LEARNING BRIEF

Strengthening Malnutrition Services at Community Health Centers in Sikasso, Mali

JUNE 2019

This Learning Brief focuses on the health worker capacity strengthening component of the USAID *Projet Nutrition et Hygiène* (PNH). Though largely a community-level social and behavior change project, USAID/PNH aims to strengthen malnutrition prevention and treatment services at the community health centers in six districts in Mali's Sikasso Region. This effort complemented community activities in two districts (Bougouni and Sikasso) and served as the main strategy for the other four districts (Kadiolo, Kignan, Koutiala and Niena) in the Region.

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STRENGTHENING MALNUTRITION SERVICES AT COMMUNITY HEALTH CENTERS

Sceening a child for malnutrition.

The high prevalence of malnutrition in Mali is a major public health problem. At the start of the project in Sikasso Region, the breadbasket of Mali, chronic malnutrition was 33 percent and acute malnutrition was 9.4 percent in children age 6–59 months,[1] close to the WHO's determination of an emergency. Food and childcare practices were suboptimal, contributing to these statistics: only 35 percent of children under 6 months were breastfed, 48 percent of children received a minimum frequency of meals, and only 8 percent of children had at least four food groups in their diets.[2] Further, most families sold the food they grew rather than feed it to their families.

In 2014, Save the Children began implementing the USAID/PNH project in Sikasso to improve the nutritional status of pregnant and lactating women and children under age 2 in six districts—using the 1,000 Day approach.[3] The project aimed to strengthen nutrition services for managing acute malnutrition in some community health centers (CSCOM) in all six districts. In two districts, Bougouni and Sikasso, the project added intensive behavior change activities in communities to complement activities at the health center level. These activities focused on improving nutrition; water, sanitation, and hygiene (WASH); and agricultural practices. The districts receiving all activities are "full package areas" while the other four districts are "partial package areas."

At the health centers, the project focused on strengthening health worker capacity to prevent, screen and manage acute malnutrition and improve the ability to counsel and negotiate with caregivers to encourage feeding and care practices in the community especially as the nutrition protocol changed so children with moderate acute malnutrition were no longer treated at the health facility.

1 Government of Mali, SMART Indicators, July-August 2014.

2 USAID/PNH Save the Children, Baseline Report 2014.

3 The first 1000 days from conception to age 2 is the period of intense brain growth and development. Well-nourished pregnant mothers and young children during this time has a profound, positive impact on a child's ability to grow, learn and thrive.

Counseling being given to the mother of a malnourished child in Fama.

USAID/PNH Approach and Activities

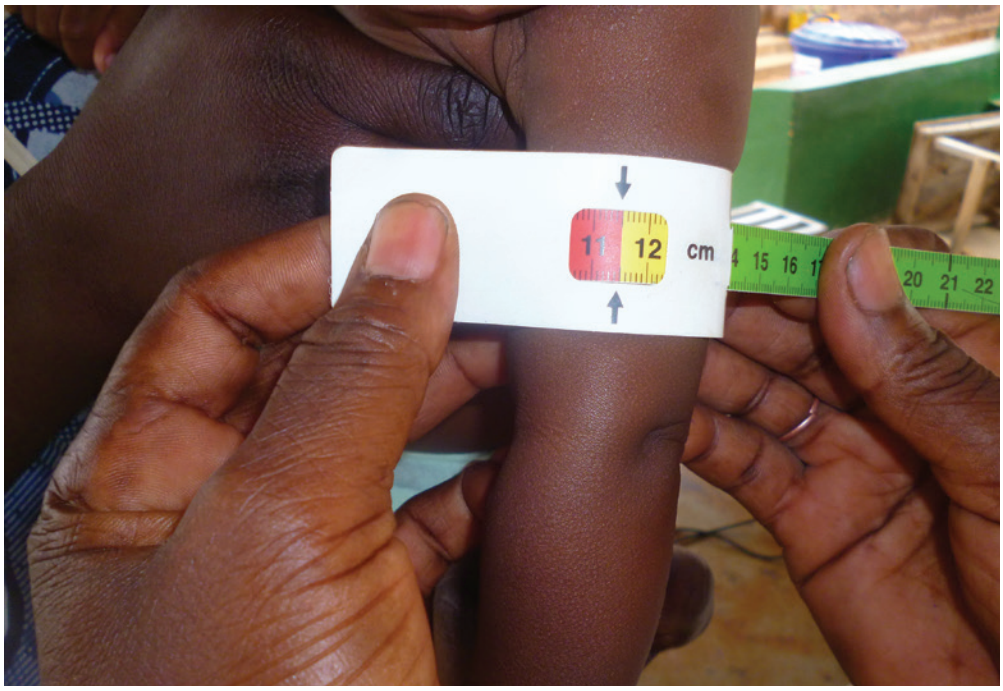
Professionalizing the health system and workers

As per the Malian CMAM protocol, health workers at CSCOMs (health directors and nutrition focal points) and community health workers (ASCs) and community volunteers in villages conduct malnutrition screenings. Moderate cases of acute malnutrition are referred to ASCs (in areas with a community essential services program). Recently MAM cases are sent to the CSCOM to be registered so the health system can monitor MAM cases. Severe cases are referred to CSCOMs directly. Severe cases with complications are admitted as inpatients at the Reference Health Center (CSRef). Village volunteers (maman, husband or mother-in-law leaders) conduct follow up home visit to outpatients until they exit the CMAM program. USAID/PNH supports health workers and ASCs to increase their capacity to deliver high quality services and manage nutrition inputs and information.

Counseling a maman at the Ureni CSREF.

In keeping with USAID's goal to increase the use of high-impact health services and to adopt healthy behaviors, USAID/PNH supported health workers and community health volunteers (relais and GSAN) to increase their capacity to provide high quality services and manage nutritional inputs as well as information through capacity building, monitoring / coaching, supervision and counseling.

The different USAID/PNH interventions helped to improve the quality of health services arousing the envy of some colleagues, as a saying from Mali says, "Quality products sell themselves." For example, Zantièbougou's health center organized a quarterly exchange forum where the center's staff (health center director (DTC), vaccinator, maternity coordinator and nutrition officer) met with community service providers (ASCs, relais and maternity ward heads and the municipal representatives and community health management committee (ASACO)) to collect, verify and analyze data and discuss



A borderline severe acute malnutrition case is detected at the Fama CSCOM.

Dietary diversity talk at a CSCOM.

difficulties and possible solutions. These meetings resolved many health center issues and led to improved data quality, more timely data collection and more consistent data. A major result was improved vaccination coverage following solutions proposed during the meeting. Other centers, eager for similar results, have requested support from the USAID/PNH CMAM supervisor to organize similar meetings.

Training DTCs and nutrition focal points on the CMAM Protocol

Health facilities did not systematically include managing malnutrition in the minimum package of activities although government policy mandates it and as a result many shortcomings existed. First the project helped the district health officials recognize the need to implement these policies. Then USAID/PNH supported and strengthened health worker capacity to implement policies that support prevention and care services for health and nutrition by organizing training on the national CMAM protocol with DTCs and nutrition focal points to address gaps and to supervise them over time to monitor progress.

Today many of these centers have seen their performance scores improved significantly. The project then also worked with community health workers to improve their ability to screen during home visits, search for gaps and follow cases admitted in the community.

Coaching health workers and community health workers

The project worked regularly with agents at different levels to improve the quality of nutrition service provision, improve data collection and reporting and manage malnutrition supplies. After the training of DTCs and nutrition officers, the project engaged in hands-on monitoring to identify and correct the insufficiencies observed in the care, identify difficulties and propose solutions. Project staff visited all centers at least once per quarter and twice a month for the worst performing sites. Visits to ASC sites were determined according to need and the performance of the site.

Nutrition room in the Kadiolo health area.

The project works with health workers at CSCOMs to complete and submit required forms and follow up on the national training dedicated to reporting statistical data and data analysis. Data quality is a problem and USAID/PNH works with the district health system to engage in hands-on monitoring to show staff how to fill the forms accurately, correct errors, analyze and interpret the data they collect. In addition, the USAID/PNH team assists staff in accurately filling inventory sheets and identified a process to order necessary inputs before stock outs occurred. This ongoing coaching is important as staff often move from center to center and new staff must be oriented. Further, the project has found that Internet access is intermittent, so health center personnel have to understand how to complete forms both manually and electronically.

Creating nutrition focal points

Mali's nutrition protocol mandates that a nutrition focal point be appointed at each level of the health system. These nutrition focal points receive extra training in data collection and analysis and formative supervision. However, the project found that the focal points did not practice their skills uniformly and that the quality of care and reporting could be improved. USAID/PNH advocated with chief medical officers to appoint a nutrition focal point at each CSCOM and to gather them monthly to discuss problems and challenges and propose solutions as a group that can be shared with all the chief medical officers in the health districts. Today all project-supported centers have a nutrition focal point and the project helps them implement the recommendations and monitors how they are implemented, and make course corrections along the way.

Senior advisors in client counseling and negotiation (SACCN)

Programmatic data on community management of severe malnutrition and health programs in developing countries show that health workers often miss opportunities to advise, guide and negotiate with clients. Health workers, mandated to conduct interpersonal communication with clients, hold group chats, but rarely provide personalized advice for children in care or negotiate changes in optimal behaviors. With support from the Ministry of Health through the National Direction of Health (DNS), the project devised the innovative Senior Advisor for Client Counseling and Negotiation (SACCN) approach to integrate counseling and negotiation systematically to improve caregiver's health behavior regarding children during health service contacts.

All SACCNs are qualified health workers (e.g. nurses, matrons, doctors, midwives, community health workers) with superior bedside manner and interpersonal skills. The SACCN actively listens and communicates effectively with clients in an open and non-

Recruiting a dedicated nutrition officer improves results

When PNH started, the vaccinator at N'golona CSCOM in Kadiolo health area was responsible for nutrition and vaccination. This officer could not accurately fill the forms in a timely manner or provide correct medical and nutrition management. The project advocated with the chief medical officer of the health center (DTC) and the chair of the community health workers (ASACO) to recruit a health technician to be the nutrition officer. The CSCOM hired a dedicated worker who has resolved all the issues and now N'Golona has the best performance in Kadiolo district.

Nutrition demonstrations started at the health centers where nutrition focal points taught mothers visiting the health center for nutrition services to make enriched porridges to feed their children

Children waiting to taste porridge at a nutrition demonstration.

judgmental manner. In working with clients, SACCN become accessible, motivated and patient so as to develop and encourage innovative solutions that clients will practice rather than promote ideal behaviors that are impossible to attain.

In addition to working directly with patients and caregivers, SACCN travel frequently to monitor and strengthen the capacity of their peers and colleagues to negotiate effective behavior change counseling. They accompany their counterparts to improve their interpersonal and negotiation skills when working with caregivers and their families to solve problems and to complete the data and tracking forms needed.

Nutrition demonstrations/community mobilization

Nutrition demonstrations started at the health centers where nutrition focal points taught mothers visiting the health center for nutrition services to make enriched porridges to feed their children. These demonstrations followed sessions on infant and young child feeding and reinforced the messages of dietary diversity, feeding children nutritious foods, and the appropriate amount and frequency to feed young children.

These interactive cooking demonstrations not only teach mothers how to maintain the health status of their children with nutritious foods, but also give them the tools to treat moderate acute malnutrition at home. Initially, the Malian CMAM protocol covered both moderately and severely malnourished children, but due to stock out issues, CSCOMs now only treat cases of severe acute malnutrition. The new protocol recommends that parents feed moderately malnourished children more frequently with meals that are highly nutritious at home.

Sometimes the World Food Program provided supplies, but often the community health worker brought the supplies and shared recipes and the food made with the families who had come for services. In the full package area, neighborhood groups (known as GSANs) led by maman leaders organize monthly nutrition demonstrations to reinforce the new practices and to highlight new recipes using nutritious ingredients. The project

supports the community health worker to conduct advocacy and promote nutrition demonstrations. The community health volunteers mobilize community members and support GSAN activities. As identified and necessary, GSAN members and ASCs refer malnourished pregnant women or children under age five to the CSCOM for follow up and treatment.

Community follow-up of malnutrition cases

Once a child has been referred to the CSCOM, the goal is to ensure that this child recovers and does not fall back into a malnourished state. If the malnutrition is not severe, the health workers counsel caregivers on how to treat it at home. Maman leaders and/or husband/mother-in-law leaders (full package villages) or SAACN (partial package villages) support these caregivers at the community level to restore health and prevent relapses. This attention also serves to prevent families from abandoning treatment before the child recovers.

Community health volunteers (relais) and GSAN members conduct malnutrition screening and monitoring activities for pregnant women and children under five at the community level. This process enables women who do not follow their child's treatment correctly to get advice and illustrates the importance of correct treatment follow-up. Home visits help ensure that children continue treatment. Community screenings also help to identify new cases of malnutrition and inform the public about the 1,000 Day strategy and promote exclusive breastfeeding. The project's CMAM supervisors regularly coached the different activities at all levels of the health system and in the community.

Multi-level supervision is critical

Supervision is critical to establishing and maintaining high quality results within the health system. Despite recurring theoretical training, until the staff actually perform these tasks in the context of their jobs, it is difficult to identify the challenges they face. Supervision provides a hands-on approach to understand how theory is translated to practice and identifies the best way to solve problems that may not have been identified in a training situation. The cascade type of training enables health workers to learn from each other, but it also helps their supervisors to understand what types of problems keep recurring. Challenges and solutions can then be fed up to the district and then to the regional health bodies to disseminate more widely across the system. The project's CMAM supervisors organized monthly supervision visits for health center staff, community health workers and volunteers and women's nutrition groups and quarterly joint supervision visits with the regional and district health officers.

Results

Since the project started, personnel and systems in 142 CSCOMs have been strengthened. A total of 36 SACCNs were trained and have conducted over 600 coaching and experience sharing visits with their counterparts across the health system. Further, almost 22,000 clients have been reached by SACCNs who have listened to challenges and negotiated improved practices to prevent or mitigate malnutrition.

Trends in malnutrition

A recent evaluation conducted for USAID found that many nutrition indicators improved over the life of the project.[4] In Sikasso, the proportion of children below 2 years who are underweight dropped by 26.8 percent of the baseline status. Wasting in children aged 0

Monthy screening and monitoring at the community level helps to identify new cases of malnutrition and promote exclusive breastfeeding.

Results

- Almost 22,000 clients have been reached by 36 trained SACCNs
- All health centers have a nutrition officer
- Malnutrition monitoring is done regularly
- Data collection and reporting is consistent, accurate and timely
- Nutrition treatment supplies (e.g., PlumpyNut) are managed efficiently with no stock outs
- Staff appropriately apply the CMAM protocol

4 Midterm Performance EVALUATION OF THE MALI NUTRITION AND WASH PROGRAMS, February 2018.

CSCOMs are significantly better able to manage nutrition treatment supplies (e.g., PlumpyNut). The mamans above are feeding PlumpyNut to their babies.

ASACO's contribute ORS to help manage acute malnutrition

When USAID/PNH began, no CSCOM provided oral rehydration salts (ORS) for children who were acutely malnourished even though the CMAM protocol calls for giving malnourished children ORS upon arrival at the center to prevent hypoglycemia and to ease hunger. The project promoted the community health workers in Diou, Dioumatene, Katele, Lanfiala, Lofine, and Zegoua to prepare and give ORS. Now most project-supported CSCOMs give ORS when malnourished children enter the health center.

to 23 months declined by 41 percent. The prevalence of anemia is 62.3 percent, compared to 83.5 percent recorded at baseline. This is a reduction of 21.2 percent points.

Improved CSCOM and District performance through supervision

Joint supervision visits by the district nutrition focal point and health staff with the USAID/PNH CMAM officer and supervisors have documented the following accomplishments.

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Community health workers and volunteers in villages collaborate closely with community nutrition groups (GSANs) and are engaged in nutrition demonstrations and home visits to ensure malnourished women and children are eating appropriately and improving. They also remain engaged with the health workers at the CSCOMs. Over the past three years, the performance scores for these cadres have improved so that almost 80 percent of the workers score above 75 percent on their performance scores. SACCN scores as well are consistently higher than 75 percent and the increase in clients requesting counseling and services from this cadre of personnel continues to grow exponentially.

Joint supervision visits by district nutrition advisors note that the quality of services has improved greatly from the start of the project to the present. The workers now really understand how to take histories and check what types of inputs the children coming to them need. They know how to talk to the mothers and counsel them on complementary feeding as well as special needs to treat and later prevent malnutrition.

Workers have increasingly gained skills in reporting. Previously staff delivered reports late and the information was not always complete or correct. The district officials have commented on the timeliness and the completeness of the reports they now receive from CSCOMs in the USAID/PNH target area. This is important in helping the government understand what is working and what is not.

CSCOMs are significantly better able to manage nutrition treatment supplies (e.g., PlumpyNut). Initially, the nutrition manager was responsible for tracking and ordering supplies, however, that person did not have the tools to complete this process adequately. Now the pharmacist is responsible for ordering all supplies; a process that works well—forms are filled out properly and most CSCOMs do not report any stock outs.

Lessons Learned / Best Practices

Community-level volunteers allows for 360 care and support to malnourished children. Treating malnutrition is a full-circle process that begins and continues at the community level. In collaboration with health center staff, USAID/PNH trains community members on how to screen for acute malnutrition and refer cases to the health center as well as cook nutrient-rich recipes that will help children thrive and, in cases of moderate acute malnutrition, regain their strength. The active participation of community members is especially important since Mali's revised CMAM protocol now states that health centers will only treat severe acute malnutrition. This means community members need to know how to treat children with moderate acute malnutrition at home and when to seek help from community health workers for severe cases.

Follow-up supervision reinforces capacity and quality of care after training. A once-off training is not adequate. Participants learn theory but rarely understand how to put the theory into practice. USAID/PNH closely supervised health workers who attended project-led trainings. The hands-on, follow-up enabled the staff to see how workers put their knowledge into practice and to correct practices immediately that were insufficient or incorrectly implemented. Further, this supervision enabled supervisors to explain the rationale for these changes, which enabled the providers to see the results of their changes and take responsibility for changes in the future.

Through training, supervision, follow-up, and analyzing data, the project helped the facility to expand the health workers' responsibilities and make them accountable to improved quality of care.

The project found that health workers had difficulty in filling the required forms and applying the national CMAM protocol to treat acute malnutrition. Further they lacked accountability and engagement in CMAM activities at the health center. After being trained, the heath officers had no opportunity to put their knowledge into practice. Through training, supervision, follow-up, and analyzing data, the project helped the facility to expand the health workers' responsibilities and make them accountable to improved quality of care.

Establishing a fixed day for malnutrition services is vital. Although the PCIMA protocol in Mali recommends a specific day to address acute malnutrition, most health centers do not have one. By combining malnutrition with other center activities such as vaccination or medical consultations, health workers often missed or incorrectly followed the CMAM protocol. This resulted in many cases dropping out of treatment.

CSCOMs that created a specific day to address acute malnutrition found that clients were more aware of malnutrition and therefore brought their children for services and parents were more engaged in following the treatment fully. A specific day enabled the CSCOM to organize nutrition demonstrations and other activities to motivate caregivers to improve their practices. Finally, the health workers were well versed in the CMAM protocol and followed it more rigorously.

STRENGTHENING MALNUTRITION SERVICES AT COMMUNITY HEALTH CENTERS

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Health workers must be empowered and held accountable for implementing the CMAM protocol. In project-targeted health centers, the project advocated for the DTC to deputize one health worker as a nutrition officer to follow PCIMA procedures, implement malnutrition protocols and track attendance and progress. These health workers received targeted capacity building on proper procedures and reporting, which helped to improve the quality of care. Coupled with supervision and oversight in their new role, the nutrition officers gained status and experienced an elevated sense of responsibility, which helped to reduce dropout cases, increase admissions, and improve activities to prevent and treat malnutrition. Such targeted capacity building improved the quality of care.

Healthcare workers and community health workers can work symbiotically to improve malnutrition. The CSCOM screens every child who enters (for curative consultation or for preventive monitoring) to assess his/her nutritional status. The nutrition officer confirms the malnutrition status of any child diagnosed with the Shakir Band (mid-upper arm circumference method) by measuring edema, reviewing BP, and assessing weight / height. Families of malnourished children then receive counseling and negotiation from the CSCOM's SACCN.

When children are screened to have malnutrition, the community health worker (ASC) helps families understand that malnutrition is a curable disease. The ASC outlines the causes of childhood illness, the process of care, and emphasizes the parents' role and responsibilities in caring for the child to prevent a reoccurrence of malnutrition. If the case is severe, the ASC works with the CSCOM staff to admit the child into the treatment program where caregivers formally agree to counseling and to attend treatment visits until the child is cured. The child is then admitted to the acute malnutrition management program. The children who followed this path were more likely to get better.

STRENGTHENING MALNUTRITION SERVICES AT COMMUNITY HEALTH CENTERS

Using two different mechanisms challenges implementation. USAID/PNH did not implement its complete package of activities in one area because another USAID-funded project, USAID/Damou ni Wassa was already operating there. The Project USAID/Damou ni Wassa promoted proper hygiene practices, complementary feeding for children under 24 months and supported pregnant and lactating women in communities. USAID/PNH assisted health workers to improve nutritional services to support acute malnutrition. Unfortunately, the Project USAID/Damou ni Wassa ended in project year 3 without a strategy for sustaining community activities. As such, synergies between the community and the health facilities did not materialize. It is more effective for donors to package implementation into one project.

Families now understand that moderate acute malnutrition cases can be cured at home through enriched porridges and other nutritious foods.

Conclusion

The USAID/PNH capacity building helped CSCOMs more effectively plan for and order nutrition treatment supplies as appropriate for the health center. Such improved planning has reduced stock outs. In addition, the Malian protocol for the management of malnutrition changed over the course of the project. Initially it was available for moderate and severely malnourished children, but a supply shortage forced a changes so that only severely malnourished children received the treatment. Caregivers were counseled to feed moderately malnourished children frequent meals of highly nutritive foods. The community health workers and maman leaders all made home visits to follow the progress of moderately malnourished children. Families now understand that moderate acute malnutrition cases without complication can be cured at home with enriched porridges and other nutritious foods.

In addition to the project sponsored activities, USAID/PNH also participated in national strategies and government-led efforts to reduce malnutrition that included engaging in the Thematic Nutrition Group (GTN), intensive nutrition weeks (SIAN) and integrating malnutrition screening in vaccination campaigns. These activities helped to keep the project abreast of new and updated approaches and strategies.

WHAT IS USAID/PNH?

The USAID-funded *Project Nutrition and Hygiene* (PNH) managed by Save the Children with partner SNV aims to improve the nutritional status of pregnant and lactating women and children under two years of age in six health districts of the Sikasso Region, Mali. It is agriculturally productive, a center for trade, and one of the most densely populated regions of Mali. Over the course of six years, the project aims to reach at least 10,000 pregnant and lactating women (PLW) and 50,000 children under 2 years of age with a full package of interventions.

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STRENGTHENING MALNUTRITION SERVICES AT COMMUNITY HEALTH CENTERS. In 2014, Save the Children began implementing the USAID/PNH project in Sikasso to improve the nutritional status of pregnant and lactating women and children under age 2 in six districts — using the 1,000 Day approach. The project aimed to strengthen nutrition services for managing acute malnutrition in community health centers in all six districts.

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