

M A L I

GLOBAL HEALTH INITIATIVE

STRATEGY

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GHI Strategy for Mali

I. Introduction

This strategy provides an overview of planned USG health programming in Mali and of the Mali-specific priority areas proposed under GHI-Plus. Section II provides an overview of the government's present health priorities, while Annex 1 provides an overview of the health situation in Mali, and Annex 2 provides an overview of the USG health program. It is important to understand that the current national development plan and health sector strategy end in 2011. Necessary strategic revisions of both will begin in January 2011. This will allow the USG under GHI-Plus to play a substantive role in shaping these new strategies and plans.

Section III describes how the USG will manage the GHI and work with the Government of Mali, as well as among and between health team partners and the Ambassador, and Annex 3 provides additional information of interagency collaborative activities.

Section IV provides specific details on the three proposed priority areas of GHI-Plus innovation that address critical points of program and policy development in Mali. These three priority areas of innovation are seen as best use of the resources and leverage offered by GHI-Plus. These priorities will provide both added value and important learning opportunities to Mali's broader health sector programming and add to the global evidence-base for best development practices. A list of illustrative indicators for these priorities is included in Annex 4

Section V illustrates how the USG program aligns with the GHI principles, Section VI provides an overview of the monitoring and evaluation, and Section VII outlines some of the key challenges for the implementation of the strategy. The GHI program matrix (Annex 5) and the GHI results framework (Annex 6) lay out the broad program approaches planned for 2010-2014.

II. Health Priorities of the Government of Mali

The government of Mali's (GOM) Ministry of Health (MOH) defines priorities for Mali through a ten-year plan consisting of two five year segments. The current Health and Social Development Program (PRODESS II) has been extended for two years, through the end of 2011. The plan for the next five years (2012-2016), PRODESS III, will be developed over the course of the next 12-15 months, to be ready for implementation at the start of 2012. The USG programs are well coordinated with the GOM and the GHI objectives are fully aligned with GOM health priorities. An overview of the health profile in Mali is presented in Annex 1. The highest priorities of GOM are:

- MDGs 4 (reduction of child mortality) and 5 (reduction of maternal mortality). Within this framework GOM supports expanded access to family planning, noting that the demand is greater than the supply, and that new approaches are needed to expand

services and reach those in need. The majority of high impact health services implemented by the government are centered around reducing maternal and child morbidities and mortalities and improving the health of mothers and their children.

- MDG 6, with an emphasis on the prevention and treatment of malaria, HIV and other diseases including neglected tropical diseases (NTDs). The GOM recognizes the importance of surveillance as a key approach to strengthening prevention and treatment activities.
- Strengthening of community-level health programs. CSCOMs nationwide require accreditation, quality improvement, facilitative supervision and training of staff at all levels. Systems strengthening is essential, especially for good governance, leadership and management of logistics and finances.
- Expanded health communication. Better communication techniques and education should change social norms and individual, family and community behaviors to improve health indicators. Communication also needs to be modernized. Data collection is a significant part of this objective.
- Youth development, especially reproductive health and hygiene education as well as life-cycle and job skills training.

Given the priorities and challenges within the health sector in Mali, and the opportunities afforded with the development of the next PRODESS, the GHI offers an opportunity for the USG to strengthen its position with the GOM and other development partners within the context of the Paris Declaration and the achievement of the MDGs. Within the context of health system strengthening, working in partnership with the government on the PRODESS also strengthens ministerial leadership and strategic planning capacity. Both the health sector working group (made up of all the health donors, health partners and the GOM) as well as the MOH have recognized the need for serious reform within the health sector particularly with emphasis on outcomes and long term impacts. Given the integrated approach of the GHI and its focus on impact, the MOH has asked the USG to serve as a leader in this reform and to help apply the principles of GHI to the sector as a whole. This, for example, will help to leverage partnerships with other donors to promote objectives such as a unified approach to system strengthening, prioritized support to service delivery and human resource capacity development. The USG will also work with the GOM to promote and implement a learning agenda to help drive decision making in its budgeting and strategy design.

Finally it is important to note that USAID's current High Impact Health Services strategy and projects, as well as the PMI program's five year strategy continue through 2013. However, the design of new awards begins 12-15 months earlier, and coincides nicely with the finalization of the new PRODESS. This will further enable GHI to align its programs with the GOM strategic plans. See Annex 2 for a description of current USG programs.

III. Doing Business Under the GHI Through Strengthened Inter-Agency Collaboration

While USAID implements the majority of health activities in country, these programs, when implemented in combination with the important work of all USG agencies, will yield better

results and more sustainable impacts over the coming years. The inter-agency integration respects the leadership areas of each agency and moves toward more efficient and effective use of each agency's inherent capabilities and expertise to support the overall priorities of the GHI. Below are a few examples of how interagency integration will be strengthened under the GHI. Joint planning for all of this work is already underway.

Under the GHI, the purposeful and yet informal ways of meeting will be systematized and formalized. Under the dynamic engagement and leadership of the Ambassador, quarterly meetings will be conducted with all USG health team partners to provide strategic direction, strengthen high level political support and commitment with GOM officials, and review progress and accomplishments. All USG partners will keep the Ambassador, the DCM, and the Political Affairs Officer informed of interesting and high visibility events, planning together for in-country communications and press releases, as well as correspondences to the GHI deputies, principals, and through diplomatic channels.

Under the leadership of the GHI Planning Lead, USG partners will meet monthly during the first year to develop operational plans, coordinate inputs, identify gaps and determine TA needs, ensure sound monitoring, evaluation, surveillance and research designs, and review implementation, progress and accomplishments in a timely manner. In addition, the GHI will hold semi-annual meetings with USG, GOM/MOH and implementing partners at two critical times of the year for work planning and annual reviews. The frequency of meetings will be reviewed in subsequent years of the GHI, and sound practices for inter-agency communication, collaboration, planning, review and evaluation documented and shared within the GHI community. The GHI/Mali team would also welcome similar information from other GHI countries, especially those that have already worked through this process and have successful approaches and lessons to share.

The different areas of expertise among and between USG agencies presents an opportunity for synergistic cross-agency learning. As each agency documents, monitors and evaluates its own activities, systems can be strengthened by sharing and/or harmonizing approaches and data when feasible. Staff training in technical health interventions is another area for cross-fertilization. For example, USAID's implementing partners have worked with the government to develop standardized, evidence-based training packages and job aides for community-based and facility-based services in all of the high-impact health services. Not only can the materials be shared among agencies, but trainers or key staff in other agencies can be trained to use these tools, thus enabling cascade training, for example by Peace Corps for training volunteers or by DOD for training Malian military.

IV. GHI Priority Areas

The designation of Mali as a GHI-Plus country provides an opportunity to take an in-depth look at the available data in order to become more effective in supporting the GOM in its efforts to attain MDG 4, 5 and 6. Under the GHI, the USG is proposing three priority areas for focusing GHI-Plus resources and leverage in ways that will add impact and/or critical program-based learning to Mali's PHN programs:

- Strengthen strategic planning for the development of the PRODESS III and the 10 Year Plan, and provide leadership within the Technical and Financial Partnership (PTF) of donors and government
- Innovate, scale up and document the effects of postpartum family planning
- Deliver integrated packages of essential services at the community level to address MDGs 4 and 5 (and 6 for Malaria). Within this priority, three innovative “models” for “smart integration” of essential health care services are proposed, based on planned and ongoing work, which can be adapted, expanded or accelerated. All models will benefit from a “learning agenda” of enhanced monitoring and evaluation and/or operations research.

Below is a draft description of the concept for each of these priorities to generate further discussion.

1. Support health systems strengthening through development and implementation of the PRODESS, the 10-year plan and the PTF

Importance - The strength of the country-led health plan will be a critical determinant of success of the GHI, in Mali and in many countries. The Health sector in Mali is governed by the Ministry of Health’s five-year health strategy called the PRODESS, which is half of an overarching ten-year health plan. All health activities, regardless of the implementer, need to align within the frame work of the PRODESS and address GOM priorities. The PRODESS II is in its fourth year of implementation and was updated and extended for two additional years through 2011. Key representatives from the Government of Mali, the Ministry of Health and other key ministries along with technical counterparts, donors and implementers have continued to raise considerable concern over the quality of the PRODESS II, its lack of vision and disconnect between priorities, needs and capacity. This has led to 10 years of minimal results at best within the health sector. The Ministry of Health recognizes the critical juncture in the health sector has arrived, and understands that a stronger strategy for key reform of the health sector is now needed to prevent the sector remaining from stagnant over the next 5 years. In order to support the MOH, the USG GHI team will use the opportunity of the PRODESS redevelopment to build the capacity of and provide technical assistance to the GOM to evaluate the current PRODESS, develop the next PRODESS and implement the strategy.

Proposed GHI-Plus action - Over the next year, the MOH will embark upon a process of evaluating the PRODESS II in order to develop an entirely new PRODESS. Within the context of strengthening the Malian health systems and building sustainable government leadership for strategic planning and implementation, the USG will provide technical assistance to the MOH in support of this activity and strengthen their capacity to undertake an evaluation of the current PRODESS, identify gaps and unmet needs in the health sector, establish priorities, and design the next PRODESS, building a strong strategy around data driven needs and program learning. Supporting the GOM in this process will also serve as a capacity building exercise, with the end result being a well-articulated strategy which addresses both the technical and financial needs of the health sector as well as clear strategic priorities, implementation plans and details links with

all partners. The new strategy will better reflect the needs of the country and will also position the health sector to achieve greater impact.

In addition, an innovation for GHI will be for the USG to provide leadership and support for strengthening the health donor coordination group which is currently functioning poorly. One such example is USAID being elected to the vice-chair of the CCM for the Global Fund in Mali. To strengthen the PTF, the USG will work with a subset of donors to reform the donor group to align with Paris Declaration guidance as well as create basic standards and norms for the group. As a part of this larger process USG agencies will advocate and support the development and/or revitalization of sub-committee technical working groups in highly integrated, collaborative areas such as maternal health and family planning, child survival and nutrition, health systems strengthening, transformative policies such as task-shifting and health financing, and monitoring and evaluation, each with a clear mandate and expectation. This participatory and collaborative process will facilitate overall donor assistance in the development of the national health strategy as well as strengthen and improve the ongoing collaboration between the donors and the GOM. This reform process will strengthen MOH's governance, leadership and involvement with the PTF which will enhance coordinated and sustainable support to health programs. It will also facilitate innovation and cross-sectoral approaches, all with a goal of achieving greater alignment with Mali's overall objectives to achieve the MDG's.

Potential USG support for the development and implementation of the PRODESS III and 10-Year plan includes:

- coordinating with other technical and financial partners (PTF) to harmonize inputs and support to the MOH in the development and implementation of the 10-year plan
- strengthening the overall capacity of the Health Donor coordination group,
- participating in every planning meeting conducted by the MOH,
- participating in working groups on individual sections of the plan
- accessing international expertise in key intervention areas to support the MOH
- developing results-oriented projects and annual work plans to build synergies, accelerate results, and innovate to strengthen services and support systems

The Learning Agenda – Supporting the development of a national five year strategic plan presents several opportunities for documenting the process, participation, and results along the way to producing the final version of the PRODESS III. The GHI will draw on the technical expertise in Washington for assistance in developing health system strengthening indicators for governance and leadership. The GHI will focus its learning on qualitative processes to better understand the evolution in leadership skills within the MOH and the PTF throughout the development of the PRODESS, document negotiations and key decisions influencing the content of the document and identify key processes that contribute to or hinder the development of the document.

GHI Partners – All of the USG partners are invited by the MOH to participate in the elaboration of the PRODESS III, principally through participation in thematic working groups. Through the GHI, the USG will work closely with the MOH to evaluate the existing PRODESS, and support the leadership role of the MOH in the development of the new PRODESS III.

USAID's National Technical Assistance-Plus (ATN-Plus) project will be the principal implementing partner to document the process in support of the learning agenda

2. Focus on Women, Girls, and Gender Equity through Expanded Access to Postpartum Family Planning:

Importance – As a highly traditional society with strong roots in conservative Islam, Mali has been very slow to make progress in reducing its rate of unintended pregnancy with limited entry points for family planning . With a population growth rate of 3.6% (resulting in a population doubling to almost 30 million by 2030), a lifetime average of 6.6 children per woman, an unmet need for family planning five times greater than the met need, and 63% of births spaced less than 36 months apart, finding an acceptable and scalable approach to family planning is critical for Mali and similar countries.

Proposed GHI-Plus action – Data and early program experience in Mali suggest that one acceptable and desired approach to family planning may be post-partum family planning (PPFP), which is consistent with Islamic beliefs about the health of mothers and infants and the appropriateness of spacing children, and provides an excellent “gateway” for family planning. USG research has found that 80% of postpartum women say that they do not want another pregnancy for at least two years. Thus, helping women select and begin using an effective method of family planning during the first year after giving birth, and to continue to effectively use a method of family planning for at least two years is one of the highest priorities in Mali. PPFP and longer birth spacing intervals reduce the risk of adverse pregnancy, birth and perinatal outcomes, and also contribute to improved under-five nutritional status and mortality reduction.

An innovation under the GHI will be to introduce, test and scale up a package of postpartum family planning services spanning a continuum of care from the hospital to the household. Currently women receive family planning when they seek it out, whether at clinics, pharmacies, or in their communities. PPFP proactively educates women and offers family planning together with other maternal and child health services.

A basic package of PPFP interventions includes:

- messages for healthy timing and spacing of pregnancy (HTSP),
- promotion and support of exclusive breastfeeding (EBF) for six months,
- educating women about their return to fertility after birth and discussing their fertility intentions
- educating women about the lactational amenorrhea method (LAM) and transitioning to another method of family planning by six months;
- assisting women to obtain and correctly use their choice of contraceptive method, including long-acting methods

A hospital to household continuum of approaches for the delivery of PPFP, based on the country context, might include:

- facility-based pre-discharge counseling on PPFP, and immediate(birth-48 hours) postpartum voluntary IUD insertion or tubal ligation, before the woman returns home

- integrating PPFp group education, individual counseling, and FP services, including long-acting methods, with immunization and other well-child services
- Integrating PPFp and maternal, infant and young child feeding and nutrition (MIYCF/N) messages and linking service delivery platforms for growth monitoring, nutrition rehabilitation, and FP services (an opportunity for smart integration with FtF).
- community-based / household distribution and re-supply of pills and injectables
- community-based EBF/LAM mothers' support groups
- community engagement of grandmothers, aunts, husbands and other family members to support EBF/LAM, PPFp and HTSP

As with all family planning services in Mali, the provision of PPFp is likely to encounter a certain number of challenges. Currently only half of births take place at a medical facility, and most of those are at CSCOMS, assisted by a matrone, who is not legally allowed to insert IUDs. Many CSCOMs experience shortages of contraceptives and supplies as well as shortages of qualified health workers trained to provide long-acting methods. Engaging husbands in the discussion about PPFp has not yet been done, although religious leaders promote healthy birth spacing intervals and are accepting of the use of modern family planning.

In high fertility and high maternal mortality country such as Mali, PPFp is anticipated to be one of the most significant contributions to the attainment of several GHI targets including reduction of maternal and under five mortality rates, reduction in unintended pregnancies, and increased modern contraceptive prevalence. Mali is also a partnership country for the OIC-USAID collaboration for engagement of Islamic countries in maternal and newborn health. The OIC can share the experiences of religious leaders in other countries who have addressed high fertility, and provide additional support to religious leaders in Mali, especially at the community level, to develop appropriate messages to encourage family planning use. Documented success in PPFp approaches in Mali will be shared widely, especially with other Islamic countries in West Africa where fertility rates and maternal mortality are also high.

The Learning Agenda – Some of the key learning agenda questions will center on the best approaches for smart integration of PPFp into maternity center settings, child health and immunization services, and community-based approaches for supporting exclusive breastfeeding, social and normative perceptions around birth spacing and family planning, and effective continuation of contraceptive use. GHI will fully document the approaches used at facility and community levels and monitor a number of indicators with a focus on the timing, initiation and duration of use of various FP methods, as well as outcome measures related to closely-spaced pregnancies, especially within the first year after a birth. The results will contribute to updated national protocols, norms and procedures (PNP), pre-service and in-service training curricula, and strengthening the health system service delivery and quality of care for integrated FP and MNCH services.

GHI Partners – USAID's MCHIP project is the principal implementing partner to develop and test the PPFp approaches at government facilities and in the community. Other implementing partners, such as those funded by MOH, USG (especially USAID and Peace Corps Volunteers), UNFPA, donors and NGOs will collaborate in sharing the program approaches and evaluations, having their staff trained, and through the national working group to update national protocols,

norms and procedures (PNPs), training curricula (both pre-service and in-service), job aides, and supervision guides.

3. Integrate and Coordinate Community-level Approaches to Address MDGs 4, 5, and 6

Importance - Currently, health delivery in Mali depends on a decentralized network of almost 900 primary health care clinics (Centres de Santé Communautaire, CSCOMs). The community owned and operated CSCOMs are managed by community health management teams (ASACO). The MOH provides the CSCOM with an initial supply of essential materials, equipment, and medications, and provides in-service training and supervision of the technical staff. The ASACO recruits staff and manages income generated by the clinic to pay staff salaries, renew the stocks of medications and supplies, and maintain the facility. The ASACO also oversees the day-to-day management of the CSCOM and its links with the community. Community-based health volunteers, or *relais*, are also recruited and managed by the ASACO, although they receive technical updates and supervision from the head of the CSCOM. Ideally, the ASACO and the CSCOM staff work hand-in-glove to achieve program results.

Given the key role of the CSCOMs, USG programs have been supporting this system through training, supervision, commodities procurement, and community health volunteers. Many of the services and products are delivered together as integrated packages. For example, pregnant women receive malaria prophylaxis, iron with foliate, tetanus toxoid immunization, and bed nets during antenatal care (ANC) visits; during postnatal visits children are immunized, diarrhea and malaria treated, bed nets distributed, and women offered family planning; and during household visits, *relais* promote hand washing with soap, household hygiene, diarrhea treatment with ORS, and use of ANC, birthing and family planning services. Communication campaigns are also implemented to promote family planning, nutrition weeks, immunization and Vitamin A distribution. The reality of persistently poor progress toward improving health outcomes and reducing unintended pregnancy in Mali indicates, however, that quality of care and utilization of services are limited, and health systems supporting these community services are not functioning optimally.

It is clear that providing women, children and communities with essential health services will benefit from the introduction of new and innovative approaches that complement and support the existing system, and result in increased quality, coverage and health outcomes. In order to link the essential health services and provide an integrated package of care, GHI will support the GoM in enhancing and connecting community-level health services in three major areas. Each of these innovative areas will be aimed at strengthening the quality, performance and utilization of the CSCOMs, and will support the MOH's priority of offering quality integrated services and expanded coverage of essential packages of services at community level.

Proposed GHI-Plus action – The three innovative approaches to increase the utilization and coverage of evidence-based, high-impact maternal and child health services at the community level are: a) a collaborative approach for improving the quality of services starting at scale, b) extending the reach of the CSCOM into communities greater than five kilometers away through the placement of a new cadre of community health worker (ASC), and c) a private-public partnership to overcome staff shortages to offer skilled services on busy immunization days..

Each model will be closely monitored and evaluated to determine the contribution each makes to coverage and use of high impact services, and to identify which specific components of the model can be taken to scale though out the country. Each of the approaches, along with its innovations, expected contribution to impact, and challenges is described briefly below.

3.1 Improvement Collaboratives with the CSCOM and ASACO:

Improvement collaboratives are a process for bringing together several CSCOM or several ASACO within a health district to work on a common problem. Together they define what service they want to improve, identify and monitor a set of indicators, and report out during quarterly meetings. Each CSCOM has the opportunity to see how they are performing compared with their counterparts, and most importantly, to share experiences of “what worked” and to solve problems together with their peers. Through this process, both the quality of care and key health systems are strengthened as CSCOMs define and monitor standards of performance, collect and analyze data, and use the findings to improve both individual CSCOM performance and the performance of the entire district collectively. This approach has been used successfully in two districts of the Kayes region to increase the number of facility-based births and the quality of care for the provision of AMTSL to reduce postpartum hemorrhage. Through the process, the HMIS, logistics, and community outreach systems are also strengthened. MOH colleagues report very positive results not only in the quality and use of services, but also in staff motivation.

An innovation to this approach will introduce and evaluate improvement collaboratives focused on two key program areas, integrated services and management system strengthening. One collaborative will engage CSCOM staff in implementing a package of integrated services for postpartum women and their infants during the first year following birth. The package will include smart integration of community-based essential newborn care and promotion of postnatal visits and immunizations, as well as family planning, birth spacing, breastfeeding, weaning and complementary feeding, Vitamin A, and prevention and control of diarrhea and dehydration. The second collaborative will engage ASACO staff in system strengthening for management and governance of the CSCOM (i.e., governance and leadership, financial management and transparency, ensuring supply of essential medicines, contraceptives and bed nets). Because the improvement collaborative approach is based on the use of data to improve the quality and use of services, the HMIS will also be strengthened by the CSCOM and the ASACO collecting, analyzing and using their own data. This innovation, because it involves multiple CSCOM and ASACO, starts at scale, thus accelerating the rapid achievement of results, and moving an entire district’s results in a positive direction. After the initial phase of the collaboratives in a small segment of districts, which takes approximately one year, the results can be quickly and efficiently expanded to other districts in the region, with technical assistance from, and introducing the best practices identified by the CSCOMs and ASACO in the first phase.

Learning Agenda –

This innovative approach to improving the quality of services and the management of the CSCOMs offers many learning opportunities, both qualitative and quantitative. Some of these include client satisfaction, provider motivation, management functioning, system strengthening, and increased provision and use of essential services in the integrated package.

Because collaboratives are based on the collection, documentation, synthesis, analysis and use of data, the process itself generates data which will also serve as an important part of the measurement of the success of this approach.

For the postpartum family planning services, the CSCOM collaborative may choose to will monitor indicators related to mothers' use of exclusive breastfeeding and LAM, use of another modern contraceptive by six to twelve months, and closely spaced next pregnancies. It may also monitor key child health indicators such as immunization, nutritional status, and Vitamin A coverage, as well as rates of diarrhea and ORS use. The ASACO collaborative could choose among a number of indicators related to strengthening key health systems functions such as governance, finance, logistics, and information. The GHI Mali team will draw upon the work and expertise of the GHI headquarters teams that are developing indicators for health systems strengthening to adapt indicators as appropriate.

Baseline and end line evaluations will also be conducted for the collaborative. The baseline provides the basis for the initiation of work by the collaborative, and the end line assesses factors beyond the quality, utilization, coverage and system indicators that are part of the collaborative process itself. It also provides the extra measure of qualitative results and value-added of the process, such as shared learning and problem-solving, worker motivation, 'ownership' of quality and results, and client satisfaction.

As the model is scaled up to more districts within region, the learning agenda will document the process of peer technical assistance, transfer of best practices and lessons learned, and the application of the process and its results in new geographic areas.

GHI Partnering – The collaborative model will be led by the Health Care Improvement project and work in partnership with the MOH at regional, district and community levels, as well as with implementing partners and other donors. The model offers several opportunities for partnering with decentralized levels of the MOH, as well as with other USG partners such as the MCHIP, Keneya Ciwara II, and the National Technical Assistance Plus projects. It is also possible to incorporate other organizations and programs including: Feed the Future's nutrition component for introducing nutritious weaning and complementary feeding foods, UNICEF, GAVI and others supporting immunization and Vitamin A coverage, the NTD program for integrating deworming with Vitamin A distribution, and UNFPA and local NGO and civil society partners supporting postpartum mothers, infant care, and family planning. Among the USG, Peace Corps volunteers in the villages are excellent partners to support both the CSCOM and the ASACO collaboratives.

3.2 Community Health Workers (ASC): The MOH has elaborated a new strategy for recruiting, training, and deploying a new cadre of salaried community health worker (*agent de santé communautaire*, ASC). Having the basic qualifications of a matrone or assistant nurse, these workers will be recruited from and based in their own communities. As CSCOM staff, the ASC will serve as an extension of the CSCOM and be located more than five kilometers from the CSCOM. They will offer an essential package of simple preventative and curative services at the household. These include treatment of uncomplicated malaria and ARI, referral and accompaniment of severe cases of malaria and ARI, treatment of diarrhea,

diagnosis and management of malnutrition, and provision of family planning, including encouraging newly delivered mothers to exclusively breastfeed and practice LAM, and the household provision of pills, condoms, cycle beads and injectable Depo-Provera.

Through the PMI, a “proof of concept” of this new cadre of health worker is currently underway. It is focused on household treatment of uncomplicated malaria with ACTs, known as community case management (CCM). Through the GHI, the ASC will deliver the full package of services as stated above, or integrated CCM (iCCM) plus family planning. The CSCOM staff will conduct facilitative supervision to ensure correct diagnosis and treatment, data collection and reporting, and re-supply of essential medicines and contraceptives. A key innovation in this model will be centered around financing the salaries of the ASC, documenting the cost recovery from their services and referrals, and testing alternatives such as contracting with the ASACO with a progressive reduction in support based on cost recovery, or performance contracting with the CSCOM based on increased coverage, utilization and results. The GHI will work closely with ASACO, health districts, and MOH on the financial support and appropriate policies required to support the approach.

Learning Agenda - As this is the first roll-out of this new cadre of worker, the learning agenda will document a number of key operational aspects of the model including recruitment and employment or contracting of ASC; training the CSCOM staff as trainers and technical supervisors of the ASC; monitoring how supervisors oversee the quality of care, referral and reporting by the ASC; ensuring that ASC have the necessary materials and a continual resupply of essential commodities; monitoring cost recovery and use of funds to support salary and procurement of commodities; and overseeing the functioning and relationships between the ASACO, CSCOM and District. Key indicators relating to numbers of episodes of illness, treatments given, quality of care, visits to health centers, cost recovery, payment of salaries, data quality and timeliness of reporting, and use of findings at the community level.

The GHI agencies on the ground will identify opportunities to collaborate on measuring impact-level indicators on disease burden, such as through malaria surveillance, provided additional resources can be identified. Additionally, given that this new level of health care worker is salaried, operations research around models for financial sustainability and cost-benefit analyses will be useful to both the GOM and the global literature, and additional resources will need to be identified to pay for such research. These are important elements to understanding the impact and sustainability of such a level of health care worker.

GHI Partnering – When the model was first conceived of with the MOH and PMI, it focused on home-based management of fever. Through expanded discussions with the MOH’s other programs and working groups, additional child health, nutrition and family planning services were added. The integrated package contains integrated community case management and essential community care (iCCM/SEC). Save the Children, with funding from PMI, has initiated the model in five districts of Sikasso region. The Keneya Ciwara II project will likely implement the integrated model in five districts of Koulikoro region, and MCHIP in two districts of the Kayes region. Peace Corps volunteers can help support the ASC and facilitate links for community referrals. Additional opportunities for partnering

include exploring with the MOH the integration of NTD control activities in the package of services dispensed by the ASC. Another innovation that might be tested with the ASC, in concert with a Spanish-funded project that is planning to introduce Implanon with the MOH, is voluntary insertion of this long-acting contraceptive implant by ASC in the community setting.

Urban Outreach: Mali has a growing urban population, with nearly 7 million people living in Bamako and the surrounding district. Other regional capitals are also experiencing rapid rates of urbanization with sprawling peri-urban areas. This demographic change is having a strain on the ability of health facilities to provide quantity and quality health services. Many peri-urban areas are growing faster than health facilities can be built and become fully operational.

The urban outreach model is a public-private partnership approach between an NGO and urban CSCOMs. Through this model, NGO midwives will conduct “outreach” visits to a CSCOM on immunization day, when many postpartum women are at the clinic. Together with the CSCOM staff, they will provide group education talks on healthy birth spacing and family planning, breastfeeding and newborn/infant care, healthy hygiene, food preparation and child feeding practices for the household, and other child health topics. The NGO midwives will also be an extra set of hands to provide long-acting contraceptives (IUD, Implant) to women who choose one of those methods. At the same time, the NGO can provide on-the-job training and updates to the CSCOM staff. Key challenges of this approach are related to the cost of long-acting family planning methods to clients, sustainability of subsidized payments by the NGO, transitioning procurement of commodities and supplies to the CSCOM, and the cost recovery financial management by the ASACO.

Learning Agenda – This model offers the opportunity to study several key operational issues related to service delivery integration and its impact on each of the services. This approach will also include strengthening key aspects of health systems at the health center, and involve working with both ASACO and CSCOM staff together, on issues of cost recovery, ensuring continuity of commodities, offering routine provision of quality FP services outside of the NGO visits, and improved data reporting.

Additional innovations to the urban approach might include the NGO working with private clinics to integrate FP and long-acting methods with their ongoing services, and/or to introduce HIV counseling and testing, diagnostic testing for malaria, and strengthening laboratory skills. Because the “proof-of concept” for the integrated family planning - immunization approach has already been demonstrated but not well documented, the GHI will focus on assessing the current model to use as a baseline and accelerating results through scale-up in urban and peri-urban sites in Bamako, as well as in three other regions, expanding the program to at least 70 urban CSCOMs.

This innovation will monitor key indicators relating to FP method choice, use, and quality of care; use of other integrated services; use of subsidized long-acting FP methods by non-postpartum women; and system strengthening, including logistics, information, and pricing policy. If additional resources can be mobilized, additional evaluation work can be done to a) quantify the acceleration of uptake in family planning methods in the CSCOMs benefiting

from the private partnership compared with a non-intervention reference area, and/or b) use economic models to cost-out the sustainability of this type of public/private partnership or to transition it over to the government.

GHI Partnering – The urban outreach model was first introduced with funding from the Dutch as an opportunity to reach a large number of women at a single time. The Pathways to Health project will scale up the foundational model while at the same time strengthening the content of health education to focus on the information needs of postpartum women and their infants, and strengthening key aspects of health systems related to training, quality of care, supplies, reporting and cost recovery. In collaboration with the MOH and other donor funded organizations that are also conducting outreach visits, key issues can be harmonized through the MOH-led working groups. USG partners will coordinate the integration of HIV counseling and testing, malaria diagnosis, and laboratory strengthening and information system reporting with CSCOMs as well as private and NGO clinics.

V. Implementation of the GHI Principles

The USG health program, and the GHI priority areas, synergistically support the implementation of the full range of GHI principles. Illustrative examples of how the program and the priority areas are working to accomplish these include:

Country Ownership: The PRODESS defines the Government of Mali’s health program and priorities, and all donor programs are aligned with portions of it to support the government’s achievement of key results. The USG’s program of high impact health services is designed to both reduce maternal and child morbidity and mortality and to improve health outcomes by expanding access, quality and use of key services. Under the GHI priority activity for the development of the next PRODESS, the USG partners will be working hand-in-glove with the MOH, supporting them to evaluate the existing PRODESS, and shape the issues and priorities in the new PRODESS. In addition, USG partners support a range of community, religious, NGO and private organizations that provide significant contributions to Malian health. Partners participate with MOH programmers and providers at community, district, regional and national levels, and work to ensure that their needs and participation are assured.

Women and Girl Centered: With MDG 5 as a top priority within USG programs and the GHI, the needs of women and girls are at the heart of programming and services; this is true not only for maternal and reproductive health, but also for malaria and HIV prevention, fistula repair and prevention, nutrition and education programs. The GHI priorities 2 and 3, including all the models in priority 3, are focused on meeting the needs of women and girls. Women’s and youth groups are active in strengthening literacy, skills and economic opportunities for women and girls, as well as defining their health needs and organizing to meet these needs.

Strategic Coordination / Integration: Mali’s health program, once focused on vertical programs, now promotes integrated packages of services, especially at the community and CSCOM levels. With tested and proven approaches to delivering evidence-based interventions, smart integration identifies strategic and synergistic opportunities to offer a maximum number of

preventive services during a single contact. Focused antenatal care offers obstetric assessments as well as prenatal immunizations, iron folate, anti-malarials, bed nets, and in certain locations, HIV testing and counseling. Both active management of third stage of labor and essential newborn care are being integrated as both services are offered at birth and in the hours immediately following birth. Family planning is being offered to postpartum women during immunization sessions as well as through community health workers along with nutrition and other essential preventive services.

Strengthen and Leverage Partner Engagement: Partner engagement takes place at several levels, with the GOM and Ministry counterparts, between the USG partners, among other technical and financial partners (PTF), as well as within the family of USG-funded implementing partners. USAID and UNICEF co-finance support to community-based relais and training of health center staff; likewise, the resources of other donors are leveraged for the procurement of essentials drugs, contraceptives supplies and commodities. The USG is working closely with UNICEF and UNFPA to promote reforms within the PTF, and to be effectively engaged in the review and development of the PRODESS. The transformative nature of the whole of government approach among USG partners anticipates greater harmonization and coverage of essential services in Mali. Another example of USG support is efforts currently underway to support the Country Coordinating Mechanism (CCM) to the Global Fund. To achieve this, the GHI Field Deputy has been voted in as the Vice President of the CCM and is currently leading an effort to reform the CCM and help to build better oversight of Global Fund monies. In the past few months there has been an investigation of potential mis-use of Global Fund monies. While the CCM is still waiting for the results of the investigation, the USG in its role as vice president of the CCM will continue to offer ongoing support and capacity building to the Global Fund supported activities in Mali.

Health System Strengthening: There are several areas where the USG partners are working with the government to strengthen the health system building blocks, most notably the pharmaceutical supply chain for essential drugs and contraceptives; laboratory and blood safety; service delivery access, quality and use through testing and scaling up innovative approaches; human resource capacity development through task-shifting policies, in-service training and pre-service education; health information system, including cell phone data transmission, computerized logistics management and a human resource database. Leadership and governance will also be strengthened from the national level through the PRODESS, the PTF and support to the CCM, down to the community ASACOs through management strengthening and collaboratives.

Health Metrics: Demographic and Health Surveys (DHS), epidemiologic and disease surveillance, detailed monitoring by projects, laboratory diagnostics, and the Ministry of Health's information system are all used to measure health incidence, coverage and use of preventive and therapeutic interventions, and health outcomes. New methodologies, such as LQAS will be introduced through GHI to provide more frequent measures of the outcomes of interventions.

Research and Innovation: The innovative priority activities being implemented through the GHI will all contain a significant research and evaluation agenda. Baseline data will be collected to

launch each innovative approach, followed by rigorous monitoring, documentation and evaluation. Appropriate indicators for health system strengthening, especially leadership and governance will be identified in collaboration with GHI HQ and incorporated as appropriate into the priorities as part of the learning agenda.

VI. Monitoring and Evaluation

Currently, monitoring and evaluation is done independently by each USG agency through their own respective channels within the GOM. Under the GHI, the USG will reform its systems for M&E on a number of levels which will allow agencies to maintain individual reporting requirements, give the program adequate data for decision making as well as create opportunities to monitor and evaluation the various “learning agendas” through operations research.

The USG will form an inter-agency working group on M&E which will consult regularly with the GOM. Presently, USAID has developed an extensive data base to track its programs. The USG interagency group has begun discussions around developing a GHI tracking matrix within this data base so that all agencies can work together to identify joint indicators and results. Peace Corps also collects and analyze Volunteer data via a database reflecting quantitative output and outcomes as well as quantitative information related to successes and challenges in the field. Through GHI data sharing, especially around qualitative results, will be incorporated into the learning agenda for key approaches. Additionally, USAID will lead the other agencies in developing and implementing a plan of action of operations research and GIS while CDC and NIH will take the lead on disease surveillance.

Under the GHI, even though the results framework is presented with “vertical platforms” that correspond to the Operational Plan, with key indicators linked directly to the OP, program implementation at service delivery points is fully integrated in support of the GOM/MOH’s service “packages”. Data that is reported into the OP is obtained through approaches to strengthen the GOM/MOH health information system reporting, thus linking health system strengthening to the monitoring of key health activities and outcomes.

For the GHI Matrix the GOM/MOH does not have corresponding goals for all GHI indicators. However, USG support for the development of the PRODESS III will work with the GOM/MOH to clearly define these goals and targets in the next five year plan.

It is important to note that in order for the USG to have a systematic, rigorous program on monitoring and evaluation, there is an urgent need for TA, additional staff and additional financial resources. While there will be amendments made to current partner agreements to free up some resources for M&E, this will not be enough to create a system which will give both the USG as well as the GOM the information which is required. With limited budget and very limited local capacity, the USG is often required to bring in outside assistance. The cost of doing business in Mali is higher than most countries on the continent. Without additional resources, the USG will have a difficult time implementing an adequate and appropriate M&E program which will in turn risk compromising the GHI learning agenda and GHI principles.

VII. Challenges for GHI in Mali

As noted above staffing, financial resources and TA are needed throughout and program and for all agencies. With the addition of GHI, the GOM is looking to the USG to serve as a leader for reform in the health section. For example they have agreed to the idea of our first GHI priority and have asked for an urgent time frame highlighting when we will be able to bring assistance including consultants to assist with an evaluation of the current PRODESS, to inform the elaboration of the PRODESS III. Additionally, as the GOM would like to use GHI as the model for how the donors, partners and GOM work together and implement programs, the USG has been asked for assistance to create a time frame for advocacy and implementation. Both of these are huge opportunities under the GHI, however, without additional resources, especially staff, our efforts may be limited. As a USG mission with far fewer resources than our GHI-Plus colleagues in Africa, and with far less capacity within the Government and implementing partners, our needs for increased resources is even greater.

The USG team in Mali fully recognizes the importance of the “whole of government” approach and has worked closely to complete this strategy in an integrated and collaborative manner. Each agency has a role to play and the team has highlighted a number of ways the USG programs will support each other.

Recent controversies around the Global Fund in Mali have reminded us all about the gaps and weakness which exist within the GOM and its ministries. While the MOH remains an open and willing partner in reform, this reform will come slow and at times be cumbersome. Results in Mali can be slower than many other countries. Conservative cultural and religious values often slow down the rate of change, especially in areas of reproductive health, maternal health and family planning. Through the reorganization of partner activities previously mentioned, the USG will address these issues but they are indeed contributing factors to sometimes disappointing results.

Despite these challenges, GHI offers an opportunity for doing things differently. In working with the GOM to develop the next PRODESS it also enables the USG partners to take a strategic look at how activities will be programmed, projects developed, and to purposefully seek out opportunities for ever greater collaboration toward strengthening health systems, services and most importantly, health outcomes for women and children in Mali. The USG/Mali partners are dedicated and will work to make the vision a reality.

Annex 1: Health Profile of Mali

Mali is a landlocked country located in West Africa. Most of its 478,839 sq. mile land mass is in the Sahara desert. With a Muslim-majority population of 14.5 million (est. 2009) and a GNI per capita of US\$580, Mali remains near the bottom of the United Nations Human Development Index. Approximately half of the population lives on less than US\$1 a day. Mali's maternal and child health (MCH) indicators, while improving in recent years, still remain among the worst in the world. The Government of Mali's (GOM) health budget is \$145 million. Donors contribute an additional \$96 million with close to \$40 million from USG (rising to \$60 million in FY10).

Demographic Information: 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. Half of Mali's population is under the age of fifteen, and two-thirds below twenty five years of age. The fertility rate is 6.6 births per woman with a modern contraceptive prevalence rate of only 6.9% of reproductive age women. Ninety percent of the population lives in southern third of the country. Over 50% of the population lives in three provinces - Sikasso (18.1%), Koulikoro (16.7%) and Segou (16.1%), with one-quarter of the population living in the capital city and the district surrounding it, and the least populated areas being concentrated in the vast northern provinces of Gao (3.7%), Kidal (0.5%) and Tombouctou (4.7%)¹. These population factors stress the country's development plans in the areas of food security, economic growth, and attainment of the Millennium Development Goals (MDGs).

Socio-Economic Information: Poverty remains pervasive with high levels of underdevelopment. The Human Poverty Index for Mali stands at 54.5 percent, the third-lowest in the world. The Human Development Index ranks Mali 178th of 182 countries². Education levels are quite low in Mali; only 17% of women and 37% of men are literate. While nearly 71% of girls are enrolled in primary school, only 48% complete primary school. Only 39% of girls are enrolled in lower secondary school with a 24% completion rate. Literacy rates are highest in Bamako (55%), while illiteracy remains above 70% throughout the rest of the country. About 10% of Malians have reached secondary school or above (9% of women and 14% of men above age 15). Agriculture is an essential component of the Malian economy, providing nearly 40 percent of the GDP in 2005³. The agricultural sector remains a major source of income and the primary livelihood for an estimated 8.9 million people, nearly 80% of the total population. There have been improvements in access to safe drinking water for much of the population, but progress in sanitation has lagged behind.

Maternal and Child Health: Maternal and under-five child mortality rates are estimated at 464/100,000 live births and 191/1,000 live births, respectively. Postpartum hemorrhage is the largest cause of maternal mortality. While 69% of women receive at least one antenatal visit, only 35% complete the recommended four visits, and only half (49%) of births are delivered

¹ 4^{eme} Recensement General de la Population et de l'Habitat du Mali, Résultats Provisoires. Institut National de la Statistique, Bureau de Recensement. July 2009.

² UNDP 2009. Human Development Report 2009 -Mali.

³ FAO (2010) Profil Nutritionnel de Pays: République du Mali. Systèmes d'Information et de Cartographie sur l'Insécurité Alimentaire et la Vulnérabilité.

with a skilled attendant. Nearly half (46%) of all newborns begin breastfeeding immediately, but only one third (37%) are exclusively breastfed for six months. Malnutrition is a major contributor to maternal and child death and disability, as 38% of children suffer from chronic under-nutrition. Vaccination rates for children (12-23 months) have made a significant improvement between 2001 to 2006: DTC3 increased from 40 to 68 percent; Polio3 from 39 to 62 percent, measles from 49 to 68 percent and complete immunization from 29 to 48 percent. Disparities between the urban and rural areas can be seen for all health categories including vaccinations. In addition, mother's educational levels are closely connected to vaccination rates, as well as other health service indicators, with 70% vaccination rates for mothers with secondary education or higher compared to 46% for mothers with no formal instruction, underscoring the link between education of girls and child health status.

Infectious Disease: Endemic malaria threatens the entire population and is the leading cause of morbidity and mortality. Malaria largely affects pregnant women and children under five, who suffer over two episodes per year on average. Although half of households own insecticide treated bed nets, only one fourth of children (27%) sleep under an insecticide treated net. Among children under five having fever, only 15% of cases were treated within two days, and only four percent (4%) of pregnant women received two doses of intermittent preventive treatment for malaria (IPT/Fansidar) during their last pregnancy.

Mali's HIV prevalence rate is low (est. 1.3%) compared with other sub-Saharan countries, with pockets of higher prevalence among most at-risk populations. The total number of HIV-positive persons is unknown, but an estimated 29,260 currently receive ARVs.

There are a number of endemic tropical diseases in Mali, some in which burden rates remain quite high. These NTDs include lymphatic filariasis, onchocerciasis, schistosomiasis (60%), soil-transmitted helminthiasis (20%) and trachoma (10%). Nearly 12 million people are at risk of one or more of these neglected tropical diseases (NTDs).

Health Infrastructure: Mali's health infrastructure is insufficient to cover the growing population, with only 11 tertiary care centers (Hospitals), 59 secondary care centers (CSREF), and 873 primary health centers (CSCOM). For every 1000 people, Mali has 0.11 physicians (1 per 8,646), 0.08 midwives (1 per 11,413); and 0.51 nurses (1 per 1,947). About 20,000 community-based volunteers provide health education and basic services at the community level. The national coverage rate of staff in health facilities is only 72%, and that is unevenly distributed, especially in poor and remote districts.

Generally, critical health interventions do not reach the population due to lack of local physical, financial and human resources. The basic service delivery point of the health system is the *Centre de Santé Communautaire* (Community Health Center, CSCOM), which are supported by cost recovery. The Ministry of Health (MOH) provides initial funding, training, and budget and start-up supplies for the CSCOMS to deliver the national minimum package of primary health care services. However, these CSCOMS remain underutilized, service quality is variable, and sustainability is tenuous. Health care material maintenance is difficult with inadequate financial support from the community. There is a growing list of selected drugs and commodities provided "free" to the population. As a result, the revenue base is reduced and some CSCOMS

are becoming de-capitalized, while others raise prices higher than clients can afford, thus further adding to the problem of underutilization.

ANNEX 2: USG Health Priorities and Programs

The USG in Mali has enjoyed long-standing, traditionally strong inter-agency working relationships and coordination. Under GHI, the USG agencies focusing on health have launched into an even more in-depth planning and strategic alignment process which will serve to further enhance the USG's ability to impact health in Mali. Over the coming months, the USG will continue to re-align its strategies through a joint planning process drawing upon each agency's comparative strength. This will include an inter-agency team on monitoring and evaluation (including an integrated data base and joint indicators), cross-sharing TA, and strategic re-alignment with implementing partners. Further work will be done with implementing partners to balance the need for vertical information for reporting with stronger programmatic integration and follow-through at the service delivery point, ultimately leading to improved health outcomes and impacts. The USG has gone through a joint integrated planning exercise for MDG 6 which has proven to be both hugely successful in terms of strategic planning and resource allocations as well as strongly supported by the GOM. The USG team will go through a similar exercise in the next few months for MDG 4 and 5, drawing upon available tools and resources within each agency.

Under the GHI, USG programs in Mali cover most areas of the health-related Millennium Development Goals 4, 5 and 6. All USG plans and programs are developed in conjunction with GOM and align with GOM health priorities. Coordination between USG agencies to support the GOM in attaining these goals is strong, and will continue. Within the current programs, USAID and Peace Corps programs address MDGs 4, 5 and 6, while CDC, NIH and DOD principally address MDG 6.

USAID/Mali, which receives approximately 90% of the USG health resources, implements a "High Impact Health Services" (HIHS) program proven to decrease child and maternal morbidity and mortality. The program is focused in 35 of the country's 59 health districts, covering close to 80% of the population. The HIHS program balances capacity building and system strengthening for the GOM at the central, regional and district levels, and provides technical assistance to improve service delivery at the community and health facility level. These services are fully aligned with the Global Health Initiative principles, supporting integration, women- and girls-centered approaches, system strengthening, and sustainability and country ownership. USAID's HIHS program is currently entering the third year of a five-year programming cycle. The program is implemented through a number of projects that focus on building capacity of public, private, NGO and civil society sectors to deliver key services, as well as essential aspects of health systems strengthening.

Some of the key programs aimed at MDGs 4, 5 and 6 supported by the HIHS in Mali include:

- Increased use of antenatal and birthing services including prevention of postpartum hemorrhage and essential newborn care
- Repair and prevention of obstetric fistula
- Family planning education, services and logistics
- Reduction of vitamin A and iron deficiency
- Increased immunization coverage
- Prevention and treatment of malaria

- Prevention and treatment of diarrheal disease
- Prevention of HIV transmission
- Improved water and sanitation programs
- Malnutrition treatment and prevention programs

Key system strengthening activities include:

- Pre-service nursing and midwifery education and in-service training for existing workers
- Integrated logistics management for essential drugs, contraceptives and medical equipment
- Advocacy and leadership among community groups, religious leaders and parliamentarians
- Quality improvement and accreditation of health facilities
- Programmatic, qualitative, evaluative, and operations research on key topics. Most recently, an operations research study on the safety of matrones providing active management of third stage of labor (AMTSL) to prevent postpartum hemorrhage resulted in a national “task-shifting” policy to allow matrones to be trained to provide AMTSL.
- Testing technology applications for strengthening health and logistics information systems, especially through the use of cell phone technologies

USAID health programs are also coordinated and implemented in collaboration with the agriculture and economic growth (AEG), governance and communication (Gov/Com), and education sectors, which also benefit from the President’s Education Initiative and the Feed the Future Initiative (FtF). FtF and GHI will spearhead a strategic review and mapping of nutrition and water and sanitation programming, with two main objectives: 1) identifying the gaps and underserved populations not addressed by other donors or government interventions, and 2) identifying areas for “smart integration” and leveraging of these activities across all USG sectors and platforms. Illustrative examples of such opportunities include reaching postpartum mothers and infants with integrated packages of messages and services for breastfeeding, weaning and complementary feeding, and family planning; using the joint AEG/Education Out-of-School Youth platform to provide health messages around family planning, reproductive health and nutrition for adolescent girls; and looking at how USAID can support and strengthen the nutrition and hygiene training for Peace Corps volunteers. Within one year, as the FtF strategy is finalized, there will be a fully developed plan for strategic coordination and programming between GHI and FtF that will be ready for implementation in 2012.

Another area of ongoing collaboration involves the Gov/Com program. The Gov/Com program works with the community health project to strengthen the community level management bodies (ASACO) responsible for overseeing the community health clinics (CSCOM) and other civil society organizations who participate in the governance and management of health services at the community and district levels.

Mali also benefits from two additional presidential initiatives that support MDG 6 – PEPFAR and PMI. The USG supports programs in HIV/AIDS prevention and control with a strong focus on prevention to most-at-risk-populations (MARPs). While USAID implements the majority of prevention programs to MARPs, the CDC uses PEPFAR funds to also implement a variety of HIV prevention and control activities including VCT, epidemiological surveillance, research, and support for building laboratory capacity. CDC also conducts training for laboratory technicians and managers. The DOD trains counselors and peer-educators for HIV/AIDS

prevention in the Malian military and communities surrounding military bases in Mali. Additionally, the DOD constructs and equips VCT Centers on nine military camps including supplying testing kits.

As a PMI focus country, the USG supports a holistic integrated program for malaria prevention and control. This includes bed net procurement and distribution, diagnosis and treatment of cases of malaria, prevention of malaria in pregnancy, indoor residual spraying, surveillance, research and laboratory strengthening. Malaria prevention activities are synergistically integrated with other health platforms at the service delivery level, especially during antenatal visits and immunization sessions. CDC conducts prevention activities for malaria as well, providing technical assistance for epidemiological surveillance and research. As Mali's program will be moving toward universal coverage of bed nets, these platforms will also serve as points for expanded distribution. To expand access to testing and treatment of malaria, the USG will support the MOH, CSCOMs and ASACOs to train, equip and deploy community-based health agents to offer an integrated community case management (iCCM) package of preventive and therapeutic care services in communities greater than five kilometers from a CSCOM.

The USG supports a large and growing research agenda in Mali through CDC and NIH/NIAID, working in close association with the Faculty of Medicine, Pharmacy, and Odonto-Stomatology (FMPOS) at the University of Bamako. In 2002, the FMPOS/University of Bamako was selected by NIAID as an International Center of Excellence in Research, with the mission of studying tropical and infectious diseases in endemic areas.

Milestones in this collaboration include the following:

- Establishment of the Malaria Research and Training Center (MRTC) at the University of Bamako, which serves as the training arm of the national malaria control program
- Development of clinical field sites to test candidate malaria vaccines and conduct studies on malaria and lymphatic filariasis
- Launch of the Centre de Recherche et Formation (SEREFO) project, which brings together physicians and researchers from Mali and the U.S. to study HIV/AIDS and tuberculosis and to provide training for African scientists

NIH/NIAID research can be leveraged by other USG agencies. The GIS (Geographical Information System) team predicts malaria epidemics and sends information to decision makers at the MOH, for instance. Additionally, in collaboration with the MOH, NIH develops strategies for the reduction of malaria transmission, including vector control and the development and testing of a malaria vaccine.

Under the umbrella of GHI, the U.S. agencies will inventory and document the research being done to fully understand the breadth and depth of what is available, identify gaps in knowledge, and look for ways to address those gaps within the existing portfolios. Given the high capacity for high quality research, Mali should be considered as an appropriate and capable venue for supporting additional research on critical unanswered questions facing high mortality countries under GHI.

Finally, the USG supports over 130 volunteers through the Peace Corps. Peace Corp Volunteers (PCVs) are currently running community-based programs in HIV/AIDS prevention and stigma

reduction. There are 29 health education volunteers and 33 water and sanitation volunteers. These volunteers coordinate a wide variety of community-based programs across Mali. Through GHI, the USG agencies will continue to look for ways to leverage the work of these volunteers to deliver more diverse health messages through this program.

ANNEX 3: Illustrative Activities of USG Collaboration to Support the MOH in Mali

1. Surveillance System Strengthening

Under the GHI, CDC will build in-country capacity to design, implement and evaluate HIV/AIDS related surveillance system as well as surveys and prioritized research. Additionally, the CDC will assist and train Malian counterparts to analyze, disseminate and use HIV/AIDS data appropriately. This information from surveillance activities allows countries to make informed decision about HIV/AIDS as well as to strengthen program accountability and improvement in data quality. There is a serious lack of data and information around Most at Risk Groups (MAPRS) notably men who have sex with men (MSM). Under the GHI, the CDC will work closely with the MOH to design and implement an in-depth study around MSM's. Following the study the CDC will work with USAID and the MOH to develop and design an appropriate prevention program which both the GOM and USAID will implement. The CDC will continue to provide ongoing system strengthening support.

CDC will also carry out other studies such as incidence surveillance and CDC and USAID will collaborate on operations research studies. For example, studies can determine if the implementation of a package of intervention at CSCOM level including (PF, HIV/AIDS and Nutrition) will increase uptake of HIV counseling and testing during antenatal visits or increase the use of modern contraceptive and reduce maternal and child mortality. Together with GOM, USAID, Peace Corps and implementing partners these studies will help to drive strategic program planning and re-design.

2. Laboratory System Strengthening

An integrated laboratory network is a critical and core component of the overall health system. Under the GHI, CDC in collaboration with NIH will play a key role in improving this system on a national, regional and district level. CDC and NIH will work with the GOM to develop a national strategic plan to strength public health laboratory network. Key components will address

- Training and personal retention
- Logistics and commodities management
- Facility equipments maintenance and quality
- Management system across diseases-wide laboratories
- Laboratory information system
- Laboratory and policies and regulatory issues

These plans will reduce parallel diseases-specific laboratory systems, build efficiency and augment the ability of Mali to respond effectively to numerous diseases, including HIV, STIs, TB, malaria and opportunistic infection. For example, CDC, in collaboration with USAID, will support dried blood spot polymerase chain reaction (DBS,-PCR) for early infant diagnosis of HIV. This support will involve CSCOM based laboratories and private laboratories in order to build a strong laboratory network which will ultimately sustain the whole health system in Mali.

3. Blood Safety Activities

A safe blood supply is critical for stopping the transmission of HIV and reducing the maternal and child mortality. Under GHI, CDC will work with USAID and other international partners to increase blood donations and blood testing GHI will offer an opportunity to decentralize the

blood activities to Regional Hospitals, which can help respond to all emergencies coming from CSCOM, especially for obstetric emergencies. Given the high maternal mortality rates due to hemorrhage. USAID's support is essential for strengthening the pharmaceutical supply chain which in turn will ensure that the necessary equipment and supplies for a safe and adequate blood supply.

4. Neglected Tropical Diseases

Control of NTDs relates to all the GHI core principles. NTDs contribute to anemia, vomiting, diarrhea, malnutrition and organ damage. Growth and cognitive development are also affected in children, who are at highest risk for infection. hookworm infection can complicate pregnancy by causing severe anemia, which may contribute to maternal and neonatal mortality. Recent research indicates that chronic parasitic infections can impair protective immune responses against many unrelated infections (including malaria, TB, and HIV) and can cause impaired responses to vaccines. Direct costs of treatment for NTDs, combined with the indirect costs of productive labor time lost due to morbidity and mortality, have a severe negative impact on the economies of afflicted communities. Combined efforts of CDC, NIH and USAID to impact NTD have the potential to significantly reduce the disease burden caused by NTD's. USAID provides technical and financial support to the MOH to implement NTD eradication programs through training of community health workers and mass distribution campaigns. Testing smart integration of deworming with Vitamin A distribution for children under five has proven successful and is being adopted. Testing is underway for integration of other NTDs with the Vitamin A distribution. A package of complementary services would include disease research and surveillance work completed by NIH and CDC along with policy work, treatment and prevention activities implemented by USAID.

Annex 4: Illustrative Indicators for GHI Priority Activities

#1 PRODESS

USG provided TA and capacity building for the MOH to evaluate and develop the PRODESS

Output

USG provided TA to evaluate the PRODESS II and assess gaps in health systems

USG provided TA to support development and implementation of PRODESS III

Outcome

PRODESS II evaluation completed and report disseminated

PRODESS III developed

PRODESS III operational plan developed and messages decentralized

PRODESS III implemented (5 year)

Develop plan to meet gaps in health systems through the health donor coordination group

Functional health donor coordination group.

Output

Group meets 4 times a year

Group membership includes all major donors in Mali

Group sub-committees constituted

Outcome

Basic governance structures for the group created and functioning

Group mobilized TA for the national health strategy

#2 PFP

Output

Packages of PFP services created for facility and community levels

Outcome:

% of PP women reached with the FP messages and services within six months of giving birth

% of PP women using a modern contraceptive method within the first year after giving birth

Impact:

Increased CYP and CPR at district level

Increase % of birth intervals of 36+ months

Decrease % of closely spaced births less than 24 months

#3 Community Based Approaches

Improvement Collaboratives

Output

of improvement collaborative created and functional at one year, two year

CSCOMs participating in collaboratives

of ASACOs able to provide management strengthening of CSCOMS

Outcome

% performance against the quality standard

Duration of sustained performance of the quality standard

Key health systems strengthened and functioning optimally (i.e., reduction in drug stock-outs)

Impact

% change in health outcome at the district level (i.e., decrease in postpartum hemorrhage)

Community Health Workers

Output

ASC recruited, trained and retained

ASC able to deliver iCCM+FP at one year

Model for financial sustainability of ASC tested and evaluated

Outcome

% of cases appropriately treated or referred by ASC

% of women reached with FP messages and services

Financial model adopted

Impact

% change in health outcome at the district level (i.e., decrease in postpartum hemorrhage)

Urban Outreach

Output

outreach visits conducted / # CSCOM visited

Outcome

and % of women reached with FP messages who accept a FP method (by type of method)

of each type of method provided

Cost analysis undertaken and disseminated

Impact

Increased CYP and CPR

Annex 5:

GHI Program Matrix - Mali

BASELINE INFO		Illustrative Indicators	Mali GOM Indicators (PRODESS)	STRATEGY	Key partners		
Area	Baseline info/country-specific GHI target <i>Note:</i> The GHI targets should be populated <u>after</u> the country team completes its Results Framework. Detailed guidance for completing country-specific RFs is forthcoming from headquarters.	Relevant Key National Priorities/initiatives		Key Priority Actions Likely to Have Largest Impact	Key GHI Principles		
					Country ownership		
					Woman and girl-centered approach		
					Strategic coordination/integration		
					Strengthen and leverage partner engagement		
					Health systems strengthening		
					Metrics/monitoring / evaluation		
					Research and innovation		
<p>HIV/AIDS: Support the prevention of more than 12 million new infections; Provide direct support for more than 4 million people on treatment; Support care for more than 12 million</p>	<p>New HIV infections/year -Current Estimate: 170,000 (2006 DHS) -Target: 500,000 by 2010 (cellule) Number in care: -Current: -Target Number in treatment: -Current: 22,547 -Target 4,000 in</p>	<p>Intensified, diversified prevention Access to treatment and PMTCT National capacity for M&E, QA Surveillance, Research, Ethics</p>	<p>HIV prevalence rate among pregnant women attending ANC (SS) # of MARPS reached with individual and/small group interventions that are based on evidence and/or meet the required minimum standards</p>	<p>Proportion of HIV pregnant women under HAART</p>	<p>Focused prevention for MARPS and youth: BCC, promotion of M/F Condoms Expand VCT, including counseling for negatives Laboratory system strengthening, quality controls Surveillance informs</p>	<p>- High Commission for HIV/AIDS reports to the President, and coordinates all funding, donor and implementing partners - Focus on women in sex trade, as vulnerable population from 'bridgers', and young women - Key partner engagement with Global Fund, USAID's prevention activities, and system strengthening by CDC and NIH for</p>	<p>GFATM CDC NIH USAID Peace Corps DOD</p>

people, including 5 million orphans and vulnerable children.	need STIs:		# of individuals who received Testing and Counseling services for HIV and received their results % of female sex workers reporting the use of a condom with their most recent client % of female sex workers reporting the use of a condom with every client in the last month # of male condoms distributed		programming STI's diagnosed and treated	laboratory, surveillance and clinical research activities should feed into strategic program decisions and monitor effectiveness of interventions	
Malaria: Halve the burden of malaria for 450 million people, representing 70 percent of the at-risk	Current est. of prevalence: Target prevalence: Current est. incidence: Target incidence:	Prevention, and treatment of Malaria	# of health workers trained in case management with ACT # of ACT treatment distributed	Malaria incidence rate in health facilities	Distribution and use of long-lasting ITNs IPT for pregnant women Community-level treatment of	- The National Malaria Control Program (PNLP) sets policy and coordinates all donor, funding, service and research partners - Support the roll out of the government's new cadre of community	GFATM PMI NIH Peace Corps ATN+ PKC II MCHIP PSI

population in Africa.	<p>Current estimate of deaths: 201/100,000 (DHS 2006) Target reduction in deaths:</p> <p>Coverage with insecticide-treated bed nets: 78% (WHO 2010) Target:</p> <p>% of children under 5 sleeping under a bed net: 27 (WHO 2010) Target:</p>		<p># of health workers trained in malaria lab diagnostics</p> <p># of ITNs purchased with USG funds and distributed to health facilities</p> <p># of RDTs purchased and distributed</p> <p># of houses sprayed with IRS with USG funds</p> <p># of SP tablets purchased with USG funds and distributed to health facilities</p>		<p>uncomplicated malaria; referral for complicated cases</p> <p>Indoor residual spraying of houses</p>	<p>health workers (ASC) for community case management (CCM) of fever.</p> <ul style="list-style-type: none"> - The approach prioritizes pregnant women for malaria prevention - Key system strengthening focuses on the supply chain, human resources, quality of care, and information system - monitoring and surveillance inform malaria programming - operations / evaluation research will ensure safety of the ASC and systems strengthening 	
<p>Maternal Health: Reduce maternal mortality by 30% across assisted countries</p>	<p>Current estimate: MMR 464/100,000 (DHS 2006)</p> <p>4 FANC visits: 35%</p> <p>Births attended</p>	<p>Focused Antenatal Care (FANC); Skilled Birth Attendant (SBA); Active Management of Third Stage</p>	<p># of ANC visits provided by skilled providers</p> <p>% of service delivery points that offer Active Management of</p>	<p>Maternal Mortality rate / 100,000 Taux d'accouchements assistés</p> <p>Taux de couverture en</p>	<p>During FANC visits, provide: Iron with Folate, Tetanus Toxoid, Intermittent Preventive Treatment (IPT) and bed net for malaria,</p>	<ul style="list-style-type: none"> - Increasing MH services to reduce maternal mortality is the highest priority of the MOH, contained in the PRODESS - MH is targeted exclusively to women, especially young mothers who are first time users 	<p>WHO UNFPA USAID</p> <p>MCHIP ATN+ PKC PSI</p>

	<p>by a skilled provider: 49%</p> <p>Facility-based births with AMTSL: 50%</p> <p>C-section rate: 2.17%</p> <p>Targets:</p> <p>MMR 334/100,000 (2011)</p> <p>4 FANC visits:</p> <p>Skilled provider:</p> <p>AMTSL:</p> <p>C-section rate:</p>	<p>of Labor (AMTSL); free caesarian policy; improve quality of services; address financial barriers to access to facility services</p>	<p>the Third Stage of Labor and Essential Newborn Care</p>	<p>CPN recentrée</p> <p>% of CSComs providing "SONUB"</p> <p>% of CSRefs providing « SONUC »</p> <p>Intra hospital Mortality rate</p> <p>Taux de réalisation de la césarienne</p>	<p>prevention, make a birth plan and discuss birth spacing/family planning</p> <p>Increase facility-based births with a SBA; provide AMTSL</p> <p>Promote Immediate and Exclusive Breast-feeding (EBF) and Lactation Amenorrhea Method (LAM)</p> <p>Provide pre-discharge counseling on FP and provide PP-IUD insertion within 48 hours of birth at appropriate facilities</p>	<p>of health services; constructive male engagement promoting women's health</p> <p>-Strategic coordination, integration and partner engagement will be leveraged through the donor coordinating group to accelerate the scale up of proven models and approaches</p> <p>- Key aspects of strengthening existing health systems include costing / price policies, human resource training, supervision and quality of care</p> <p>- operations research on service integration at facility and community to promote utilization of services, and a rigorous monitoring and evaluation component to determine replicability and efficacy.</p>	
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<p>Child Health: Reduce under five mortality rates by 35% across assisted countries</p>	<p>Current estimate: Infant Mortality: 96/1,000 (DHS 2006)</p> <p>Under 5 Mortality: 191/1,000 live births (DHS 2006)</p> <p>Essential Newborn Care: 28%</p> <p>Fully vaccinated by 1 yr: 42%</p> <p>GoM Targets: Infant Mortality: 56/1,000 (2011)</p> <p>Under 5 Mortality:</p> <p>ENC: Vaccination Coverage (DTP/Penta3): 90% (2011)</p>	<ul style="list-style-type: none"> - Essential Newborn Care (ENC); - IMCI: treatment of sick child for malaria, diarrhea, pneumonia - Vaccinations - Nutrition - Hygiene 	<p>% of births attended by a qualified person in a health center</p> <p># of children (6 to 59 months) who received a dose of vitamin A in the last six months</p>	<p>Mortality rate for children under five years of age (x/1000)</p> <p>Taux de couverture vaccinale DTCP3 (PENTA 3) des enfants de moins d'un an</p> <p>Proportion des enfants de 1 an vaccinés contre la rougeole</p>	<ul style="list-style-type: none"> - Essential Newborn Care (ENC): drying, warming, cord care, and immediate breastfeeding - Kangaroo Mother Care (KMC) for low birth weight babies - Exclusive breast-feeding for 6 mos - RED: full immunization coverage - Sleep under LL-ITNs - Integrated Community Case Management (iCCM) of malaria, pneumonia, diarrhea, malnutrition - Birth spacing and family planning 	<ul style="list-style-type: none"> - Support the introduction and transition to decentralized government of the new cadre of community health workers (ASC) to expand access to iCCM and family planning - Partner engagement will be leveraged through the donor coordinating body for strategic program support and to accelerate the scale up of proven models - The community models will include strengthening key health systems at the local level such as decentralized government planning for RED, training and supervision of human resources, quality of care, health information reporting, supply chain distribution, and financial management - rigorous monitoring and evaluation to determine efficacy and replicability 	<p>UNICEF USAID</p> <p>PKC II SAVE MCHIP PSI ATN+</p>
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<p>Nutrition: Reduce child under nutrition by 30% across assisted food insecure countries in conjunction with the President's Feed the Future Initiative</p>	<p>Current estimate: Children underweight: 27% Mothers receiving iron folate: 61% Exclusive breastfeeding for 6 months: 38% Age-appropriate feeding: 30% Vitamin A Distribution: 72% for 6-59 mos 41% for PP women Improved Water access: 60%</p> <p>Targets: Children underweight: Mother's iron folate: Exclusive breastfeeding 6 mos: Age appropriate feeding: Vitamin A distribution: Improved water access:</p>	<p>National Nutrition Weeks for Vitamin A distribution</p> <p>National Breastfeeding Week</p> <p>Prevention & treatment of malnutrition</p>	<p># of children (6 to 59 months) and for postpartum women provided with Vitamin A</p> <p>% of malnourished infants (6 to 59 months)</p>	<p>% of infants with diarrhea provided with le SRO</p>	<ul style="list-style-type: none"> - Iron folate, Vitamin A for PP mothers - Exclusive breast-feeding for 0-6 months -breastfeeding and complementary foods from 6-24 mos - weighing/measuring, nutritional counseling - Vitamin A - 2x/year for 6-59 mos - Nutrition rehabilitation - Food/ salt fortification - Aquatab social mktg - Handwashing/hygiene 	<ul style="list-style-type: none"> - Transition to government multi-sectoral plan for food and nutrition security - Primary beneficiaries of all nutrition activities focus on women, girls and children, and require male engagement to support behaviors - Build strategic alliance with agriculture production and marketing of nutritious foods (i.e., Feed the Future) , as well as improved water sources and products, to promote social and household messages and behaviors - strengthen community systems for management of water sources, broad-based community and family support of feeding practices for mothers and children < 2 yrs - monitoring and evaluation of approaches for effectiveness and replicability for scale up 	<p>UNICEF USAID Feed the Future</p> <p>HKI MCHIP SAVE</p>
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<p>Family Planning and Reproductive Health: Prevent 54 million unintended pregnancies;</p> <p>Reach a modern contraceptive prevalence rate of 35 percent across assisted countries, reflecting an average 2 percentage annual increase by 2014;</p> <p>Reduce from 24 to 20 percent the proportion of women aged 18 -24 who have their first birth before age 18</p>	<p>Current CPR: 6.9% Target CPR: 20% by 2015</p> <p>Unmet Need: 32% WRA 80% PP women</p> <p>Adolescent pregnancy: 57% by 18 yrs 65% by 19 yrs</p> <p>Births spaced less than 3 years: 73%</p>	<p>Community-based distribution and CSCOM services; Long-acting methods; Annual FP campaign; Population policy; Youth RH</p>	<p>Couple Years of protection</p> <p>% of postpartum women using a modern contraceptive within one year of giving birth</p> <p>Birth intervals 36+ months</p> <p>Contraceptive Prevalence Rate</p> <p>Total Fertility Rate</p>	<p>Couple Years of protection</p>	<p>- National policy for population and development, communicated and implemented multi-sectorally, with committed leadership at all levels</p> <p>- Reaching postpartum women and youth with FP information and services integrated with MNCH/N, sport/educ/ employment services as “gateways” for FP</p> <p>- Outreach visits for long-acting methods</p> <p>- CBD and social marketing for short-acting methods</p> <p>- Reliable supply chain of contraceptives</p> <p>- Sustained positive communications</p>	<p>- Support government to embrace population with all development sectors, especially at the district level, and the development of a comprehensive strategy for addressing social norms, sustaining positive BCC, and expanding access to quality FP services</p> <p>- women and girl centered FP services focus on youth, postpartum and high parity women, urban and rural, as well as male engagement</p> <p>- critical health systems strengthened for FP include price/cost policy, logistics, information, human resources and quality of communications and care</p> <p>- operations research and programmatic evaluation of approaches will identify effective and efficient programs for scale up.</p>	<p>HPI ATN+ MCHIP PKC II PSI</p>
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					<p>approach for normative social change</p> <ul style="list-style-type: none"> - Expand private sector products and services 		
<p>NTDs: Reduce the prevalence of 7 NTDs by 50 percent among 70 percent of the affected population contributing to (1) the elimination of onchocerciasis in Latin America by 2016; (2) the elimination of lymphatic filariasis globally by 2020; and (3) the elimination of leprosy</p>	<p>Current Estimate: Onchocerciasis: <5% Trachoma: 35% Lymphatic Filariasis: 7% Schistosomiasis: 43 - 95% Soil helminths: 4 – 22%</p> <p>Targets: 80% therapeutic coverage of target populations:</p>	<p>Focused on five diseases; Awareness raising; Integrated training; Integrated mass treatment; Monitoring and evaluation; Institutional support</p>			<ul style="list-style-type: none"> - De-worming provided with Vitamin A 2x/yr - Support supply chain logistics distribution - Behavior Change Communication - Monitoring and surveillance 	<ul style="list-style-type: none"> - Government implementation and support of community distribution, surveillance, laboratory and drug quality - strengthening key health systems for procurement and distribution of medicines, linking surveillance to programming, improving outreach services to reach underserved populations 	<p>WHO, USAID, HKI Global Alliance, Merck Co, Glaxo-Smith-Kline,</p>

<p>Health system strengthening: Address critical barriers that impede GHI health impact.</p>	<p>Baseline: Targets: Improvements in financing, equity, human resources, information and pharmaceutical management systems, public health functions and governance.</p>	<p>-Bamako Initiative cost recovery - DPM/PPM and DNS/DRS</p>	<p># of policies or guidelines developed or updated with USG assistance to improve access to and use of high impact health service</p> <p>% of Communes in which investment to basic health services has increased</p> <p># of facilities with qualified personnel in drug procurement</p> <p># of facilities with skilled laboratory Personnel</p> <p># of health facilities rehabilitated for MCH services, and laboratory, by level</p>	<p>% of minimum personnel by category needed at CSCom level</p> <p>Proportion of person living at < 5km from a functional CSCOM</p> <p>% of use of curative care</p> <p>Proportion of patients admitted to referral and evacuation services</p> <p>% of occupied beds (surgery/medicine)</p>	<p>- Support evaluation of existing PRODESS and development of next PRODESS</p> <p>- support development, introduction, evaluation quality improvement, and scale up of integrated packages of health interventions</p> <p>- Support MOH to transition financial system (i.e., from cost recovery to performance contracting)</p> <p>- Support new HR Division of MOH to strengthen quality and competency of teachers, trainers, graduates</p> <p>- Support MOH to strengthen supply chain for pharmaceuticals</p>	<p>- Health system will be functioning under the district, regional and national leadership of the MOH, with adequate budgetary and human resource support</p> <p>- Strategic leveraging of donors, private sector and/or development of public-private partnerships for strengthening system components such as for service delivery, logistics, information, research</p>	
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			# health facilities equipped with technical material for Maternal and Child Health (MCH) services, treatment and laboratory		- Support decentralized planning, financial management, governance of health services		
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