Using Quality Improvement to Strengthen Nutrition Services in Malawi

Starting in 2012, three USAID projects—FANTA, LIFT, and ASSIST—began working with the Ministry of Health in Malawi to improve nutrition care for people living with HIV through the revitalization of the country’s nutrition care, support, and treatment (NCST) program. The projects focused on providing support at the national level and at 12 facilities in Balaka and Karonga districts, which were selected as NCST learning sites.

One of the strategies utilized to strengthen the NCST program and improve nutrition outcomes of clients was the application of quality improvement (QI) methods at the facility level. ASSIST trained district coaches and frontline service providers in QI methods in eight health facilities in order to integrate QI methods into NCST service delivery. ASSIST also supported the Ministry of Health to provide coaching and mentoring field visits, and organized learning exchanges through facility learning sessions. Meanwhile, FANTA supported the Ministry of Health to develop national guidelines and competency standards, training materials, and tools, and LIFT strengthened referrals between the facility and community services for food security support and economic strengthening.

The use of QI for improving NCST services has since been expanded beyond the learning sites. FANTA supported the Ministry of Health and other partners, such as the World Food Programme, Dignitas International, Support for Service Delivery Integration-Services, and the Partners in Hope, in teaching and applying QI methods in 12 districts across the country. Applying QI methods has helped health facility teams integrate NCST services with HIV and tuberculosis care and treatment services.

Malawi has been using quality improvement (QI) methods to strengthen the quality of services for nutrition care, support, and treatment (NCST) and community-based management of acute malnutrition (CMAM).

The QI process enables service providers to systematically improve the quality of health care delivery by identifying weaknesses in current practices, analysing the reasons for the weaknesses, and developing solutions to improve current practices. QI can play an important role in improving a variety of processes that affect safety, effectiveness, patient-centeredness, timeliness, efficiency, or equity within a health care delivery system.

While QI was first introduced into nutrition services in Malawi to strengthen NCST, in 2016 FANTA and the Ministry of Health began applying the methodology to community-based management of acute malnutrition (CMAM) interventions at seven facilities to address critically high death rates among clients with severe acute malnutrition (SAM). The overall goal of the CMAM-QI activities is to reduce the SAM mortality rate among children to less than 5 percent by improving case management within targeted pediatric wards.
and nutrition rehabilitation units. To implement the QI activities, a series of working sessions with district health management teams and facility-based health care providers were conducted to identify issues and challenges leading to the high mortality rate among children admitted to inpatient care with SAM. In addition, nutrition QI teams were formed and solution-oriented action plans to improve case management, and address SAM-related deaths were developed.

QI methods have become part of the national NCST and CMAM guidelines and are included as part of in-service training provided to facility-based service providers in Malawi. A national- and district-level mentoring and coaching system is being set up by the Ministry of Health to further improve NCST and CMAM services and reach additional health facilities in the country.

**The Model for Improvement in Malawi**

The “model for improvement” is the QI model that the Ministry of Health, FANTA, and others are using for nutrition services in Malawi. The model asks three questions that are fundamental to making improvements:

1. What are we trying to accomplish?
2. How will we know a change is an improvement?
3. What change can we make that will result in improvement?

In combination with the plan-do-study-act (PDSA) test cycle, the model forms the foundational framework for successful improvement activities.

The actions in the model for improvement are implemented with the following principles in mind:

**Patient focus.** Services should meet the needs and expectations of the patient and their families or communities. For example, treatment and care provided to a child with SAM should be safe and address clinical, nutritional, and psychosocial needs of the child and their caregiver. The service provider should involve the caregiver and empower them to make informed decisions in caring for the child for better outcomes.

**Focus on systems and processes.** Service providers should analyse the systems and processes through which they are delivering services to improve them. For example, a service provider needing to conduct a nutrition counselling session may lack a private, quiet space to do so. By analysing patient flow and identifying opportunities for creating space within the health facility, adjustments can be made to facilitate nutrition counselling for clients who need such support.

**Test changes and emphasize the use of data.** Service providers should develop and test changes to improve the way services are provided and to determine whether they yield the desired changes. Teams should consistently collect data on or evidence of whether changes or solutions applied are yielding positive or negative results. For example, Mbera health facility staff developed a new clinic patient flow in order to increase the number of HIV-positive patients whose nutritional status is assessed at the clinic. By recording and tracking the number of clients assessed at each visit, the facility team will be able to determine if the new flow helps them achieve their objective.

**Teamwork.** QI is achieved through a multisectoral team approach to problem solving. A QI team should consist of representatives from every step in a process or system of health care delivery. For example, to improve SAM case management at a facility in Malawi, the nutrition rehabilitation unit’s QI team should include a clinician, nurse, home-craft worker, pharmacy technician, and the hospital in-charge, as each of these roles is important for comprehensive care of a child with SAM.

Application of the model for improvement has provided a guide on how nutrition interventions can be integrated and implemented within existing health care systems. Through a systematic analysis of the process and system within which nutrition interventions are delivered, health care providers are able to develop, test, and implement solution-oriented actions for improved outcomes.