

MCHIP Country Brief: Guinea



Selected Health and Demographic Data for Guinea	
Maternal mortality ratio (deaths/100,000 live births)	724
Neonatal mortality rate (deaths/1,000 live births)	33
Under-5 mortality rate (deaths/1,000 live births)	123
Infant mortality rate (deaths/1,000 live births)	67
Contraceptive prevalence rate	7
Total fertility rate	5.1
Skilled birth attendant coverage	45%
Antenatal care, 4+ visits	57%
Sources: World Bank; Ministère Plan 2012; DHSIV.	

Health Areas:

- Family Planning
- Maternal Health
- Newborn Health
- Child Health
- HIV/AIDS
- Malaria



Program Dates	October 2010–June 2014					
Total Mission Funding	Redacted					
Geographic Coverage	No. (%) of provinces	50%	No. of districts	20	No. of facilities	234
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INTRODUCTION

In Guinea, the maternal mortality ratio is one of the highest in the world, reported to be 724 deaths per 100,000 live births.¹ This high rate is due in part to very low use of modern contraceptive methods, with only 7.0% of women aged 15–49 using a modern method, and continued high fertility of 5.1 total births per woman in 2012.^{2,3} Unmet need for family planning (FP) is estimated at 24%, lower than many countries in the West Africa region, yet the demand for postabortion care remains high. The leading cause of maternal deaths is postpartum hemorrhage (PPH), mostly due to a lack of quality maternity services that are adequately prepared to respond to emergencies, referred to as emergency obstetric and newborn care (EmONC). In countries such as Guinea where malaria is endemic, malaria is a significant cause of morbidity and mortality for pregnant women and children under the age of five. In Guinea the infant mortality rate was 67 deaths per 1,000 live births in 2012 and the child mortality rate among children under the age of five was 123 deaths per 1,000 live births.

In 2010, the Maternal and Child Health Integrated Program (MCHIP) began working in Guinea to strengthen the integration of FP with maternal, newborn, and child health and to strengthen the continuum of care from the community to the health center to the hospital. MCHIP has engaged with the Ministry of Health and stakeholders at the national level to maintain up-to-date health policies and national guidelines, and to support strengthening the national health management information system (HMIS). The geographic focus of MCHIP's work has reached all intervention areas of the United States Agency for International Development, including the five communes of the capital Conakry and the 15 prefectures of the three eastern regions of Faranah, N'zerekore, and Kankan. MCHIP's interventions cover a population of 6.4 million, 234 facilities, and 1,700 villages.

Starting with a focus on family planning and quality improvement in the first year of activities, MCHIP/Guinea greatly expanded its scope of work and reach in the second year to include, among others: comprehensive EmONC, management of the sick child, pre-service education at the national midwifery school, malaria prevention and treatment, prevention of mother-to-child transmission of HIV (PMTCT), and gender-based violence.

KEY ACHIEVEMENTS

Family planning interventions have focused on expanding the method mix to include long-acting reversible and permanent methods and ensuring that women are better able to access and select a method that meets their needs. Particular attention was given to linking FP to postpartum and postabortion care (PAC) as entry points to promote healthy timing and spacing of births and the avoidance of unwanted pregnancies. By the end of MCHIP, 110 facilities offered implants (Jadelle), 125 offered interval IUDs, 110 facilities provided counseling to pregnant women on postpartum FP options, 34 facilities offered postpartum IUDs in the maternity ward, and 20 MCHIP-supported facilities offered laparoscopic tubal ligation. The provision of these services is the result of the training of:

- 502 providers on different long-acting FP methods,
- 332 providers in counseling for postpartum care and PAC, and

¹ Institut National de la Statistique (INS) et ICF International. 2013. *Enquête Démographique et de Santé et à Indicateurs Multiples de Guinée (EDS-MICS 2012)*. Calverton, MD, USA: INS and ICF International.

² Ibid. Total fertility rate represents the number of children who would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates.

³ UNFPA. 2014. *State of the World Population 2013: Motherhood in Childhood: Facing the Challenge of Adolescent Pregnancy*. New York: UNFPA. <http://www.unfpa.org/webdav/site/global/shared/swp2013/EN-SWOP2013-final.pdf>.

- 1,130 community health workers on an integrated package of FP/reproductive health/maternal, newborn, and child health messages to accompany community-based distribution of short-acting methods (pill and condoms).

The training was accompanied by site strengthening activities such as provision of instrument kits and communication and data collection materials; quality improvement using the Standards-Based Management and Recognition (SBM-R) approach; and supportive supervision. MCHIP also developed a pool of 35 trainers and 64 community health worker (CHW) supervisors capable of providing ongoing training and supervision of FP services in facilities and in communities. As a result of MCHIP's support for FP service expansion and quality improvement, HMIS data collected by the project have shown steady increases in:

- The number of women receiving counseling as part of PAC or postpartum services
- The number of women adopting a modern method
- PAC and postpartum services
- New and continuing FP users
- Couple-years of protection

Long-acting and reversible contraception, as a proportion of all methods distributed, increased steadily from 10.5% in the first semester of 2013, to 11% in the third quarter, 15% in the fourth quarter, and 16.6% and 17.2% respectively in the first two quarters of 2014.

Service Delivery Indicators for FP Services by Fiscal Year: 2011–2014

INDICATORS	2011	2012	2013	2014 (SIX MONTHS)
Number of new acceptors of modern contraceptive methods	7,107	176,281	197,222	96,418
Number of continuing users of FP methods	–	153,677	131,620	84,370
Couple-years of protection	10,759	66,858	116,032	66,871

Maternal and newborn health interventions have focused on quality improvement and comprehensive EmONC in particular, and, in 2013, expanded to include PMTCT. Eighty-three providers from 20 facilities were trained and updated on clinical skills for comprehensive EmONC and a total of 48 facilities are implementing performance standards for EmONC as part of SBM-R. Training was again accompanied by technical support for the development and updating of training materials, job aids and performance standards, support for site strengthening through the provision of key materials and instruments, including locally fabricated delivery tables and privacy screens, as well as supportive supervision. To support sustainability, 17 trainers in teams of three to four were qualified to provide EmONC clinical training and supervision, an additional 34 trainers were qualified for focused antenatal care, and 22 trainers were qualified to support improved infection prevention practices. As a result of these activities, consistent use of key clinical actions during labor and delivery has improved, including active management of third stage labor, use of the partograph to monitor labor, management of pre-eclampsia and eclampsia using magnesium sulfate, and essential newborn care. An analysis of 16 initial SBM-R facilities showed a decline in postpartum hemorrhage (2% to 1.5%) and post-operative/post-procedure infections (1.1% to 0.5% and 2% to 0%).

MCHIP/Guinea also conducted a pilot study of community-based distribution of misoprostol for PPH prevention, which is contributing to multi-country learning on operationalizing this intervention. A total of 31 health facilities and 219 providers were included in the

implementation in 5 sub-prefectures. CHWs and TBAs distributed misoprostol to 555 pregnant women. 43% of the women received the misoprostol through ANC and 57% received it from a CHW. Among the 555 women, 59% gave birth in a facility and 41% gave birth at home. All the women who delivered at home took the misoprostol as recommended.

Specific to PMTCT, MCHIP supported the PMTCT policy review for the adoption of the World Health Organization's option B+ in Guinea prior to the training of 20 providers from 10 facilities. MCHIP worked closely with UNICEF to quantify HIV testing and antiretroviral needs for the new services. In the first six months of PMTCT services, all women attending antenatal care received HIV counseling and testing (n=1,925) and a further 728 women received counseling and testing during labor or postpartum. All women who tested HIV-positive (n=30) received antiretroviral prophylaxis for PMTCT and were referred for ongoing care.

Child health interventions were initiated in 2012 to strengthen the availability and quality of care for sick children. Particular emphasis was given to promotion of the revised and shortened training program of integrated management of newborn and child illness (IMNCI), including developing country-level experience with integrated community case management (iCCM). Working in a pilot area of 20 facilities and their surrounding communities, 38 providers and 101 CHWs were trained and supported to implement the updated package of facility and community interventions.

Facilities were provided with supplies, job aids, and revised registers and record-keeping tools. CHWs were provided a kit of supplies, initial stocks of medications, and communication and record-keeping tools for community-based services. In the 18 months following the trainings, more than 20,000 sick children were treated using updated protocols (91% in health facilities). Performance standards for IMNCI were also developed and introduced in three of the pilot facilities, which expanded the use of SBM-R as a quality improvement tool across multiple technical domains.



CHW uses the updated protocol to assess a child's health.

Community health interventions were implemented to improve access to quality health services and health information in rural and urban communities to contribute to a reduction in maternal and child mortality in Guinea. CHWs in Guinea provide a package of services, approved by the Ministry of Health and focused on health promotion messages, including maternal, neonatal, and child health and family planning. They also offer non-prescription FP services and support the management of simple cases of the most common diseases in children under five years. MCHIP reinforced the skills of 1,092 existing CHWs through refresher training, supportive supervision, and provision of bicycles and other materials to support their work in the community. MCHIP also worked closely with the CHW supervisors to strengthen their capacity for supervision and monitoring. While most of the work in Guinea with CHWs was focused on reaching rural communities with health information and services, MCHIP also implemented innovative approaches to reach urban communities with health interventions through community organizations and through hair salons, training 241 community organizers and 58 new CHWs. MCHIP-supported CHWs conducted 103,805 group education sessions on FP, maternal and newborn health, and IMNCI over the four years of the project. In the final 18 months of activities, 74,346 group discussions reached 292,164 people. Community-distributed FP services contributed approximately one-third of all new and continuing users in MCHIP-supported zones.



MCHIP worked closely with the faculty at ENSK to improve education and training of health care providers in Guinea.

MCHIP supported **pre-service education (PSE)** interventions with the Faculty of Medicine in Conakry and the midwifery program at the National Public Health School in Kindia (ENSK). Activities included support for the development of skills labs where students can get hands-on experience using anatomic models and simulators, and training sessions for faculty and preceptors on effective teaching skills, student performance assessment, and clinical training and mentoring skills for maternal and newborn health. MCHIP worked closely with ENSK to revise the midwifery training curriculum in accordance with recommendations from West African Health Organization and the International Confederation of Midwives to ensure a competency-based approach to education. Quality improvement using SBM-R included adapting performance standards for PSE, training

faculty in the problem-solving methodology, completing a baseline assessment, and supporting ongoing follow-up. A review of action plans shows a positive evolution in performance along the five domains of theory, practice, evaluation, infrastructure, and management, with global performance improving from 11% to 67% of standards met between the baseline in December 2012 and January 2014.

Guinea became a focus country for the President's Malaria Initiative (PMI) in November 2011. MCHIP was asked to incorporate interventions to strengthen the prevention and treatment of malaria as part of its 2012 workplan. MCHIP provided technical and financial support for the revision of national policies and protocols for the prevention and treatment of malaria to include updated protocols on case confirmation using rapid diagnostic tests, intermittent preventive treatment of malaria for pregnant women, and communication messages. In PMI's four focus regions, 34 supervisors and trainers were updated as a means to train 136 providers and 102 CHWs using the updated training materials, job aids, and monitoring tools.

SBM-R is a quality improvement methodology developed by Jhpiego to address the need for ongoing attention to the quality of care. By developing an agreed-upon set of performance standards, providers, managers, and community stakeholders are better able to assess the status of health care services at any given time, develop action plans to address gaps, and recognize improvements between assessments. Over the life of the project, SBM-R was introduced in 48 MCHIP-supported facilities. The initial focus included standards for FP services, EmONC, and infection prevention, while additional standards were also adapted and integrated into selected facilities for the surgical and anesthesia skills required for comprehensive EmONC, PMTCT, IMNCI, and PSE. A total of 224 stakeholders, including providers, managers, and community representatives, were trained on SBM-R. To promote sustainability, six trainers were qualified to support SBM-R activities and a further 35 prefectural and regional supervisors were trained to support the process. The Ministry of Health has been highly supportive of this process, forming the National Recognition Committee, and included it in the national maternal mortality reduction strategy. By the end of the project, 16 facilities achieved recognition for consistent high performance,



A symbol of recognition was placed at the entrance of each facility that met consistent high performance of SBM-R standards.

while others were continuing to see progress and improvements. To address gaps in performance, facility teams successfully leveraged support from local partners as well as their own initiative to make improvements.

While **monitoring and evaluation** is a routine part of project management, MCHIP's efforts to improve data recording and reporting in MCHIP-supported facilities led to a request to support the updating of indicators and tools for the national HMIS. MCHIP's implementation of data quality assurance sampling methods also led to a request to train HMIS staff at all levels on the methodology.

Infection prevention was identified as one of the weakest elements of service delivery and therefore MCHIP developed targeted activities to reinforce trainers' and supervisors' capacity to model good infection prevention skills in conjunction with the National Department for Health and Public Hygiene.

MCHIP supported two initiatives to use mobile phone technology—**mHealth**—to strengthen health care service delivery. A network of 264 mobile phones was distributed to providers and managers to facilitate communications for referrals, stock management, coordination, and epidemiological surveillance, as well as colleague-to-colleague consultation. Over three years of operation, more than 120,000 calls were made. Initial costs for the network were \$6,000, with annual costs for airtime of \$7,000. The second initiative was a pilot using mobile phones to provide mentoring—**mMentoring**—to providers following training in place of an in-person supervision visit.

The USAID Guinea Mission successfully applied for incentive funding to address **gender-based violence reduction**. In collaboration with the American Bar Association, MCHIP initiated activities during the final project year to better understand the scope of the problem and what resources exist in order to prepare for a comprehensive intervention that addresses the health, social support and legal aspects of victims of GBV, as well as communications to increase community awareness and prevention efforts. MCHIP conducted a literature review to inform the situation analysis on GBV, developed a survey protocol for the situation analysis, designed data collection tools, selected and trained 15 interviewers and 5 supervisors. MCHIP also developed a 3-year workplan for work that will continue under another funding mechanism.

With all its activities and accomplishments, MCHIP/Guinea has contributed extensively to program learning in several domains of the global MCHIP program, including: integration of services for EmONC and postpartum FP; scale-up of integrated PAC and FP services; linking SBM-R performance improvement with health outcomes; operationalization of community-based distribution of misoprostol for PPH prevention; innovative community interventions to reach urban residents; implementation of the revised IMNCI/iCCM training model and updated protocols; and mHealth technology to support providers and increase access to health care.

WAY FORWARD

Over the course of three and half years, a number of important improvements were made in the provision and quality of health care services in USAID-supported regions. In order to continue to build on these gains, and assist the Ministry of Health of Guinea to continue to improve its capacity to lead and sustain quality services for the people of Guinea, it will be important for donors and partners to sustain their support. The Guinean health system is still very dependent on external assistance and gains can be quickly lost when support fluctuates and/or is accompanied by conflicting strategies and advice.

- The MOH should be encouraged and supported to continue to institutionalize SBM-R as a quality improvement process.
- The MOH should also be supported to strengthen and institutionalize its coordination and policy setting role in health care and public health in general.
- MOH and partners should be encouraged to make use of the national trainers that were trained by MCHIP in various technical areas and then in training skills. (See Annex 7 for the list of trainers by topic.) These national resources and the training materials adapted in collaboration with the MOH under MCHIP can serve to systematize in-service, continuing education efforts.
- **Family planning:** The integration of LARC into family planning services should continue, as well as continued integration of FP and maternal health services through postpartum family planning counseling and access to immediate postpartum methods (PPIUD, and implant if guidance changes). An expanded method mix and linking FP to ANC and maternity services increases the opportunities for women to find a method that suits their needs at a time when they interact with the health care system and may desire to space or limit future pregnancies.
- While FP methods posed a particular commodity challenge, the overall supply chain remains weak and ultimately FP commodities need to part of an integrated supply management system to effectively ensure that facilities and community health workers have the drugs and materials to offer the services that other resources are invested in for their education and training.
- **Maternal and newborn health:** The MOH and partners need to continue to identify opportunities to strengthen and perpetuate the capacity of the facilities providing Comprehensive EmONC and PMTCT services and the providers working there to respond effectively to urgent care needs of pregnant women and sick children.
- Continued support to the midwifery school at ENSK is another important way to ensure that student midwives are adequately prepared from the beginning of their careers to provide quality maternal and newborn care.
- **Misoprostol for prevention of postpartum hemorrhage:** CHW and ANC distribution of misoprostol for use at home births represents an important opportunity to put in place a practice that can save many women's lives. It will be important to support the
- MOH to extend the use of this medication at community level, by integrating its use into policy and norms and supporting the scale-up of its implementation.
- **Child health:** Lessons should continue to be gathered from the pilot of the updated IMNCI protocols and training in 20 sites.
- **Community health:** The extensive investment in training CHWs to date merits focused efforts to continue to support their work, ensure their work is properly recorded and reported, and to provide periodic refreshers and updates.
- **mHealth:** The mobile phone network is a promising approach to improve the connections between and communications among providers for multiple elements of health service delivery at a reasonable cost.