Family Health Services (UI-FHS) project is using innovative approaches to expand equitable access to routine immunization (RI) services for all eligible children in Ethiopia—including those in hard-to-reach pastoralist communities. The project, funded by the Bill & Melinda Gates Foundation and implemented by JSI Research & Training Institute, Inc. (JSI), currently works in five of the country's 11 regions.

To reach these "last-mile" communities, JSI built upon the Federal Ministry of Health (FMOH) national strategy for RI, Reaching Every District (RED). The project's innovation, RED-QI, integrates quality improvement to the RED approach. RED-QI's three mainstays—strengthening community-facility linkages, sustainably building capacity, and improving data use—target regional-, woreda-, and facility-level managers and health workers. The approach helps them plan, implement, and monitor tailored health services to reach all children with RI, regardless of where they live. The expectation is that strengthening the management and delivery of context-specific RI services will not only offer full protection to all eligible children, but also has the potential to increase access to a wider range of primary care services.

The RED-QI approach represents a promising practice for immunization coverage in remote pastoralist communities. Based on the success of initial testing in three woredas and expansion of the approach to 103 woredas, the FMOH integrated several RED-QI practices within its national guidance. JSI's experience increasing access to immunization among hard-to-reach communities offers useful information on how to achieve equity in services for all children.

