# STRENGTHENING HEALTH SYSTEMS: KEY FANTA ACHIEVEMENTS AND LESSONS LEARNED

#### Introduction

Achieving the U.S. Agency for International Development (USAID) goal of improving nutrition to save lives, build resilience, increase economic productivity, and advance development in a sustainable way depends on strengthening health systems. Given that the health sector is responsible for delivering the majority of nutrition-specific services, increasing the provision and use of high-quality nutrition services will require high-performing health systems at all levels—national, sub-national, and community.

A health system consists of "all people, institutions, resources, and activities whose primary purpose is to promote, restore, and maintain health." Based on the World Health Organization (WHO) framework, health systems strengthening activities involve supporting six core functions: leadership/governance, health care financing, health workforce, medical products and technologies, information and research, and service delivery (see Figure 1).

The Food and Nutrition Technical Assistance III Project (FANTA) has worked with governments, partners, and civil society in several countries to improve health systems and their ability to sustainably deliver high-quality nutrition services. FANTA's efforts in strengthening health systems have focused on the following:

- Strengthening the nutrition workforce by improving systems for educating and training health workers
- Supporting estimation of financial requirements for essential nutrition services
- Improving sustainable country capacity in transparent and accountable policymaking, planning, leadership, and management,





including strengthening the capacity of civil society to advocate for increased government transparency and accountability

- Supporting improvements in integrated health information systems, including systems for routine health information and evaluations
- Strengthening supply chain components to ensure the uninterrupted availability of nutrition commodities
- Scaling up quality, coordinated delivery of evidence-based nutrition services

This brief highlights some of FANTA's work from 2012 to 2018 supporting these six core functions.

<sup>&</sup>lt;sup>1</sup> U.S. Agency for International Development (USAID). 2015. Vision for Health Systems Strengthening 2015–2019. Washington, DC: USAID.









FANTA helped Guatemala's MOH and partners develop the country's first nutrition distance-learning course. Photo credit: FANTA

# Human Resources for Health: Strengthening the Nutrition Workforce

Poor nutrition is an underlying factor in many illnesses, and improved nutrition is an aid to treating them. In the 2013 Lancet Maternal and Child Nutrition Series, Bhutta et al. identified evidencebased nutrition-specific interventions that could reduce deaths in children under 5 by 15 percent if they were implemented at 90 percent coverage.<sup>2</sup> Increasing the number of frontline workers who have the technical knowledge and skills required to provide quality nutrition services is not only critical to improving nutrition but also to reducing mortality and improving health outcomes. Thus, a strong nutrition workforce is essential to a robust health system. FANTA worked in several countries to strengthen nutrition education and training systems—including pre-service and in-service training—to ensure the sustainable transfer of and maintenance of knowledge and skills.

In Ghana, for example, FANTA collaborated with the Ministry of Health (MOH), Ghana Health Service, the Nurses and Midwives Council of Ghana, training institutions, the Maternal and Child Health Integrated Program, WHO, and UNICEF to strengthen nutrition competencies as part of the pre-service training of nurses and midwives. Based on a core set of prioritized nutrition competencies and performance standards, all tutors teaching nutrition in the nursing

and midwifery schools were trained on a broad range of nutrition topics. The tutors and schools were also linked with national facility- and community-based nutrition learning sites to facilitate partnerships in service delivery and opportunities for continued clinical practice, including internships. Standardized teaching aids including lesson plans and reference materials were developed from national and international resources to assist tutors with the required nutrition competencies. Overall, the intervention resulted in more competent nursing and equipped midwifery pre-service trainers with the latest evidence-based teaching materials and references that were aligned to national policy priorities, service delivery, and in-service training.

FANTA also collaborated with Guatemala's MOH and partners to develop the country's first full-scale nutrition distance-learning course to strengthen nutrition knowledge and skills among frontline health workers, especially in the Western Highlands. The course, implemented under the stewardship of the MOH, promotes essential nutrition actions to improve the health and nutrition of pregnant and lactating women and children under 2 years of age. FANTA trained 83 MOH and partner staff to facilitate the course; 1,099 staff completed the 6-month course in 2015–2016 and earned 25 credits as part of an MOH certification program. The MOH allows staff to take the course during normal working

<sup>&</sup>lt;sup>2</sup> Bhutta et al. 2013. "Evidence-Based Interventions for Improvement of Maternal and Child Nutrition: What Can Be Done and At What Cost?" *The Lancet*. 382: 452–77.

hours, which prevents interruptions in health service provision, and the course duration enables participants to assimilate new knowledge and skills by applying what they learn on the job. The course used an innovative design that combines self-study modules with study circles, where participants meet biweekly with a course facilitator for group discussion and practical exercises. FANTA and partners helped the MOH to establish a core team responsible for implementing and monitoring the course and to develop tools to monitor participants' nutrition competencies after the course. The course has been officially adopted by the MOH and transferred to the MOH's virtual classroom, which will ensure its sustainability. Course content has also been adapted for civil society and universities.

In Ethiopia, FANTA worked with six regional health bureaus to equip 22 local training institutions to conduct in-service nutrition services training and provide follow-up mentoring to health care providers. FANTA trained 142 trainers from the institutions and the regional health bureaus and provided technical assistance to the institutions in cascading the training to lower levels of health care providers and clinical mentors. As a result of this initiative, 638 health care providers and 150 clinical mentors from the six regions were trained in nutrition assessment, counseling, and support (NACS) services as of July 2018.

# Health Finance: Supporting Estimation of Financial Requirements for Essential Nutrition Services

A strong health financing system ensures that adequate resources are mobilized to provide essential health services that are accessible to all beneficiaries. FANTA supported countries to generate information on the costs of scaling up essential nutrition interventions such as community-based management of acute malnutrition (CMAM) and NACS services and to incorporate this information into policy development and implementation planning and monitoring.

In Guatemala, FANTA and the Central American Institute of Fiscal Studies (ICEFI in Spanish) collaborated with the MOH and the Ministry of Finance (MINFIN) to determine the costs of implementing nine essential nutrition interventions nationally and in each of 10 high-priority

departments. The costing exercise used activitybased costing (ABC), which estimates overall program costs by costing activity (intervention or cost center) within the program, marking the first use of ABC in Guatemala. The costing exercise showed that nutrition was severely underfunded in Guatemala and that if the government continued to increase its nutrition budget by only 5 percent a year, the nutrition investment gap could reach nearly 3 billion quetzales (about US\$380 million) by 2021. The government used the cost estimates to make decisions about resource allocation. In addition, FANTA trained key MINFIN and MOH officials in the ABC methodology and collaborated with the government to develop an ABC manual to increase capacity and conduct costing exercises to better plan and budget for nutrition.

FANTA also developed costing tools to help governments estimate the quantity and cost of resources needed to establish, maintain, and/ or expand nutrition services within the health system. The tools, which include the CMAM Costing Tool and the NACS Planning and Costing Tool, are Microsoft Excel-based applications designed to help policymakers, program managers, and implementers plan for the design, financing, and management of nutrition services at national and sub-national levels.

In Ghana, the MOH and Ghana Health Service used FANTA's CMAM Costing Tool to develop a national strategy and plan for scaling up CMAM within the health sector. The tool allowed the government



Guatemala Costing Report

"We greatly appreciate and value all the support provided by the [FANTA] project and the momentum it gave to results based management in Guatemala...the project has left much knowledge and progress in DTP."

Kildare Stanley Enriquez, Director, Technical Budget Office (DTP), Ministry of Finance, Guatemala to analyze the costs associated with scaling up and institutionalizing CMAM within the national health system from 2013 to 2017. With FANTA's support, Malawi's MOH used the NACS Costing Tool to develop the country's 5-year national operational plan for scaling up NACS services and found that it played a critical role in generating costs for the essential set of activities needed to provide high-quality nutrition services.

# Health Governance: Strengthening Nutrition Leadership, Planning, and Management

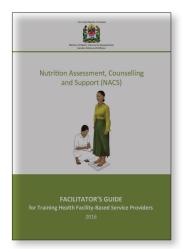
Effective leadership and governance are essential to a robust health system. Strong commitment, capacity, and accountability at all levels of government are required to improve nutrition and health outcomes. FANTA has worked to strengthen country capacity in transparent and accountable health policymaking, planning, leadership, and management. These efforts involved coordination and collaboration with other government sectors to act on key determinants of health and nutrition. In addition, FANTA has worked with civil society organizations to enhance their capacity to advocate for increased government transparency and accountability on nutrition.

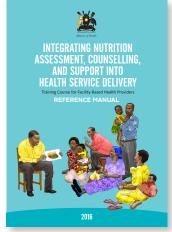
In Ghana, FANTA collaborated with the MOH and Ghana Health Service to develop national CMAM guidelines that provide protocols for managing severe acute malnutrition in inpatient and outpatient care and for conducting for community outreach.

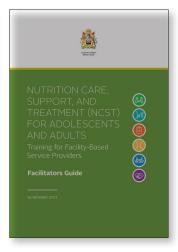
FANTA also worked with the government to ensure that management of severe acute malnutrition is one of the high-impact interventions included in Ghana's national nutrition policy, child health policy, and health sector development plans.

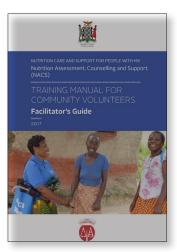
In addition, FANTA supported the development and update of national guidelines and training materials for the nutrition care and support of people with HIV in the Democratic Republic of Congo, Côte d'Ivoire, Ethiopia, Malawi, Nigeria, Tanzania, Uganda, and Zambia. In total, FANTA helped produce 106 NACS-related guidelines, plans, national training materials, and tools, including job aids and health facility forms and registers.

FANTA also worked with civil society organizations to strengthen their capacity to advocate for nutrition and monitor their respective governments' nutrition activities. In Guatemala, FANTA collaborated with Health and Education Policy Plus (HEP+) to equip civil society representatives to monitor maternal and child nutrition service delivery during social audits and present their findings to local decision makers so that maternal and child nutrition remains a priority. In addition, FANTA and HEP+ designed a series of training and coaching sessions to help civil society leaders advocate for nutrition plans. action, and decisions as members of the National Food Security and Nutrition Council. FANTA also developed nutrition advocacy materials to better equip civil society organizations in several countries to promote and monitor nutrition activities.









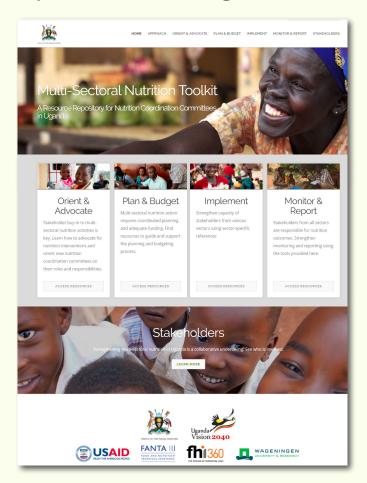
NACS materials from Tanzania, Uganda, Malawi, and Zambia.

# Improving Multisectoral Nutrition Leadership and Governance in Uganda

Addressing the key determinants of malnutrition and improving health and nutrition outcomes require a multisectoral response. In Uganda, FANTA collaborated with nutrition stakeholders to strengthen coordination of various government sectors in addressing nutrition challenges. This initiative focused on enhancing the capacity and technical leadership of nutrition coordination committees (NCCs). These committees— which include representatives from the health, agriculture, gender and social development, education, planning, water, trade and industry, and administration sectors—play an integral role in planning, budgeting for, and overseeing implementation and monitoring of multisectoral nutrition activities.

In collaboration with the Office of the Prime Minister's Nutrition Secretariat, the Ministry of Local Government, and the Wageningen Centre for Development Innovation, FANTA implemented a 2-year initiative to strengthen the capacity of NCCs to support nutrition in 10 districts.

FANTA helped train, mentor, and orient NCC members in the development of nutrition action plans and in budgeting for and monitoring nutrition activities. FANTA also developed several technical resources to support this effort, including National Nutrition Planning Guidelines; Multi-Sectoral Nutrition Coordination Committee Orientation Guide; Multi-Sectoral Nutrition Action Planning Training Materials; and the Multi-Sectoral Nutrition Toolkit, a website that provides information, tools, and other resources to support Uganda's multisectoral approach to strengthening nutrition governance.



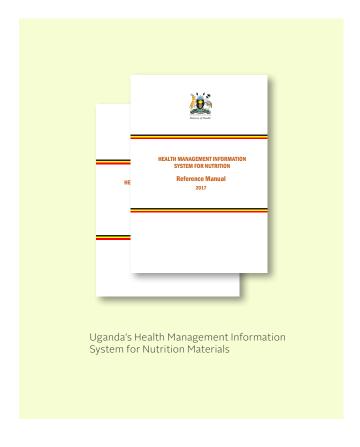
The key achievements of this initiative include increased nutrition capacity among staff from various sectors; stronger nutrition planning processes, including the integration of nutrition activities into district development plans and annual work plans and budgets; and improved in-country capacity to scale up the multisectoral approach to additional districts.

# Health Information: Supporting Improvements in Integrated Health Information Systems

The development and implementation of evidence-based policy and programs—including ensuring that quality nutrition services reach those who need it—require an effective health information system that collects, analyzes, disseminates, and uses timely and reliable health information. FANTA has helped governments strengthen integrated health information systems, including systems for routine health information, and fostered a culture of decision making grounded in evidence.

Access to quality data on nutritional status and nutrition services is critical in improving nutrition service coverage and quality. However, in some countries, like Ethiopia and Uganda, the health management information system (HMIS) lacked nutrition data needed to inform decision making. FANTA worked with the governments of both countries to ensure that nutrition services indicators were integrated within the national HMIS. To support effective application and use of the new indicators in Uganda, FANTA and the MOH created the HMIS for Nutrition training—Uganda's first HMIS training package. In Ethiopia, FANTA developed a NACS routine data quality assessment (RDQA) guideline and trained monitoring and evaluation officers from the Federal Ministry of Health and regional health bureaus and health staff from selected health facilities in using RDQA to improve the quality of nutrition data.

FANTA's technical assistance also helped Mozambique achieve gains in data quality, timeliness, and use. With FANTA's support, key health facilities in selected districts improved the timeliness of their monthly report submissions from 65 percent of facilities in the March–August 2015 baseline period to a high of 93 percent of facilities during the April–September 2017 period. In addition, district and provincial staff, including the provincial nutrition technical working groups, used the data



to assess how well facilities were implementing nutrition services and to identify any gaps. FANTA also strengthened facility staff capacity to improve the quality of data by ensuring the removal and/or correction of inaccurate or incomplete information. One notable example was the Nicoadala Health Center in Zambezia Province. After cleaning its nutrition register books, the center found that only 49 percent of patients classified as active were truly active patients, while the rest were defaulters. This allowed for more accurate estimates of the center's actual caseload and better forecasts of its need for nutrition products. It also raised awareness of the problem of defaulter patients and led the provincial nutrition technical working groups to brainstorm ways to address the issue.

#### Using Survey Results to Improve Access and Coverage of CMAM Services in Ghana

In Ghana, where FANTA supported the integration of CMAM into health services at several learning sites, FANTA found that although geographic access to services was improved, several health facilities reported low admission of children with severe acute malnutrition and high default rates. To explore this problem, FANTA provided extensive technical assistance to equip the Ghana Health Service to conduct CMAM coverage surveys to better understand barriers to service uptake.

In Ghana's Ashaiman Municipality, the coverage survey confirmed low admission rates (less than 30 percent of children with severe acute malnutrition were receiving CMAM services in July 2013, when the survey was conducted) and high default rates (as high as 85 percent in some facilities). Identified barriers included stigma commonly associated with acute malnutrition and limited understanding among community members about malnutrition and where to seek treatment.

Drawing on the survey's findings on barriers and factors that could counteract those barriers, the Ashaiman municipal health management team engaged communities and leaders and raised awareness about the causes of severe acute malnutrition, how to identify signs and symptoms, and where to seek treatment and care. As a result, new cases were identified, and the default rate was reduced from 60 percent in July 2013 to 17 percent in September 2013. The results showed that FANTA's training in Ashaiman not only enabled the Ghana Health Service to conduct coverage surveys but also empowered it to use survey data to take steps to improve admission and default rates.

Results from a coverage survey conducted in Ashaiman Municipality with technical assistance from FANTA prompted actions that resulted in 88 new cases of severe acute malnutrition being found and admitted to care programs.

#### **Admission Trends**



#### Medical Products, Vaccines, and Technologies: Strengthening the Supply Chain to Ensure Availability of Nutrition Commodities

One challenge many countries face in establishing and maintaining effective health systems is an inadequate supply of health commodities, including nutrition products, which undermines the quality of health and nutrition services. FANTA partnered with governments to address weaknesses in the supply management system and improve the availability of nutrition commodities at health facilities.

For example, in Mozambique, stock-outs of nutrition products were common in the provinces where FANTA worked. Gaps in the supply chain were related to several factors, including product requisitions based on district demographic data rather than consumption data, poor reporting of nutrition services data, and late and incomplete restocking requests. FANTA worked with four facilities in Nampula and Zambezia provinces to improve nutrition reporting and supply management, including conducting on-the-job training for health facility and district-level staff on developing restocking requests based on health facility consumption data. In addition, FANTA worked with the provincial staff to develop distribution plans based on district data and adjust restocking plans based on health facilities' needs and available stock. As a result of FANTA's technical assistance, health staff at the four facilities consistently completed all nutrition-related sections of the stock control cards used to track supplies of nutrition products, with the percentage of cards completed correctly doubling from the

March–August 2015 baseline period to 100 per cent during the April–September 2017 period. Moreover, all district warehouses in the facilities' districts developed supply chain forecasts based on the facilities' data, up from 50 percent before FANTA's technical assistance.

In Ethiopia, at the regional level, FANTA facilitated coordination and collaboration among the regional health bureaus, the government's Pharmaceuticals Fund Supply Agency, and other implementing partners to ensure NACS commodities were supplied to facilities. One example of this effort was in Addis Ababa. FANTA and the Addis Ababa City Administration Health Bureau found that nutrition commodities at health facilities were improperly stored—resulting in damage that rendered the products unusable—and that facilities suffered from frequent stock-outs and delayed restocking requests. Moreover, 87 percent of pharmacy personnel in Addis Ababa had no training in nutrition commodity management and the remaining 13 percent had not received training in more than 4 years. To address these challenges, FANTA helped develop a customized NACS commodity and supply chain management training for pharmacy personnel and trained them using the training package. Subsequent visits to select health facilities found an overall improvement in commodity management. Pharmacists started tracking the dispensed commodities in separate registers and compiling monthly supply records. In addition, storage of NACS commodities improved, as pharmacy staff started using pallets and shelves for storage, ensuring better ventilation. Pharmacy staff also began updating stock cards and submitting timely requests for restocking, leading to fewer commodity stock-outs.

"I record the amount of commodities dispensed daily, monitor the remaining balance, and request on time for restocking. ... The training helped us in improving our pharmaceuticals supply management."

- Pharmacy technician, Yeka Health Center, Addis Ababa

# Service Delivery: Scaling Up High-Quality, Coordinated Delivery of Essential Evidence-Based Nutrition Services

A strong health system provides sustained and equitable access to essential health services, including nutrition services. Improving access to effective and high-quality nutrition services for those who need them has been one of FANTA's key objectives. FANTA helped governments and partners to develop essential tools and materials and to strengthen capacity of MOH staff at all levels to integrate quality nutrition services within health services.

An important component of FANTA's work has been the integration of NACS into the care and treatment of HIV and tuberculosis. Integrating nutrition care and support into infectious disease services contributes to overall health outcomes as well as specific nutrition outcomes. NACS is a comprehensive systems-strengthening approach to address the nutritional needs of children, pregnant women, adolescents, and adults with chronic infectious diseases while linking patients and their families to economic strengthening and livelihood resources in their communities. This approach has increased access to and improved the quality of nutrition services and has contributed to better health outcomes for patients, including improved adherence and retention in HIV care and treatment.

In collaboration with the Livelihoods and Food Security Technical Assistance II (LIFT II) and Applying Science to Strengthen and Improve Systems (ASSIST) projects, FANTA has worked in Côte d'Ivoire, Democratic Republic of Congo, Malawi, Mozambique, Namibia, Tanzania, Uganda, and Zambia to scale up NACS services at health facilities and communities. With FANTA's technical assistance and training support, NACS has been scaled up to a total of 260 health facilities and the communities surrounding these facilities in those countries.

As services were scaled up. FANTA worked with governments and partners to apply quality improvement (QI) methods to ensure the delivery of high-quality services. FANTA supported the application of the QI methodology to improve NACS services in Côte d'Ivoire, Democratic Republic of Congo, Ethiopia, Malawi, Mozambique, and Zambia. In Ethiopia, for example, FANTA worked with regional health bureaus to train selected health facility staff in QI and provided technical support and guidance to facility staff in the identification of NACS-related quality issues, analysis of the root causes, and generation of possible solutions to test and implement. An analysis of QI data from nine facilities showed considerable gains in the quality of NACS services. Six months after FANTA's QI assistance began, the facilities showed improvements in assessing and classifying the nutritional status of patients with HIV and in providing nutrition treatment to malnourished HIV patients (see Figure 2).

FANTA also helped the MOH in Malawi apply the QI methodology to strengthen the care of children with severe acute malnutrition and medical complications at seven hospitals with high death rates of up to 11.6 percent among these children. As a result, over 12 months, service delivery improved at the seven hospitals: The percentage of children receiving initial clinical and nutrition assessment increased from 23 percent to 95 percent; treatment of dehydration increased from the baseline of 14.1 percent to over 80 percent; and immediate cautious feeding according to national protocols rose from a baseline of 26 percent to 75 percent.

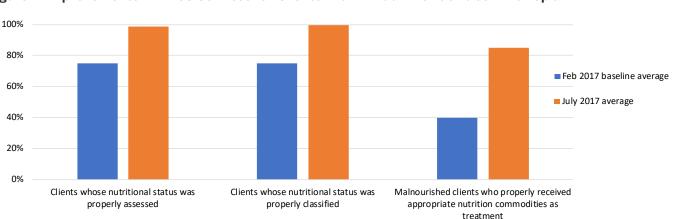


Figure 2. Improvements in NACS Services for Clients with HIV at Nine Facilities in Ethiopia

#### **Lessons Learned**

FANTA's experience working with governments and partners in several countries yielded important lessons that can inform future efforts to strengthen health systems and sustain progress:

Regular mentoring and supportive supervision are crucial to enhancing and sustaining frontline health workers' knowledge and skills. To reinforce knowledge and skills gained during training, follow-up mentoring of frontline health care workers is required. Clear, consistent, and constructive feedback provided during supportive supervision and mentoring activities enhances health workers' motivation, builds confidence in achieving their targets, and strengthens their capacity—and commitment—to improve the quality of services.

Staff shortages and frequent staff rotation hinder efforts to maintain a consistent level of service delivery quality. Support to national governments must not only include strengthening frontline health workers' capacity to deliver services but also equipping administrators and decision makers to ensure the availability, effective deployment, and retention of qualified staff.

A robust health management information system is critical in advocating for and sustaining actions to improve nutrition. A strong monitoring and reporting system creates accountability and facilitates learning and improvement. Timely and reliable data that measure health system performance are critical to ensuring an effective and efficient health system.

QI methodologies not only improve the quality of nutrition service delivery but also help strengthen the broader health system. Data from FANTA's QI initiatives show the effectiveness of this approach in improving nutrition services. However, FANTA also observed that staff who had knowledge and skills in QI began applying these skills to other services, such as maternal and child health and tuberculosis treatment.

While significant progress has been made in integrating nutrition services into routine health services, there is still a need for the health sector to scale up integrated services to reach a significant proportion of the population. This will require strengthening capacity at sub-national levels (e.g., provincial/regional and district health management teams and local training institutions) to plan, train, oversee, and monitor integrated nutrition and health services as well as training communities to provide care and support services. Approaches such as equipping local training institutions to provide training in scaling up integrated services will contribute to the scale-up and sustainability of these services.



Health staff in Mozambique analyze client data in a health register. Photo credit: Sandra Remancus, FHI 360/FANTA

For more information on FANTA materials and activities, please visit our website: www.fantaproject.org.

#### **Contact Information:**

Food and Nutrition Technical Assistance III Project (FANTA) FHI 360 1825 Connecticut Avenue, NW Washington, DC 2000 9-5721 Tel: 202-884-8000

Fax: 202-884-8432

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