



USAID | **MALI**
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HEALTH STRATEGY

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This document outlines USAID/Mali's general strategy for health from 2013 to 2018. It does not constitute a commitment to conduct or finance any of the activities mentioned or implied in the document.

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ACRONYMS

AEG:	Accelerated Economic Growth
AFD:	French Development Agency
ARV:	Anti-Retroviral Drugs
ASACO:	Community Health Association
AVRDC:	Asian Vegetable Research and Development Center
CCM:	Country Coordinating Mechanism
CDC:	U.S. Center for Disease Control and Prevention
CDCS:	Country Development and Cooperation Strategy
CHV:	Community Health Volunteer
CHW:	Community Health Worker
CNIECS:	National Center for Health Information, Education and Communication
CSCOM:	Community Health Center
CSCR	Strategy Framework for Growth and Poverty Reduction
CSREF:	Health Reference Center
CYP:	Couple Years Protection
DHS:	Demographic and Health Survey
DO:	Development Objective
DOD:	Department of Defense
DOS:	Department of State
ESR:	Epidemic Surveillance and Response
EU:	European Union
FARA:	Fixed Amount Reimbursement Agreement
FOG:	Fixed Obligation Grant
FSW:	Female Sex Workers
FtF:	Feed the Future
GBV:	Gender Based Violence
GFATM:	Global Fund to Fight AIDS, TB, and Malaria
GHI:	Global Health Initiative
GOM:	Government of Mali
HIHS:	High Impact Health Services
HMIS:	Health Management Information System
HSS:	Health Systems Strengthening
IEE:	Initial Environmental Examination
IR:	Intermediate Results
M&E:	Monitoring and Evaluation
MARP:	Most At Risk Population
MDG:	Millennium Development Goals
MIS:	Management of Health Information Systems
MRTC:	Malaria Research and Training Center
MSM:	Men who have Sex with Men
NGO:	Non-Governmental Organization
NTD:	Neglected Tropical Diseases
OTI:	Office of Transition Initiatives

PDDSS:	Plan of Health and Social Development
PEPFAR:	President's Emergency Plan for AIDS Relief
PHDP:	Positive Health, Dignity, and Prevention
PMI:	President's Malaria Initiative
PMT:	Project Management Team
PPP:	Public Private Partnerships
PRODESS:	Health Sector Development Program
SBCC:	Social and Behavior Change Communication
SD:	Service Delivery
SM:	Social Marketing
SMC:	Seasonal Malarial Chemoprevention
UN:	United Nations
UNAIDS:	United Nations Program on HIV/AIDS
UNFPA:	United Nations Population Fund
UNICEF:	United Nations Children's Fund
USG:	United States Government
WASH:	Water, Sanitation and Hygiene
WHO:	World Health Organization

EXECUTIVE SUMMARY

The USAID/Mali Health Strategy is a five year strategy with the goal of **sustained improvements in health** through **increased use of high impact health services and healthy behaviors**. This will be achieved through programming in three component areas: 1) delivery of an integrated package of high-impact health services (HIHS) at the community level, 2) social and behavior change communication (SBCC), and 3) health systems strengthening (HSS).

Based on the epidemiology and conditions in Mali, interventions will fall into the following technical areas:

- Maternal, Neonatal, and Child Health; Family Planning and Reproductive Health
- Malaria
- Infectious Disease
- Nutrition, Water, and Sanitation¹

Key projected national-level results over the five years of the strategy include:

- Reduce maternal mortality by 30%
- Reduce under-five mortality by 30% from 98/1000 to 67/1000
- Reduce infant mortality by 25% from 58/1000 to 43/1000
- Increase modern method contraceptive prevalence rate by 5 percentage points from 9.9 to 14.9
- Reduce prevalence of underweight children under five by 30% from 18.9% to 13%
- Reduce prevalence of stunted children under five by 30% from 27.8% to 19.5%
- Reduce prevalence of wasted children under five by 50% from 8.9% to 4.4%
- Reduce prevalence of underweight women by 30% from 13.5% to 9.5%

This strategy is fully aligned with all relevant USG strategies and policies. Additionally, input to the project design included consultations with Government of Mali (GOM) health officials, and project activities and components fall within the GOM sector-wide strategic plan (PRODESS) and the Plan de Relance Durable (PRED). The project design also takes into account the activities of major health development partners in order to ensure complementarity and avoid overlap.

The strategy's major inter-related activities in service delivery, SBCC, and health systems strengthening at the local level will focus geographically on the peri-urban areas of Bamako and four regions: Kayes, Koulikoro, Sikasso, and Gao. Activities in Gao (or other appropriate areas in the north) will be added as conditions allow. Activities will aim to cover all districts in each region. The strategy will also include some activities at the national level, including HSS and policy work, and some activities with national coverage, such as treatment for Neglected Tropical Diseases (NTDs), contraceptive commodity distribution, immunizations, and SBCC mass media campaigns. In general, the strategy will focus on those national level activities which support local level service delivery (SD) and SBCC activities. Some health activities, such as HIV/AIDS, resilience, and spraying for malaria mosquitoes, have a geographic focus based on the epidemiology of the health issues they address.

¹ See Annex, the Health DO Results Framework, for more detail.

BACKGROUND AND PROBLEM STATEMENT

Despite recent improvements, Mali still has some of the worst health indicators in the world. Maternal, under-five, and infant mortality rates are estimated at 464 maternal deaths per 100,000 live births,² 98 child deaths per 1,000 live births,³ and 58 infant deaths per 1,000 live births,⁴ respectively. While child mortality has fallen dramatically (from 191/1000⁵) since 2006, the proportion of under-five mortality related to infant deaths rose from 50% in 2006⁶ to 59% in 2012.⁷ Malnutrition is a major contributor to maternal and child death and disability, as 38% of children suffer from chronic undernutrition.⁸ Nutritional factors are an underlying cause of up to 45% of childhood deaths in Mali. There have been improvements in access to safe drinking water for much of the population, but progress in sanitation has lagged behind. Poor water quality and sanitation lead to diarrhea and other infectious diseases, contributing to the high rates of undernutrition and malnutrition.

The 2009 census showed the total population of Mali is 14,517,176 - nearly double the population of 20 years ago (1987: 7,696,348), and the rate of population growth climbed from 2.4% to 3.6% during the same period. The fertility rate is 6.1 births per woman with a modern contraceptive prevalence rate of only 9.9%.⁹ Population projections show that, with current conditions, the population of Mali will be over 20,000,000 ten years from now and 26,000,000 twenty years from now.¹⁰ These population factors stress the country's development plans in food security, economic growth, and attainment of the Millennium Development Goals (MDGs).

Endemic malaria threatens the entire population and is the leading cause of morbidity and mortality. Although mosquito net ownership per household (84%) and use among pregnant women (75%) and children under five (70%)¹¹ are improving, malaria prevalence remains high with 52% of children carrying malaria parasites during the high transmission period.¹²

Mali's HIV prevalence rate is low (est. 1.2%¹³) compared with other sub-Saharan countries, with pockets of higher prevalence among the people most at risk for HIV infection, particularly female sex workers (FSWs) (24.2%¹⁴) and men who have sex with men (MSM) (17%-35%).¹⁵ The total number of HIV positive people is estimated at 70,000, of whom 29,260 currently receive anti-retroviral drugs (ARVs). Program data shows that many HIV positive individuals in care do not use condoms or family planning. Nearly all Malians are at

² Fourth Mali Demographic and Health Survey, 2006. Ministry of Health and Macro International. Bamako, Mali. 2007.

³ Preliminary Report of the Fifth Mali Demographic and Health Survey (DHS), 2012-2013. INFO-STAT, Ministry of Health, Ministry of the Economy and Finances, and ICF International. Bamako, Mali. 2013.

⁴ DHS 2013

⁵ DHS 2006

⁶ DHS 2006

⁷ DHS 2013

⁸ DHS 2013

⁹ DHS 2013

¹⁰ Spectrum DemProj Policy Projection Modeling Tool. Futures Institute/USAID Health Policy Project.

¹¹ Anemia and Parasitemia Survey. USAID, 2010

¹² DHS 2013

¹³ DHS 2013

¹⁴ Mali Integrated STI Prevalence and Behavior Survey (ISBS) Final report 2009. Ministry of Health, Mali; Centers for Disease Control and Prevention; and USAID. Bamako, Mali: Ministry of Health Publications. 2010.

¹⁵ USAID Program Data

risk of contracting endemic NTDs, including lymphatic filariasis, onchocerciasis, schistosomiasis, soil transmitted helminthes, and trachoma.

The following table summarizes historic trends in major health indicators in Mali:

Indicator	2001 DHS	2006 DHS	2009/2010/2011	2012/13 DHS
Infant Mortality Rate (per 1000 children 0-12 months)	113	96		58
Child Mortality Rate (per 1000 children under 5 years)	226	191		98
Maternal Mortality Rate (per 100,000 live births)	582	464		
DPT3 vaccination coverage (%)	40	68	72 (MICS 2010 ¹⁶)	63.1
Children under 5 with chronic malnutrition (%)	38	34	27.8 (MICS 2010) 27.0 (SMART 2011 ¹⁷)	38.3
HIV (%)	1.7	1.3		1.2
Modern Contraceptive Prevalence Rate (%)	5.7	6.9	9.2 (MICS 2010)	9.9
Total Fertility Rate	6.8	6.6	6.4 (2009 Census)	6.1

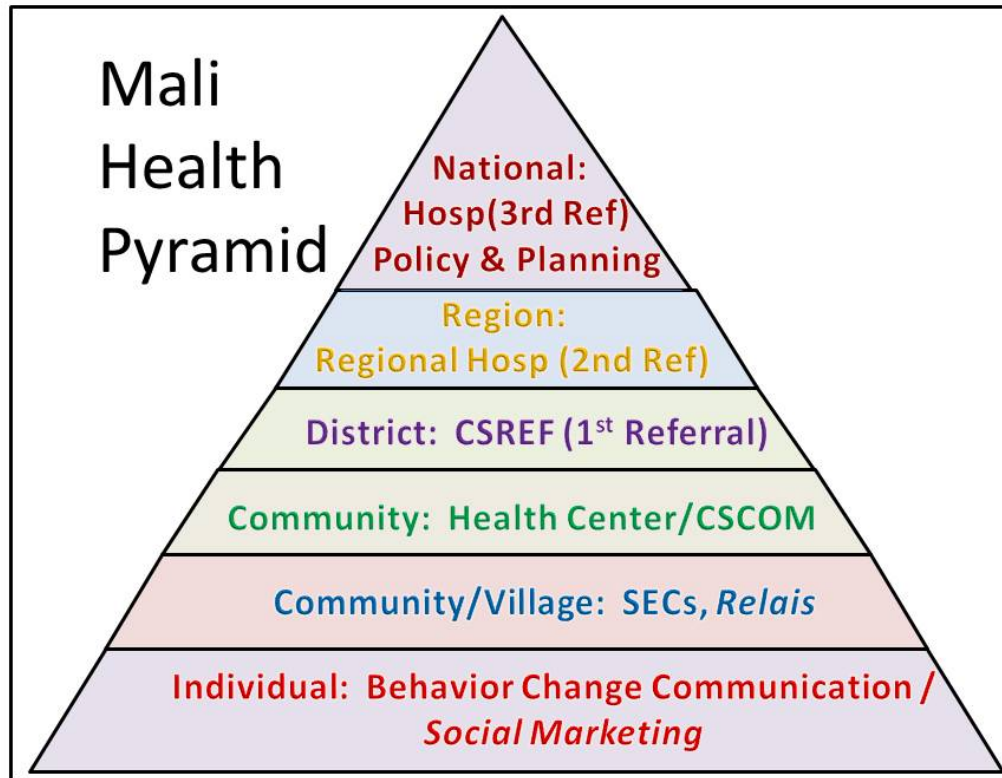
Additionally, Mali has experienced a complex emergency which began in 2012 with a food crisis, and continued with the March 2012 coup d'état and the fall of northern Mali to jihadist rebels. During the time that the rebels controlled northern Mali most of the physical health infrastructure was destroyed or damaged, many of the health staff fled, and the health systems that support health care provision stopped functioning. Fighting and insecurity remain, and over 400,000 people have fled the region.

One of the causes of Mali's low health indicators is weak health systems performance. The GOM health service delivery structure is a pyramid (see graphic), with some 20,000 community health volunteers (CHVs) forming the largest cadre at the bottom, and reporting to the Community Health Centers (CSCOMs), which are managed by Community Health Associations (ASACOs), immediately above them. There is also a growing cadre of paid community health workers (CHWs) with hundreds already trained and delivering services in southern Mali. However, Mali needs thousands of CHWs to successfully extend primary

¹⁶ Multiple Indicator Cluster Survey. UNICEF. 2010.

¹⁷ SMART Survey – Malnutrition Percentage and Caseload. OCHA. 2011.

health care services to populations that are geographically isolated. CSCOMs, CHVs and CHWs are the main sources of public sector primary health care and high impact health services in Mali.



A 2011 external evaluation of the MOH's last ten-year strategy¹⁸ identified several systemic weaknesses that impede progress toward achieving national health objectives. Key findings include:

- Local health systems and SBCC interventions do not provide extensive enough coverage of quality health services, and critical health interventions do not reach the population, especially people who live far from CSCOMs.
- Key national and local health systems are not able to provide all of the inputs (commodities, human resources, etc.) needed to support health services at the local level.
- The Health Management Information System (HMIS) does not provide accurate and timely data for informed decision-making.

¹⁸ Evaluation Externe du Plan Décennal de Développement Sanitaire et Social, 1998-2007. Ministère de la Santé et Ministère du Développement Social de la Solidarité et des Personnes Agées. Bamako, Mali. 19 August, 2011.

I. RELATIONSHIP TO GOVERNMENT OF MALI AND OTHER DEVELOPMENT PARTNERS

A. GOM: Relationship to Goals and Policies

The GOM adopted a Strategy Framework for Growth and Poverty Reduction (CSCR) 2012-2017 in December 2011 after a two year participatory process that involved all development sectors. Priorities in the CSCR include maternal and child health, malaria, social development, nutrition, HIV/AIDS, and WASH with a long-term vision of improving the quality of life of Malians. In 2013, the GOM conducted an annual review of the implementation of the CSCR, including priorities for the next year of transition. Priorities for health include: financial and geographic accessibility of services; better management of financial and human resources for health (including systems for encouraging health staff to return to the north); water and sanitation; and HIV/AIDS.¹⁹

All health sector activities in Mali by all implementers are governed by the MOH's 10-year health strategy and 5-year implementation plan, called the Health and Social Development Plan (PDDSS) and Health Sector Development Program (PRODESS), respectively. USAID provided technical assistance, capacity building and funding for an external evaluation of the PDDSS/PRODESS in 2011, which emphasized key areas of interventions for the next PRODESS. The evaluation allowed the MOH to identify and address gaps and needs in the health sector, and establish evidence-based priorities for the various levels and functions of the health system.

Based on the external evaluation recommendations, the MOH developed a new PDDSS/PRODESS 2013-2022. The document was delayed by the coup d'état, but is currently in progress.

This strategy is fully aligned with the draft document and with the recommendations from the PRODESS evaluation. The principle vision of the GOM in the draft PDDSS/PRODESS is improved health status in order to meet Millennium Development Goals (MDG) 4 (Child and Infant Health), MDG 5 (Maternal Health including Reproductive Health), and MDG 6 (HIV, Malaria). The strategy also aims to address five health system deficiencies identified in the PRODESS evaluation: 1) geographic inaccessibility of health services; 2) quality of services; 3) logistics and management of pharmaceuticals and other commodities, 4) human resources training, utilization, and motivation, and 5) limited financial access and capacity for population participation in health financing.

B. Other Development Partners

The health donor community follows a sector-wide approach to support the GOM health sector under the PRODESS, and adheres to the Paris Declaration principles for aid effectiveness: country ownership, use of country systems, and coordination and collaboration. The activities of other development partners were considered in both the technical design and the geographic focus of this project.

¹⁹ Annual Review of the Implementation of the CSCR – 2012. PTF Mali, 2013.

II. PROJECT DESCRIPTION

A. Overview of the Strategy: The Health Development Objective, Results Framework, and Components.

Good health is essential to improved productivity, higher incomes and reductions in poverty in Mali. Mali's poor health status is evidenced by high infant, under-five, and maternal mortality and morbidity, and high fertility. This is costly to individuals, families, and communities, and ultimately to the nation. Achieving the USAID/Mali Health Development Objective (DO), "Increased Use of High Impact Health Services and Healthy Behaviors" with particular focus on the health of the most vulnerable groups (infants and children under five and women of reproductive age) is essential to improving and sustaining health status.

Key projected national-level results over the five years of the project include:

- Reduce maternal mortality by 30%
- Reduce under-five mortality by 30% from 98/1000 to 67/1000
- Reduce infant mortality by 25% from 58/1000 to 43/1000
- Increase modern method contraceptive prevalence rate by 5 percentage points from 9.9 to 14.9
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The strategy and Health DO have established five Intermediate Results (IRs). Intermediate Results 1-4 correspond to the High Impact Health Services (HIHS) which are essential to making a difference in health status in Mali.²⁰ Research in many developing country settings has clearly demonstrated their low cost and high impact of these HIHS on reducing infant, child, and maternal mortality and effectiveness in reducing unmet need for family planning.

²⁰ See Annex for full DO/strategy Results Framework.

See the table below for examples of high-impact interventions under each IR:

IR	Illustrative High-Impact Interventions
IR 1 Use of Quality Family Planning, Maternal, Neonatal & Child Health Services Increased	Focused ante-natal care, active management of the third stage of labor, essential newborn care, post-natal care, and fistula care in selected settings; immunization of children, and use of ORS with zinc; and family planning with specific emphasis on access to long-acting, reversible contraception and post-partum family planning.
IR 2 Coverage and Use of Key Malaria Interventions Increased	Provision of insecticide treated bed nets, indoor residual spraying, SMC, prophylaxis for pregnant women, and rapid testing and case management.
IR 3 Coverage of HIV/AIDS & STI Prevention among key populations, and other infectious disease, increased	Prevention for most at risk populations, prevention for positives, and testing and counseling, as well as mass drug administration for neglected tropical diseases.
IR 4 Nutritional Status, Water Supply, Hygiene and Sanitation Improved	Promotion of maternal, infant, and young child nutrition from conception to two years of age, essential nutrition actions (breastfeeding, complementary feeding, and nutritional care of sick/malnourished children), deworming, micronutrient supplementation, integrated community based management of acute malnutrition, handwashing with soap, community led total sanitation, and water treatment.
IR 5 National, Regional, District, & Community Management and Health Systems Improved	Focuses on the health systems interventions that improve the quality and sustainability of the high impact health services of the other IRs.

The strategy was also designed with three technical components. They are:

- **Social and Behavior Change Communication:** Improved demand for quality health services and improved knowledge of preventive healthy behaviors at the individual, household, and community levels.
- **Integrated High Impact Health Services and Appropriate Referrals:** Improved availability of and access to integrated high impact health services and appropriate referrals
- **Health Systems Strengthening and Management:** Improved health systems management and functioning to the community level.

The effectiveness of this design approach has also been well documented in the international literature, as well as through previous experience in Mali.

B. Description of Components and Sub-Components.

Component 1: Social and Behavior Change Communication

Sub-Purpose 1: Improved demand for quality health services and improved knowledge of preventive healthy behaviors at the individual, household, and community levels.

In Mali, a large number and variety of organizations and groups have engaged in social and behavior change communications activities. Few evaluations of the effectiveness and impact of these efforts have been conducted. However, practitioners and development partners agree that the SBCC capacity of the national level down to the community level needs development and reinforcement.

Sub-Component 1.1: National level coordination

The MOH National Center for Health Information, Education and Communication (CНИЕCS) is responsible for the development and implementation of strategic planning and overall coordination of SBCC initiatives and activities. USAID partners and staff have engaged with the CНИЕCS in the development of strategies and plans for SBCC activities in malaria, nutrition and other relevant areas.

The strategy will build on the work to date and collaborate closely with the CНИЕCS and, as appropriate, other national entities, to strengthen capacity for integrated SBCC strategic planning and coordination.

Sub-Component 1.2: Formative research, monitoring and evaluation of SBCC activities strengthened

SBCC approaches, materials and other tools in Mali have been criticized for lack of strong formative research and effective monitoring and evaluation of their roll out, use and impact on behavior change at the individual and family level and on norm change at the community level and above.

Under the strategy all partners who engage in SBCC approaches, materials and tools will support strong formative research. All partners who support dissemination of SBCC approaches, materials and tools, will monitor their activities and, as appropriate, evaluate impact.

Sub-Component 1.3: SBCC messages, approaches, materials and tools developed and produced for use at different levels of the health care system

With the human capacity strengthening anticipated from sub-components 1.1 and 1.2 (improved strategic planning and coordination and better research), approaches, materials, and tools will be better adapted to the Malian context and the diversity of cultural groups.

Sub-Component 1.4: Dissemination of messages and materials

The strategy will emphasize the dissemination of messages and materials through mass media and at the community level, and reinforcement of timely use of high impact health services and healthy behaviors in all high impact service delivery contexts.

Component 2 Integrated High Impact Health Services and Appropriate Referrals

Sub-purpose 2: Improved availability of and access to integrated high impact health services and appropriate referrals.

A major constraint to improving the health status of Malians is the limited coverage of high impact health services. One barrier to access is limited knowledge of the availability and need for timely use of services. This will be addressed through Component 1, SBCC messages and dissemination. Other barriers to access, such as high cost and poor quality, will be addressed under Component 3, Health Systems Strengthening. Other major barriers to access will be addressed under this component.

USAID and other development partners have provided support for expanding community-level services using various health care models and mechanisms with some success. Specifically, USAID/Mali has supported outreach through CHWs, CHVs, campaigns, and integrated outreach for family planning in urban settings. However, HIHS coverage is still not sufficient to meet need.

Various service delivery approaches have been developed and piloted in Mali, offering different “packages” of integrated services. Some combine maternal and newborn care with child health care, or with post-partum family planning. To the extent feasible and appropriate, integration of HIHS will continue under the strategy.

Sub-Component 2.1: Increased number and improved quality of high impact health service sites at the community level and below

Community level health services start at the CSCOM, which is a community-initiated health facility for the delivery of primary health care. Improving the functioning and technical capacity of CSCOMs will be one approach to expanding access. The other will be strengthening the CHWs and CHVs who extend access to HIHS to homes and communities beyond the five kilometer catchment area of the CSCOM.

Sub-Component 2.2: Expanded mobile outreach and campaigns to reach those beyond 5 kilometers from high impact health service sites

In addition to fixed service sites, the GOM has used mobile approaches and campaigns to extend services to those living more than five kilometers from health care facilities or providers (about 40% of the population in 2011). For example, the GOM National Nutrition Week campaigns, supported by USAID, are one example of an approach which has been successful in reaching more than 90% of children under five and pregnant women. Such campaigns are cost-effective in delivering a range of high impact services to many people in a short period of time.

Sub-Component 2.3: Increased social marketing outlets for information, products, and services

An assessment of a ten year USAID-supported social marketing program (2000-2010) found a positive value for investments in the provision of services and products through social marketing. When converted to Couple Years of Protection (CYP), sales of contraceptives exceeded expectations by 10%. The strategy intends to further expand social marketing to urban and peri-urban areas and beyond as sales outlets and funding permit. Additionally, USAID will focus strongly on developing a local, independent social marketing organization.

Sub-Component 2.4: Increased number of private sector providers deliver high quality, high impact health services

Many Malians avail themselves of private, for-profit, health services rather than, or in addition to, those available at the community level through the public system (CSCOMs, etc.). This includes commercial for-profit clinics and hospitals as well as those run by NGOs

and faith-based groups; traditional healers; and birth attendants. Private pharmacies are a significant source of commodities as well. The 250 registered private practices and 70 hospitals perform over 1.4 million consultations per year, handling about 10% of first consultations and 23% of second. The quality of private sector services varies.²¹ USAID has not engaged significantly with the private (non-social marketing) sector to date, but analysis identified this as a programmatic gap and missed opportunity under the previous USAID health portfolio.

Sub-Component 2.5: Strengthened referrals and follow up

Prompt and appropriate referrals of complicated cases are essential to reducing morbidity and mortality. Research shows that many maternal, child, and infant deaths could be avoided if patients with life-threatening conditions were immediately referred to appropriate care. There are many challenges to establishing a functioning referral system, including availability of referral facilities, correct diagnosis, delayed care-seeking, perception of need and urgency on the patient's part, unavailability of transportation and/or funding for transportation, and data collection, monitoring and supervision. The strategy will work to address these challenges.

Sub-Component 2.6: Special initiatives, including mass distribution for neglected tropical diseases, targeted activities to address selected infectious diseases, and resilience activities.

Some activities will focus geographically and technically on specific areas based on the epidemiology of key diseases and vectors causing morbidity and mortality in Mali. For example, all Malians are at risk for contracting selected Neglected Tropical Diseases, including lymphatic filariasis, onchocerciasis, schistosomiasis, soil transmitted helminthes, and trachoma. These NTDs significantly contribute to malnutrition and cause morbidity. USAID, with other partners, has been conducting annual mass treatment campaigns, which provide drugs to treat NTDs to all nearly the entire population of Mali, for four years. The strategy will continue national mass treatment campaigns with the goal of controlling and ultimately eliminating these diseases. In HIV/AIDS, the strategy will focus on the urban areas where groups at high risk for contracting HIV tend to concentrate. Indoor Residual Spraying (IRS) activities to kill the mosquitoes that carry malaria will focus on the geographic areas with the highest prevalence of malaria, and which can benefit the most from the removal of this vector.

Health resilience activities will target the vulnerable populations of children under five and pregnant women, especially those who are acutely or chronically malnourished. Nutrition interventions will further specifically target children from conception to two years of age ("the first 1000 days"), when good nutrition is essential for survival as well as life-long physical and cognitive development.

Resilience activities will include:

- Integrated nutrition and WASH activities which will improve the nutritional status of women and children, with special emphasis on building resilience through the prevention and treatment of undernutrition while targeting the first 1000 days of a child's life through: a) increased access to and consumption of diverse and quality foods (which complements AEG efforts to increase agricultural production), b)

²¹Private Health Sector Assessment in Mali. World Bank, 2011.
<https://openknowledge.worldbank.org/handle/10986/5944?show=full>

improved nutrition and hygiene related behaviors, and c) increased use of high impact integrated nutrition and WASH promotion and treatment services.

- The resilience zones will benefit from all strategy activities with national coverage, including: the provision of health commodities (malaria bednets, medicine, test kits, family planning supplies, ORS with zinc for the treatment of diarrhea, vitamin A supplementation, etc.), treatment for neglected tropical diseases, immunizations, mass media messages, and activities for the strengthening of the national human resource, commodity logistics, and HMIS systems.

These activities will improve the overall health status of the population of the resilience zones. This, in itself, will increase their resistance to cyclic shocks, especially food crises. A healthy, well-nourished population is better able to withstand sudden illness, and is less likely to become severely malnourished when food is scarce. Additionally, healthy populations are more able to work, contributing to household productivity and economic growth.

Component 3 Health Systems Strengthening and Management

Sub-purpose 3: Improved health systems management and functioning to the community level.

Key health systems must function well at all levels of the health care pyramid to effectively ensure the delivery of quality health services. For example, family planning services cannot be offered at the community level if the national contraceptive commodity logistics system does not function smoothly. Family planning commodities must be accurately quantified, ordered in a timely manner, and distributed from the national to the community level to ensure a steady supply of products at service delivery points. Other key health systems include the HMIS, governance and accountability, human resources, and health financing. The strategy will focus on strengthening decentralized health systems and health management at the community, district and regional levels. Additionally, the strategy will support the strengthening of key national systems required for the effective delivery of decentralized health services.

Sub-Component 3.1: Increased health commodity and essential drug security

Challenges exist with the national commodity management system. As a result, stock-outs of life-saving commodities are frequent at all health service delivery points.

This sub-component will address challenges in the pharmaceutical and commodity management system from the national to the community level. Support will be provided to train personnel and reinforce commodity transportation, storage, quantification, and forecasting. Additionally, the project will address gaps in logistics management information for decision-making. This will build on USAID/Mali's previous work with the commodity management system, including a comprehensive assessment of the system conducted jointly with the MOH and initial activities to address weaknesses identified during this assessment.

Sub-Component 3.2: Strengthened health management information systems for evidence-based decision making

Health management information systems in Mali are encumbered by multiple monitoring and reporting procedures, including different registers and processes for capturing and reporting service delivery statistics. Monthly reports are not systematically processed and forwarded up the system, nor are data systematically used at community, district or regional facilities for

internal analysis and decision making. Reporting of services provided by CHVs and private sector providers is not routinely done.

This sub-component will strengthen HMIS by streamlining and harmonizing reporting systems and improving the quality of data collection and use. It will support improved processes for capturing, analyzing and reporting data, as well as use of data to the community level for better decision-making for planning and budgeting, human resource management, and provision of quality goods and services. It will also strengthen data reporting and use in the private sector.

Sub-Component 3.3: Strengthened health governance including improved management, leadership, accountability, and policy development and implementation, for improved delivery of essential services to the community level

A transparent and accountable governance structure is a critical determinant of a strong health system, and is a necessary component to support strong country ownership and sustainability. This sub-component will support improved governance, particularly at the local level. For Mali's highly decentralized health system to function well and achieve desired health outcomes, local health management and accountability systems need to be reinforced. This sub-component will support and strengthen the management, accountability, and transparency of CSCOMs/ASACOs, and district and regional health centers.

This sub-component also addresses the need to strengthen national and local level policy development and implementation. It will support the development and implementation of relevant policies and the appropriate use of policy tools at the national, district and sub-district levels.

The sub-component will also, in concert with Component 1, strengthen the capacity of civil society, local NGOs, and other actors to: 1) **advocate** for increased budget transparency at the local level, increased allocations for health, and increased use of high impact health services and healthy behaviors; and 2) **demand accountability and transparency** in health service provision, promotion, and financing from ASACOs, CSCOMs, and other health structure managers, and from locally elected leaders (e.g. district mayors).

Sub-Component 3.4: Strengthened human resources for health

Mali's health worker density remains low. A 2011 analysis of health workforces worldwide classed Mali as one of 57 "human resources for health crisis countries" which do not have enough health workers to provide basic health services.²² Nationally, the country has one physician per 8,646 people, one nurse per 1,947, and one midwife per 11,413. Approximately 20,000 CHVs provide services at the community level, with uneven coverage in remote areas. The World Health Organization estimates that 2.3 health workers per 1000 people are needed to provide basic health services. Mali has 0.81 health workers per 1000 people. The national coverage rate of staff in health facilities is only 62%, and that is unevenly distributed, with most qualified health staff concentrated in Bamako and the regional capitals.

In addition to the *number* of health workers, the *quality* of the health workforce is a constraint to achieving national health goals. Strategies such as pre-service and in-service training and

²²Population Growth and the Global Health Workforce Crisis. Pacque-Margolis, Muntifering, et. al. USAID/Capacity Plus. November, 2011.

supportive supervision have been successful in improving the quality of services provided by health workers, and will be supported by the strategy.

Mali has one medical school in Bamako, and about 200 public and private midwifery and nursing schools throughout the country. Health care curricula are not standardized, and there is little regulation of private health care schools through licensing and accreditation.

In close coordination with other development partners and the GOM, this sub-component will focus on strengthening the health care workforce by improving: recruitment and retention for critical personnel, performance management systems, capacity and distribution of the health workforce, including deployment of health staff to rural areas, and pre-service training. It will also support strengthened coordination with private health care providers.

Sub-Component 3.5: Expanded health financing options and improved use of and accountability for funds at all levels

Many Malians face financial barriers to accessing health care, and nearly 50% of expenditures for health care are out-of-pocket.²³ Revenue gaps in CSCOM/ASACO cost recovery mechanisms result in increased costs to patients for pharmaceuticals and health services. It is a significant challenge to improve the allocation of resources in a way that promotes efficiency, equity and quality. The GOM is in the process of developing a national health financing strategy, which will encompass the GOM's plans to move toward universal health coverage. This includes investing in community-based health insurance schemes, which, to date, have been a key source of coverage. However, without significant scale-up, such mechanisms will only cover 5% of the population by 2015. The health sector donor coordination group has formed a health finance sub-group to work with the MOH and coordinate members' efforts in the area of health finance. Activities under this strategy sub-component will be elaborated in collaboration with the GOM and other development partners to maximize donor strengths and resources and ensure that activities contribute to the GOM national health financing strategy.

C. Geographic Coverage

National level

The strategy will provide support to the MOH at the national level in its health policy and health systems strengthening work. Key areas will be health commodity distribution, health management information systems, and selected aspects of human resources for health.

USAID will also assist in the assessment and updating of policies that affect high impact service delivery at the community level.

Additionally, selected activities under the strategy will have nationwide coverage. These include:

- Drug distribution for addressing specific neglected tropical diseases.
- Social marketing of information, products and services.
- Some SBCC campaigns and dissemination of messages through mass media.
- Distribution of malaria, family planning, and other commodities.
- In-service training of health staff through direct support to the MOH.

Targeted regions and districts

²³ Private Health Sector Assessment in Mali. World Bank, 2011.
<https://openknowledge.worldbank.org/handle/10986/5944?show=full>

The strategy's most significant investment will be the extension of integrated HIHS service delivery and SBCC activities at the community level and below, and the strengthening of health systems through improved management and accountability at the district level and below. This investment will initially focus on Bamako (with an emphasis on peri-urban areas) and all of the districts of three regions: Kayes, Koulikoro, and Sikasso. Selected districts of Gao (and/or other areas in the north) will be added as conditions allow. These regions were selected based on population size, epidemiology (of those illnesses targeted by the HIHS), opportunity for impact, existence of a base to build on (i.e., experience in the region with previous projects and other USAID sectors), the presence of other development partners' activities, GOM preferences, and potential for effective and efficient project management. Activities will be expected to cover every district in each region in order to achieve the greatest impact and make efficient use of resources.

Activities in the targeted regions and districts will reach a population of approximately 9,200,000 total, including about 2,000,000 women of reproductive age and 1,600,000 children under five. This represents 65% of the population of Mali. The targeted regions contain 670 CSCOMs, or about 60% of all CSCOMs in Mali. See the table below for more detail.

Region	Total Population	Number of Health Districts	Number of CSREFs	Number of functional CSCOMs (2012)
Kayes	1,933,615	7	7	199
Koulikoro	2,422,108	9	9	182
Bamako	1,810,336	6	6	58
Sikasso	2,643,179	9	9	207
SUB-TOTAL	8,709,238	31	31	646
Gao	542,304	1	1	24
TOTAL	9,251,542	32	32	670

USAID's previous health programming covered 36 districts, but target districts were unevenly distributed throughout the country. One of the major findings of the analysis conducted during the development of this strategy was that USAID's health programming was too diffuse, and this wasted project management resources and reduced impact. By consolidating target districts in the same regions, the strategy will have greater national-level impact by reducing project management burden and promoting better coordination with regional authorities, allowing for intensified implementation of project activities.

Other targeted areas

Given the epidemiology of some health issues in Mali, some high impact interventions will be targeted to selected districts and areas. For example, HIV/AIDS prevention activities will focus on HIV positive individuals and on MARPs and will be conducted in those locations where these populations are most concentrated. Similarly, IRS and SMC are targeted to high malaria transmission districts, where they will have the most benefit. Resilience activities will be targeted to the resilience zones, which were chosen in part because of high malnutrition rates, which make populations more vulnerable to shocks.

During the implementation of the strategy, new opportunities, innovative technologies and approaches may be identified that may have potential for increasing the impact of the project and the achievement of the Development Objective. Selected areas outside the targeted

regions or sub-areas of the targeted regions and districts may be chosen as sites for testing their applicability and effectiveness in the Mali context.

III. ANALYSES

The strategy extended design team relied on extensive analysis of the Mali health sector and USAID's previous health sector programming in the design of this project. These included key informant interviews with implementing partners, beneficiaries, the GOM, and other development partners; field visits; statistical analysis of key indicators in USAID vs. non-USAID assisted geographic areas over the past ten years; the PRODESS Evaluation; analyses done for GHI and BEST; activity annual reports; knowledge and experience of the extended design team as expressed through a design workshop; Demographic Health Surveys from 2013, 2006, and previous years; and other surveys in nutrition, HIV/AIDS, maternal health, etc. Additionally, the design team relied on international research and best practices in the health sector.

While these analyses have informed the entire strategy design, the following significant aspects of this project were based on the analysis and represent new strategies under the strategy:

- A reduced number of partners (from approximately 40 under old portfolio to approximately 20 under the strategy) and better programmatic integration to enhance coordination and efficiencies.
- Consolidated geographic focus and implementation in every district in target regions. This will increase efficiencies (transportation, staff time, etc.) and ensure stronger coordination with regional health authorities.
- Inclusion of private sector providers at the community level. This will address the large proportion of Malians who seek care from the private sector first, as well as the varying quality of services in the private sector.
- A greater emphasis on local-level governance, transparency, and accountability.

ANNEX: HEALTH DEVELOPMENT OBJECTIVE RESULTS FRAMEWORK

Sustained Improvements in Health Through Increased Use of High Impact Services and Healthy Behaviors				
Program indicators:				
Under Five Mortality Rate (U5M)		HIV Sero-prevalence among Most At Risk Groups (MARP)		
Maternal Mortality Ratio (MMR)		Prevalence of underweight children under five years of age		
Infant Mortality		Modern Method Contraceptive Prevalence Rate (MCPR)		
Malaria Prevalence among Children Under Five				
IR 1: Use of Quality Family Planning, Maternal, Neonatal & Child Health Services	IR 2: Coverage and Use of Key Malaria Interventions Increased	IR 3: Coverage of HIV/AIDS & STI Prevention among key, populations and other infectious disease increased	IR 4: Nutritional Status, Water Supply, Hygiene and Sanitation Improved	IR 5: National, Regional, District, & Community Management and Health Systems Improved
Sub-IR 1.1: Improved behavior change communication (BCC) interventions for demand & use of MNCH & FP/RH services	Sub-IR 2.1: Increased coverage of adequate & timely malaria case management with ACTs in government health facilities	Sub-IR 3.1: Increased coverage of package of prevention services for MARP	Sub-IR 4.1: Improved access to diverse & quality foods	Sub-IR 5.1: Strengthened leadership & governance in health
Sub-IR 1.2: Increased access to quality MNCH & FP/RH services	Sub-IR 2.2: Increased use of ITNs among children under five and pregnant women	Sub-IR 3.2: Increased coverage of core package of prevention to “bridgers”	Sub-IR 4.2: Improved nutrition related behaviors	Sub-IR 5.2: Strengthened pharmaceutical & commodity supply systems
Sub-IR 1.3: Scaled-up active management of the third stage of labor & essential newborn care services	Sub-IR 2.3: Reduced malaria vectors through indoor residual spraying (IRS) in targeted areas	Sub-IR 3.3: Increased counseling & testing to target groups	Sub-IR 4.3: Improved use of maternal & child nutrition services	Sub-IR 5.3: Strengthened human resources for health
Sub-IR 1.4: Strengthened integrated community case management (ICMM) & child prevention package (RED)	Sub-IR 2.4: Increased IPTp with sulfadoxine-pyrimethamine (SP) among pregnant women	Sub-IR 3.4: Increased coverage of core package of prevention services for PLHIV	Sub-IR 4.4: Increased knowledge & improved attitudes & practices of caretakers & children around hygiene & sanitation	Sub-IR 5.4: Improved health information systems
Sub-IR 1.5: Increased coverage of the basic package of post-partum family planning (PPFP) services	Sub-IR 2.5: Improved BCC activities for demand & use of the four proven malaria interventions	Sub-IR 3.5: Increased coverage of mass administration for NTDs	Sub-IR 4.5: Improved quality of drinking water at the household level	Sub-IR 5.5: Strengthened health systems financing
			Sub-IR 4.6: Increased access to improved water sources in target communities	Sub-IR 5.6: Health service delivery improved