Linking Health Facilities and Communities Improves Routine Immunization

The Universal Immunization through Improving Family Health Services (UI-FHS) project works to improve the routine immunization system in over 100 woredas (districts) in six regions of Ethiopia. The project works to operationalize Ethiopia’s national routine immunization strategy, Reaching Every District (RED), through technical assistance for immunization and by introducing Quality Improvement (QI) tools such as Plan-Do-Study-Act (PDSA) performance improvement cycles. This combined approach is called RED-QI.

This widespread implementation of RED-QI generated a strong interest within the project to explore both the uptake of the RED-QI approach and the experiences of project beneficiaries in using QI tools, particularly PDSA cycles, to locally identify and solve problems. To understand this, in 2016, UI-FHS carried out qualitative research in three UI-FHS-supported woredas in three regions of Ethiopia, conducting interviews with 27 key informants, facilitating 12 focus group discussions, and reviewing facility documents.

This brief focuses on key findings, highlighting how the RED-QI approach encouraged greater facility-community linkages through engagement in PDSA cycles.

Linking Facilities and Communities through Quality Improvement Teams

The partnership between health facilities and communities is an essential component in strengthening immunization services to reach more children. When communities are involved in the planning and monitoring of services, it promotes a sense of shared accountability and makes communities more likely to use services.

UI-FHS trains health workers at health centers and health posts about how to apply QI tools and strategies to improve immunization at their facilities. These trained health workers then activate Quality Improvement Teams (QITs) at their facility using already existing groups, with an overall aim to help identify local solutions to immunization problems on the ground.

Through the PDSA process, the QITs are designed to: work together to test out local solutions to service delivery problems, use data to determine whether the change has brought about improvements, and incorporate the successful local solutions into the system as a regular practice.

PDSA cycles are often used by health professionals in hospital settings to improve the quality of health services. UI-FHS brought this team-based, problem-solving process down to the community level – engaging key community members to work hand in hand with the health worker at their local facility.
QIT Composition

At the health center (HC) level, the QITs were mostly composed of health workers, sometimes including community members, either members of a health committee or members of the Health Development Army (HDA), a network of community health volunteers.

By contrast, at the health post (HP) level, QITs included a majority of community members and were based on existing community structures (i.e. the governmental command post, social mobilization committee, or steering committee). QIT composition at the HP level represented agriculture, education, health, HDAs, and other key community subgroups, plus the HP’s health worker that was most closely involved with immunization.

QITs: the “Bridge” to the Community

In most settings, QITs were formed from groups which already existed in the community; these groups were asked to add the new function (or re-energize previous efforts) of helping the health worker to improve immunization in their communities by meeting once per month to discuss local problems.

Enablers to Productive Facility-Community Linkages

- **QITs as a model:** After health workers were trained on QI and instructed to activate QITs with community members near their facility, the process of engaging them in PDSA cycles helped institutionalize practices that improved the quality and functionality of immunization services. For example, the majority of the facilities visited with trained staff had instituted a mechanism for tracing immunization defaulters and had strengthened communication between the health facility and surrounding community, making immunization and broader health issues a regular discussion topic.

- **Community influencers:** Having community influencers/leaders or other key people (e.g., school teacher) as QIT members was felt to be important to the success of the group. When the QIT is comprised of people with different roles in their community, they can take responsibility and help push efforts forward from multiple angles, leveraging their social capital in the community.

- **Strong and consistent relationship:** Fostering a good working relationship was important to creating a sense of responsibility and accountability to successfully implement positive changes. If there was consistent staff turnover or a balance was not struck with community influencers and their other competing priorities, this strong, consistent linkage was difficult to achieve and thus made those QITs less successful.
QITs were cited by multiple health worker respondents as having an extremely important function as the intermediary link between the community and the health facility. In their role, they worked with both the community and the health facility to relay messages and facilitate actions between them. HP QITs mobilized communities, helped with tracing children who needed to return to a facility to complete their immunizations, and educated their local communities about concerns such as possible side effects of vaccines. They viewed their roles as focusing on problem solving, working with the health worker who was also a QIT member.

In some hard to reach areas, QITs also played a major role in mobilizing the community to bring children to outreach vaccination sessions brought from the health facility to the community. In doing this, they provided awareness of health issues and promoted demand for these outreach services. The role of the QIT was found to be similar across all three regions surveyed. The roles of the QIT were also found to be similar at the health post and health center level.

In addition, the QITs dealt with more than immunization; meeting agendas included other health areas like low institutional delivery, family planning uptake, sanitation, and more. QIT members expressed satisfaction due to partnerships with the community and problem solving, as well as dissatisfaction due to limited member commitment and time. The QITs were considered by health workers and woreda staff as valuable links to the community because they served as the connectors between the facility and the community.

**QIT Engagement in the PDSA Process**

Multiple respondents described a process for implementing PDSA cycles where the health worker would communicate with the QIT to generate ideas related to identifying problems and possible solutions. Additionally, some health workers indicated that they conducted their own process of problem analysis and solution identification, which they then presented to the QIT for further input and to operationalize their plan. Then, the community members of the QIT were engaged to implement solutions the group wanted to test (the “Do” stage). It was mostly health workers who monitored data to track progress (“Study”), sometimes circling back with the QIT for the “Act” step. However, the “Study” and “Act” steps of the PDSA cycle were only infrequently documented.

QITs in health centers functioned differently from the pattern observed at health posts. These HC QIT members were found to be engaged throughout the entire PDSA process, as compared to QIT members at the HP level. HP level QIT members were often not aware of the exact steps of the process that they were participating in, nor what PDSA meant. This was because formal training was provided only to health workers, who guided the group through the process but did not typically provide QIT members with an orientation on PDSA cycles as a problem-solving process.
Overall, QITs reported meeting once a month but it was difficult for UI-FHS to verify their meetings and outcomes of the meetings; the QIT minute books that are intended to record their activities were often incomplete or respondents were unable to provide detailed agendas of the last meeting. Some respondents noted irregularity of meetings due to competing responsibilities.

**Key Takeaways and Lessons Learned**

Some key takeaway messages from this qualitative research into the experience of QITs with PDSA cycles are the following:

- The linking of facilities and the community through QITs served an important function in beginning to improve immunization service delivery.
  - The mere effort of gathering community members with health facility staff to engage them in a QIT served to strengthen communication between facility and community. Even if meetings were irregular, a mechanism for discussion of immunization problems in the community helped bring issues into focus and encouraged more active community participation to improve health services, which may have been absent before. This came through most saliently in the defaulter tracing mechanisms which were established at many facilities, in which community members and health workers coordinated efforts to identify and vaccinate children who were not completely protected.

- The role and function of QITs with community members represents an innovation on the typical use of PDSA cycles in facility settings to improve the quality of clinical care. At the same time, it poses certain challenges, especially if community members are not trained directly in this methodology. These community-based QITs can nonetheless be successful in terms of achieving important positive outcomes.
  - Active community QITs were valuable in: facilitating immunization outreach/mobile service delivery, tracking children who had missed needed vaccine doses, and providing information to communities about the benefits of immunization and when and where to seek services. These successes occurred as a result of these strengthened facility-community linkages.

- Working in challenging low-resource contexts with users who have varying levels of education and literacy and numeracy skills means that a technical PDSA process needs to be

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**Health workers were able to use the PDSA process to engage the community members of the QIT at specific points of the PDSA cycle, gathering feedback from them or leveraging their relationships with the larger community to carry out activities that needed extra manpower.**

While a functional and active QIT can provide benefits by bridging the gap between the health facility and the community, some challenges were encountered in keeping QITs regular and active. For example, some respondents said that QITs are difficult to maintain because members were not consistently available to meet. Furthermore, staff turnover at the health facilities was cited as a barrier to the consistent linkage between facility and community.

As a whole, improving linkages between the community and health facility helped to build accountability between both entities and achieve results through combined efforts from both parties.
adapted to the strengths of its users. A balance must be found between the benefits of providing a platform for community engagement and leveraging the strengths of community members, and the challenges of not over-burdening them with technical expectations.

- This balance was most evident in the “Plan” and “Do” stages of PDSA cycles, with community members identifying and diagnosing problems and testing solutions, facilitated by a trained health worker who guides the processes and discussions.

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In partnership with the Federal Ministry of Health and with a focus on improving equity and quality, UI-FHS uses the Health Extension Program to operationalize the national routine immunization strategy, Reaching Every District, and helps health workers generate local solutions to problems using Quality Improvement methods and tools.

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