USAID
FROM THE AMERICAN PEOPLE

HRH2030
HUMAN RESOURCES FOR HEALTH IN 2030







FINAL REPORT | MARCH 2021

Human Resources for Health in 2030 in Mali

ACKNOWLEDGEMENTS

This publication was developed with support from the United States Agency for International Development. It was prepared by members of the HRH2030 consortium.

March 2021

Cooperative Agreement No. AID-OAA-A-15-00046

Credit for cover photos: HRH2030 Mali.

TABLE OF CONTENTS

ACTIVITY DETAILS

IMPLEMENTING PARTNERS
Chemonics International, University Research Co. (URC)

IMPLEMENTATION PERIOD
January 2018 – December 2020

AWARD NUMBER
AID-OAA-A-15-00046

SUBAWARDEES
University Research Co. (URC), InfoStat

GEOGRAPHIC COVERAGE
Bamako, Kayes, Koulikoro, Mopti, Sikasso, and Segou regions

TOTAL ESTIMATED INVESTMENT
US$16,025,089 + US$700,00 in COVID-19 investment

ACRONYMS

ANC	Antenatal Care
ASC	*Agents de Santé Communautaire* (Community Health Workers)
ASSIST	Applying Science to Strengthen and Improve Systems
BEmONC	Basic Emergency Obstetric and Newborn Care
CCN	*Cellule de Coordination Nutrition*
CDPFIS	*Centre de documentation, planification, formation, information sanitaire*
CHW	Community Health Workers (*Agents de Santé Communautaire)*
CLA	Collaboration, Learning, and Adapting
CSCOM	*Centre de Santé Communautaire* (Community Health Center)
CSRéf	*Centre de Santé de Réference* (Referral Health Center)
CSO	Civil Society Organization
DEHR	Division of Equipment and Health Regulations (*Division Equipement et Règlementation Sanitaire/DESR*)
DGSHP	*Direction Générale de la Santé et de l'Hygiène Publique* (General Directorate of Health and Public Higyene)
DHIS2	District Health Information System 2
DRDS-ES	*Direction Régionale du Développement Social et de l'Economie Solidaire*
DRPFEF	*Direction Régionale de la Promotion de la Femme, de l'Enfant et de la Famille*
DTC	*Directeur technique de centre*
EONC	Essential Obstetric and Newborn Care
FP	Family Planning
HMIS	Health Management Information System
HQ	Headquarters
HR	Human Resources
HRD	Human Resources Directorate (*Direction Nationale des Ressouces Humaines en Santé*)
HRH	Human Resources for Health
HRH2030	Human Resources for Health in 2030 Program
IP	Implementing Partner
MHSD	Ministry of Health and Social Development
MNCH	Maternal, Newborn, and Child Health
PPFP	Post-Partum Family Planning
PRODESS IV	National Ten-Year Health and Social Development Plan, Phase IV
QI	Quality Improvement
RH	Reproductive Health
SBC	Safe Childbirth Checklist
SI-GRH	*Système d'information pour la gestion des ressources humaines*
SPE	*Suveillance Préventive des Enfants*
SUN CSN	Scale Up Nutrition Civil Society Network
UHC	Universal Health Coverage
UPFIS	*Unité Planification Formation Information Sanitaire*
USAID	United States Agency for International Development
WHO	World Health Organization

OVERVIEW AND EXECUTIVE SUMMARY

The Government of Mali (GoM) is committed to improving health care quality and services for its people. To underscore this commitment, the GoM proposed a health reform initiative in 2019 that aims to accelerate the achievement of the country's Sustainable Development Goals by 2030, through the establishment of universal health coverage (UHC). Through the Ministry of Health and Social Development (MHSD), it has prioritized human resources development, quality improvement of health services and care, and community contribution to health access and financing as key steps for achieving the health objectives detailed in its national 10-year Health and Social Development Plan, Phase IV, 2019-2023 (PRODESS IV). In addition, by aiming to reduce the maternal and infant mortality rates, the proposed reforms constitute an essential contribution to the improvement of the country's human resources, which are key to increasing the productivity and wellbeing of the Malian people and their access to quality primary health care services at the community level.

The MHSD is committed to lead, manage, and finance the restructuring of the entire health care sector in two phases over the coming years. The first phase is focused on primary health care, specifically strengthening the community health center network, and the second phase is focused on secondary and tertiary health care, the referral health center network, regional hospitals, and specialized hospitals. Challenges relating to the quality of services and human resources for health are an overarching priority for the MHSD and its partners.

Program Purpose

As a strategic development partner to the GoM and the MHSD, the United States Agency for International Development (USAID) supports Mali's goals for improving its population's health and wellbeing through sustainable approaches and increased country ownership. The Human Resources for Health in 2030 (HRH2030) Mali program, funded by USAID Mali from January 2018 to December 2020, provided technical assistance directly to the Ministry of Health and Social Development to strengthen human resources management for the health workforce and the improve the quality of care and services throughout the health system.

HRH2030 Mali was designed to address HR needs that had been articulated in the country's 2009-2015 national strategy for human resources for health that were still unrealized. These included the need for well-defined supervision and coaching processes and normative documents to support regional and district-level human resource managers and the need for increased use of health workforce data for decision-making. In addition to providing direct assistance to the MHSD, HRH2030 Mali implemented activities in collaboration with other ministries, with a focus on ensuring that HR policies and practices facilitated the availability of quality health care and services in six regions: Kayes, Sikasso, Segou, Koulikoro, Mopti, and Bamako. In particular, the program aimed to strengthen health service provider training at all levels of the health system to improve the effectiveness and efficiency of maternal, newborn, and child health, family planning and nutrition services.

Community health worker Batoma Souare (on the right) and midwife Nema Sogoba (behind) provide antenatal care to Banana Dembele (on the left) at a maternity in Kolosso, Mali. Photo Credit: Ibrahima Kamate, HRH2030 Mali.

HRH2030 Mali built on the five-year USAID-funded Applying Science to Strengthen and Improve Systems (ASSIST) program, which relied on a quality improvement approach to improve maternal, newborn and child health (MNCH), family planning, and nutrition services and community health centers and referral centers five regions. As the HRH2030 Mali program evolved in its second year, after seeing strong results from the quality improvement approach, it integrated the focus on quality improvement into an adapted community approach designed by HRH2030's technical team, in collaboration with regional-based technical staff from the social development and women's welfare ministries as well as representatives from community health associations, which engaged the Malian population living in program intervention areas directly in the efforts to increase health care access and quality. This community approach was implemented in five regions; it was not applied in Bamako.

Figure 1 (below) illustrates HRH2030's objectives and how they supported the overall programmatic goal of strengthening and implementing HR policies, guidelines, and practices to govern an effective health workforce in service to delivering quality maternal, newborn, and child health, family planning, malaria, and nutrition programs.

The HRH2030 Mali program was implemented by Chemonics International, the prime recipient of the global HRH2030 program, in partnership with subrecipient consortium partner University Research Company (URC).

Key Achievements

After three years, HRH2030 Mali has measurably improved access to quality health care services for 2,126,280 women and 1,509,130 babies in the program's geographic regions. The HRH2030 program built health workforce capacities to implement the national strategy to improve health care and services, training 254 health worker coaches on maternal, newborn and child health, family planning, nutrition, and malaria at more than 1,100 community health center and referral centers which have:

- Provided 756,153 couple-years of protection via family planning services
- Treated 122,278 cases of child diarrhea and 208,025 cases of childhood pneumonia
- Provided postnatal care to 592,310 newborns within two days of childbirth
- Reached 5,192,527 children under five and 2,004,180 pregnant women with nutrition-specific interventions
- More than doubled the number of women receiving their 4th antenatal care (ANC) visit, from 5,750 women per quarter to 13,388 per quarter in 38 districts
- Improved the skills of more than 2,400 service delivery providers from 1,103 health facilities in 46 districts in compliance with Mali's national norms and standards of service delivery in of maternal, newborn and child health, family planning, nutrition, and malaria

FIGURE 1: HRH2030 MALI GOAL AND OBJECTIVES

HRH2030 MALI GOAL

Human resources policies, guidelines, and practices—that govern an effective and functional workforce to build strong, quality maternal, newborn, and child health, family planning, malaria, and nutrition programs from the facility to household levels—have been strengthened and implemented

OBJECTIVE 1	Improve the effectiveness of MNCH, FP, malaria, and nutrition care and service deliveries at facility level in five target regions using CLA process of improvement. *(Quality improvement at the facility level)*
OBJECTIVE 2	Improve demand and access to quality MNCH, FP, malaria, and nutrition care and service deliveries at community and household levels using community quality improvement approach. *(Quality improvement at the community level)*
OBJECTIVE 3	Objective 3: Contribute to improve the standards and procedures to support HRH management capacity at national and regional levels. *(HRH development and management)*
OBJECTIVE 4	Contribute to health system strengthening by improving HMIS and SI-GRH data quality and supportive supervision mechanism. *(Health system strengthening)*

HRH2030's community strategy contributed to measurable increases in the use of services at the community level, and improved quality of care and services at community health facilities in Kayes, Koulikouro, Sikasso, Segou, and Mopti. This community approach, integrated into 1,233 community platforms in 23 districts:

- Provided services to 250,000 Malians—including 30,208 pregnant women, 49,400 children under 23 months, and 136,458 children between ages two and five
- Spurred an increase in health facilities' service utilization rate from 38% to 73% over a two-year period, impacting 2,311,045 Malians in rural communities
- Contributed to an increase in the proportion of childbirths taking place at 190 HRH2030-supported health centers in 18 districts from 35% to 89% over the first half of 2020
- Trained 687 community health cadres including CHWs and rural matrons who, in turn, trained 997 community committees, in collaboration with local partners
- Reached 53,337 women of reproductive age and 42,121 pregnant women with key health messages by through HRH2030-trained community health workers
- Contributed to increasing financial accessibility to health services for 60,000 women across the 1,233 community platforms

The work of HRH2030 fostered national and regional leadership and ownership of the managing of the health workforce. Over the course of the program, through HRH2030's support, the MHSD's Human Resources Directorate and its regional and district team members:

- Completed and verified more than 10,000 HRH personnel files within Mali's HR information system, SI-GRH
- Built the data analysis skills of 62 HRH managers across five regions
- Trained 15 national-level Human Resources Directorate staff on quality improvement in human resources for health
- Cascaded quality improvement training to 50 HRH managers at regional and district levels, who are now implementing continuous quality improvement plans
- Developed normative documents to guide the day-to-day human resource management of the health workforce

HRH2030 also helped to strengthen services and data quality and use to advance evidence-driven policy- and decision-making. The program's interventions:

- Refreshed skills of 175 rural matrons and 252 CHWs on data monitoring tools and skills to support the use of data in decision-making
- Supported the development of the National Multisectoral Nutrition Plan 2021-2025 and its corresponding budget
- Introduced the community approach to the Scaling Up Nutrition Partnership, which will integrate in future activities

Nearly midway through the program's final year, the COVID-19 outbreak arrived in Mali, and quickly began disrupting health services. USAID Mali supported the government's response by working on prevention and management activities, and HRH2030 Mali received new funding to support surveillance systems at the community level, develop rapid response capacity, ensure quality case management, and support coordination at the national level. This work was centered in four target regions where HRH2030 was already working: Bamako, Kayes, Koulikouro, and Sikasso. Between May and November 2020, HRH2030:

- Trained 2,654 health workers on surveillance in Bamako and Sikasso
- Supported rapid intervention teams to test 2,470 people with suspected COVID-19 cases in Bamako
- Disseminated appropriate monitoring guidelines or protocols for COVID-19 to 437 health facilities
- Provided technical assistance to 209 facilities and community platforms for COVID-19 risk communication and community engagement through the distribution of communication materials
- Visited 812 community groups in Mopti, Segou, and Sikasso to deliver COVID-19 prevention messages on social distancing, face covering, and handwashing
- Reached 56,034 people through community platforms and oriented 11,244 people to COVID-19 related messages in Kati, Koutiala, Sikasso, Yelimane, and Yorosso districts

The HRH2030 Legacy

At the program's conclusion, the MHSD has enhanced expertise and capacity to continue to improve health care quality and services, in particular health service delivery in maternal, newborn and child health; family planning; nutrition; and malaria.

"[HRH2030's] training gave me the opportunity to speak the same language as my midwifery colleagues with regard to standards of care, because a head of maternity services, I was completely out of date in this area."

— Dr. Namory Camara, Reproductive Health Officer Kadiolo Referral Center, Sikasso

Malians—especially women and children in the program's intervention areas—are taking greater advantage of health services in or close to their communities, improving maternal and child health outcomes. Through the community approach, HRH2030 built the capacity of the community stakeholders to promote health management for self-reliance.

"HRH2030 began working with local women's groups, seeking to improve the demand for maternal, newborn, and child health care services… As a result, the number of women completing the ANC visits increased."

— Saran Camara, Obstetric Nurse, Debo Kagolo Secondary Health Center

Building management and leadership capacity in the MHSD's Human Resource Directorate (HRD) is essential to make progress on the Sustainable Development Goals, enact UHC, and achieve Mali's overall health objectives. The MHSD's Human Resources Directorate has professionalized and institutionalized its management capacities, with tools and resources now in place to ensure sustainable, continued investment in human resources at all levels of the health system.

"At the beginning of our collaboration, I was not convinced of the benefit of using the quality improvement approach to solve our internal problems. With the results we have achieved... I am one of the advocates for this approach and will develop it in our daily work within the department."

— Dr. Etienne Coulibaly, Director of HRH Department, Mali's Ministry of Health and Social Development

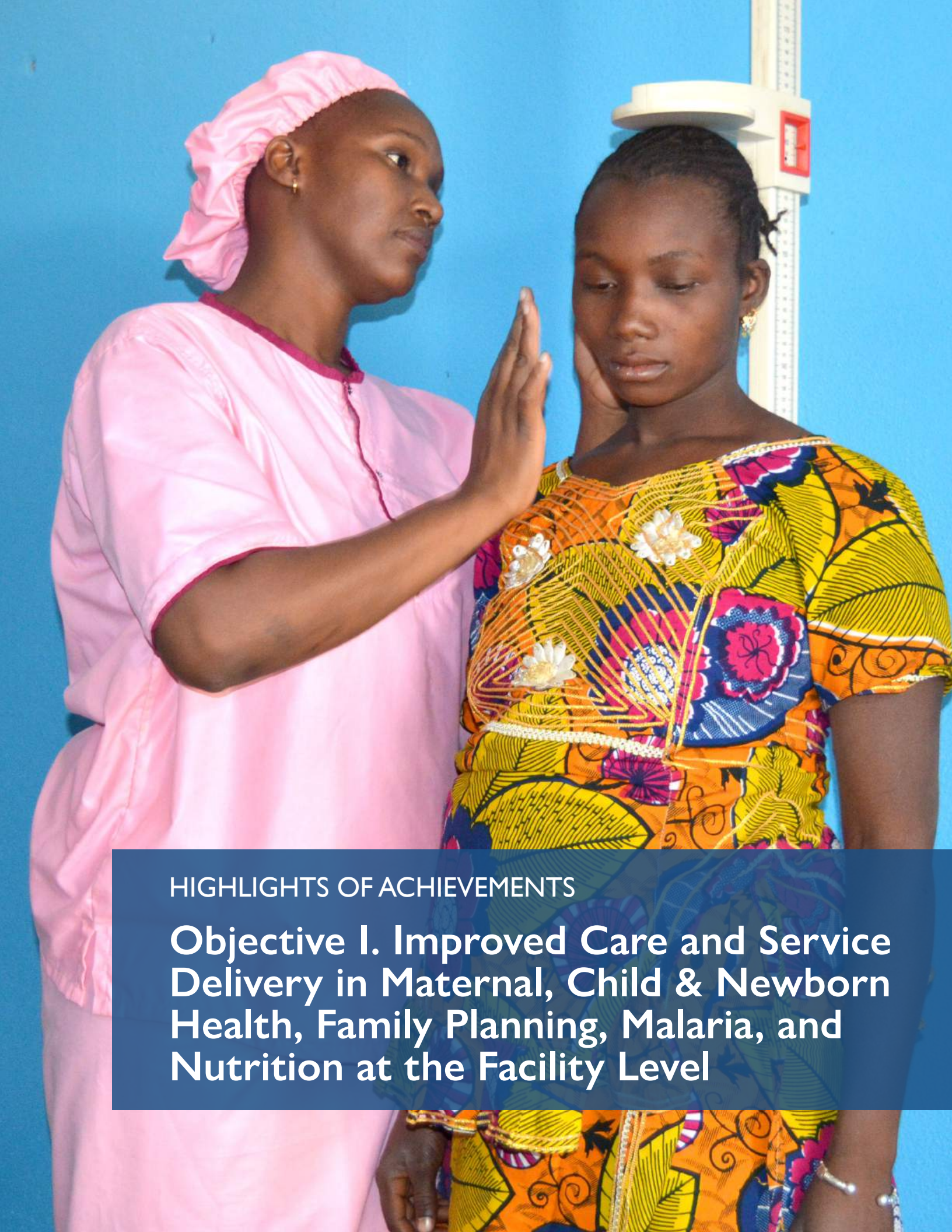
From its inception, the HRH2030 Mali program's vision has been to implement strategies and approaches that support the government of Mali's priorities to respond to the population's needs and advance universal coverage. The government's commitment for health reform is promising, and it will require the support of the many actors who have contributed to the HRH2030 Mali program's success, as well as those whose efforts are ongoing. Continued investment in human resources at all levels of the health system and in communities themselves will be essential to the success of these reform efforts.

PERSPECTIVE:

Fatoumata Kone, Obstetric Nurse, Kayes Region

Obstetric Nurse Fatoumata Kone is located at the Kita Reference Health Center.

"Until recently, I had a low level of training in postpartum family planning and little interest in counseling clients in family planning methods," she says. "Now, thanks to HRH2030 Mali's training, I have been able to overcome these shortcomings and am able to conduct appropriate post-partum family planning counseling by following a standardized process. Currently, I am providing 15-20 post-partum family planning sessions per month."



HIGHLIGHTS OF ACHIEVEMENTS

Objective I. Improved Care and Service Delivery in Maternal, Child & Newborn Health, Family Planning, Malaria, and Nutrition at the Facility Level

KEY RESULTS

- Provided 756,153 couple-years of protection via family planning services at HRH2030-supported facilities
- Treated 122,278 cases of child diarrhea and 208,025 cases of childhood pneumonia at HRH2030-supported facilities
- Provided postnatal care to 592,310 newborns within two days of childbirth
- Reached 5,192,527 children under five and 2,004,180 pregnant women with nutrition-specific interventions
- More than doubled the number of women receiving their 4th ANC visit, from 5,750 women per quarter to 13,388 per quarter in 38 districts
- Trained 254 health worker coaches on maternal, newborn and child health, family planning, nutrition, and malaria services, and these coaches subsequently supported service delivery providers at more than 1,100 health referral centers and community health centers
- Improved the skills of more than 2,400 service delivery providers from 1,103 health facilities in 46 districts in compliance with Mali's national norms and standards of service delivery in of maternal, newborn and child health, family planning, nutrition, and malaria.

A key priority of the Malian government—at the time of HRH2030 program start-up in 2017 and through program closeout—has been to improve the quality of health services and care throughout the country. A particular focus was to make progress on some of the health indicators documented in Mali's 2012-2013 DHS: a maternal mortality ratio (MMR) of 368 per 100,000 live births; a neonatal mortality ratio of 34 per 1,000; and a child mortality ratio of 95 per 1,000. HRH2030's vision at program launch was to respond to this priority through institutionalizing quality improvement interventions related to maternal, newborn, and child health, family planning, and nutrition services in order to accelerate improved health outcomes; the health areas expanded to include malaria in the program's final year. HRH2030 made progress toward this vision by using both a quality improvement (QI) approach and USAID's Collaboration, Learning, and Adapting (CLA) cycle of improvement over the life of the program. Through these approaches, described in more detail on pages 9 and 10, HRH2030's interventions have led to measurable improvements in delivering quality care and services in newborn and child health, family planning, nutrition, and malaria care and treatment.

Dr. Namory Camara consulting with a patient, Kadiolo Referral Health Center, Mali. Photo Credit: Ibrahima, Kamate, HRH2030 Mali.

Improving Quality of Health Care and Services

HRH2030 strengthened and supported decision makers to become skilled in using analytical tools, as the foundation for making data-driven decisions in providing quality health services, including increasing access to services, and improving service delivery at the facility level. Specifically, HRH2030 focused on improving service delivery frameworks at referral health centers and community health centers to reduce maternal, newborn, and child morbidities and mortalities; improve delivery of quality emergency obstetric and neonatal care at the community level; and strengthen district and regional health managers'

capacities to improve planning and management of quality improvement activities.

Health worker coaches—trained by HRH2030 and tasked with improving results—empowered the providers themselves to perform better at their jobs and initiate the reorganization of services in their facilities to address gaps in client satisfaction. By training 254 health worker coaches on maternal, newborn and child health, family planning, nutrition, and malaria at the health facility and reference center levels, HRH2030 built the capacities of more than 2,000 health workers to implement Mali's national strategy for improving health care and services. These health workers were located throughout more than 1,100 service delivery sites and provided millions of services over the program years. These HRH2030-supported facilities:

- reached 5,192,527 children under five and 2,004,180 pregnant women with nutrition-specific interventions
- treated 122,278 cases of child diarrhea and 208,025 cases of childhood pneumonia
- provided postnatal care within two days of childbirth to 592,310 newborns
- provided 756,153 couple-years of protection for family planning
- increased the percent of newborns surviving 24 hours after resuscitation from 79% at baseline to 95% (see Figure 2 below)

Figure 3 (at right) illustrates how HRH2030 coaches improved health worker performance.

FIGURE 2. HIGHER QUALITY CARE HAS IMPROVED SURVIVAL OUTCOMES FOR NEWBORNS

Over FY2019, the percent of newborns surviving 24 hours after resuscitation improved by more than 15%.

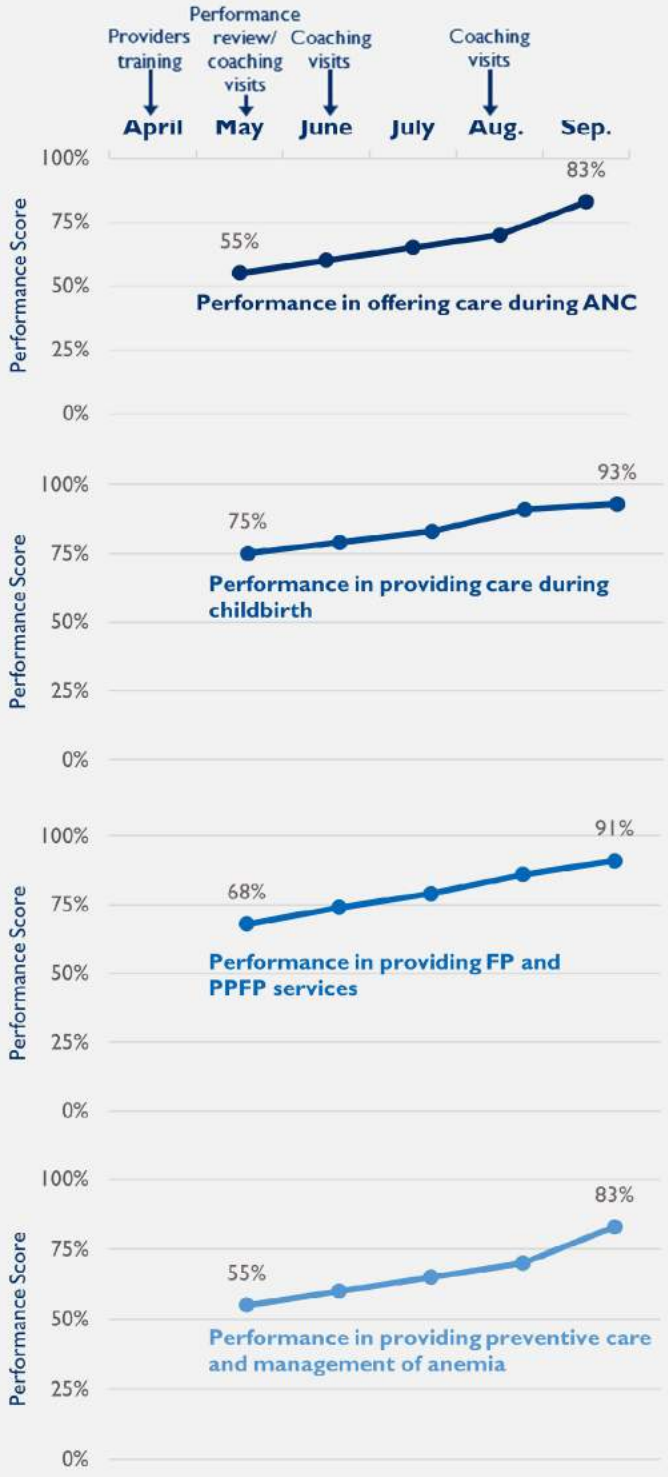
% of newborns surviving resuscitation:

Data source: DHIS2

FIGURE 3. HRH2030'S COACHING METHODOLOGY IMPROVED HEALTH PROVIDER PERFORMANCE

For example, in 2018 HRH2030 identified improved performance of 397 providers trained in 146 health centers in 5 regions based on the results of on-the-job observations, practical demonstrations, and review of essential standards.

2018 coaching timeline and performance scores over time:



Data source: Provider performance assessments/observations conducted during coaching visits. Assessments measure the number of criteria where the provider adhered to standards over the total number of criteria assessed.

IMPLEMENTING A QUALITY IMPROVEMENT (QI) APPROACH TO IMPROVE HEALTH CARE AND SERVICES

HRH2030's quality improvement approach included techniques such as QI collaboratives, use of the Plan-Do-Study-Assess/PDSA (Shewhart Cycle), and use of checklists, coaching visits, and supportive supervision, to increase health care providers' capacity to more effectively carry out their responsibilities and comply with national norms and standards. HRH2030 developed the capacity of regional and district coaches to improve the quality of service delivery models that empowered providers to perform better at their jobs and reorganize delivery of services where necessary to fill gaps in client satisfaction. This coaching capacity has been institutionalized through strong partnerships with regional and district health teams.

During the coaching visits, the HRH2030 Mali's technical team and coaches assessed (1) the performance of providers on site; (2) the quality of services and care provided using the national norms and standards; (3) the quality and consistency of data from the monthly DHIS2 report; (4) the clarity of job description for providers; and (5) the organization of services to facilitate clients' access. Coaches emphasized that compliance to norms and standards was paramount, despite the many other health system challenges (lack of equipment, insufficient resources, and low staff motivation) the providers faced.

An adaptive service delivery model focused on providers' individual performance levels, with coaches working directly with each individual to determine areas in need of improvement—through direct observation, task simulations, or peer-to-peer discussions, for example—followed up by regular monitoring and feedback. The process increased providers' confidence in the system, as they were able to track their performance throughout the year. Seeing measurable changes in important health indicators resulting from simple, feasible, and accessible solutions made a huge difference in providers' perception of quality and the possible changes they could make in a complex system.

By applying a people-centered approach to both providers and clients (discussed more in the community approach on page 17), HRH2030 helped realize a new vision for health services within Mali's health system.

In addition to the extensive coaching, the program's results can be attributed to the technical assistance they provided to DSR and regional health teams to disseminate MNCH, FP, and nutrition essential norms, standards tables, and jobs aids for use at facility level; the provision of technical and financial assistance to regional and district health teams to build capacity specifically on essential obstetric and newborn care; and successful support in improving the planning and management processes at district and community levels.

Improving Maternal, Newborn, and Child Health Outcomes

One of the program's key achievements was the increase in the quality of antenatal care at the facility level, reflected in the increase in the number of women receiving the fourth ANC visit as well as increased compliance to Mali's norms and standards around maternal and newborn care. HRH2030-trained coaches worked intensively with the providers in charge of antenatal care to refresh them on the importance of complete ANC visits and provided client registers where needed to better track ANC data. Coaches also advocated with the community health center and district health management teams when necessary, to provide the ANC units with the requisite supplies for delivering quality services. These efforts at the facility level were complemented by the program's community outreach to increase local residents' knowledge and acceptance of antenatal care services, which led to an increase in the number of women referred for ANC services at the village level, as seen in Figure 4 on the next page. HRH2030's community approach is described further on page 17.

Improved compliance with norms and standards for maternal and child health care services, has led to strengthened service provider performance in these areas, and in turn, contributed to improved outcomes for Malian mothers, children, and newborns in HRH2030-supported facilities. At the program's inception, many health workers—especially those in rural health areas—weren't familiar with the government's national norms and standards

IMPLEMENTING USAID'S COLLABORATING, LEARNING, AND ADAPTING (CLA) PROCESS TO IMPROVE CARE AND SERVICE DELIVERY

HRH2030 Mali's approach to improving quality and care of services also drew on USAID's Collaboration, Learning, and Adapting (CLA) cycle of improvement, which was an integral part of the program's monitoring & evaluation approach. As USAID notes, "Strategic collaboration, continuous learning, and adaptive management link together all components of the program cycle." The CLA practices ensure that program implementers continuously assess how and when they're working with partners (collaborating); what kinds of questions they are asking and if these are the right questions to support effective decision making (learning); and how they use the information gleaned from collaborating and learning to make good decisions and adjust programming when necessary.

The HRH2030 Mali team integrated CLA into the program not just for their own internal learning, but to support the interventions' target audiences, too, helping to transform unskilled—and sometimes reluctant—decision makers at all levels of the health system into confident users of analytical tools, capable of making data-driven decisions for the provision of quality services, increasing access to care, and improving service delivery at the facility level.

The CLA cycle of improvement was integrated routinely into program activities that included: (1) Monthly data reviews: The program's technical team collaborated with district data managers, regional health teams, and representatives from community activities to review data completion, quality, and accuracy and then analyze the data to take action. Acting upon the data in a timely manner contributed to the ongoing quality improvement efforts and strengthened service delivery teams' performance; (2) Quarterly coaching visits: To improve quality of care and ensure compliance with norms and standards, HRH2030 worked continuously with regional and district coaches, coaches from the MHSD, facility health providers at community health centers, CHWs, and communities to analyze the data in these areas and make course corrections when necessary; and (3) Regional and community meetings: Community-level stakeholders (described further in the next section) were engaged regularly and included in program opportunities to reflect on activities, evaluate progress, and adjust as necessary.

**USAID's Learning Lab CLA Toolkit: https://usaidlearninglab.org/qrg/understanding-cla-0*

FIGURE 4. MORE WOMEN IN 38 HEALTH DISTRICTS OF THE 5 PROJECT REGIONS ARE ATTENDING THEIR 4TH ANC VISIT NOW THAN IN EARLY 2018

In Q1 2018, 5,750 women received their 4th ANC visit. After two years this figure more than doubled; 13,388 women received their 4th ANC visit in Q4 2019.

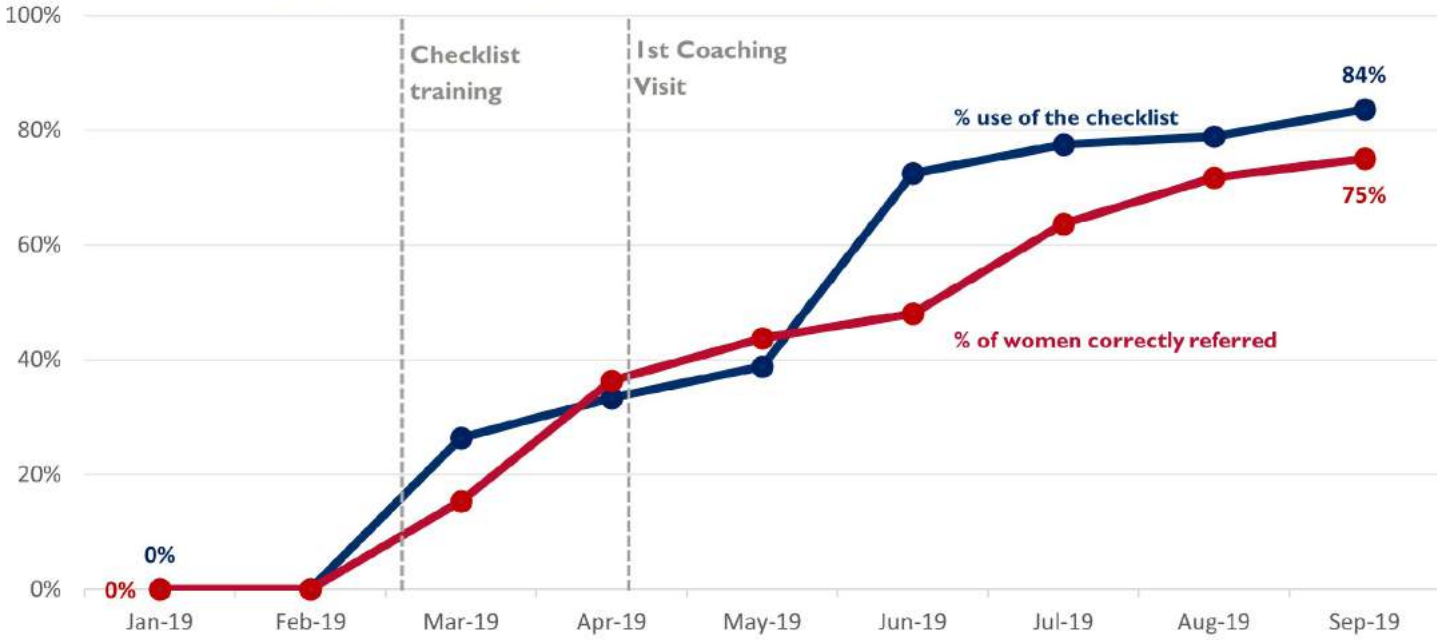
Data source: DHIS2.

documents. HRH2030 developed a series of job aids highlighting these protocols and assessed performance regularly to ensure that health workers were adhering to these norms. By the program's end, more than 406 rural matrons had received coaching on consistent use of the Safe Childbirth Checklist, for example, ensuring timely screening and referral of women at risk of delivery complications. See Figure 5 on the next page.

To further complement the MHSD's efforts to reduce maternal and neonatal mortality, in 2020, HRH2030 set up 66 Basic Emergency Obstetric and Newborn Care (BEmONC) centers in the Sikasso, Segou, and Mopti regions, providing existing community health centers with new equipment, and training 129 health care workers how to provide these life-saving services in accordance with national protocols. In addition, providers received training on data collection and recording of BEmONC efforts, and received follow-up coaching after the initial training.

FIGURE 5. RURAL MATERNITIES ARE MORE COMPLIANT WITH MNCH STANDARDS; AS A RESULT, MORE WOMEN IN CHILDBIRTH WHO MEET CRITERIA FOR REFERRAL TO ANOTHER FACILITY ARE CORRECTLY REFERRED

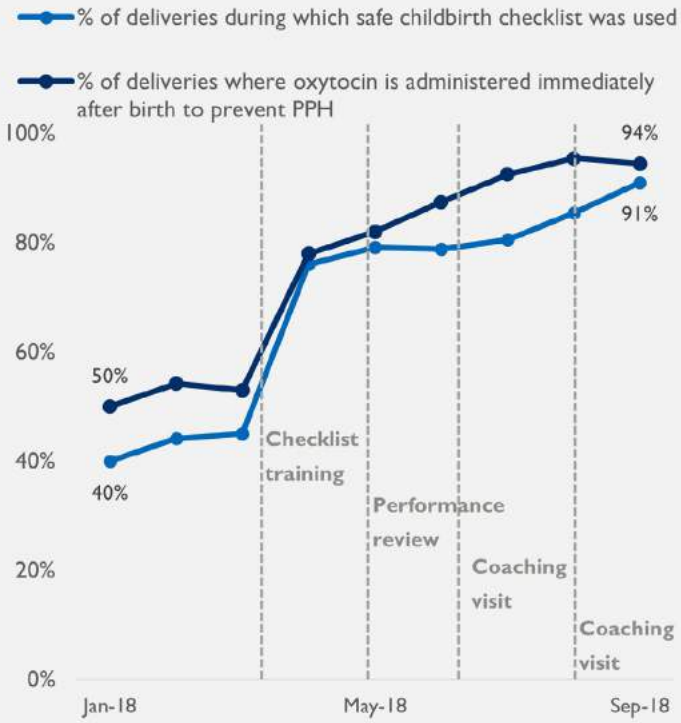
Prompt referral can be critical for the health and safety of the mother and baby. After training and coaching rural matrons on use of Safe Childbirth Checklist in 2019, the results of 164 rural maternities in 3 regions demonstrate increased use of the checklist and increased proportion of referrals performed in accordance with checklist procedures.

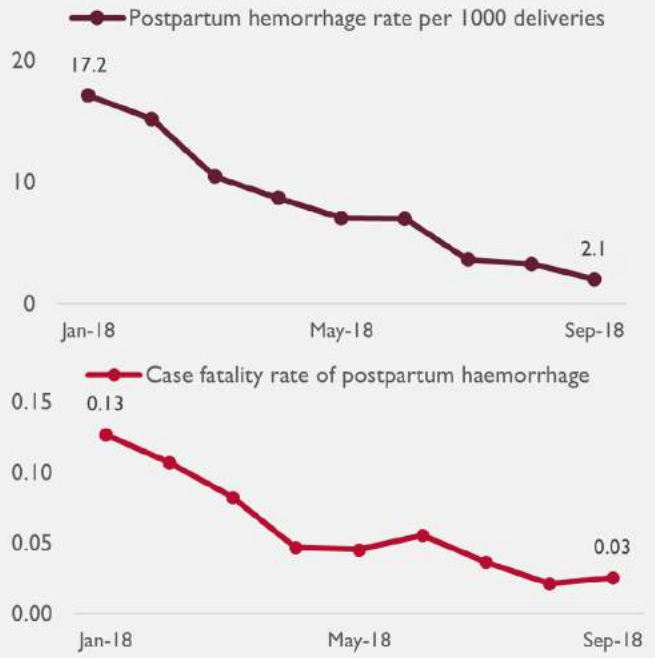


Data source: Provider performance assessments/observations conducted during coaching visits at rural maternities. Assessments measure the number of criteria where the provider adhered to standards over the total number of criteria assessed.

FIGURE 6. COACHING IN 146 FACILITY MATERNITY WARDS HAS INCREASED COMPLIANCE WITH MNCH STANDARDS

Implementation of the checklist and lifesaving measures like oxytocin administration have decreased the postpartum hemorrhage rate per 1,000 deliveries, as well as the case fatality rate per 1,000 cases of postpartum hemorrhage.





Data source: Provider performance assessments/observations conducted during coaching visits at facility maternity wards. Assessments measure the number of criteria where the provider adhered to standards over the total number of criteria assessed. Hemorrhage rates and case fatality rates are sourced from birth registers/partograms.

By first training and then coaching facility staff to ensure that MNCH services are provided in line with standards and norms, as well as equipping facilities with the resources needed to provide BEmONC care, HRH2030 has enabled improved outcomes for mothers, newborns, and children. In particular, these interventions have increased the use of oxytocin after birth to prevent post-partum hemorrhage, and also reduced the number of women dying due to postpartum hemorrhage, as illustrated in Figure 6 on the previous page.

The story on page 14 highlights one physician's experience in compliance with norms and standards through the HRH2030 program, first being trained in compliance, and later as a program coach. The story on page 15 illustrates one midwife's experience with the BEmONC training.

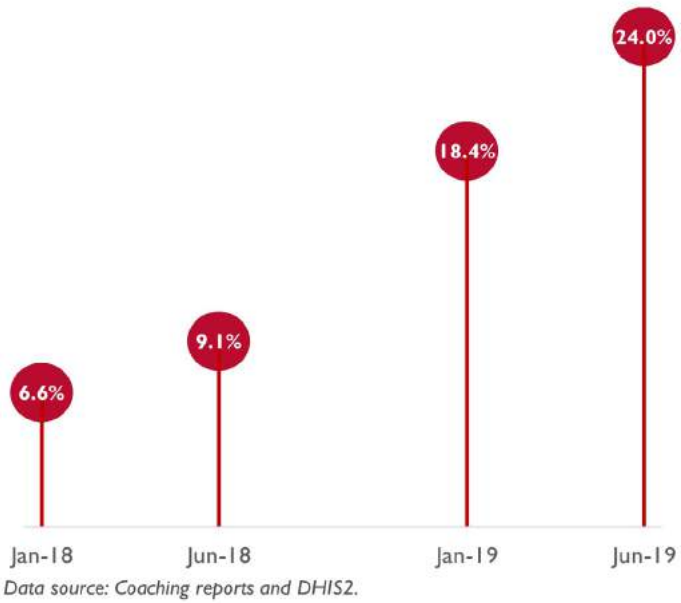
Improving Family Planning Outcomes

Another key achievement was the prioritization and intensification of family planning activities at the facility level. In collaboration with regional health management teams and existing regional FP partners—including USAID implementing partners, other donor-funded initiatives, local governments, and civil society groups—the program provided technical and financial assistance to each region to organize FP coordination meetings, creating a platform and network to regularly monitor implementation and progress on the Government of Mali's National Family Planning Action Plan. Examples of recommendations coming out of these coordination meetings included requests to provide all centers with family planning counseling registers, integrating private sector data on family planning into reporting, and more. The regional health teams developed improvement plans with targeted activities aligned to many of the resulting recommendations, which were then implemented in their communities.

The program further built the capacity of 328 FP providers in delivering quality FP counselling services at the district and community levels. One noteworthy result came from the Bamako region, where 14 out of 15 low-performing health facilities benefited from HRH2030's training and coaching, which contributed to the number of new users of FP methods, as seen in Figure 7.

FIGURE 7. THROUGH BUILDING THE CAPACITY OF FP PROVIDERS, HRH2030 CONTRIBUTED TO AN INCREASED CONTRACEPTIVE PREVALANCE RATE

For example, the contraceptive prevalence through use of modern FP methods more than tripled from 6.6% to 24% in 15 Bamako sites from June 2018 to June 2019.



Data source: Coaching reports and DHIS2.

Increasing Compliance with Norms and Standards in Service Delivery

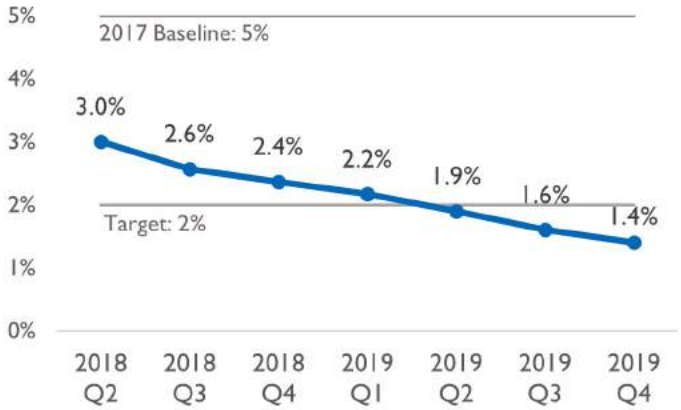
The emphasis on compliance and adherence to norms was emphasized as a means to improve service delivery throughout the program, with coaches returning to it again and again to measure health worker performance. At the program's end, more than 2,400 providers from 1,103 health facilities in 46 districts had improved their skills to comply with Mali's national norms and standards of service delivery, particularly in the areas of maternal, newborn and child health, family planning, nutrition, and malaria. Some specific examples include:

- Increased compliance with standards for complication screening (42% to 79%), complication management (33% to 70%), and complication prevention (44% to 88%) in FY2020. These results indicate increased level of adherence of providers to quality standards, resulting in higher quality care that protects pregnant women from life-threatening complications, as seen in figure 8 on the following page.
- Increased the percentage of women in immediate postpartum who received family planning counseling (73% to 81%)
- Increased compliance with standards for severe acute malnutrition screening and management (55% to 64%)

FIGURE 8. IMPROVED MATERNAL SERVICE DELIVERY HAS PROTECTED WOMEN FROM LIFE-THREATENING COMPLICATIONS

By the end of FY2019, the mortality rate of eclampsia was reduced to less than one third of the baseline rate from 2017.

Lethality of eclampsia:



Data source: Monitoring and management record of detected cases, death register

Institutionalizing Quality Improvement

The quality improvement approach—discussed previously on page 9—was another driver of improving facility performance. In collaboration with Mali's Division of Equipment and Health Regulations (DEHR), HRH2030 worked in its first year to formalize the National Quality Improvement Committee, made up of partners working on quality improvement in Mali, including USAID implementing partners and others. The National Quality Improvement Committee was designated by a national decree signed by the MHSD in 2018, which officially validated the committee's scope of work. Following the creation of this national committee, the Minister instructed regional health directors to work with their governors to establish regional quality improvement committees. Once established, these committees developed their costed plans and mobilized funding to implement activities with technical support from implementing partners, institutionalizing a quality improvement focus that endures beyond the life of the program.

Mama Diancoumba (right) explains the benefits of prenatal visits to one of her patients at Selingué Reference Health Center, Mali. Photo credit: Ibrahima Kamate, HRH2030 Mali.

PERSPECTIVE:

Dr. Namory Camara, Reproductive Health Officer, Kadiolo Referral Health Center, Sikasso Region

In 2017, Dr. Namory Camara's career took a new trajectory when, after seven years of working in private health clinics, he joined Mali's civil service and was assigned to the Kadiolo Referral Health Center in the Sikasso region. At 37, he was appointed the reproductive health officer in this public facility, responsible for maternity services and working with midwives who had substantially more experience than he did.

"It is a heavy responsibility, but I do my best," says Dr. Camara. "The position corresponds perfectly to my deepest aspirations which are the well-being of women and children."

Shortly after arriving at Kadiolo Referral Health Center in 2018, Dr. Camara participated in one of HRH2030's trainings for maternal, newborn, and child health services.

"This training gave me the opportunity to speak the same language as my midwifery colleagues with regard to standards of care, because as head of maternity services, I was completely out of date in this area," he notes.

HRH2030 then tapped Dr. Camara to become a quality improvement coach, and he now coaches maternity service providers at 24 community health centers affiliated with the Kadiolo Referral Health Center, to ensure that the network is providing services in accordance with Mali's standards.

Early on in his coaching, he discovered gaps in providers' familiarity and use of certain key documents including the Safe Childbirth Checklist, a critical resource for preventing maternal and infant deaths during childbirth.

"I made the heads of the care teams responsible for monitoring the accurate completion of all of the maternity data collection documents, including the checklist," he says. "I also set up a staff rotation system between the different units to facilitate familiarity of systems across the family planning, prenatal, postnatal, and prevention of mother-to-child transmission of HIV units."

According to Dr. Camara, advances in data collection and monitoring, especially through proper use of the safe birth checklist, have improved the quality of care for newborns and their mothers during the 24 hours after delivery. Complications are being detected early and adequately managed, and the care rating for newborns and mothers at the facilities has improved from 15 to 89 out of 100.

Dr. Camara's colleagues are impressed by his approach.

Midwife Fatoumata Coulibaly says that in her 15 years of service, she has never seen a doctor who is as engaged in his work as Dr. Camara. Her colleague, Midwife Manager Ramata Fofana agrees, emphasizing, "He loves his work, and he manages the staff well."

PERSPECTIVE:

Elizabeth Traore, Midwife, Zantiguila Community Health Center, Sikasso Region

Midwife Elizabeth Traore has been responsible for maternity services at the Zantiguila community health center in Mali's Sikasso region since 2018. The center provides services to approximately 888 pregnant women annually. But caring for them has its challenges, as Traore points out.

"We're located 65 km from the referral health center, but due to poor road conditions, it can take an ambulance three to four hours to transport a woman in need of urgent care. This was a problem for us, given that the staff did not have the skills and materials to deal with complications such as postpartum hemorrhage and eclampsia," she says, adding that the center sees approximately 133 women a year with these life-threatening complications.

Traore was one of 129 health workers who received HRH2030-supported training on Basic Emergency Obstetric and Newborn Care (BEmONC). Following the training, coaching visits that included practical demonstrations were made to every health worker's facility, including Zantiguila. These visits reinforced the knowledge gained at the training and further prepared the newly trained workers for real life situations.

"A woman was recently treated for postpartum eclampsia five days after giving birth. On her admission to the maternity ward, she received the first dose of magnesium sulphate and was then prepared to be evacuated to the referral health center, as indicated in the country's maternal care standards," Traore explains. "Unfortunately, the ambulance broke down and she could not be evacuated. Having acquired skills in the management of obstetric complications, we were able to continue administering the other doses of magnesium sulfate and to monitor parameters according to the national protocol." The woman recovered, Traore notes.

"This training has given me a higher level of job performance," says Traore.

Because health workers like Traore are now more prepared and confident to deliver lifesaving BEmONC care, including administration of magnesium sulfate to treat or prevent eclampsia, Mali is closer to achieving a goal of zero preventable maternal and neonatal deaths: from 2018 through 2019, the mortality rate of eclampsia dropped in program health centers from a baseline of 5% to 1.4%.

HIGHLIGHTS OF ACHIEVEMENTS

Objective II. Improved Quality of Health Care and Services at the Community Level

KEY RESULTS

- Integrated the community approach into 1,233 community platforms in 23 districts in Kayes, Koulikoro, Sikasso, Ségou, and Mopti, reaching 54,024 Malians
- Provided services to 250,000 Malians—including 30,208 pregnant women, 49,499 children under 23 months, and 136,458 children between two and five—through HRH2030-supported community platforms and community health
- Spurred an increase in health facilities' service utilization rate from 38% to 73% over a two-year period, impacting 2,311,045 Malians in rural communities
- Contributed to an increase in the proportion of childbirths taking place at HRH2030-supported health centers in 18 districts from 35% to 89% over the first half of 2020
- Trained 687 community health cadres including CHWs and rural matrons who, in turn, trained 997 community committees, in collaboration with local partners
- Reached 53,337 women of reproductive age and 42,121 pregnant women with key health messages by through HRH2030-trained community health workers
- Contributed to increasing financial accessibility to health services for 60,000 women across the 1,233 community platforms

As discussed in the prior section, Mali's recurrent health challenges at the community level included low rates in many key drivers of maternal and child heath, including completing the recommended four antenatal care (ANC) visits, deliveries at health centers, use of family planning services, and immunization coverage. Malians themselves, especially women in rural communities, traditionally had limited involvement in decision making regarding local health services, and, if they were involved, their influence was minimal. When HRH2030 began planning to improve care at the community level in the second year of the program, the women attending the introductory meetings in rural villages shared stories of disrespectful, unresponsive, and unsupportive health workers and declared that they did not feel empowered to change the situation.

To help resolve these challenges, HRH2030 developed an adaptive community strategy based on the QI process to raise the quality of services available at the community level, including those provided by the community-based health workforce (in the box on the next page). The goal of this community approach was to increase the demand and access for services at CHW delivery points, rural maternities, and household levels; improve the quality of maternal, newborn, and child health, family planning, malaria, and nutrition care and services; and strengthen community health cadres to improve community systems.

Banana Dembele is one of the solidarity fund beneficiaries who is receiving antenatal care in her rural maternity. Photo Credit: Ibrahima Kamate, HRH2030 Mali.

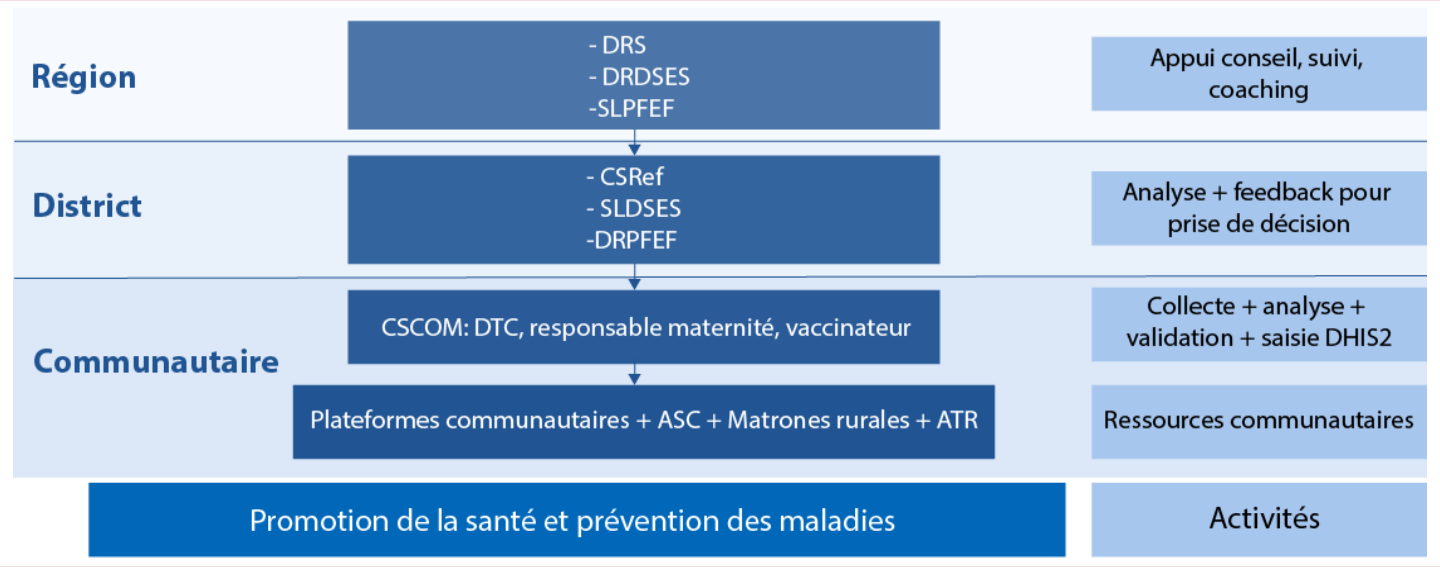
IMPLEMENTING A COMMUNITY APPROACH TO IMPROVE THE QUALITY OF HEALTH CARE AND SERVICES AND INCREASE COMMUNITY MEMBERS' CARE-SEEKING BEHAVIORS

The Regional Directorates of Social Development and Solidarity Economy and the Promotion of Women, Children and the Family are primarily responsible for the implementation and monitoring of health activities at the community level. They work in close collaboration with the management teams of the health districts, the technical directors of the centers, the heads of maternity hospitals, vaccine agents and community platforms. At the village level, CHWs, rural midwives, community committees, and women's groups are other key stakeholders. Bringing them all together, HRH2030 Mali implemented an adaptive community strategy based on the QI process to raise the quality of services available at the community level, including those provided by community-based health workforce. The strategy used each region's existing community resources—such as women's groups, facility-based rural matrons, and community health workers, to name just a few—and leveraged them to support building community capacity, particularly women's capacity to participate in addressing their own health needs with knowledge and confidence, participating in decision-making with service delivery providers, and promote greater independence for longer-term health and wellbeing within households and communities. Specifically, HRH2030 focused on improving the quality of MNCH, FP, malaria, and nutrition care and services; increasing demand and access at care delivery points, rural maternities, and household levels; and strengthening community health cadres to improve community systems.

Women's associations and groups exist in almost all of Mali's villages, but their focus, objectives, and functions differ from one location to another. HRH2030 capitalized on their well-established presence and roles in the community to underpin their community approach and did not create new organizations to undertake the work. By respecting the place of well-established local groups and building on their knowledge of local challenges and resources, HRH2030 was able to foster a sense of ownership and sustainability of the interventions. Women's groups formed community committees which then liaised with HRH2030-trained community health workers, bridging gaps between households and health facilities. Community committees and health workers shared messages on the importance of family planning, maternal care, vaccinations, and nutrition. Community health workers collected accurate data on community health, and then shared it with health facilities, for further recording and dissemination through the district, regional, and national health system structures.

Figure 9 below summarizes the role of the different actors.

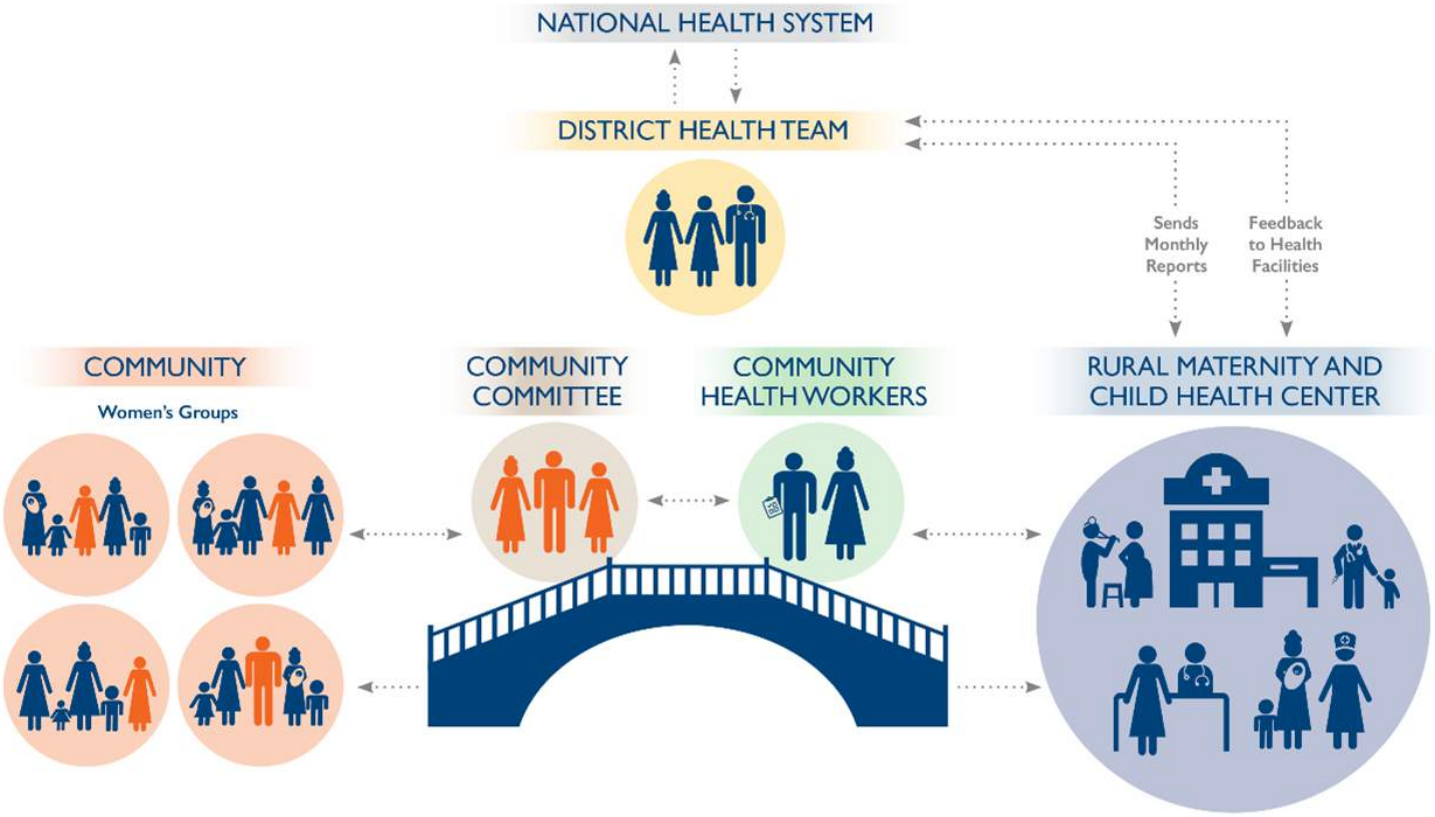
FIGURE 9: DIAGRAM OF STAKEHOLDERS IN THE COMMUNITY APPROACH BY HEALTH SYSTEM LEVEL



Over the course of two years, HRH2030 worked with 1,233 community platforms from 23 districts—with a total of 54,024 members—in Kayes, Koulikoro, Sikasso, Ségou, and Mopti. Working with the Government of Mali's directorates charged with community health, social development, and the promotion of women, families, and children (*Direction Régionale de la Santé; Direction Régionale du Développement Social et de l'Economie Solidaire; Direction Régionale de la Promotion de la Femme, de l'Enfant et de la Famille*), HRH2030 trained 374 staff members from these directorates as community coaches. Already known and respected within the program's target communities, the new coaches were familiar with local cultures and traditions, and well positioned to promote positive health behaviors while also fostering mutual respect and trust between health service providers and community residents. With the community coaches in place, HRH2030 trained 687 community health workers including CHWs and hospital matrons who, in turn, trained 997 community committees. Together, committee members, CHWs, and matrons reached a total of 53,337 women of reproductive age and 42,121 pregnant women with key messages on critical health topics, including the risks of home births, the importance of ANC visits, and the health benefits of exclusive breast feeding. With these messages being delivered by trusted members of their own community—whether women's group leaders or CHWs—women were more likely to act upon their recommendations. The infographic at bottom of page illustrates HRH2030's community approach.

HRH2030's community strategy contributed to an increase in the use of services at the community level across the program's intervention regions, and improved quality of care and services at the corresponding facilities. Nearly a quarter million Malians—including 30,208 pregnant women, 49,400 children aged 0-23 months, and 136,458 children aged 24-59 months—were reached through community committees and by CHWs who had been empowered through HRH2030 support. By connecting these women and children to care and strengthening the quality of services in communities as well as at HRH2030-supported facilities, the program made large contributions to increasing the service utilization rate from 38% to 73% over two years. These actions have also strengthened continuity of care by building client trust in health services; for example, more women are completing all four recommended ANC visits. The evidence shows that the gap between women who receive their first

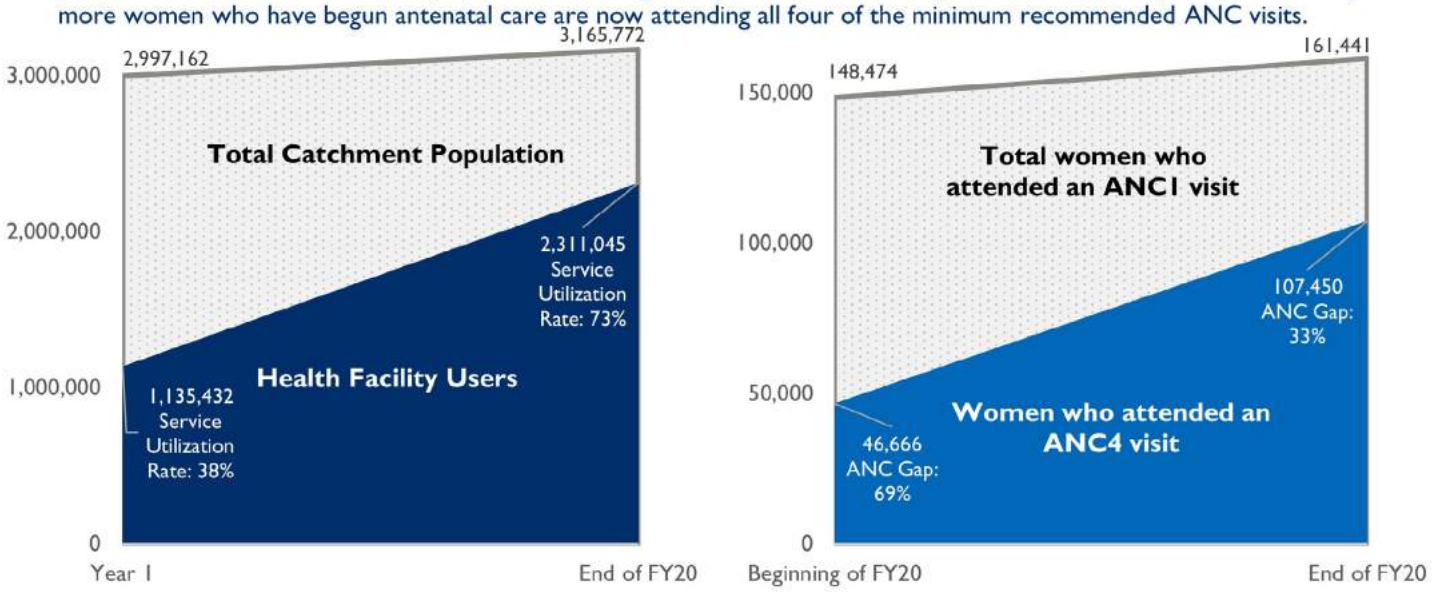
INFOGRAPHIC: HRH2030'S COMMUNITY APPROACH IN MALI



antenatal care visit and the number of those women who complete all four recommended ANC visits decreased from 69% to 33% during FY20. Figure 10 below captures how HRH2030's efforts have increased health facility utilization as well as continuity of ANC care.

FIGURE 10. HRH2030'S COMMUNITY APPROACH HAS CONTRIBUTED TO INCREASED USE OF HEALTH SERVICES

These efforts have increased the service utilization rate across the program's intervention regions, meaning that a larger proportion of the total catchment population are using facility services. Continuity of care has also improved; for example, more women who have begun antenatal care are now attending all four of the minimum recommended ANC visits.



Data source: DHIS2 data. Service utilization is calculated as the total number of outpatient department visits among USAID-supported facilities implementing QI over the total number of people residing in those facilities' catchment areas. ANC4 rates count the total number of pregnant women who received antenatal care 4 times or more.

PERSPECTIVE:

Lassine Sogoba, Technical Director, Tougouni Community Health Center, Koulikoro

When Lassoine Sogoba joined the Tougouni Community Health Center in the Koulikoro Health District in February 2018, he noticed the low rate of women using the center's services, particularly antenatal and postnatal care. He made several attempts to address this by talking with people in the community, but little changed.

"About a year into my role, the health center received support from HRH2030 Mali's community outreach team, offering capacity building and coaching on how to work with our local community health committees," he says. "Through this support, I learned how to have better discussions with the committees, and I then realized that many women just didn't know which services the center provided. I then provided more detailed information about the services including why they are important for women and infants. Subsequently, 18 women from the six target villages visited the center for antenatal care services in February, and 20 came in March. Previously we had no more than five women from these villages making ANC visits."

"I am now convinced that the HRH2030 community approach in Tougouni—in which the community is directly involved in raising awareness of health issues and making their own decisions—will continue to lead to increased attendance at the health center and other improvements in health indicators."

HRH2030's community approach—in addition to having positive results on ANC care—positively impacted a wide range of other key MNCH indicators, including the number of children under age two reached with nutrition interventions, the number of women sensitized on risks for anemia, and the number of women sensitized on family planning services. Figure 11 illustrates these improvements in Sikasso, Kayes, and Koulikoro over a nine-month period.

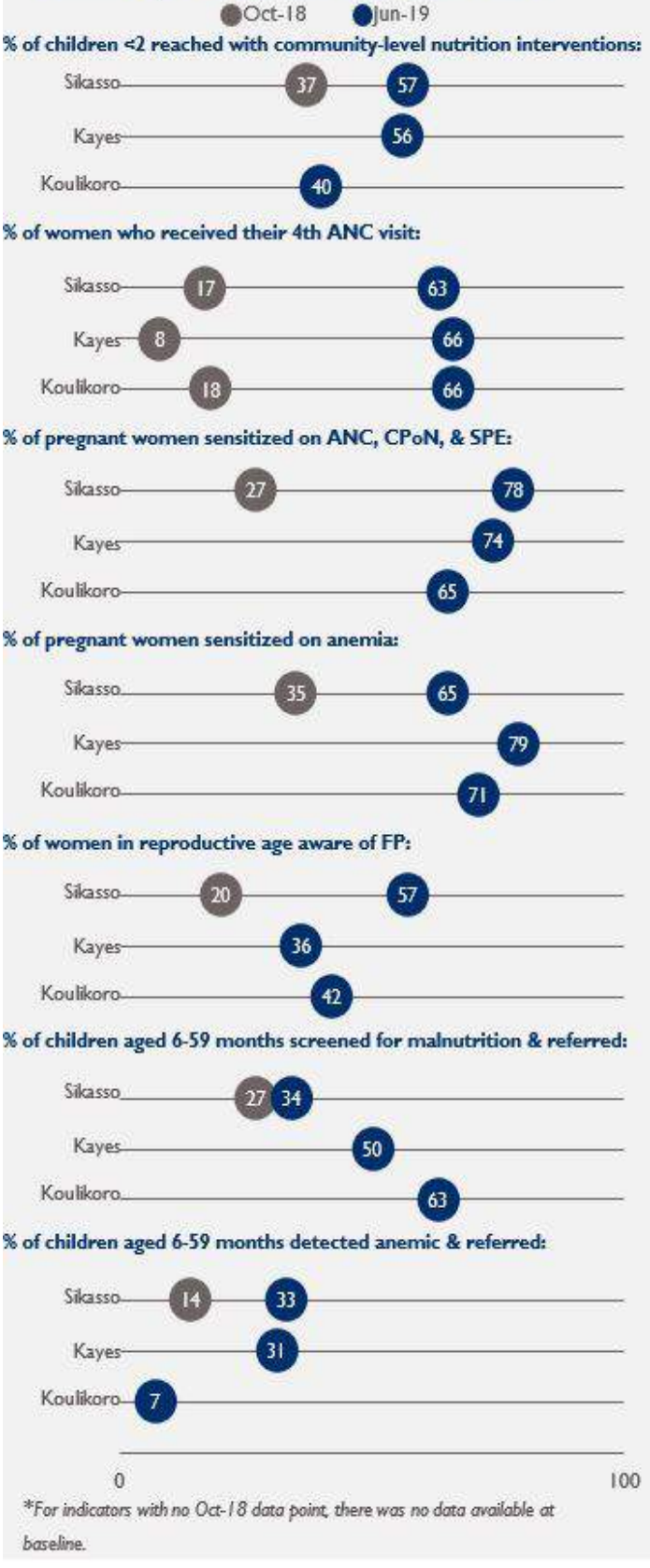
Building trust was also a critical step in convincing women to shift their mindset about giving birth in health centers. HRH2030 Mali found ways to harness the influence of local cultures and traditions, such as the position of respect held by traditional birth attendants – working with these attendants to orient them away from harmful practices. With the program's support, 435 traditional birth attendants were educated about maternal and child risks linked to home births, and the benefits of giving birth in health centers. A total of 252 traditional birth attendants shifted to new roles as counselors and "accompanists" (women who accompany expectant mothers to maternities at the onset of childbirth). This contributed to an increase in the proportion of childbirths taking place at program-supported health centers from 35% to 89% over the first half of 2020 in 190 facilities in 18 districts.

The story of Madjita Diarra, on page 24 is one example of a traditional birth attendant who changed direction due to the program's influence. It is followed by the story of Saran Camara, an obstetric nurse at the Debo Kagolo Secondary Health Center, who saw how HRH2030's work with women's groups helped increase the number of expectant mothers seeking care.

In the Sikasso, Segou, and Mopti regions, where community activities were intensified over the last year of the program, improvements in key indicators accelerated. The figures on the following page demonstrate increased ANC utilization and deliveries at facilities (Figure 12), increased use of family planning following a family planning campaign (Figure 13), and reduced vaccination dropout rates (Figure 14) achieved with contributions from the community strategy.

FIGURE 11. HRH2030'S COMMUNITY APPROACH REACHED MORE WOMEN AND CHILDREN WITH MNCH SERVICES

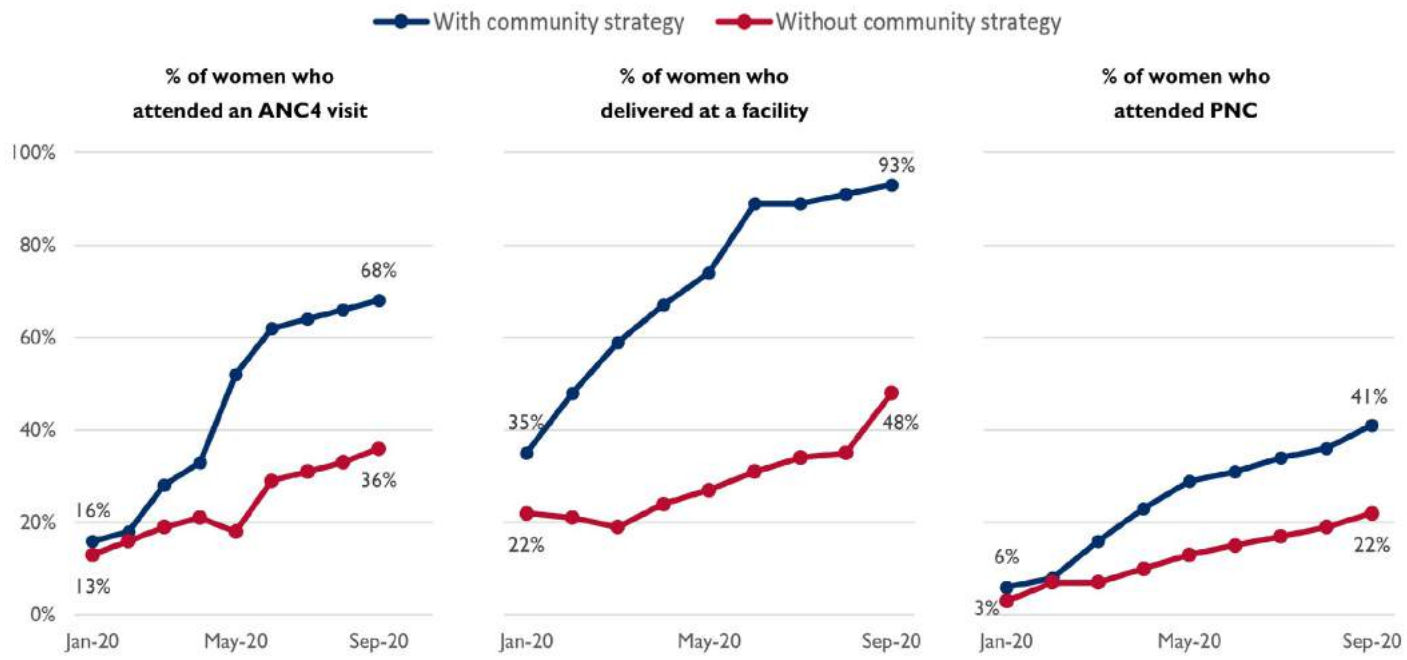
Districts in Sikasso, Kayes, and Koulikoro saw improvement in several key MNCH indicators from 2018 to 2019*



*For indicators with no Oct-18 data point, there was no data available at baseline.

FIGURE 12. OF THE WOMEN WHO SOUGHT MNCH CARE FROM JANUARY THROUGH SEPTEMBER 2020, THE HRH2030 COMMUNITY STRATEGY CONTRIBUTED TO AN INCREASE IN WOMEN WHO RECEIVED KEY MNCH SERVICES

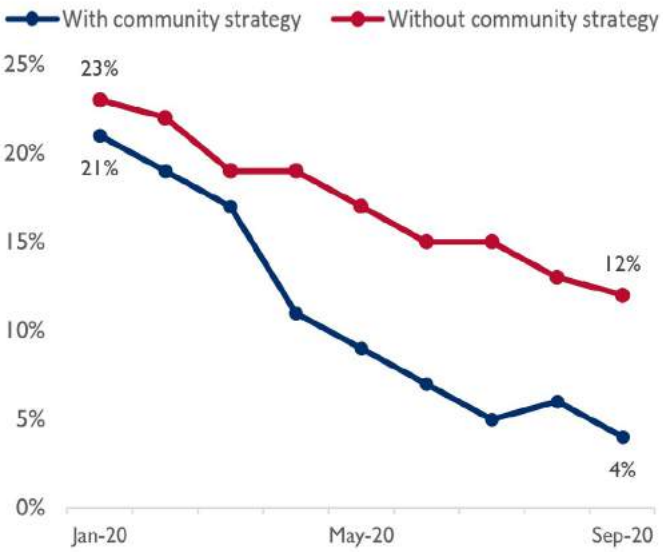
These increases were larger in the 190 facilities of 18 districts in Segou, Sikasso, and Mopti where the community strategy was implemented than in the 442 facilities in the same districts where the community strategy was not implemented.



Data source: DHIS2. Calculated as the number of services in each category provided over the total number of women seeking MNCH care during the collection period.

FIGURE 13. COMMUNITY ACTIVITIES ALSO CONTRIBUTED TO A DECREASED DROPOUT RATE BETWEEN THE FIRST AND THIRD DOSE OF THE PENTAVALENT VACCINE

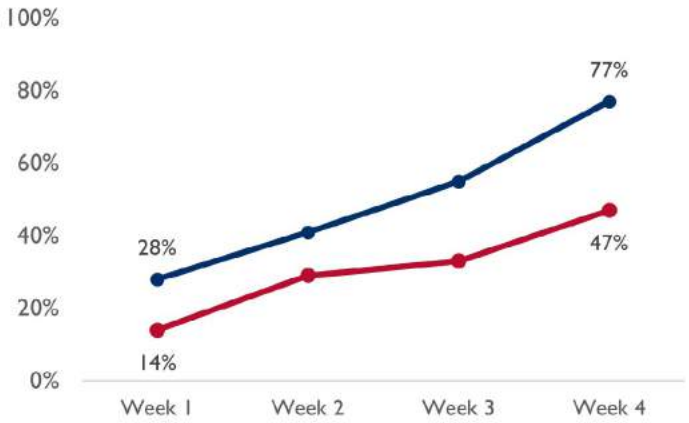
In September 2020 in facilities with the community strategy, of the 15,614 children who received the first penta dose, only 625 children did not complete all three doses.



Data source: DHIS2. Calculated as the number of children who who did not receive the 3rd penta dose out of the number of children who received the 1st dose.

FIGURE 14. FAMILY PLANNING ACCEPTANCE RATES ALSO ROSE, DUE IN PART TO THE COMMUNITY STRATEGY

A higher proportion of women of childbearing age were mobilized to accept FP during the 4 week FP campaign in the health centers with community activities versus those without community activities. By the end of the campaign, the health centers with community activities had mobilized 18,960 new postpartum family planning users.



Data source: DHIS2. Calculated as the number of new FP acceptors over the total number of women of childbearing age in the catchment area.

Eliminating Financial Barriers to Accessing Services

To further increase uptake of services, HRH2030 Mali's community approach involved collaboration with the departments of social development and promotion of women, families, and children, to tap into women's groups' existing income-generating activities to overcome financial barriers to accessing services. Women in the program's intervention areas raise funds through a variety of micro-business activities: producing shea butter products, making soap, selling vegetables, breeding and selling animals, and making charcoal, to give a few examples.

Traditionally, women contribute their income from these microbusiness activities into their own small group fund, called a *tontine*, which they use to further fund their small business needs or to provide small loans to women when needed. As HRH2030 began to raise the quality and availability of health services within the community, the women's groups began realizing that the financial barrier to accessing services was one of the last impediments to ensuring that they could receive care when they needed it. HRH2030 Mali's trained coaches and community health cadres introduced the idea of using the funds from these activities to pay for costs for services for pregnant women and children under five, such as prenatal consultations, maternal deliveries, and vaccinations for all village children. This idea took off among the women, and women's groups began using *tontine* funds for health needs.

Members of the Benkadi women's group clean the village during a health visit in Kolosso, Mali. Photo Credit: Ibrahima Kamate, HRH2030 Mali.

For example, in the Segou region, 98% of community platforms (122 of 125) began using these funds for to pay for health services fees. These *tontines* received monthly contributions per member ranging between 50-200 FCFA (9 to 37 cents in USD). As a result, 183 members benefitted from this financial support (a total of 344.300 FCFA or approximately $643 USD) to pay for services at community health centers, including ANC, delivery, and immunizations.

By the program's end, the funding for health services within these platforms totaled FCFA 3,825,400, and 34,151 pregnant women had used them to access ANC services. While HRH2030 Mali and partners introduced this idea, the women's robust discussions about this topic, supported by the community health cadres, empowered the women to make their own decision to shift the purposes of these funds. Through this support, HRH2030 has contributed to improving financial accessibility to health services for more than 60,000 women across 1,233 community platforms.

In 2020, during coaching visits at the village level, the program team heard testimonies from women on the positive changes and benefits of the community approach. Providers are now more likely to greet clients respectfully, display kindness in their interactions, listen to community members, offer reassurance and address fears, invite clients to return to the health center, and schedule home visits when needed. In addition, because of the health funds available to them, the women are more likely to seek care for themselves and their families. The community strategy has allowed more access to health care for women and children and contributed to increasing the sustainability of health system improvements and access to health services and care at the community level.

PERSPECTIVE:

Madjita Diarra, Former Traditional Birth Attendant, Debo Bambara

At 67 years old, Madjita Diarra had been a traditional birth attendant in the village of Debo Bambara for more than 10 years, following in the footsteps of her grandmother and mother-in-law.

"Despite the opening of a secondary health center in the village, women continued to request my services because they were free and because I had developed a certain level of trust with the women over time. On average, I had five home births a month and the only time I accompanied women to the health center was when their bleeding did not stop after childbirth. Despite my advanced age, I did not plan to stop supporting home births," Diarra says.

Then, in February 2019, the HRH2030 program brought together women's groups, the rural hospital matron, community health workers, and traditional birth attendants to improve maternal and newborn health.

"The women's group, of which I am a member, actively carried out information and awareness-raising activities in the village to encourage women to seek out the care and services in our local health structures. Through these activities, I came to understand the consequences of home birth, in particular the risk of hemorrhages due to uterine ruptures, the risk of tetanus due to the instruments we used, and also the high risk of HIV and hepatitis transmission to the birth attendant. I realized that I was at risk in my job and so I decided to give up home births to save lives including my own," Diarra recalls.

"In March 2019, I transitioned from being a traditional birth attendant to being a counselor and 'accompanist'—one who accompanies pregnant women to our health center for antenatal care, services, and childbirth. Nowadays, no woman in the village gives birth at home. I encourage traditional birth attendants who still continue their work to give it up and help to save lives," Diarra concludes, adding. "Health workers have more skills and resources than we do."

PERSPECTIVE:

Saran Camara, Obstetric Nurse, Debo Kagolo Secondary Health Center

Saran Camara has been an obstetric nurse at the Debo Kagolo Secondary Health Center for more than five years. Despite the proximity of the center to the community, the presence of trained staff providing a wide range of services, the number of women who visited the center for antental care (ANC) consultations was low.

"For example," Camara says, "between August 2018 and January 2019, of the 70 women enrolled for ANC services, only seven women completed their recommended ANC visit in their first trimester, representing just 10 percent of the target." She adds that she was also accustomed to seeing many women for the very first time well into their pregnancy, and these tended to arrive with complications such as anemia, malaria, and high blood pressure.

"In February 2019, the USAID-funded HRH2030 program, began working with local women's groups, seeking to improve the demand for maternal, newborn and child health care services," Camara notes. "HRH2030 invited the women's groups to take part in a series of activities focusing on the importance of prenatal care and the health advantages to expectant mothers and their newborns. As a result, from March to May 2019, the number of women completing their ANC visits while in the first trimester of their pregnancy increased from 10% to 43%, with 28 of 65 women. During this quarter, there were also no cases with complications."

PERSPECTIVE:

Members of the Benkadi Women's Group, Kolosso, Segou Region

It's 7 a.m. on a Friday in the village of Kolosso, and members of the Benkadi women's group have come together in the public square with buckets, shovels, and wheelbarrows to collect garbage. They aren't just cleaning the village. They are gathering materials to make and sell compost, a valuable commodity in their region, and their profits will be used to raise funds for improved health care access in their community.

These funds are necessary because even though a maternity center opened in Kolosso four years ago, most women in Kolosso could not afford the services offered there.

"Despite the availability of primary health care and services, the mortality of children under 5, home births, frequency of diarrheal diseases, and respiratory infections remained very high," says Sitan Dao, president of the Benkadi women's group.

However, over the last year, things improved as HRH2030's community approach began to bear fruit. To tackle the high levels of maternal and child mortality in Kolosso, the program's trained community health workers had been working with Benkadi's members to familiarize them with key messages on maternal and child health, the maternity center's services, and the benefits for mothers and children. These included the importance of prenatal and postnatal consultations, the risk of home births, and the availability of services for children under age five, including preventative care, immunizations, and nutrition.

HRH2030 Mali's community cadres also worked with the women to increase their skills in identifying problems and using local means to solve them. And so realizing that the financial barrier to access to care was one of the last obstacles facing them, the women's group set up what they call a "solidarity fund," using income generated from their charcoal-making activity. The funds were specifically targeted to cover the costs of prenatal consultations, maternal deliveries, and vaccinations for all village children. After eight months of regular contributions, deposited weekly by the women's group members, the fund now fully covers Kolosso's maternal and child health needs.

As group member Banana Dembele says, "I am no longer worried about my prenatal care at the health center, thanks to our solidarity fund, which is covering my prenatal care and services entirely."

Overall, the majority of the pregnant women are now visiting the center for their prenatal care and delivery needs, and fewer children under age five are developing complications from routine illnesses, because care is sought early and often.

Community health promoter Amos Dembele explains that it is the combination of the health messages and the solidarity fund that is saving lives.

"Thanks to awareness-raising in the community and monitoring of pregnant women and children under age 5, we have not had a death in three months.," Dembele says.

HIGHLIGHTS OF ACHIEVEMENTS

Objective III. Strengthened Human Resource Management of the Health Workforce at National and Regional Levels

KEY RESULTS

- Completed and verified more than 10,000 HRH personnel files within the human resource information management system, through support to the regional and district human resource managers within the HRH2030 Mali program
- Built skills for 62 HRH managers across five regions in producing dashboards for analysis and decision-making in human resources for health.
- Trained 15 national-level Human Resources Directorate staff on quality improvement in human resources for health
- Cascaded quality improvement training above to 50 HRH managers at regional and district levels, who are now implementing continuous quality improvement plans.
- Developed normative documents to guide the day-to-day human resource management of the health workforce:
  - Internal procedures manual for the HR Directorate
  - Recruitment manual for the health, social development, and women's welfare cadres in the public system, formalizing the guidelines for regulating the distribution, career management, and retention of health professionals from within those three departments
  - User's guide for digital supervision tools

There will be no universal health coverage—health for all—without health workers for all. Improving care and service delivery in health facilities and increasing access to quality care for communities are impossible without a well-skilled, well-supported, and high-performing health workforce. Critical to developing that workforce is a human resource for health management team with strong managers and leaders, who have the right tools at their disposal to plan for, manage, and optimize the health workforce. Building management and leadership capacity in the MHSD's human resource directorate (HRD) is essential to achieve Mali's health objectives.

By adapting the quality improvement approach used in improving service delivery and increasing community demand for and access to services, HRH2030 worked alongside the HRD to strengthen national and regional ownership of health workforce management. At the program's launch, the MHSD was lacking well-defined processes, policies, and procedures to execute its roles and responsibilities for managing HRH. The goal was to ensure a more effective HRH leadership at the national level and cascade this approach to the regional, district, and facility levels to optimize health workforce effectiveness. Today, the HRD has professionalized and institutionalized its management capacities, with tools and resources now in place to ensure sustainable, continued investment in human resources.

As one of its first priority activities, HRH2030 Mali developed normative documents to guide HRH processes, policies, and systems, and set a foundation for future interventions. In 2018, for example, HRH2030 worked with the HRD to develop an internal procedures manual for HR management that has since been institutionalized within the directorate and is an ongoing reference guide for the director and heads of capacity building. Similarly, HRH2030 supported the HRD's quality improvement team the following year, as they initiated the development of a recruitment manual. To this end, they documented all departments' various procedures, in order to streamline and harmonize the recruitment, management, and retention processes for the health, social development, and women's welfare cadres in the public system.

The HRD's senior technical staff was similarly trained by HRH2030, using the quality improvement approach. The program's technical team addressed how to develop job descriptions linked to responsibilities for each position, and also how to put in place a quality improvement team to sustain these efforts in the long-term. As a result, the HRD's head of training developed an internal training plan

that featured a follow-up performance management component. With the program's support, the HRD led the training of 50 regional HRH managers and facilitated their development of individualized HRH improvement plans based on each manager's specific challenges raised. As a result of these capacity building efforts, the HRD improved internal communication, decreased the time for approval of personnel files, and processed almost 100 files that had been backlogged and pending approval for a year— files related to diplomas, training leave, training certificates, transfer requests, and availability to work outside the public system, for example.

Following the national training, HRH2030 supported the HRD to cascade the training and supervision/coaching of all regional- and district-level HRH managers in the program's five regions, tailored to activities outlined in the region's own HRH development plans. Activities in these plans included assessing knowledge and familiarity with specific HRH normative documents, and capabilities in using the *Système d'information pour la gestion des ressources humaines* (SI-GRH, the information system for human resource management) to record vacancies, recruitment, and deployment information. As a result of these tailored trainings, 62 HRH managers were provided with national normative documents for HRH management and 23 HRH managers at the regional or district level began using the SI-GRH in their decision-making processes, including producing dashboards for data analysis. Later evaluations showed their mastery rate of the software was scored at 90% and the rate of data completion within the SI-GRH was at 87%. Figure 15 on the next page captures how HRH managers knowledge shifted from pre-training to post-training.

Throughout the implementation of these regional activities, HRH2030 Mali was also supporting HRH team members to ensure the application and operationalization of national-level HRH policies and guidelines, such as the National Policy for the Development of HRH – the dissemination of which was largely supported by HRH2030 in the program's six regions. Following its dissemination, the national

PERSPECTIVE:

Etienne Coulibaly, Director of HRH, Mali's Ministry of Health and Social Development

Etienne Coulibaly (in blue at center), who heads up the Ministry of Health and Social Development's HRH department, began working with HRH2030 to define the department's training needs, identify potential trainers, and set up an improvement plan which included the development of job descriptions and a detailed procedure manual for HRH management.

Over the course of three months, he set up a dedicated quality improvement (QI) team within the HRH department under his leadership. The QI team initiated weekly technical meetings to ensure that the implementation of priorities related to HRH management were communicated to all health, social development, and women's welfare staff.

The team began with some foundational human resources work: the department's organizational chart was updated and disseminated, and job descriptions were developed and mapped to the new organigram. Fifteen staff were trained on QI applied to HRH, using the Plan-Do-Study-Act (PDSA) cycle, a powerful tool developed by the Institute of Healthcare Improvement designed to accelerate quality improvement. Following this initial training, scores of participants' knowledge on how to apply a quality improvement approach to HRH management increased from 62% pre-training to 72% post-training, indicating enhanced capacity to follow HRH norms. This training was then cascaded down to the regional and district levels by the newly trained trainers, reaching 50 HRH managers. Their QI knowledge scores jumped from 62% pre-training to 91% post-training. At the end of the training, district and regional HRH managers developed their-first ever QI plans to strengthen HRH management within their own geographic areas.

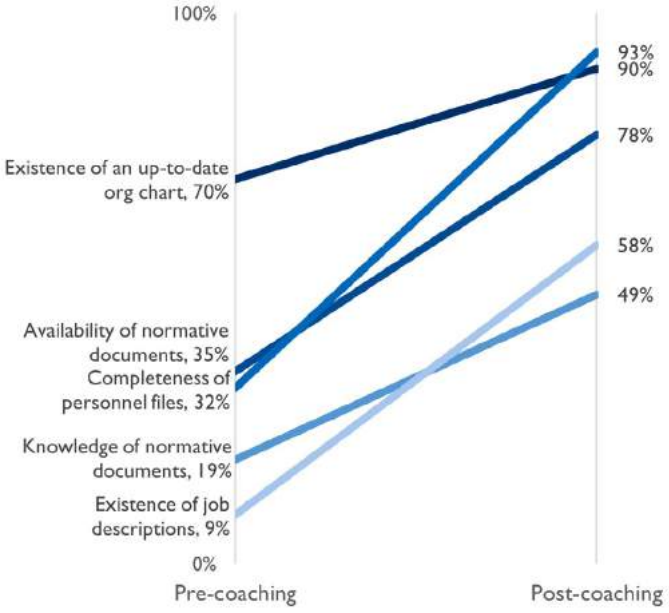
Dr. Coulibaly has been impressed by the results. He notes, "At the beginning of our collaboration, I was not convinced of the benefit of using quality improvement approach to solve our internal problems. With the results we have achieved in this short period of time, I am currently one of the advocates of this approach and will develop it in our daily work within the department."

priorities were integrated into regional key priorities. Today, at the program's end, this means that HRH managers at the regional and district levels have updated job descriptions for all service providers, and are using them as part of managing the workforce; have accurate organigrams based on the national HRH standards; have completed or are in the process of completing HR files within SI-GRH; have updated and archived relevant paper files; and are continuously improving the information related to HRH needs based on the SI-GRH data.

Throughout the life of the program, HRH2030 fostered national and regional leadership and ownership of the management of the health workforce. The systematic institutionalization of these capacities within the HRD is ensuring sustainability and continued investment in human resources for health at all levels of the health system.

FIGURE 15. HRH2030 TRAINING AND COACHING IMPROVED DISTRICT-LEVEL HRH MANAGERS' PERFORMANCE

Managers demonstrated increased knowledge as well as improved performance in areas of data completion and HRH management in Sikasso, Ségou, and Mopti.



Data source: Coaching assessments implemented through HRH2030's coaching cascade. Assessments included review of managers' files and SI-GRH records.

PERSPECTIVE:

Yaya Kone, Regional Director of Human Resources, Koulikoro

Yaya Kone manages human resources for three health departments within the Ministry of Social Development and the Promotion of Women. He was appointed to this position to replace his predecessor, and had little practical experience in the day-to-day responsibilities he was expected to undertake. His challenges included a lack of information on the workforce, due to poor archiving of records by his colleagues, incomplete and inaccurate personnel data in the SI-GRH; and lack of information to help staff plan their career paths or advancement.

I had a steep learning curve in understanding how to do my job effectively and organize my work," he recalls. "However, I was fortunate to receive a coaching visit from HRH2030 Mali to assist me with the challenges I was facing. These challenges have caused enormous problems such as the loss of files, especially for retired health workers, poor data on the number of health personnel in the region, and low morale and motivation among the workforce. Combined, these issues made the department less relevant to the staff we serve."

"The coaching visit helped me to develop an improvement plan to address these challenges. The implementation of this plan was supported by my supervisors, who were also trained by HRH2030. Four months later, we evaluated the plan and saw how the following indicators had improved: Between July and December 2018, the rate of archiving physical records increased from 0% to 80%; the updating of the personnel list within the SI-GRH increased from 80% to 100%; and the completeness and accuracy of the data in the SI-GRH increased from 80% to 100%. This increase in data quality and completeness allowed me to put in place resources that individual staff could access to track their own career plan and advancement. Knowing that a career path exists and can be followed, staff are more motivated to work.

HIGHLIGHTS OF ACHIEVEMENTS

Objective IV. Strengthened Health Services and Health Workforce Data Quality and Use to Advance Evidence-Driven Decision-Making

KEY RESULTS

- Refreshed skills of 175 rural matrons and 252 CHWs on data monitoring tools and skills to support the use of data in decision-making
- Supported the development of the National Multisectoral Nutrition Plan 2021-2025 and its corresponding budget
- Introduced the community approach to the Scaling Up Nutrition Partnership, which will integrate in future activities

Health System Strengthening through Improved Data Systems and Quality

When the program launched in 2018, there was a clear need to improve data systems and increase the use of data for decision-making—not only service delivery data but also health workforce data—by the HRD, regional health teams, and district level stakeholders. Much of the work related to increasing data for decision making at the regional level was integrated into human resources management skills building, as described in the prior section. However, health workforce data was only one type of data needed to strengthen Mali's health system. The program helped health management information system (HMIS) managers to monitor the quality of health services data at the national, regional, and district levels; and worked to improve this data quality, through persistent, continuous coaching, so that decision-makers could act based on evidence.

The program assisted the Health Planning and Statistics Department and the HMIS Department at the National Directorate of Health to ensure consistent, accurate data transfer into DHIS 2. HMIS managers were used as regular coaches for program data monitoring and validation at the district and regional levels. Data completion, accuracy, and analysis were completed by each HMIS manager on site with the support of HRH2030 after the coaching visits. As MHSD integrated supervision visits are not regularly scheduled, the program coaching visits allowed HMIS managers to check missing data, verify the data with district health teams and program technical staff, and complete data entry within DHIS2 on a quarterly basis.

At the community level, HRH2030-supported coaches and partners enabled 175 rural matrons and 252 CHWs to receive refreshers on data monitoring tools and skills to support the use of data in decision-making. The program team supported monthly data reviews and validation at community health centers, bringing together community stakeholders—health workers, rural matrons, and members of community committees—to validate data, discuss progress towards and barriers to improvement, and identify opportunities to enlist support from local authorities and health center managers to improve performance. The data validation process ensured consistency of numbers, completeness, and readiness for integration into the community health center data reporting through DHIS2.

Health System Strengthening through Coordination with Multi-Sectoral Actors

To further strengthen health system decision-making, HRH2030 supported the revision, improvement and development of national key documents related to nutrition and maternal and child health. The program's technical team helped the senior cadres from the Center for Planning, Training & Health Information (CDPFIS), the National Nutrition Coordination Unit (CCN), the Reproductive Health Division (DSR), and the CSO Network for Nutrition to identify challenges and solutions for implementing their institutional activities.

For example, HRH2030 assisted the National Nutrition Coordination Unit to mobilize resources for hosting a nutrition forum to increase investment in nutrition across the country. Following the national forum, HRH2030 further assisted the Scale Up Nutrition Civil Society Network (SUN CSN) to organize a regional forum on nutrition in Kayes, to mobilize local resources to ensure sustainable management and care for nutrition-related services. This forum brought together local authorities, businesses such as mining companies, and civil society organizations who committed to contributing resources to address local need, including using local producers to manufacture products to prevent malnutrition. Later, building on lessons learned from Kayes, the program further supported the SUN CSN to replicate this approach in Segou. The program

also supported the SUN CSN to identify and foster nutrition "champions" who included members from local governments (prefects, subprefects) members from reginal councils, mayors, and private sector leaders from the Chamber of Agriculture, and Chamber of Commerce and Industry. These activities served as a framework to strengthen the private sector and other actors' decision-making processes on multi-sectoral issues of nutrition for a cohesive, collaborative approach designed to have the best impact on the population. By the program's end, the implementation of these activities led to the development of the National Budgeted Multisectoral Nutrition Plan, 2021-25.

In 2019, HRH2030 worked with the General Directorate of Health and Public Hygiene (DGSHP) to identify opportunities to better govern the health sector and mobilize political will to support health reform. The program helped the DGSHP to focus on strengthening national governance for quality improvement in human resources for health. HRH2030, the DGSHP, and the HRD supported the national technical leadership from the Ministry of Health and the Malian government (including the *Cabinet du Ministre, Secrétariat Général du Gouvernement, Centre de Documentation Institutionnel*) to develop the institutional documents to operationalization the health reform strategies. Building on program experiences in working with regional and district health management teams and establishing links between different levels of the health system, HRH2030's team worked to interpret and further shape the legal guidelines that will be validated by the inter ministries sessions in December 2020 to launch the reform.

Health coaches and health center staff in Kouremalé review a partogram and checklist sheets for safe delivery to check the standards of care. Koulikoro, Mali. Photo Credit: A. Kone, HRH2030 Mali.

IMPLEMENTING NEW COVID-FUNDED ACTIVITIES IN 2020

KEY RESULTS

- Trained 2,654 health workers on surveillance in Bamako and Sikasso
- Supported rapid intervention teams to test 2,470 people with suspected COVID cases in Bamako; of the 226 positive cases, 224 were referred to case management centers
- Supported 437 health facilities to have appropriate monitoring guidelines or protocols for COVID-19
- Provided technical assistance to 209 facilities and community platforms for COVID-19 risk communication and community engagement through the distribution of communication materials
- Visited 812 community groups in Mopti, Segou, and Sikasso to deliver COVID-19 prevention messages on social distancing, face covering, and handwashing
- Reached 56,034 people through community platforms and oriented 11,244 people to COVID-19 related messages in Kati, Koutiala, Sikasso, Yelimane, and Yorosso districts

When COVID-19 began disrupting health services in other countries, Mali's Ministry of Health and Social Development, working with its health partners, developed a national budgeted plan for prevention and response. Structured around prevention and management, the plan defined strategies and activities at different levels of the health system to prevent and manage the pandemic throughout the country. Prevention activities were based on epidemiological surveillance, human resources capacity building, patient transfer, reinforcement of hygiene measures, communication, social mobilization, coordination and monitoring; management activities focused on the availability of medical resources, care for health providers, and case management.

USAID Mali, through its implementing partners, supported the government's response by working on both prevention and management activities in its impact regions. HRH2030 Mali was one of the implementing partners that received new USAID funding to work on supporting surveillance systems at the community level, developing rapid response capacity, ensuring quality case management, and supporting coordination at the national level. Efforts covered four target regions: Bamako, Kayes (in Yélimané, Kayes, and Kenieba districts), Koulikoro (in Kalaban-Coro and Kati districts), and Sikasso (in Koutiala, Sikasso, and Bougouni districts).

While implementing new unplanned work in a year when the team had been focusing on successfully concluding its final year of the program—and while team members dealt with the universal, personal challenges of the pandemic, such as remote working and juggling family responsibilities—the scope of work for HRH2030's specific COVID-19 activities built upon the program's partnerships, relationships, systems, and approaches already in place. The program's three specific objectives under the COVID-19 work included:

- Improving surveillance at the community level and rapid response at the facility level (referral centers and community health centers) to prevent and reduce the risk of new cases/ infections and mortality in the target districts
- Improving case management and contact-tracing in collaboration with healthcare providers and other actors including community health workers and community committees to support the quality of care and services provided by facilities in the target district
- Improving the availability of COVID-19 communication resources for health providers and managers to strengthen their knowledge and understanding of COVID-19 preventive measures

Throughout the course of this COVID programming, from May through November 2020, the HRH2030 Mali team collaborated with health system actors, other USAID implementing partners, other donor-funded programs, and community groups to rapidly respond to divergent needs.

Improving Surveillance at the Community Level and Rapid Response at the Facility Level

A key activity in improving surveillance at the community level and rapid response at the facility level to prevent new cases and reduce the risk of mortality in the target districts was training and refreshing surveillance teams to comply with Infection and Prevention Control standards in order to keep providers as well as their communities as safe as possible. In Sikasso, HRH2030 organized a training for 97 providers, using the validated national IPC training modules delivered by regional trainers from the USAID-funded Medicines, Technologies, and Pharmaceutical Services (MTaPs) program

HRH2030 coaches were also integral to ensuring compliance with infection prevention and social distancing measures at the facility level. In collaboration with regional health teams in Bamako Kayes, and Koulikoro, 83 regional and district coaches visited 248 facilities to evaluate care providers and support staff, such as cleaners and drivers, on diverse topics such as knowledge of disease prevention practices, compliance with infection prevention measures, data collection and entry into DHIS2, and reporting based on surveillance system standards. Coaching was then provided to monitor performance in these areas following the visits, and facilities reported progress or full compliance in areas such as "facilities have handwashing stations at entrance and each unit," "facilities have sufficient IPC materials for providers," and "facilities are providing key messages on the disease to women."

Improving Case Management and Contact Tracing in Collaboration with Community Health Workers, Community Committees, and Others to Support the Quality of Care at Facilities

HRH2030 worked with the Regional Directorate of Bamako to identify supplementary staff needed to reinforce contact tracing teams and agreed to provide technical and financial assistance to support these complementary teams for two months. With this support, 18 new contact tracers were recruited, who helped the region to monitor 1,947 contacts across six health districts of Bamako.

While training support was critical, as community health centers were stretched, financial support was equally important. HRH2030 provided financial support to ensure regular COVID-19 reporting in 10 districts across Bamako, Kayes, and Koulikoro at a total of 190 community health centers. By ensuring that facility-based teams had the funds to make daily reports of surveillance information to the referral centers and regional surveillance teams, these districts were able to transmit information needed at the national level, in order to make evidence-based decisions about where outbreaks were occurring and how to address them quickly. By October, nearly 100% (943 of 945) surveillance reports from health care facilities were submitted to the Ministry of Health on time.

Improving the Availability of COVID-19 Communication Resources for Health Providers and Managers to Strengthen their Knowledge and Understanding of Prevention Measures

Capitalizing on HRH2030 Mali's work with promoting national norms and standards, one key responsibility for their COVID-19 funded activities was to ensure that providers and health managers knew the best way to prevent transmission of the virus by guiding them to seek information from official sources, including those from MSDS, the World Health Organization, and others. The program team continuously updated the regional health teams of Bamako, Kayes, Koulikoro and Sikasso with the latest information, guidance, and reports received from official sources. For example, HRH2030 Mali shared the national case management protocol and the IPC modules to help these regions organize the training of providers in collaboration with other partners. CHW guidelines on COVID-19 prevention were also shared to help districts initiate orientation sessions and integrate COVID-19 messaging into their regular communication activities.

Through COVID-19, HRH2030 supported health workers in Sanso, Mali, so they could continue to provide antenatal health services to patients. Photo Credit: Ibrahima Kamate, HRH2030 Mali.

Efforts to transmit knowledge went beyond informing providers, extending to the community and household levels. HRH2030 used community-level coaching visits in Mopti, Segou and Sikasso as an opportunity to integrate COVID-19 prevention and social distancing messages during their activities. A total of 812 of the program's community platform partners received information on COVID-19 that also included demonstrations on best practices for prevention and hygiene, including effective handwashing, social distancing, and the use of masks. Health workers, rural matrons, and volunteers from these community groups were further familiarized with social distancing measures by the program and supported to sensitize households and community members on the disease. Battling misinformation, HRH2030's community agents worked hand-in-hand with community leaders and community health center teams to respond to false information and ensure that households received accurate information on the disease directly from health professionals. In total, 56,034 people were reached through the community platforms and 11,244 people were oriented to COVID-19 related messages.

HRH2030's program implementation across all three objectives was challenging in the regions of Bamako, Kayes and Koulikoro, where the multiple partners needed solid coordination and regular information sharing to harmonize activities. Because of the nature of the pandemic, government partners, civil society, the private sector, and other donors expressed interest in many activities while the MSDS management and coordination system was inadequate to support the sheer number of proposed interventions and activities. The MSDS technical teams were sufficiently prepared to shift the daily activities into pandemic management but the management and technical guidance took longer than expected to be operationalized for the preparedness and response plan. In addition, the many international organizations present in Mali—including the WHO, CDC, One Health and others—participated in the early management of interventions but faced some dysfunctionality due to the political situation and unclear leadership roles.

To resolve as many of these challenges as possible, HRH2030 joined the subcommittee for surveillance and case management to provide technical assistance and to collaborate with all involved partners and support advocacy efforts. In the process, the team learned the following lessons:

- Being well-prepared together with a response plan is not enough to effectively respond to a pandemic. The plan must be designed to be dynamic and flexible to allow rapid intervention and mobilization of resources for implementation.
- By working systematically and using existing available expertise, stakeholders and partners were able to implement activities quickly over a short period as needed during a pandemic.
- By promoting coordination among IPs and technical assistance for activities, projects were able to implement their activities without many difficulties.

Through COVID-19, HRH2030 supported health workers in Sanso, Mali, so they could continue to provide antenatal health services to patients. Photo Credit: Ibrahima Kamate, HRH2030 Mali.

ADAPTING TO PROGRAM CHALLENGES

While difficulties in achieving programmatic objectives are to be expected by implementing partners over the life of any development program, HRH2030 Mali faced chronic insecurity issues that hindered successful completion of some activities, and the onset of a global pandemic, COVID-19, which began in March 2020 and endured through the end of the program. This section details some of the specific constraints as a result of these challenges as well as challenges related to a specific intervention proposed by the global HRH2030 program and jointly funded through USAID Washington's Office of Health Systems, a research study on enhanced supervision in two regions of Mali to measure the impact of digital, integrated supervision interventions and remote supervision, and how the HRH2030 program team worked with USAID to help address them.

Mali's Insecurity Issues

Political tensions within Mali, coupled with a rise in violent extremism from external influences, have provoked instability and unrest in pockets of the country since well before the life of the HRH2030 program. These conflicts have exacerbated weaknesses in the health system, particular in many districts within the Mopti, Segou, Kayes, and Koulikoro regions where HRH2030 Mali operated. In alignment with security plans and training put in place at the program's inception, access to these districts and the availability of MHSD partners to implement activities were continuously assessed internally, and with other partners working in the same districts over the course of the program.

Even as the security context shifted from one region to another, the biggest programmatic areas affected by the insecurity were consistent, and included training, coaching, and data collection. For example, coaching visits to facilities were often limited to the more urban areas of Mopti in the program's second year, when travel to villages was deemed too risky. This recurred the following year, expanding into Koulikoro and Segou. HRH2030 Mali's technical team adapted the coaching to the context in each region and when able, communicated via phone call and WhatsApp messaging with coaches to get local information. HRH2030's adaptive management approach facilitated the ability to continue activities, as the team and its partners dealt with day-by-day changes in scheduling and activities with flexibility and resilience.

Insecurity issues greatly impacted reporting—both for health facility and community platforms in the locales affected by security crises, and in program team's reporting to the USAID Mission over the course of the program. Data was sometimes incomplete due to the insecurity of certain districts; for example, information on specific activities might be available for only a two-month implementation period, as opposed to the standard three months within a quarter. Or if activities were halted, there were gaps in data. From the overall program perspective, some indicators were affected due to changes in locales or target populations, resulting in dropping indicators from the M&E plan or adding new indicators in the program's later years.

At the program's end, HRH2030 Mali provided the USAID mission with key transition documents including GIS data relating to site security and accessibility, to support the partners who are implementing other programs in insecure sites beyond the life of HRH2030.

COVID-19's Impact on Planned Programming

When the COVID-19 outbreak was declared in Mali on March 17, HRH2030 Mali responded with the expertise it had gained through the adaptive management approach to continue with planned programming as much as possible. Team members started teleworking and complying with prevention measures in all field offices and Bamako, following guidance from USAID Mali and lead implementing partner Chemonics, which helped adapt operations and activities to the pandemic context.

Early on, activities that required gathering participants for training and working meetings were postponed and took place later in the year, such as training sessions on emergency obstetric and newborn care in Segou and Sikasso, and meetings for nutrition activities in Segou and Bamako. Travel to program sites also was curtailed.

Coaching visits were also immediately impacted. In the Kayes, Segou, and Koulikoro regions, the regional health teams mobilized all coaches and technical staff to focus on COVID-19 and delayed all other activities for a month. In Sikasso and Mopti, activities continued with restrictions in place for social distancing, face coverings, and handwashing measures. HRH2030 team members worked at the facility levels to strengthen infection prevention measures during service delivery and care; put in place social distance measures at facilities and at the community level; and oriented providers and community members on COVID-19 messages.

As the pandemic wore on, some activities resumed, following national guidance and protocols, and were able to meet planned deadlines. For example, FY21 planning activities for the regional health teams in Sikasso and Segou, along with participants from the National Statistical Unit, took place between April and June, with HRH2030 Mali shifting planned large

in-person activities to smaller group meetings that observed social distancing measures which were then complemented by remote working sessions. As a result of this approach, both regions submitted their FY21 operational plans and budgets on time to the national level for review and approval.

Other activities scheduled for the first half of the year took place later, including many of the activities with Scale Up Nutrition team related to the national plan and budget.

By the program's end, earlier disruptions had been minimized since most activities advanced through virtual meetings and in-person convenings held in compliance with government mandates in social distancing at the central and regional levels. The team took away a few key lessons from the pandemic which are noted here:

- By acting quickly to adapt activities and put strategies in place to respond to the pandemic's rapidly evolving context, and by continuously assessing these adaptations and strategies, the team was able to lessen the impact results.
- By anticipating challenges and working systematically with health system managers and community partners through regular communication and information sharing, the program was able to maintain most operations and support ongoing implementation to achieve planned results
- By adapting the implementation strategy at the community level—expanding the roles of some specific community platform leaders to monitor and report on activities more broadly—HRH2030 maintained the expected level of community results while receiving complete, accurate information and data on achievements.

Insecurity and COVID-19: Impact on the Enhanced Supervision Research Study

In late 2019, HRH2030 launched a research study, jointly funded by USAID/Washington's Office of Health Systems, on enhanced supervision in two regions of Mali to measure the impact of digital, integrated supervision interventions and remote supervision. Building off the findings from a landscape study on the topic done earlier by the global HRH2030 program, the research study team collaborated with the MHSD, through its CDPFIS sub-directorate in charge of the integrated national supervision system, to develop the pilot and test an approach to "enhanced supervision." Among

In the commune I referral health center of Bamako, HRH managers use digital supervision tools on DHIS2 to enter, monitor, and record staff activity, Mali. Photo Credit: Ibrahima Kamate, HRH2030 Mali.

the interventions adapted by the study team were using Android tablets to complete digital supervision checklists in the DHIS2 to improve the availability of supervision data; integrating this data within dashboards for district-, regional-, and national-level supervisors; and digital self-evaluations to support remote supervision.

Despite the good will and ability of all involved, the research team encountered several challenges starting in 2020. Some of these arose from insecurity issues in certain districts in the study region. In one case, because of growing insecurity in Mopti, some health workers in community health centers were redeployed to health referral centers, disrupting the interventions. A delay resulted when the research team was forced to eliminate 79 of the least safe facilities in three districts in Mopti, when it became clear that supervisors wouldn't be able to conduct regular visits due to risks to their safety. Other challenges were due to COVID-19, when in the second quarter of 2020, routine supervision visits to community health centers were suspended for a month.

These challenges were compounded by resource issues. Some districts only received intermittent integrated supervision visits because the MHSD, which is partially responsible for providing these visits lacked the funds. On the HRH2030 side, the initial study period was for the first six months of 2020 and then extended to the end of calendar year 2020 with the extension of the HRH2030 global program. However, the Mali activity's implementation timeline further limited the ability to ensure the interventions' frequency and fidelity. Considering these circumstances including the ongoing issues of insecurity and the pandemic, HRH2030, with the concurrence of USAID Washington, decided to terminate the study.

Fortunately, the MHSD is still greatly interested in doing further research to support enhanced supervision, especially through interventions that include digital components, as the study questions align well with their goal of strengthening the country's integrated national supervision system. Prior to the program's closing, they indicated that they might take the study forward and were seeking other partners to support this effort. HRH2030 produced a brief summarizing the lessons learned and recommendations for future adaptations of this work, which was shared with USAID Mali and USAID Washington.

CONCLUSIONS AND THE ROAD AHEAD

From its inception, the HRH2030 Mali program's vision has been to implement strategies and approaches that support the government of Mali's priorities to respond to the population's needs and advance universal health coverage. The programs' key achievements would not have been possible without the support of the Malian government, in particular the Ministry of Health and Social Development, and the Ministry for the Promotion of Women, Children, and Family, and the national, regional, and district health teams and partners who contributed to this work.

Equally important, in terms of contributing to the program's results, are the community members in the five regions where the community approach was implemented: Kayes, Sikasso, Koulikoro, Segou, and Mopti. At the program's conclusion, Malians—especially women and children in the program's intervention areas—were taking greater advantage of health services in or close to their communities, improving maternal and child health outcomes. Through the community approach, HRH2030 built the capacity of the community stakeholders to make decisions regarding resource allocation, management of community assets, and procurement of equipment for community health centers to promote health management for self-reliance. By increasing these stakeholders' capacity to locally monitor health activities and share data to identify challenges and gaps, the community has become more engaged in seeking local solutions where possible, promoting the sustainability of their contributions.

The MHSD's Human Resources Directorate has professionalized and institutionalized its management capacities, with tools and resources now in place to ensure sustainable, continued investment in human resources at all levels of the health system. With its strengthened expertise and capacity, it is better positioned to drive forward improvements in health care quality and services, in particular health service delivery in maternal, newborn and child health; family planning; nutrition; and malaria. Continuing to build management and leadership capacity in the MHSD's human resource directorate is essential to making progress on the Sustainable Development Goals, enacting UHC, and achieving Mali's overall health objectives.

The MHSD and the Ministry for the Promotion of Women, Children, and the Family, now have one common national reference guide to implementing a community approach to improve quality of care and services, so that the gains shown under the HRH2030 program may be sustained and scaled.

Still, the road ahead is long. Infant and maternal mortality in Mali remain among the highest in the world and will continue to be high while there are still financial barriers to accessing health care. Forty-six percent of the population in need of care doesn't receive it because services are too expensive.[1] The government's commitment for health reform is promising, and it will require the support of the many actors who have contributed to the HRH2030 Mali program's success, as well as others. After nearly three years of program implementation, the program team compiled a brief list of recommendations for continued improvements in Mali's health system. These include:

At the facility level, the MHSD is advised to capitalize on service providers' thirst for continued learning and training in their health areas. Build upon the hundreds of coaches already well-trained by the program and grow their number. Mobilize the existing regional and district coaches for training, coaching, and supervision activities in as many facilities as possible, and commit to maintaining their motivation and success. In areas where insecurity impedes coaching visits, develop and use new technologies for the implementation of training, coaching, and supervision activities. Issues of security remain volatile in Mali, but interventions such as using tablets for digitized supervision checklists show promise and the MHSD recognizes the importance of an integrated national supervision system.

To further support service delivery, strengthen the operationalization of the national strategy for improving the quality of health care and services through regional quality committees. Regional health management teams were great champions for the work of HRH2030 Mali, and their expertise should be tapped into for ensuring the implementation of national strategies. At the same time, leaders of the health system should provide regular, ongoing technical assistance to regions and districts to ensure better planning of activities and regular coordination.

At the community level, HRH2030 Mali advocates for the expansion of the community approach to villages beyond those targeted in the HRH2030 program. Building the capacity of locally led community groups and connecting them to the national health system is an example of how to build a sustainable model that magnifies and amplifies the work these community groups do. As the HRH2030 Mali program has

[1] EMOP 2017. Enquête modulaire et permanente auprès des ménages. INSTAT

shown, women's groups in particular can bridge the gaps between communities and health systems, playing an essential role in Mali's journey to self-reliance. The health system should integrate capacity building of these local groups into the current package of activities for community health centers. Other countries can follow Mali's lead by empowering and training rural women's groups and promoting locally led efforts that are more likely to remain in place long after donor-funded activities end.

To overcome the daunting financial barriers to local residents' access to health care, health system leaders should continue to promote health "solidarity" funds within community groups and integrate these local funds into their system for universal health coverage. On a national level, the government needs to look for private financing mechanisms to further sustain the use of these funds.

Moving forward in the management of human resources for the health workforce, the MHSD should continue to promote the valuable contributions of the human resource managers who manage the health workforce, by ensuring their integration into capacity building and supervision activities. In addition, their responsibilities should be detailed in the health system's reference documents for health workforce management. In a culture with a nascent awareness of these contributions, actors across the health system need to be encouraged to respect the decisions made by these HR experts, whether in developing human resources profiles for specific roles, recommending personnel, or suggesting innovations in management systems. To assure continued knowledge transfer, the MHSD should foster regional exchanges between human resource managers to capitalize on achievements and share good practices.


Fedate
dans un centre de santé. En cas de séropositivité
la grossesse sera bien suivie. Aussi, ton futur bébé sera protégé
CARY

ANNEXES

Annex I. Indicator Results

TABLE 1: MALI ACTIVITY INDICATORS

Indicators are presented in order of the objectives/results of the Mali activity. If there is a dash (-) in the cell, then the indicator was not part of the activity monitoring and evaluation plan during that time period. Percentage indicators are updated quarterly, and the annual result presents the achievement as of Q4 for each year. Note that frequently, activities were rolled out to new facilities at the beginning of each year, which can often shed light on the difference in indicator results between fiscal years

Indicator	Baseline Date	Baseline Value	2018 Target	2018 Result	2019 Target	2019 Result	2020 Target	2020 Result	Life of Activity Result
Activity Goal: Improved MNCH, FP, and nutrition health outcomes with decreases in associated morbidity and mortality									
Objective 1: Improve the effectiveness of MNCH, FP, malaria, and nutrition care and service deliveries at facility level in five target regions using CLA process of improvement.									
Result 1.1: Improved service delivery frameworks at facility level (CSRéf, CSCom) to reduce maternal, newborn and child morbidities and mortalities									
HL0.2 Overall service utilization rate among USAID-supported facilities implementing quality improvement (QI)	First reported value, FY20 Q1	51%	-	-	-	-	70%	**72%**	**72%**
HL0.3 Average of the service gaps between a) ANC1 and ANC4; b) Polio 1 and Polio 3*, in USAID-supported districts	First reported value, FY20 Q1	-	-	-	-	-	10%	**21%**	**21%**
HL.6.2-1 Number of women giving birth who received uterotonic in the third stage of labor (OR immediately after birth) through USG-supported programs	FY2017	430,000	437,066	**438,070**	459,969	**465,664**	508,962	**567,604**	**1,471,338**
6.6-1 Number of cases of child diarrhea treated in USG-supported programs	N/A	N/A	-	-	-	-	113,919	**122,278**	**122,278**
HL.6.0: Estimated potential beneficiary population for maternal and child survival programs in USG-supported districts	N/A	N/A	-	-	-	-	4,204,346	**5,154,554**	**5,154,554**
HL.6.6-2: Number of cases of childhood pneumonia treated in USG-assisted program	N/A	N/A	-	-	-	-	203,765	**208,025**	**208,025**
HL 6-3-2 Number of newborns who received postnatal care within two days of childbirth in USG-supported programs	N/A	N/A	-	-	-	-	532,930	**592,310**	**592,310**
HL 7.1-1 Couple-years protection in USG-supported programs	N/A	N/A	-	-	-	-	800,828	**765,153**	**765,153**
HL.7.1-2 Percent of USG-assisted service delivery sites providing family planning (FP) counseling and/or services	FY2017	100% (791/791)	100%	**100% (844/844)**	100%	**92.1% (844/960)**	100%	**100% (1,176 / 1,176)**	**100%**
HL 9-1 Number of children under five (0-59 months) reached by nutrition-specific interventions through USG-supported programs	FY2017	1,900,697	1,993,632	**1,991,567** Boys: **1,005,403** Girls: **986,164**	2,091,145	**2,134,486** Boys: **1,041,538** Girls: **1,092,948**	1,394,017	**1,066,474** Boys: **518,741** Girls: **547,733**	**5,192,527** Boys: **2,565,682** Girls: **2,626,845**
HL 9-3 Number of pregnant women reached with nutrition-specific interventions through USG-supported programs	FY2017	118,500	123,900	**124,226**	130,437	**131,351**	1,400,449	**1,748,603**	**2,004,180**
HL 9-4 Number of individuals receiving nutrition-related professional training through USG-supported programs	FY2017	1,776	400	**397**	500	**5,032**	800	**540**	**5,969**

Indicator	Baseline Date	Baseline Value	2018 Target	2018 Result	2019 Target	2019 Result	2020 Target	2020 Result	Life of Activity Result
HL 9-5 A national multi-sectoral nutrition plan is in place that includes responding to emergency nutrition needs (Yes=1, No=0)	FY2017	0	1	**1**	1	**1**	1	**1**	**1**
Number of USG-supported facilities that provide appropriate life-saving maternity care (last reported FY19 Q1)	FY2017	791	903	**844**	N/A	**889**	-	**-**	**889**
Number of newborns surviving 24 hours after resuscitation (last reported FY18 Q4)	N/A	N/A	2,639	**7,035**	-	**-**	-	**-**	**7,035**
Checklist use rate (last reported FY19 Q1)	FY2017	89%	97%	**95%**	N/A	**97%**	-	**-**	**97%**
Percentage of clients satisfied with the use of services in the sites (last reported FY18 Q4)	First reported value, FY18 Q3	97%	90%	**97%**	-	**-**	-	**-**	**97%**
Proportion of women for whom the eligibility criteria has been applied in the FP methods offer (last reported FY18 Q4)	FY2017	76%	90%	**85%**	-	**-**	-	**-**	**85%**
Lethality of eclampsia in health centers (last reported FY19 Q4)	FY2017	5%	2%	**2.4%**	2%	**1.4%**	-	**-**	**1.4%**
Percent of newborns surviving 24 hours after resuscitation (last reported FY19 Q4)	FY2018	79%	-	**-**	85%	**95%**	-	**-**	**95%**
Percent of women in immediate postpartum who received FP counseling (last reported FY19 Q4)	First reported value, FY19 Q2	73%	-	**-**	85%	**81%**	-	**-**	**81%**
Percent of compliance with MAM screening and management standards (last reported FY19 Q4)	First reported value, FY19 Q2	63%	-	**-**	60%	**59%**	-	**-**	**59%**
Percent of compliance with MAS screening and management standards (last reported FY19 Q4)	First reported value, FY19 Q2	55%	-	**-**	60%	**64%**	-	**-**	**64%**
Number of new users of modern family planning methods among women between 15-49 years age (last reported FY20 Q1)	FY2017	398,377	633,668	**636,368**	655,768	**659,381**	N/A	**52,684**	**1,348,433**
Percent of women in immediate postpartum who leave the health center with a provision of modern FP method (last reported FY19 Q4)	First reported value, FY19 Q2	51%	-	**-**	70%	**58%**	-	**-**	**58%**
Proportion of women who completed 4 antenatal care visits during the current or last pregnancy (last reported FY19 Q4)	FY2017	59%	70%	**65%**	70%	**70%**	-	**-**	**70%**
Percent of checklists for which key procedures for pre- and postpartum care meet standards (last reported FY19 Q4)	First reported value, FY19 Q2	78%	-	**-**	80%	**88%**	-	**-**	**88%**
Percentage of children 0-11months who are fully vaccinated before the first birthday (last reported FY19 Q4)	First reported value, FY19 Q2	67%	-	**-**	75%	**77%**	-	**-**	**77%**
Result 1.2: Improved delivery of quality emergency obstetric and neonatal care at community level									
HL.6.3-1 Number of newborns not breathing at birth who were resuscitated in USG-supported programs	FY2017	11,238	13,112	**12,242**	12,487	**11,745**	12,332	**13,804**	**37,791**
Proportion of post-partum morbidity due to hemorrhage in USAID supported health facilities	First reported value, FY20 Q1	7.2%	-	**-**	-	**-**	5%	**1.6%**	**1.6%**
% of compliance with standards for complications screening related to pregnancy	First reported value, FY20 Q1	75%	-	**-**	80%	**85%**	90%	**79%**	**79%**

Indicator	Baseline Date	Baseline Value	2018 Target	2018 Result	2019 Target	2019 Result	2020 Target	2020 Result	Life of Activity Result
% of compliance with standards of complications management related to pregnancy	First reported value, FY20 Q1	70%	-	-	75%	78%	80%	70%	70%
% of compliance with standards of pregnancy complication prevention	First reported value, FY20 Q1	80%	-	-	80%	87%	90%	88%	88%
Result 1.3: Strengthened districts and regionals health managers capacities to improve planning and management of QI activities									
Number of training activities conducted	FY2017	0	3	18	3	6	2	10	34
Number of staff trained	FY2017	0	400	535	500	5,487	N/A	1,289	7,311
Number of regional quality improvement operational plan developed and implemented (last reported FY19 Q4)	FY2017	0	5	5	5	9	-	-	14
HL-1 Number of Universal Health Coverage (UHC) areas supported by USG investment (last reported FY20 Q1)	FY2017	1	1	1	1	1	1	1	1
HL-2 Strengthening human resources for health (HRH) (last reported FY20 Q1)	FY2017	1	1	1	1	1	1	1	1
Objective 2: Improve demand and access to quality MNCH, FP, malaria, and nutrition care and service deliveries at community and household levels using community quality improvement approach									
Result 2.1: Improved MNCH, FP, malaria, and nutrition quality of care and services demand and access at CHW delivery point, rural maternities and household levels									
HL 7.2-2 Number of USG assisted community health workers (CHWs) providing Family Planning (FP) information, referrals, and/or services during the year	N/A	N/A	-	-	-	-	520	708	708
HL 9-2 Number of children under two (0-23 months) reached with community-level nutrition interventions through USG-supported programs	FY2017	115,128	119,831	120,172 Boys: 60,951 Girls: 59,221	126,181	129,013 Boys: 63,624 Girls: 65,389	600,621	607,890 Boys: 296,228 Girls: 311,662	857,075 Boys: 420,803 Girls: 436,272
Number of pregnant women identified in the first trimester of pregnancy by the committees	N/A	N/A	-	-	8,288	8,417	13,819	16,132	24,549
Number of pregnant women newly identified by the committees (for inclusion in the pregnancy monitoring target)	N/A	N/A	-	-	9,404	9,522	15,354	20,686	30,208
Number of pregnant women sensitized on ANC/Exclusive breastfeeding, CPoN & SPE, Children's minimum acceptable diet	N/A	N/A	-	-	9,404	11,605	16,560	30,516	42,121
Number of women in reproductive age aware of FP	N/A	N/A	-	-	176,317	73,174	205,694	201,045	274,219
Number of children aged 0-23 months identified in households	N/A	N/A	-	-	12,716	12,641	15,801	36,759	49,400
Number of children aged 24-59 months identified in households	N/A	N/A	-	-	23,616	22,603	47,710	113,855	136,458
Number of children aged 0-59 months with fever reference at CHW	N/A	N/A	-	-	-	-	60,331	53,073	53,073
Number of children aged 6-59 months detected anemic and referred	N/A	N/A	-	-	4,103	723	910	2,325	3,048
Number of pregnant women sensitized on anemia (last reported FY19 Q4)	N/A	N/A	-	-	9,404	10,780	-	-	10,780
Number of children aged 6-59 months screened for malnutrition and referred (last reported FY19 Q4)	N/A	N/A	-	-	4,103	4,216	-	-	4,216
Percent of deliveries at rural maternities using the safe childbirth checklist and partograph (last reported FY19 Q4)	N/A	N/A	-	-	75%	84%	-	-	84%

Indicator	Baseline Date	Baseline Value	2018 Target	2018 Result	2019 Target	2019 Result	2020 Target	2020 Result	Life of Activity Result
Objective 3: Contribute to improve the standards and procedures to support HRH management capacity at national and regional levels									
Result 3.1: Strengthened HRH managers in compliance to the use of HRH standards and procedures for HRH management and the use of SI-GRH at regional level									
Number of tools and approaches developed and/or applied and/or evaluated by objective and type	N/A	N/A	1	**13**	4	**10**	5	**7**	**30**
Strengthening integration of health information systems (HIS) data	FY2017	1	1	**1**	1	**1**	1	**1**	**1**

TABLE 2: MALI COVID-19 RESPONSE INDICATORS

Indicator	May	June	July	August	September	October	November	Life of Activity Result
COVID-19 Response Indicators								
Percent of required surveillance reports submitted on time to the Ministry of Health by health care facilities	80% (725/909)	80% (753/945)	94% (880/935)	94% (890/943)	94% (890/945)	100% (943/945)	-	**100%**
Number of health workers trained in surveillance	0	50	868	868	868	0	-	**2,654**
Percent of monitoring tools adapted to the COVID-19 context	67% (46/69)	100% (69/69)	100% (10/10)	100% (10/10)	100% (10/10)	100% (10/10)	-	**100%**
Percent of rapid response teams supported under COVID-19	86% (19/22)	86% (19/22)	100% (22/22)	100% (22/22)	100% (22/22)	100% (22/22)	-	**100%**
Percent of health facilities with appropriate monitoring guidelines or protocols for COVID-19	90% (313/349)	100% (349/349)	74% (325/437)	100% (443/437)	100% (437/ 437)	100% (437/ 437)	-	**100%**
Percent of health facilities supervised under COVID-19	0% (0/ 349)	46% (140/306)	0% (0/437)	68% (297/437)	-	41% (180/437)	-	**41% (peak 68%)**
Number of health workers oriented to barrier measures for the provision of health care and services	950	2,827	-	884	-	0	-	**4,661**
Percent of health facilities/community platforms where USAID provided technical assistance for COVID-19 risk communication and community engagement through the distribution of communication materials	35% (109/314)	67% (209/314)	-	-	-	-	-	**67%**
Number of people oriented to COVID-19 related messages	1,333	2,836	3,078	3,388	-	-	609	**11,244**
Number of people reached by USAID-supported community platforms	8,927	12,006	12,267	12,927	-	-	9,907	**56,034**

Annex B. Financial Information

In the tables below, we have provided estimates of total accrued expenditures and remaining obligated funds through December 31, 2020.

Cash Flow Chart

HRH2030 Cumulative Obligation for Mali (not including COVID)	$16,025,089
HRH2030 Estimated Accrued Expenditures through Dec 2020 for Mali	$15,951,404
Estimated Obligated Funds Remaining* Reserved for 2020 NICRA Adjustments	$73,685*

Budget Details

Line Item	Total Estimated Accrued Expenses through Dec 2020
Salaries	$1,954,174
Fringe Benefits	$810,237
Overhead	$1,211,431
Travel and Transportation	$45,041
Allowances	$1,097,698
Other Direct Costs	$1,099,195
Equipment, Vehicles, and Freight	$316,872
Training	$2,927,327
Subrecipients/Subcontractors	$4,296,686
Subtotal	**$13,758,661**
General and Administrative	$711,134
Allocable	$1,481,609
Total	**$15,591,404**

Funding Source Breakdown

	Obligation	Estimated Accrued Expenditures through Dec 2020	Estimated Obligated Funds Remaining
FP/RH	$5,964,725	$ 5,944,298	$21,643.08
MCH	$7,987,548	$7,942,928	$43,631.86
HIV/AIDS	$52,824	$52,824	$0
Malaria	$60,000	$60,000	$0
WASH	$309,583	$309,583	$0
Nutrition	$1,650,409	$1,641,771	$8,638
Total	**$16,025,089**	**$15,951,404**	**$73,685**

Cash Flow Chart: HRH2030 Mali COVID

HRH2030 Cumulative Obligation for Mali COVID (Funding Source: GHSD)	$700,000
HRH2030 Estimated Accrued Expenditures through Dec 2020 for Mali COVID	$691,932
Estimated Obligated Funds Remaining* Reserved for 2020 NICRA Adjustments	$8,068*

Budget Details: Mali COVID

Line Item	Total Estimated Accrued Expenses through Dec 2020
Salaries	$56,978
Fringe Benefits	$10,425
Overhead	$37,440
Travel and Transportation	-
Allowances	$4,828
Other Direct Costs	$7,707
Equipment, Vehicles, and Freight	-
Training	$435,015
Subrecipients/Subcontractors	$20,026
Subtotal	**$590,419**
General and Administrative	$31,513
Allocable	$70,000
Total	**$691,932**

Cost Share Details

Under the cooperative agreement, the HRH2030 program committed to generating a minimum of 15 percent cost share from funding sources other than the US government across all activities. The HRH2030 Mali activity has surpassed its cost share contribution target due, in large part, to its strong relationship with in-country partners and stakeholders and the significant interest in this activity by the government and people of Mali. As of December 31, 2020, the HRH2030 Mali activity has reported cost share from sources other than the US government totaling $9,015,430. With projected expenditures of nearly $15.6 million, cost share represents 56 percent of the total activity expenditures.

Cost Share Chart

Total Estimated Accrued Expenses through Dec 2020	HRH2030 Mali Cost Share Target	HRH2030 Mali Total Cost Share Reported	Percent Cost Share
$15,591,404	$2,338,711	$9,015,430	56.26%

A midwife from M'Pegnesso health center and a rural matron verify the correct filling of a partogram in Sikasso, Mali. Photo Credit: HRH2030 Mali.

Program Partners

- Chemonics International
- American International Health Alliance (AIHA)
- Amref Health Africa
- Open Development
- Palladium
- ThinkWell
- University Research Company (URC

About HRH2030

HRH2030 strives to build the accessible, available, acceptable, and high-quality health workforce needed to improve health outcomes.

Global Program Objectives

1. Improve performance and productivity of the health workforce. Improve service delivery models, strengthen in-service training capacity and continuing professional development programs, and increase the capacity of managers to manage HRH resources more efficiently.

2. Increase the number, skill mix, and competency of the health workforce. Ensure that educational institutions meet students' needs and use curriculum relevant to students' future patients. This objective also addresses management capability of pre-service institutions.

3. Strengthen HRH/HSS leadership and governance capacity. Promote transparency in HRH decisions, strengthen the regulatory environment, improve management capacity, reduce gender disparities, and improve multi-sectoral collaboration for advancing the HRH agenda.

4. Increase sustainability of investment in HRH. Increase the utilization of HRH data for accurate decision-making with the aim of increasing investment in educating, training, and managing a fit-for-purpose and fit-for-practice health workforce.

HRH2030
HUMAN RESOURCES FOR HEALTH IN 2030

www.hrh2030program.org

This material is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of cooperative agreement no. AID-OAA-A-15-00046 (2015-2020). The contents are the responsibility of Chemonics International and do not necessarily reflect the views of USAID or the United States Government.

@HRH2030Program @HRH2030

251 18th Street, S Arlington, VA 22202 | Phone: (202) 955-3300 | Fax: (202) 955-3400 | Email: info@HRH2030Program.org