Attachment A

SYSTEMS STRENGTHENING FOR HEALTH COMMODITIES

I. Program Description

A. Activity Summary

The U.S. Agency for International Development/Uganda (USAID/Uganda) anticipates awarding a cooperative agreement for an activity titled Systems Strengthening for Health Commodities (SSHC). The objective of the activity is to improve the health status of the Ugandan population by increasing the availability, accessibility and appropriate use of essential medicines and health supplies (EMHS).[1] The objective will be achieved through three main intermediate results: 1) National policies and strategies support cost-effective, equitable and transparent use of available EMHS resources, 2) Country capacity strengthened for effective management and utilization of EMHS and, 3) Increased availability and access to EMHS for priority populations.

The SSHC activity will build upon key investments made and lessons learned under USAID/Uganda's Securing Ugandans' Right to Essential Medicines activity (2009-2014) to develop and implement interventions in new areas that are strategic to achieving the overall objective. This activity contributes to and will be implemented in alignment with the country's National Health Sector and Strategic Investment Plan (HSSIPII) which identifies availability and equitable access to EMHS and health systems strengthening as critical priorities to achieving national health and development goals.

SSHC will contribute to achieving USAID/Uganda's Country Development Cooperation Strategy (CDCS) Development Objective Three (DO3): "Improved health and nutrition status in focus areas and population groups". Under DO3's Intermediate Result (IR) 3.1 "More Effective Use of Sustainable Health Services" SSHC contributes to the sub-result "Strengthened Health Systems" (IR 3.1.1). The expected outcomes will advance progress toward IR 3.1 sub-results of: 1) Functional enabling environment and partnerships to implement sector policies, regulations and strategies, 2) Increased availability of resources for public and private sector health services, and 3) Improved organization and management of service delivery. The applicant will work in close collaboration with the Government of Uganda (GOU) Ministry of Health (MOH), U.S. Government implementing partners and other donor and non-governmental partners engaged in health sector service delivery and health systems strengthening to optimize results and sustainability from this investment. SSHC interventions will specifically focus on the public and private-not-for-profit sector. The term Essential Medicines and Health Supplies as used in this document includes medicines, laboratory diagnostics, contraceptives, vaccines, and other health supplies

2. Background

2.1 Problem Statement

The goal of the GOU's National Drug Policy and National Pharmaceutical Sector Strategic Plan (NPSSP) is to ensure "the availability and accessibility at all times of adequate quantities of affordable, efficacious, safe and good quality essential medicines and health supplies to all people

[1] .

who need them in the fulfillment of the basic requirement for the delivery of the Uganda National Minimum Health Care Package (UNMHCP)". The country's health indicators, little changed over the past decade, indicate that these outcomes have yet to be achieved. The leading causes of death among children under 5 (malaria, pneumonia, and diarrhea) and pregnant women (hemorrhage, sepsis, eclampsia) are those that can be prevented with known cost-effective life-saving commodities. Insufficient funding, inequities in resource allocation, inefficiencies in procurement and distribution and poor knowledge and skills of health workers are some of the key reasons why the NPSSP goal has not been meet.

Although an estimated 80 percent of Ugandan households are within five kilometers of a health facility, health care intervention coverage is low because of the uneven quality of care and lack of sufficient resources including EMHS. Country surveys carried out between 2006 and 2010 in public, private-for-profit (PFP) and private-not-for-profit (PNFP) outlets across the country found that 20 to 50 percent of a basket of 40 essential medicines were unavailable on the day of visit.[2] Availability was better in PFP and PNFP outlets and urban areas than public and rural outlets. Rural government facilities had the lowest availability of essential medicines. Even when available a majority of the essential medicines are unaffordable to poor households. Medicine prices are unregulated in Uganda and mark-ups are high: lowest priced generics are three times more expensive than the median international reference price and innovator brands more than 17 times higher.[3] Poor households, which have a greater burden of disease, bear the brunt. A significant proportion of people in rural areas do not seek formal health care when ill because of the cost[4]. A 2006 study found that 65 percent of the poorest quintile households experienced **c**atastrophic expenditures on health care in the previous month.[5] Medicine expenditures account for half of out-of-pocket health care expenditures.

In the public sector, insufficient financing is the primary cause of the lack of availability of EMHS. GOU funding currently covers only 21 percent of the country's estimated pharmaceutical needs. Per capita funding for essential medicines is less than one US dollar ($0.90) at lower health care levels and $2.60 at higher level facilities, well below what is needed for delivery of the UNMHCP.[6] The performance of National Medical Stores (NMS), which procures, stores and distributes EMHS for all public sector facilities, is a key factor in determining availability. The 2012 Annual Pharmaceutical Sector Survey found that only 50 percent of the items ordered by HCIVs and hospitals were delivered in the ordered quantities; the remaining half of the items were either not delivered at all (43%) or the quantities were adjusted up or down. On average, lower level facilities (HCII to HCIV) have more stock outs of vital EMHS and for longer periods of time than do hospitals. Since 2010, the NMS has been trying to ensure a minimum supply at lower levels by sending out pre-packed kits of EMHS, one designed for HCIIs and one for HCIIIs, every two months. Average stock out days have reduced from 20 days to 3-7 days for the 60 items in HC II kits and the percentage of public facilities with all six tracer medicines[7] in stock on the day of visit increased from 34 percent in 2010/11 to 51 percent in FY 2012/13. [8] This is good progress but further action is needed to attain the HSSIP target of 80 percent availability in FY 2015.

Increasing the availability, accessibility and quality of private sector health services is a priority for

[2] By the Ministry of Health in collaboration with the World Health Organization (WHO), Health Action International Africa (HAI-Africa) and Coalition for Health promotion-Uganda (HEPS-Uganda)
[3] SURE policy options analysis, 2010
[4] Konde-Lule et al, 2010
[5] HAI medicines pricing and availability study, 2006
[6] This does not 64 percent of the budget which is ring-fenced for ARVs, ACTs, TB drugs, vaccines and RH supplies .
[7] Tracer medicines: oral rehydration solution, cotrimoxazole 480mg, Depo-Provera injectable, measles vaccine, first line ACT, SP 525mg
[8] HSSIP Mid-term review report, 2013

GOU. Over the past few years, USAID/Uganda, through a grant and SURE, has successfully supported the strengthening of Joint Medical Store (JMS), a pharmaceutical wholesaler established by the Catholic and Protestant Medical Bureaus and primary supplier for 600 PNFP health units and hospitals. The facilities are now faced with a serious lack of financing for EMHS, a major issue because they provide 30-50 percent of health services in the country. Although PNFPs still receive a small GOU annual subsidy from the non-wage Primary Health Care budget (in exchange for reduced service fees), the GOU and DANIDA no longer fund the essential medicines credit line (EMCL) that has provided PNFPs with an approved list of free EMHS since 2003. Their support for the EMCL ended in December 2011. USAID/Uganda provided one-time stop gap funding to mitigate shortages but the gap remains. The full impact on availability and cost of EMHS to patients is not known although it can be expected that small rural units will be the worst affected.

Finally, health worker skills are critical to the overall functioning of the supply chain. Good management and utilization of EMHS in health facilities increases the health benefits to patients and improves the availability of resources. Poor stock management will lead to stock imbalances and waste through expiry and loss. Under-prescribing of available effective medicines or prescribing of the wrong medicines and/or unnecessary medicines is wasteful and can lead to negative health consequences. The indicators below from the 2010-2011 Uganda Pharmaceutical Sector Reports illustrate the urgent need to improve health worker knowledge and skills in stock management, prescribing and dispensing. Data from facilities supported by trained Medicine Management supervisors demonstrates that regular on-the-job supervision and mentoring can have a positive impact (see Attachment A).

Table 1. Indicators on Medicine Management and Prescribing Practices in Uganda

Medicines Management Practices			**Prescribing Practices**		
Indicator	2010 (n=63)	2011 (n=63)	Indicator	2010 (n=63)	2011 (n=63)
Average availability of stock cards for survey basket items (31	68%	77%	Avg number of medicines prescribed per patient	3.2	3.3
Stock card balance and physical count agree	53%	42%	% of patients prescribed 1 or more antibiotics	68%	72%
Average % of items for which monthly physical count conducted	4%	6%	% of patients prescribed injections	23%	21%
Staff can correctly calculate order quantities	NA	21%	Patients who received correct malaria treatment*	25%	59%
Opened bottles of liquid/mixtures in dispensary labeled with opening date	5%	2%	Patients who received correct diarrhea treatment*	33%	14%
Separate area used to keep expired drugs before disposal	48%	31%	Patients who received correct treatment for acute respiratory infection*	1%	6%

*As per Uganda Clinical Guidelines

2.2 USAID/Uganda Support to the Health Sector

The Mission has an integrated health, HIV/AIDS, and education portfolio with cross-cutting programs to strengthen systems and practices for a higher-performing and sustained health workforce; strategic behavior change communication; supply chain system strengthening; district capacity-building to plan, budget, implement, coordinate, monitor and evaluate decentralized services; and private sector provision of health services, including social marketing. These cross-cutting issues have application across all Presidential initiatives and Mission-level funding sources. Uganda is a focus country for major Presidential and other U.S. development assistance initiatives and plans: President Obama's U.S. Global Development Policy, the Global Health Initiative (GHI), Feed the Future, USAID/Uganda Best Action Plan for Family Planning, Maternal and Child Health and Nutrition (BEST); A Promise Renewed (APR), USAID Forward and the related UN Commission on Life-Saving Commodities for Women and Children (UNCoLSC).

The SSHC activity is essential for optimum effectiveness of USAID's support to the country's health programs and achievement of national health goals. As the largest international donor in the health sector in Uganda, and one of the largest donors of health commodities to the country, USAID has a major interest in the success of this activity. All of the above USAID's health initiatives are dependent upon having an adequate and continuous supply of the right, quality health commodities for diagnostic, prevention and treatment services; without them national health programs are unable to scale-up and implementing partners are unable to meet their targets.

To yield more effective results, promote sharing of lessons learned and reduce costs, SSHC is expected to coordinate and collaborate with other USAID implementing partners engaged in complementary activities in the public and private sector. The focus of SSHC activities will be the public and PNFP health sector. They will collaborate with other USAID implementing partners and donor partners implementing activities in the public, PNFP as well as PFP sector (see section 3.3). Relevant partners include Private Health Support (PHS) which is working with private health providers to increase quality and affordability of their services and products; AFFORD/Uganda Health Marketing Group which is using a social marketing approach to increase demand for health products and PFP services; ASSIST which is working in partnership with USAID service delivery partners to establish quality improvement approaches and best practices, and; the district or regional-based health/HIV service delivery partners.

2.3 Alignment with Government of Uganda

USAID Health, HIV/AIDS, and Education programs incorporate the principles, practices, and priorities of these U.S. Presidential and other initiatives and at the same time ensure that programs are aligned to Government of Uganda policies, plans and strategies. The National Development Plan (NDP) 2010/11–2014/15 provides the overall framework for development in Uganda, and one of its eight objectives is to improve the health status of the population, as reflected in increases in literacy levels, life expectancy at birth, safe water coverage and sanitation levels, and reduction in the newborn and child mortality rate, maternal mortality ratio and incidence of communicable diseases and HIV. The NDP also aims to promote sustainable population growth and sustainable use of the environment and natural resources.

Existing policies and plans include the revised (2nd) National Health Policy (NHP II) and the Health Sector Strategic and Investment Plan (HSSIP). NHP-II and HSSIP prioritize health systems strengthening and health service delivery. The HSSIP builds on a large number of sub-sectoral and program strategies and lays out the key technical clusters and areas for investment; U.S. Government

programs align closely with and support achievement of the HSSIP's main objectives for specific service delivery interventions as well as the health system strengthening. USAID also supports the GOU's commitments to both local and international declarations and goals such as Millennium Development Goals, the United Nations General Assembly Special Session (UNGASS) declaration, the national Roadmap for Maternal and Reproductive Health, the Ugandan Nutritional Action Plan (UNAP) and re-commitment for maternal and child survival through the global movement-APR.

The SSHC activity is aligned with the GOU's policies and strategies to strengthen the health system and improve the availability and accessibility of EMHS. It will contribute to the five aims of the NPSSP: 1) strengthen the policy and legal environment governing the production, procurement and distribution of pharmaceuticals in Uganda; 2) strengthen coordination among different stakeholders in the pharmaceutical sector; 3) financing an adequate volume of pharmaceuticals and medical supplies in both the public and private sectors; 4) strengthen the organizational structure of the pharmaceutical sector management; and 5) strengthen the delivery and storage of pharmaceutical and medical supplies at all levels.

2.4 Alignment with Country Development Cooperation Strategy (CDCS)

President Obama's U.S. Global Development Policy directs USAID to formulate CDCS that are results-oriented and partner with host countries to focus investments. USAID/Uganda's five-year CDCS (2011-2015) implements this policy in the Ugandan context, making considerable choices that focus and deepen programs and take closer account of the host country and donor context, while maintaining close coordination with USG partners.

The CDCS Goal Statement echoes the Government of Uganda's (GOU) vision for national development in Uganda, as outlined in the National Development Plan: *Uganda's transition to a modern and prosperous country accelerated*. This goal will be pursued through three Development Objectives (DOs) and one Special Objective (SpO):

- DO1: Economic growth from agriculture and the natural resource base expanded in selected areas and population groups.
- DO2: Democracy and governance systems strengthened and made more accountable.
- DO3: Improved health and nutrition status in focus areas and population groups.
- SpO1: Peace and security improved in Karamoja.

The Development Objective (DO3) is "improved health and nutrition status in focus areas and population groups." It will be achieved through "more effective use of sustainable health services" (IR 3.1), resulting from Strengthened Health Systems (IR 3.1.1), Improved Accessibility to Quality Health Services (IR 3.1.2), and Increased Health Seeking Behaviors and Demand for Quality Services (IR 3.1.3). The three IRs are interrelated: Health Systems Strengthening (HSS) addresses the various constraints underlying service delivery performance; allowing Health Service Delivery to tackle issues related to the heavy disease burden, under nutrition, unmet need for family planning, low uptake of maternal, neonatal and child health services; and justifying investments in communication, education, and social protection to change Health Seeking Behavior and Demands for Quality Services.

The SSHC activity will support the achievement of USAID/Uganda's DO3 IR 3.1.1 Strengthened Health Systems by contributing to the following strategic outcomes: (i) functional enabling environment and partnerships to implement sector policies, regulations, and strategies; (ii) increased availability of resources for public and private sector health services; and (iii) improved organization

and management of service delivery. Successful implementation of the CDCS-DO3 strategy will largely depend on USAID/Uganda's: fostering more collaborative relationships with the GOU, the private (for profit and not-for-profit) sector, civil society, and other development partners; better capitalizing on decades of USAID programmatic experience in Uganda; and making better informed, evidence-based choices for implementing and sustaining the interventions.

The CDCS recognizes that in order to achieve results contributing to the above Development Objectives and to maximize investments and impact on the improved health and nutritional status of the population, USAID will require focusing of resources on key populations in specific geographic areas and building on existing platforms to integrate service delivery. A major component of USAID/Uganda's Country Development Cooperation Strategy applies the principles of selectivity and geographic focus by coordinating programming across Mission Development Objectives (DO) in the 19 districts where all three of the DOs have activities. These "Focus Districts" operationalize this concept through a coordinating mechanism known as the District Operational Plan (DOP). The SSHC will operate in three of the 19 "Focus Districts" and is expected to participate in DOP-related activities. Section 3.6 provides more details.

2.5 Building upon USAID/Uganda Investments in Supply Chain Strengthening

USAID/Uganda is uniquely positioned to support the SSHC activity because of the Mission's experience over the past decade in supply chain strengthening. USAID/Uganda's five-year $40 million Securing Ugandans' Right to Essential Medicines (SURE) program, now in its final year, is the largest investment to date toward strengthening Uganda's national supply chain system. The Mission's investment in SURE was a result of the lessons learned from previous USAID supply chain technical assistance mechanisms[9] which demonstrated that a larger budget and longer time frame for implementation were needed to achieve significant and lasting change in the complex area of supply chain management and capacity building.

Over the past four years, SURE has designed and supported implementation of a wide range of interventions and achieved considerable success in a number of areas including EMHS quantification, procurement, quality assurance, warehousing, distribution, logistics information management tools, and health worker capacity building. The system changes made in the public and PNFP supply chain systems were focused on reducing inefficiencies and optimizing the use of available resources; and their investments in building capacity of local institutions and individuals were aimed at ensuring sustainability of USAID's investment.

The 2013 evaluation of the SURE program highlighted their particular achievement of building the skills of hundreds of health workers in medicines management and the confidence that the health workers and their managers had that they can sustain the improvements because they "now know what to do". The return from investments to improve the efficiency and expand operations of JMS in serving the PNFP sector and wider market was identified as another important and sustainable achievement that will improve the availability and accessibility of EMHS in the sector. A summary of these and other achievements and results are in Attachment B.[10] These achievements were due to the commitment and joint planning and implementation with colleagues from the MOH Pharmacy Division (PD), AIDS Control Program (ACP), National TB and Leprosy Program (NTLP), Central Public Health Laboratories (CPHL), National Drug Authority (NDA), Joint Medical Store, and the

[9] DELIVER, SCMS and SPS

[10] Further information and details about SURE activities can be found in their annual and quarterly progress reports, annual work plans and technical documents. The final report of the SURE program evaluation is not yet available.

hundreds of District Health Office staff in the 45 districts where they worked. The support of other US government implementing partners was also leveraged to expand SURE's district interventions to an additional 37 districts.

The SURE program demonstrated that it is possible to improve the performance of the supply chain management systems and increase the availability of EMHS. Their approach of close collaboration with national counterparts, building on existing MOH structures and tools, strengthening local systems for performance accountability and strengthening of the PNFP sector have proven to be effective strategies for enhancing sustainability. The SSHC Applicant is expected to utilize these and other strategies to ensure the sustainability of results after the involvement of USAID ends.

The SURE activity is still underway with more expected achievements and lessons learned. Any new information and experience will be shared with the successful applicant at the time of award to take into consideration in work planning.

2.6 Transition from SURE

SURE's goal was to ensure that Ugandan population has access to adequate quantities of good quality essential medicines and health supplies (EMHS). The SSHC goal encompasses the original focus on adequate quantities and expands the expected results by including accessibility and appropriate use of EMHS, both of which are essential to achieve the overall goal of improved health status.

The SSHC activity will be expected to continue providing logistics management technical support to MOH programs (including PD, ACP, Reproductive Health/Family Planning Division, Maternal Child Health, National Malaria Control Program, CPHL) in the areas of commodity forecasting, quantification, implementation and monitoring of program activities involving critical commodities. This support is necessary for these programs to manage the ever-increasing commodity requirements and supply-chain related decisions as programs are scaled up to increase national coverage and new vaccines, technologies and medicines/drug regimens are introduced. Given the human resource and GOU budget constraints it is anticipated that this technical support may have to continue for the first year and more of the SSHS activity. The Applicant is expected, however, work with MOH counterparts to develop a feasible plan for the MOH/GOU to assume these technical and financial responsibilities. [11]

SURE is currently working with the PD to identify options for maintaining the technical and financial support needed to keep functioning the two information management systems developed by SURE: the web-based ARV reporting and ordering system (WAOS) and the District Supervision Data System (DSDS),which houses data from the web-based SPARS reporting system, functioning. In the event that the above options fail to ensure the continued, smooth functioning of the WAOS and DSDS, SSHC will be expected to provide the interim support needed to keep systems operating to ensure that USAID's initial investment under SURE is not wasted. Again, SSHC will need to develop a feasible plan for the MOH/GOU to assume these technical and financial responsibilities.

3. Activity Description and Intended Results

[11] SURE did not provide technical assistance to the Uganda Expanded Program for Immunization; the Applicant will determine the need for their involvement with UNEPI.

The overall objective is to improve the availability, affordability, access and appropriate use of essential medicines and health supplies (EMHS) in the country. The objective will be achieved through the following expected outcomes: Result 1: National policies and institutions support cost-effective, equitable, transparent utilization of EMHS resources; Result 2: Country capacity strengthened for effective management and utilization of EMHS, and; Result 3: Increased availability and access to EMHS among priority populations

3.1. Development Hypothesis

The SSHC activity is based on the development hypothesis that if USAID supports the development and implementation of policies, strategies and sustainable interventions that result in EMHS being more available, affordable and used more appropriately (in the public and private sector), then more people will be able to obtain and use effective EMHS, treatment outcomes will improve and the overall health status of Ugandans will improve.

Successful achievement of the development hypothesis depends on the following key assumptions:

- The Government of Uganda, collaborating ministries, and district local governments have sufficient commitment and capacity to raise and efficiently utilize health sector resources; and
- USAID's financial and technical support can positively influence (i) the enabling environment; (ii) the constraints to mobilizing, allocating, and managing critical sector resources; and (iii) the functionality of the health system (from national to facility level and into the community).

3.2. Expected Results and Illustrative Outcomes

The following shows the linkages between DO3 IR.3.1.1 and SSHC expected results**.**

DO3 IR 3.1.1 Strengthened Health Systems		
Functional enabling environment and partnerships to implement sector policies, regulations, and strategies	**Improved organization and management of service delivery**	**Increased availability of resources for public and private sector health services**
Activity: Systems Strengthening for Essential Medicines and Health Supplies		
Result 1: National policies and strategies support cost-effective, equitable, transparent utilization of EMHS resources	**Result 2: Country capacity strengthened for effective management and utilization of EMHS**	**Result 3: Increased availability and access of EMHS among priority populations**
1.1 Policies developed and implemented to improve medicines affordability, availability and access in alignment with national health goals	2.1 Central supply chain management systems strengthened	3.1 Support Ugandan Country Plan to Scale-Up RMNCH commodities
1.2 Pharmaceutical sector research and advocacy enhanced	2.2 District capacity for EMHS management and utilization improved	
	2.3 Country capacity enhanced to sustain good pharmaceutical practices	

Result 1: National policies support cost-effective, equitable and transparent use of EMHS resources

GOU budget resources for EMHS (known as Vote 116) are managed by the parastatal NMS. Currently the bulk of government funding for medicines goes to more advanced health services in urban areas rather than to primary health care facilities in rural areas where most of the burden of disease and mortality occurs.[12] Although GOU funding for EMHS has almost doubled in total value over the past few years, from 110 billion Uganda shillings in 2010/11 to 217 billion in 2013/14, the budget only covers less than one third of the needs. As it is unlikely that the GOU is able to substantially increase funding for medicines in the near future, it is critical that the available resources for public facility services, which are provided free, are used as efficiently and cost-effectively as possible to achieve the greatest health impact.

The current formula used by NMS to allocate EMHS is loosely based on a district's population size, mortality indicators and live births. The budget for individual facilities within a district is determined primarily on what level of care it is (e.g. HCII, HCIII, HCIV, general hospital, regional referral hospital or national referral hospital) and other factors such as whether it is an urban facility (it gets more) and their history of expenditure.[13] Critically, the facility's budget does not factor in patient load even though patient loads vary widely across the same level of care. The result, as a recent study showed, is a very wide range of EMHS funding per patient for the same level of care. On average, the higher the facility level of care the higher per patient allocation of EMHS; lower level facilities had more stock outs of vital EMHS and for longer periods of time than did hospitals. [14]. One important problem is that many districts and facilities do not even know or track their EMHS budgets and expenditures.

Although the essential medicine kit approach has resulted in some gains there are built-in inequities and inefficiencies. Every HC II and HCIII facility is allocated the same annual medicines budget regardless of geographic location, disease patterns or client volume. An analysis of the kit contents against what would be needed to treat the expected number of cases of the most common causes of child mortality in the catchment area showed that facilities were grossly undersupplied with cost-effective treatments like ORS, zinc and vitamin A. [15] And yet on average 40 percent of the kit items are over-supplied and accumulate unused on facility shelves. Further, only half of the kit items are those classified in the Uganda Essential Medicines and Health Supplies List as "vital", meaning they must be available as they are life-saving; the other items fall under "essential" and "necessary".[16]

As the biggest barrier in access to medicines, the issue of the high prices of EMHS in the private sector must be tackled. This longer-term goal will require commitment of the GOU and other stakeholders.

1.1 Policies developed and implemented to improve medicines affordability, availability and access in

[12] In Fy 12/13 two national referral hospitals were allocated 27% of the essential medicines budget while only 43% of the funds were allocated to the 3,276 public and PNFP district health facilities This budget excludes funding for ARVs, ACTs, vaccines, TB, and RH commodities.
[13] NMS communication, Oct. 2013
[14] SURE Equity presentation, Oct 2013
[15] D. Kraushaar, Uganda consultancy report, Dec. 2011
[16] MOH, Annual Kit Assessment Survey, Dec. 2012

alignment with national health goals

Policy development and implementation is the responsibility of the GOU; the applicant shall play an important role by providing technical assistance and capacity building to GOU counterparts, collecting and analyzing relevant data and evidence, and facilitating public-private sector dialogue.

The applicant will work with GOU, USAID's Private Health Support implementing partner, donor partners and relevant non-governmental institutions/organizations to develop policies, regulatory options and strategies to address the underlying causes of unaffordable medicine prices, align procurement and distribution of medicines to achieve equity and efficiency and improve accountability of GOU expenditure in alignment with national health goals.

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Illustrative outputs/outcomes:

- Strategies to reduce consumer prices of vital health commodities developed and implemented
- Financing mechanisms to reduce out-of-pocket expenditures for EMHS developed and implemented
- Increased availability of essential medicines in rural government facilities
- Reduced number of households in the lowest socioeconomic quintile that face catastrophic expenditures on medicines
- GOU allocation formula transparent and application widely shared
- Effective mechanisms in place to track public sector financial resources for EMHS

1.2 Pharmaceutical sector research and advocacy enhanced

The Applicant will provide technical support to build national level capacity to generate evidence and translate that evidence into policy options and better programming. Working with one or more non-governmental institutions or organizations, the Applicant will support the design, implementation and dissemination of studies on critical issues relevant to the availability, accessibility and appropriate utilization of EMHS. This research will in part be specifically conducted to monitor and evaluate the effectiveness of SSHC interventions and build a body of evidence for USAID/Uganda's Collaborating/Learning and Adapting (CLA) agenda. The results will be used by SSHC to learn and adapt their approaches throughout the life of the project.

Illustrative outputs/outcomes:

- National surveys conducted to measure EMHS affordability, availability, and access (i.e. WHO indicators) and results disseminated
- Policy papers developed for GOU and key stakeholders
- Quality evidence available and utilized by SSHC to learn and adapt interventions

Result 2: Country capacity strengthened to effectively and sustainably manage the supply chain system

2.1 Central supply chain management systems strengthened

The recipient will work with the central MOH technical programs, NDA, NMS, JMS, Medical Bureaus, USAID IPs, and other donor partners to conduct problem analyses and develop and implement a comprehensive package of interventions designed to maintain and continue strengthening the capacity and performance of these programs and institutions in their respective supply chain management functions. Each entity has different strengths, weaknesses and priorities. The recipient

will focus on interventions that will have the greatest impact on improving decision-making and efficiency, quality, effectiveness and sustainability of a program or system. The interventions should, where applicable and of value, build upon those activities supported under the SURE program.

Illustrative outputs/outcomes:

- Stock outs of vital EMHS reduced at central level
- Central warehouse procurement, warehousing and distribution performance indicators markedly and consistently improved
- NDA product registration and quality testing procedures aligned with international best practices
- Cohesive logistics management information systems and tools in place and functioning
- MOH pharmaceutical sector monitoring and evaluation system in place and functioning

2.2 District-level capacity for EMHS management and utilization strengthened

The Applicant will work with MOH, Medical Bureaus, NMS, JMS and other USAID national level partners to develop new district-level approaches and tools to increase the availability, accessibility, and appropriate use of EMHS. Illustrative areas of focus include improving rational use of medicines, logistics data quality and utilization, pharmaceutical financial management, and community-based distribution mechanisms.

SSHC will be directly responsible for providing financial and technical support to District Health Offices (DHOs) to implement these approaches and tools in up to 51 target districts. (The final number of target districts is subject to change; it will be determined after further consultations with other US government agencies.) Where PNFP facilities are involved the Medical Bureaus and diocese health coordination offices will be appropriately engaged. One specific requirement will be to support implementation of the Supervision, Performance Assessment and Recognition Strategy (SPARS) program in districts where it has not been implemented to date; this could be up to 16 districts. In doing this SSHC will support the MOH PD's goal of having 100 percent national coverage of SPARS. Attachment C lists the 51 districts that might be supported by SSHC and the 16 districts where SPARS needs to be implemented. Attachment D provides illustrative costs to implement SPARS in a district.

In the 61 districts that are supported by district-based health/HIV service delivery implementing partners, SSHC will be responsible for providing oversight and technical support to the partners and district health authorities to ensure standardized, quality implementation of the ongoing and new district-level approaches and tools that are related to EMHS management. The initial priority will be to work with the seven partners to review the progress of SPARS in the 36 districts where they are supporting it. The partners include STAR-E, STAR-EC, STAR-SW, NU-HITES, IDI and MUWRP. It is anticipated that by the time SSHC starts the majority of facilities in these districts will have completed their final supervisory visit.

Illustrative outputs/outcomes:

- All districts and health sub districts have trained MMS routinely supervising, assessing and mentoring facility staff
- SPARS score for all government and PNFP facilities reach and are maintained at 20 or higher (out of possible 25)
- Increased percentage of cases (of major causes of morbidity and mortality e.g. diarrhea, pneumonia, malaria, TB) treated with appropriate EMHS as per national clinical guidelines
- Hospitals and HCIV facilities demonstrate improved pharmaceutical financial management

- Availability of priority EMHS increased markedly and consistently
- Increased proportion of households obtain medicines for recent illness at a government health facility

2.3 Country capacity enhanced to promote and sustain good pharmaceutical practices

Because of the current human resource gap of pharmacists and pharmacy technicians all categories of health workers are involved at some point in the management of medicines including nurses, midwives, laboratory technicians, clinical officers, doctors and even social workers. Integrating the basic principles and core competencies of EMHS management into the pre-service training of all health professional cadres is a cost-effective investment. Equipping core health worker cadres with the basic knowledge and skills in EMHS management will contribute to improving the availability of priority EMHS in facilities, reduce wastage of resources, provide better protection of patients and improve treatment outcomes.

In 2012, Makerere University analyzed 18 training program curricula from 45 health professional training institutions and interviewed tutors about available teaching resources.[17] Half (56%) of the institutions considered EMHS management competencies outside the scope of training needed for clinical officers, nurses, midwives and laboratory technicians.[18] Of the 10 core competencies assessed good dispensing was the most often covered in the curricula; the least covered were management of expired medicines, stock management, financial management, monitoring and evaluation. None of the institutions used the MOH Medicines and Health Supplies Management Manual as a reference book. Only four of the 45 institutions had a tutor with expertise in medicines management and only six had a full-time tutor for the topic areas. The most common challenges or gaps in teaching medicines management were the lack of qualified experts, lack of funds for field attachments, non-practical teaching materials, and the little time allocated to the topics. With SURE support Makerere is currently training 150 tutors in 50 institutions to promote and improve the teaching of EMHS. The outcome of this activity is not known at the present time.

The recipient will work with Makerere University Pharmacy Department, the Ministry of Education and Sports, USAID IPs engaged in human resources for health capacity building, and other relevant stakeholders to build capacity of tutors and integrate good EMHS management concepts and competencies in the pre-service training curricula of health worker cadres that will be involved in managing commodities once in service. Key health professional training institutions will be selected based upon their commitment and potential impact in the health system.

Illustrative outputs/outcomes:

- Standardized training modules and approaches developed and implemented in selected key health professional training institutions
- Graduates of the selected institutions demonstrate greater competency in EMHS management skills than non-graduates

Result 3: Increased availability and access to vital medicines and health supplies among priority populations

[17] Medicines Management Training at Health Professional Training Institutions of Uganda, Nov. 2012

[18] The ten competencies were defined as: VEN classification, selection of medicines, how to organize a medical store, completing a stock card, calculation of minimum and maximum stock levels, calculation of average monthly consumption, processing orders, receiving supplies, management of expired medicines, good dispensing practices

As a focus country that signed commitments for "A Promise Renewed", the UN Commission on Life-Saving Commodities (UNCoLSC), Family Planning 2020 (FP2020), and *Saving Mothers, Giving Life*, the Government of Uganda has reinvigorated its pledge of support to maternal, neonatal, and child health in support of MDGs 4 (reducing the 1990 under-five mortality rate by two-thirds) and 5 (reducing the 1990 maternal mortality ratio by three-quarters) by 2015 and beyond. The government is leading efforts and coordinating partners to implement an evidence-based Reproductive, Maternal, Newborn and Child Health (RMNCH) action plan for accelerating declines in preventable maternal, newborn and child deaths. By 2015, the GOU expects to reach the goal of reducing the maternal mortality ratio to 159/100,000 live births, neonatal mortality rate to 20/1,000 live births and under-5 mortality to 63/1,000 live births. USAID is a member of the UNCoLSC and RMNCH Secretariat and is committed to supporting RMNCH interventions in Uganda, one of eight focus countries.

The UN Commission Uganda has committed to making available and scaling up the use of 30 priority medicines and health supplies identified by WHO as the most effective commodities to reduce maternal, neonatal and child morbidity and mortality. Within this list are the 13 UNCoLSC life-saving commodities (LSC) which are a focus of the RMNCH country implementation plan.[19] The plan identifies the regions with the lowest coverage of RMNCH interventions, the specific barriers to increasing availability and access and the planned interventions to address those barriers.

IR.3.1 Support Ugandan Country Plan to Scale-Up RMNCH commodities

SSHC is expected to be an active member of the MCH Technical Working Group, the coordinating body for the RMNCH plan, and collaborate with the other stakeholders to develop and implement interventions to support the Uganda Country Plan to scale-up RMNCH commodities.

Illustrative outputs/outcomes:

- Research on pricing and availability of RMNCH commodities conducted and results/recommendations disseminated
- Policies and approaches to improve financing, procurement and distribution of RMNCH commodities for priority populations developed and implemented
- Approaches and tools developed and implemented to strengthen district-level RMNCH commodity management and utilization
- Increased availability and utilization/coverage of RMNCH commodities in public and private sector.

3.3 Other USAID Programs and Partnerships

The SSHC activity will coordinate and collaborate with relevant USAID/USG implementing partners and other donor partners to maximize effectiveness of interventions, promote sharing of lessons learned and leverage available resources.

The following are the key USAID implementing partners that SSHC will work with:

Project	**Activities**
Private Health Support	Increase affordability of private health services and

[19] Female condoms, contraceptive implants, emergency contraceptive pill, misoprostol, Magnesium Sulphate, oxytocin injection, antenatal corticosteroids, injectable antibiotics, newborn resuscitation devices, Chlorhexidine, ORS and Zinc

Project	Activities
	products and improve quality of private health sector facilities and services
Uganda Health Marketing Group's (UHMG)	Improve access and utilization of health services and products through social marketing
Marie Stopes Uganda	Improve access and utilization of maternal child services through voucher program with private providers
STRIDES	Improve access and utilization of maternal and child health services through performance based grants to private providers
ASSIST	Quality improvement within selected private sector entities;
STARS and NU-HITES	Improve the quality of public and PNFP health services
Capacity Program/HRH Strengthening	Improving and maintaining a health workforce for the delivery of health and HIV/AIDS services.
SDS	Improve the sustainability and results of decentralized service delivery of health and HIV/AIDS services at Local Government levels. Coordinates DOP process in selected districts.

SSHC will also coordinate and collaborate with the following donor partners:

Organization	Activities
Global Fund to Fight HIV/AIDS, Tuberculosis, and Malaria (GFATM)	Supports the Ugandan health system to scale-up comprehensive services to address HIV, TB and malaria and strengthen the supply chain system.
UK Department for International Development (DfID	Supports the health sector through assistance in essential medicines, family planning, malaria and PNFP sector.
World Bank (WB)	Supports health systems strengthening with particular emphasis on maternal and child health; provides funding for RH/FP commodity procurement.
UNICEF	Supports child health services, integrated management of childhood illnesses, expanded immunization program, and emergency obstetrics and newborn care training.
UNFPA	Supports implementation of the Uganda RMNCH Country plan and reproductive health activities.
Belgian Technical Cooperation (BTC)	Supports the health sector through assistance to districts and PNFP facilities and essential medicines

II. List of Attachments

Attachment A Prescribing Practices: Pharmaceutical Sector Survey and SPARS results
Attachment B Summary of SURE Key Achievements
Attachment C SSHC Target Districts
Attachment D Illustrative District Budget for SPARS