EVALUATION
Interim Evaluation of Systems for Improved Access to Pharmaceuticals and Services Project

May 2016

This publication was produced at the request of the United States Agency for International Development. It was prepared independently by Constance Carrino, Maria Miralles, and Regan Whitworth.
Cover Photo: A pharmacist in Chokwe, Mozambique, dispenses Coartem, and explains to a mother how to administer the prescription to her child with malaria. Credit: 2012 Arturo Sanabria, Courtesy of Photoshare
INTERIM EVALUATION OF THE SYSTEMS FOR IMPROVED ACCESS TO PHARMACEUTICALS AND SERVICES (SIAPS) PROJECT

May 2016

AID-OAA-C-14-00067

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ACRONYMS

ACPE  Accreditation Council for Pharmacy Education
ACT  Artemisinin-based combination therapy
AFG  AIDS-Free Generation
AIDS  Acquired Immunodeficiency Syndrome
AMDS  AIDS Medicines and Diagnostics Services
AMR  Antimicrobial Resistance
AMREF  African Medical and Research Foundation
AMRH  African Medicine Regulatory Harmonization
AOR  Agreement Officer’s Representative
APTS  Auditable Pharmaceutical Transactions and Services (Ethiopia)
ARV  Antiretroviral
BPR  Business Process Reengineering
CA  Cooperative Agreement
CDC  US Centers for Disease Control and Prevention
CMS  Central Medical Store
COMU  Country Operations Management Unit
COPs  Country Operation Plans
COR  Contract Officer’s Representative
CPD  Country Program Director
CSO  Civil Society Organization
DDTS  Daily dispensing tally sheet
DGDA  Directorate General of Drug Administration (Bangladesh)
DGFP  Directorate General of Family Planning (Bangladesh)
DGHS  Directorate General of Health Services (Bangladesh)
DRC  Democratic Republic of the Congo
DTC  Drug and Therapeutics Committee
EAC-MRH  East African Community Medicines Regulation Harmonization
EMF  Emergency Medicines Fund
EML  Essential Medicines List
EPCMD  Ending Preventable Child and Maternal Deaths
EPN  Ecumenical Pharmaceutical Network
EUV  End-use verification (survey)
FDA  U.S. Food and Drug Administration
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>NCD</td>
<td>Non-communicable Diseases</td>
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<tr>
<td>NDoH</td>
<td>National Directorate of Health (South Africa)</td>
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<tr>
<td>NEPAD</td>
<td>New Partnerships for Africa’s Development</td>
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<tr>
<td>NHI</td>
<td>National Health Initiative</td>
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<tr>
<td>NIS</td>
<td>Newly Independent States</td>
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<tr>
<td>NTD</td>
<td>Neglected Tropical Diseases</td>
</tr>
<tr>
<td>NTP</td>
<td>National TB Program (Bangladesh)</td>
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<tr>
<td>OAA</td>
<td>USAID’s Office of Acquisitions and Assistance</td>
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<td>OHA</td>
<td>Office of HIV/AIDS</td>
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<tr>
<td>OHS</td>
<td>Office of Health Systems</td>
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<tr>
<td>PBL</td>
<td>Problem-based Learning</td>
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<tr>
<td>PCID</td>
<td>Protecting Communities against Infectious Diseases</td>
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<tr>
<td>PDoH</td>
<td>Provincial Directorate of Health (South Africa)</td>
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<tr>
<td>PEPFAR</td>
<td>U.S. President’s Emergency Plan for AIDS Relief</td>
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<td>PLDP</td>
<td>pharmaceutical leadership development program</td>
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<td>PMI</td>
<td>President’s Malaria Initiative</td>
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<td>PMP</td>
<td>Performance Monitoring Plan</td>
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<tr>
<td>PRH</td>
<td>Office of Population and Reproductive Health</td>
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<td>PTC</td>
<td>Pharmacies and Therapeutics Committee</td>
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<tr>
<td>PV</td>
<td>Pharmacovigilance</td>
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<tr>
<td>R4D</td>
<td>Results for Development</td>
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<tr>
<td>RPM</td>
<td>Rational Pharmaceutical Management</td>
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<tr>
<td>RPM Plus</td>
<td>Rational Pharmaceutical Management Plus</td>
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<tr>
<td>SAE</td>
<td>Serious adverse event</td>
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<tr>
<td>SCMS</td>
<td>Supply Chain Management and System</td>
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<td>SDGs</td>
<td>Sustainable Development Goals</td>
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<td>SEAM</td>
<td>Strategies for Enhanced Access to Medicines Program</td>
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<td>SIAPS</td>
<td>Systems for Improved Access to Pharmaceuticals and Services</td>
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<td>SIMS</td>
<td>Site Improvement through Monitoring System</td>
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<tr>
<td>SOP</td>
<td>Standard Operating Procedure</td>
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<td>SOW</td>
<td>Scope of Work</td>
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<td>SPS</td>
<td>Strengthening Pharmaceutical Systems</td>
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<td>SSV</td>
<td>Supportive Supervision Visit</td>
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<td>SUGEMI</td>
<td>Unified Pharmaceutical Management System (Dominican Republic)</td>
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<td>SWAP</td>
<td>Sector Wide Approach Plan (Bangladesh)</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>TA</td>
<td>Technical Assistance</td>
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<td>TB</td>
<td>Tuberculosis</td>
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<td>TO</td>
<td>Task Order</td>
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<tr>
<td>TOT</td>
<td>Training of trainers</td>
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<tr>
<td>UCDC</td>
<td>Ukrainian Center for Disease Control</td>
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<tr>
<td>UHC</td>
<td>Universal Health Coverage</td>
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<tr>
<td>UNCoLSC</td>
<td>UN Commission on Life-Saving Commodities</td>
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<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<tr>
<td>USAID</td>
<td>U.S. Agency for International Development</td>
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<tr>
<td>USFDA</td>
<td>U.S. Food and Drug Administration</td>
</tr>
<tr>
<td>USG</td>
<td>U.S. Government</td>
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<tr>
<td>UW</td>
<td>University of Washington</td>
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<tr>
<td>WAHO</td>
<td>West Africa Health Organization</td>
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<tr>
<td>WDI</td>
<td>William Davidson Institute</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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EXECUTIVE SUMMARY

Evaluation Purpose and Evaluation Questions
The purpose of the evaluation of the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) program is to assess the effectiveness of the project’s technical approach and progress to date. The following questions were addressed:

1. What is the effectiveness of the SIAPS’ technical approach to pharmaceutical system strengthening? Why does the approach work, or not work?
2. Is there evidence that the SIAPS technical approach has contributed to the strengthening of pharmaceutical systems?
3. What technical areas are necessary for a program that strengthens pharmaceutical systems? Does SIAPS currently incorporate all these areas? Are there any additional areas that should be considered to meet USAID objectives in Ending Preventable Child and Maternal Deaths (EPCMD), AIDS Free Generation (AFG), or Protecting Communities against Infectious Diseases (PCID)?
4. How do the SIAPS goal and objective relate to those of the Global Health Supply Chain program (GHSC)?
5. Are SIAPS’ Intermediate Results (IRs) relevant to the pharmaceutical systems strengthening needs of countries as they move towards Universal Health Coverage (UHC)?

This evaluation was conducted by a three-person team: Constance Carrino, Ph.D., Maria Miralles, Ph.D., and Regan Whitworth, Ph.D., J.D. between September 3, 2015 and December 31, 2015. It comes beyond the mid-point of the SIAPS program and as the USAID Vision for Health Systems Strengthening 2015-2019 was launched. This timing led the evaluation team to focus on the present pharmaceutical system strengthening environment and future programming in this field (i.e., the strengthening of the medicines function within health systems).

Project Background
SIAPS is a cooperative agreement (CA) initially awarded to Management Sciences for Health (MSH) for the period September 23, 2011 to September 22, 2016. The total estimated amount of the CA was $197,926,458, with a required cost share of $14,844,484.00, or 7 percent of the award. In October 2015, SIAPS was awarded an extension until September 2017 and a ceiling increase of an additional $28 million.

The goal of SIAPS is to “assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes,” and its objective is “to promote and utilize a systems strengthening approach consistent with the Global Health Initiative (GHI) that will result in improved and sustainable health impact.”

Core SIAPS partners include Accreditation Council for Pharmacy Education (ACPE), Harvard University Medical School (HMS), Harvard University’s School of Public Health, Logistics Management Institute, (LMI), and the University of Washington. Expertise is also accessed from several of the following resource partners: African Medical and Research Foundation (AMREF), Boston University’s Center for Global Health and Development, the Ecumenical Pharmaceutical

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SIAPS is led by a Program Director and three Deputy Directors, and has 360 staff members, 75 percent of which are technical staff. Funds from 30 countries or regions make up 83 percent of the SIAPS budget with 15 percent coming from USAID/Washington health element teams and 2 percent from GH crosscutting sources. Originally, SIAPS was managed in the Office of Health, Infectious Diseases and Nutrition (HIDN) in the Bureau for Global Health (GH), but was moved to GH’s Office of Health Systems (OHS) in the second year of the program.

**Evaluation Methodology**

Findings, conclusions, and recommendations were developed based on the review of documents, presentations, key informant interviews, a survey of missions, and the evaluation team’s own direct observation.

In-depth interviews were held with 155 people: SIAPS, USAID, host country government, and global and in-country stakeholders. Fifty-five USAID Health Officers were surveyed using a web-based questionnaire including 29 missions receiving SIAPS support. There were 17 responses (a response rate of 30.9 percent), including eight from missions using SIAPS. Individual comments collected in the survey are presented as individual responses given that the small number of respondents precluded aggregate analysis. Field visits were made to Bangladesh, Ethiopia, and South Africa where evaluation team members conducted interviews, made site visits, observed SIAPS tools in use, and were briefed on SIAPS, USAID, government, and other stakeholder activities and priorities. In all cases, respondents were assured that their responses were both voluntary and not to be shared beyond the evaluation team.

**Findings, Conclusions, and Recommendations**

SIAPS takes a system-wide approach to meet disease-specific objectives while strengthening pharmaceutical systems. Strengthening is measured through a results framework structured around the familiar five health system components as they relate to medical products: governance, human and institutional resources, information systems, finance, and services. These make up the five SIAPS IRs. The approach embraces Global Health Initiative principles, especially country ownership and sustainable health systems strengthening.

The flow of the SIAPS approach to system strengthening moves from analysis to evidence-based strategies, to work deliberately and systematically in any or all of the five systems input IRs that form the technical approach, leading to improved system performance and subsequently to improved coverage and access to medicines and drug-related services. Intended results include conditions to support sustainable health outcomes and impact.

**Is the approach effective?** Yes. Project documentation and SIAPS clients and observers explain the effectiveness of the approach in three ways: 1) SIAPS accomplished most of what it set out to do in its annual work plans; 2) Country programs demonstrated performance outcomes that indicated system strengthening (e.g. shorter procurement schedules, absence of stock-outs, shorter lines at the pharmacy, more time for counseling); and 3) Numerous useful

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contributions were made in global leadership (e.g. UHC, antimicrobial resistance (AMR), pharmacovigilance (PV), and maternal, neonatal, and child health (MNCH).

**What made the SIAPS approach successful?** The SIAPS approach offers countries and global stakeholders and collaborators highly technical and broad, yet grounded, expertise in pharmaceutical system strengthening while maintaining country ownership of all activities. Staff members have the stature to convene stakeholders and the people skills to act as facilitators. The project’s mix of global, regional, and country led activities has helped educate and develop program interventions in key issues, such as MNCH commodity security, PV, and AMR.

SIAPS’ approach to professional training and capacity building leaves senior health system managers with the skills to identify and fix bottlenecks in their systems (e.g., provincial pharmacy leads in South Africa), health facilities with the ability to collect and analyze information relevant to their daily decisions (e.g., data collection and analysis system in Ethiopia), and the country with institutionalized in-service and pre-service programs (e.g. pharmacist needs assessments and training in Bangladesh). USAID and government respondents noted that the project provides thorough (though sometimes slow) and effective documentation as well as valuable expertise with technical documents, such as guidelines and Standard Operating Procedures (SOPs) to ministries and international agencies engaged in pharmaceutical management activities. SIAPS clients noted that the project has responsive program management, and an exceptional AOR.

**What didn’t work?** Government health leaders in the three countries visited have called for welcome, though formidable, strengthening and expansion of information and management systems and SIAPS government counterparts have proposed or promised human resource contributions to achieve and sustain national rollouts with SIAPS assistance. SIAPS was not prepared with the strategies and technologies to take their own successful interventions to scale. Future programs would benefit from technology assessments, more creativity in contracting out for services related to information technology (IT) locally, and increased USAID engagement in negotiating present and long-term government contributions for national scale roll-outs.

Measuring and reporting on system strengthening did not occur. An operational definition of system strengthening was not developed until the fourth year of the program, making it difficult to assess how the approach contributed to system strengthening. IR reporting, where activity streams customarily cut across IRs, tracks individual elements of the technical approach, as required in the RFA, but not how those elements are used together to strengthen systems. SIAPS success stories and work plan annexes do provide some comprehensive reporting of the results of SIAPS work but do not adequately document the system-strengthening occurring (or not) and its contribution to improved health outcomes from the country’s perspective (e.g., how South Africa is meeting the pharmaceutical and service needs of HIV patients, and how Bangladesh is improving the efficiency and quality of government procurement in health).

**Is there evidence of system strengthening?** The lack of an obvious operational definition for success of the program makes it difficult to objectively assess its effectiveness in terms of system strengthening. The evaluation team used Performance Monitoring Plan (PMP) program data as a proxy, and found that governments and USAID mission clients see SIAPS’ PMP results as evidence of a strengthened pharmaceutical system, especially in cases where the improvements are maintained over time. Among the important outcomes or improvements
tracked in the PMP are price reductions, decreases in stock-outs, reductions in the time it takes to register a medicine, reduction in treatment regimens used, increases in the number and accuracy of lab reporting, and percentage of cases of tuberculosis (TB) and multidrug resistant (MDR) TB treated. Although SIAPS' ability to report on sustained improvement over a longer time is necessarily limited due to the length of the project, presumably key information systems will be able to capture and analyze this information beyond the project end date.

SIAPS had not as yet developed a measurement framework for pharmaceutical system strengthening. Beginning in the first year of operation, SIAPS was to develop a measurement framework with corresponding indicators and this remains a priority for OHS. USAID reports that while some work on indicators began in that first year, it was not until 2014 that SIAPS convened a technical advisory panel from eight organizations to discuss the definition of pharmaceutical systems and pharmaceutical systems strengthening and to draft indicators. The results of that exercise are currently under review.

Is SIAPS relevant to GH Initiatives? Yes. SIAPS has made relevant and useful contributions to meeting GH objectives. Respondents noted in critiques that increased emphasis in some areas was more important than adding new areas to meet the needs of GH objectives. Health element leads would like to see more promotion of appropriate use of medicines to combat the emergence of AMR, and strengthening civil society organizations (CSOs) to better advocate for and monitor implementation of strategic activities. Examples of SIAPS' contributions to GH initiatives include:

- **EPCMD**: Compilation of evidence to support global and country level strategies and interventions in response to the United Nations Commission on Life-Saving Commodities (UNCoLSC). This work provided USAID with a reference for both core and priority country-specific MNCH work plans not only for SIAPS but also for other USAID and non-USAID projects in subsequent years.

- **PCID**: Development of a country technical assistance strategy to support the Global Drug Facility (GDF), including key information management, and presentation technologies endorsed by the GDF to help with country and global TB commodity needs planning, and procurement: e-TB Manager\(^3\) in 11 countries and QuanTB\(^4\) in 15.

- **AFG**: Design of indicators for evaluating systems issues related to medicines at the facility level in the Site Improvement through Monitoring System (SIMS) used by PEPFAR countries. Strengthening of drug management systems at the country level (e.g. Cameroon) and rationalizing antiretroviral (ARV) regimes at the facility level (e.g. the Dominican Republic).

**SIAPS and the new GHSC.** Awards under the new Global Health Supply Chain Program were just beginning to be announced as this evaluation began. GHSC includes a series of awards focused on health commodity procurement, quality assurance, and supply chain technical assistance. Of these, the Procurement and Supply Chain project (known as the Green Box), the

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\(^3\) e-TB Manager is a web-based tool for managing the information needed by national TB control programs. It integrates data across all aspects of TB control, including information on suspects, patients, medicines, laboratory testing, diagnosis, treatment, and outcome.

\(^4\) QuanTB, a TB quantification tool, is a downloadable desktop tool that transforms complicated calculations into a user-friendly dashboard displaying key information for managing medicines. It is recommended by the Global Drug Facility.
multiple awards for systems strengthening (Red Box) and the Quality Assurance project (Orange Box) are all expected to conduct country-level technical assistance. The objectives of the technical assistance components of the first two of these programs (Green and Red) are to strengthen systems to improve the availability of health commodities, with a focus on improving supply chain performance, and are similar to those of the SIAPS program.

The evaluation team reviewed what is presented in the statements of work in the GHSC solicitation documents\(^5\) to compare with SIAPS. The SIAPS program, part of a systems strengthening portfolio in OHS, has a results framework organized around health systems components. In contrast, the scopes of work (SOWs) of the GHSC technical assistance components group supply chain activities into the following categories: strategic planning, in-country logistics, capacity building, and enabling environment under a broad concept of commodity security, reflecting a difference in approach to system strengthening in addition to an apparent difference in scope.

The GHSC solicitations suggest both overlap and differences between GHSC and SIAPS activities. The GHSC solicitations call for work in strategic planning, financing, human resources and capacity building, advocacy, product selection, and pharmacovigilance, all to achieve GHSC’s commodity security goal. Yet GHSC solicitations do not call for assistance more closely related to service delivery, e.g. pharmaceutical services, antimicrobial resistance, UHC, or medical benefit packages, indicating that GHSC is not expected to replicate SIAPS’ technical mandate and approach to systems strengthening.

**UHC and Future Challenges.** Most USAID-assisted countries are moving, or planning to move, towards universal health coverage.\(^6\) SIAPS funding contributed to an MSH-led initiative to position the issue of medicines in UHC in the global agenda by convening donors, experts, and governments in a seminal meeting in Washington, DC in May 2013 (“Universal Health Care and Medicines: The Start of a Dialogue”). This event served to catalyze further work by researchers and other global actors. A second meeting in Cape Town, South Africa on September 28-30, 2014 focused on engaging country leaders to share experiences and to work on next steps for the design and implementation of medicines strategies within UHC.\(^7\)

Much of SIAPS’ assistance to countries moving towards UHC centers on governance and the development of tools to support effective stewardship of an expanded health system that includes both public and private providers. In the three countries visited, national health leaders have decided or decreed to launch large-scale, national roll-outs of some of these SIAPS tools and approaches. For example:

- **South Africa’s HIV program** further adapted an integrated dispensing and stock management program, RxSolution, to increase transparency and accountability in inventory management practices and support patient care and adherence as the government devolves

\(^5\) RFP SOL-OAA-12-000128 (February 7, 2014) and RFP SOL-OAA-14-00034 (January 8, 2014).

\(^6\) The World Health Organization (WHO) defines Universal Health Coverage as ensuring that all people have access to needed promotive, preventive, curative, and rehabilitative health services, of sufficient quality to be effective, while also ensuring that people do not suffer financial hardship when paying for these services.

management responsibilities to districts. SIAPS helped the national government develop the legal and regulatory framework to support implementation of the new national health system and is assisting with their national roll-out of the RxSolution stock component.

- **In Ethiopia**, SIAPS worked with officials of Food, Medicines and Healthcare Administration and Control Authority (FMHACA) to develop standards for good prescribing and good dispensing. Working with regional authorities, SIAPS helped develop the automated pharmaceutical management information tool (APTS) accepted by several regional and health facility managers as they prepare for the move toward UHC. SIAPS has helped to draft related supportive regulation and is assisting roll-out of APTS in regions where the regulations have been adopted.

- **In Bangladesh**, based on the project’s success in helping Ministry of Health and Family Welfare (MOHFW) develop transparent, real-time information systems to support health and family planning procurement and SIAP’s preliminary work on facility asset management, the MOHFW is asking SIAPS to develop the centerpiece cost-savings, quality improvement asset management plan to include diagnostic technologies for the upcoming Sector Wide Assistance Program 3 (SWAP3).

**Emerging issues.** USAID missions and government respondents noted that as countries move toward UHC, they face challenges that require more critical thinking, such as: information systems and technologies to support decision-making; identifying and addressing issues with rational distribution and use of medicines; financing; addressing infectious and non-communicable disease simultaneously; and the need to better educate, regulate, and monitor the private sector, especially as private industry continues to expand in Africa and Asia. Focal topics of concern include preserving the effectiveness of medicines by containing the emergence of AMR, the cost of new medicines and diagnostics, increased attention to substandard drugs and patient safety, as well as the introduction of new medicines that have not undergone evidence based testing.
I. INTRODUCTION

Evaluation Purpose
This is an interim evaluation of the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) program managed by the Office of Health Systems (OHS) in USAID’s central Bureau for Global Health (GH). The evaluation comes near the end of the project, and just as USAID launched a formal vision statement on health systems strengthening (HSS). Its purpose is to assess the effectiveness of the project’s technical approach and progress to date. The Scope of Work (SOW) appears as Annex I.

Evaluation Questions
Evaluation questions center around the relevance of the technical approach used by the program to strengthen pharmaceutical systems in USAID-assisted countries, and whether evidence exists that the approach actually strengthened, as opposed to supported, those systems. As the OHS moves forward with plans for global initiatives and country field support in this field, questions were also asked about whether the program is addressing current global health initiatives such as Ending Preventable Child and Maternal Deaths (EPCMD), AIDS-Free Generation (AFG), and Protecting Communities against Infectious Diseases (PCID) launched after SIAPS was designed, and whether the project’s intermediate results (IRs) were relevant to countries moving towards Universal Health Coverage (UHC). OHS also asked how the SIAPS goal and objectives relate to the new Bureau for GH Global Health Supply Chain program (GHSC).

Specific evaluation questions are:

1. What is the effectiveness of the SIAPS' technical approach to pharmaceutical system strengthening? Why did the approach work, or not work?
2. Is there evidence that the SIAPS technical approach has contributed to the strengthening of pharmaceutical systems?
3. What technical areas are necessary for a program that strengthens pharmaceutical systems? Does SIAPS currently incorporate all these areas? Are there any additional areas that should be considered to meet USAID objectives in EPCMD, AFG or PCID?
4. How do the SIAPS goal and objective relate to those of the GHSC?
5. Are SIAPS' IRs relevant to the pharmaceutical systems strengthening needs of countries as they move towards UHC?

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8 Ibid.
II. PROJECT BACKGROUND

SIAPS was awarded to Management Sciences for Health (MSH) as a cooperative agreement (AID-OAA-A-11-00021) for the period September 23, 2011 to September 22, 2016. The total estimated amount of the CA was $197,926,458, with a required cost share of $14,844,484.00, or 7 percent of the award. In October 2015, SIAPS was awarded an extension until 2017 and a ceiling increase of an additional $28 million, primarily to accommodate support to Ebola-affected areas.

The goal of SIAPS is to “assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes.” Its objective is “to promote and utilize a systems strengthening approach consistent with the Global Health Initiative (GHI) that will result in improved and sustainable health impact.”

To respond to the broad technical scope of the SIAPS program, MSH recruited the expertise of various partners. Core SIAPS partners include the Accreditation Council for Pharmacy Education (ACPE), Harvard University Medical School (HMS), Harvard University’s School of Public Health, Logistics Management Institute, (LMI), and the University of Washington. In addition, SIAPS accesses the expertise of various resource partners. These include the African Medical and Research Foundation (AMREF), the Ecumenical Pharmaceutical Network (EPN), Harvard Pilgrim Healthcare Institute (HPHI), Imperial Health Sciences (IHS), Results for Development (R4D), Village Reach, and the William Davidson Institute. Boston University’s Center for Global Health and Development was added in as a core partner in 2015.

SIAPS was originally a program of the Office of Health, Infectious Diseases and Nutrition (HIDN) in the Bureau of Global Health.

USAID mission-funded, field support buy-ins to support activities in 30 countries or regions account for the largest amount of the SIAPS obligations (83 percent), most of which are PEPFAR funds. Funding from core health element teams to support directed technical activities represents 15 percent of the obligations. Only 2 percent of the obligations received by SIAPS are from cross-bureau sources that would, in principle, be available to support furthering activities to advance the general technical area of pharmaceutical system strengthening, including participation in global forums, research and policy paper development, and developing tools not directly tied to a country program or specific health elements.

SIAPS Antecedents

SIAPS is the fifth in a succession of global cooperative agreements awarded by USAID to Management Sciences for Health, a globally recognized public health technical leader, to address pharmaceutical management weaknesses and related challenges to the availability and appropriate use of essential medicines and health commodities.

Predecessor pharmaceutical systems programs – Rational Pharmaceutical Management (RPM) (1992-2000), RPM-Russia (1995-1999), RPM Plus (2000-2009), and Strengthening Pharmaceutical Systems (SPS) (2007-2012) – were all implemented by MSH and managed by HIDN. When the GH established the OHS in 2012 to address sustainability in health outcomes as expressed in

9 SIAPS RFA, SOL-OAA-11-00064
the GHI, SIAPS was moved to that office. All of the programs included global technical leadership activities and country-level technical assistance for implementation of basic system improvement interventions as well as direct support. For this, MSH opened the program headquarters in Arlington, Virginia, and opened country offices when appropriate. Unlike the USAID commodities donations programs operating during the same period, DELIVER and Supply Chain Management Systems (SCMS), with the exception of the RPM Plus program, none of the pharmaceutical management programs procured health commodities.

A focus area of the first program, the RPM program (1992-2000), was the development of internationally recognized methodologies and standardized indicator-based tools to conduct comprehensive country pharmaceutical system assessments. The results from studies using these tools generated baseline information of national pharmaceutical system performance as well as a basis for comparison of performance across countries. Country assessments often documented the devastating impact of ill-planned health sector reforms on the availability of essential medicines throughout the supply chain. They also demonstrated the impact of poor product selection, procurement practices, storage, and distribution practices on prescribing and dispensing practices, and the risk of increasing rates of antimicrobial resistance. During this time, a separate RPM cooperative agreement was awarded to MSH for work in Russia (1995-1999).

Under the follow-on to RPM, the RPM Plus program (2000-2009), these tools were adapted to address the specific pharmaceutical management issues of the priority health programs, namely child and maternal health, malaria and tuberculosis, and HIV and AIDS. The guiding conceptual framework for these tools remained systems-based and helped to support implementation of two major medicines-related presidential initiatives, PEPFAR and the President’s Malaria Initiative (initially the Malaria Action Coalition). RPM Plus technical experts worked closely with global stakeholders to further adapt the framework and tools to support new global initiatives, in particular the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), who used them to make decisions related to country capacity and readiness. This approach was also used to help develop strategies for managing the introduction of new drug therapies for malaria, for example. During this time, RPM Plus was also able to leverage from the Strategies for Enhanced Access to Medicines (SEAM), another MSH program funded through a grant from the Bill and Melinda Gates Foundation, and contribute to the development of innovative and complementary private sector approaches to improving access to safe, quality-assured medicines in lesser developed countries.

The Strengthening Pharmaceutical Systems program (2007-2012) was the follow-on to RPM Plus, with the mandate to build on lessons learned from the predecessor programs and support the national scale-up of successful programs and their adaptation to other countries. Through SPS, USAID continued to participate in various global forums and exert influence on issues of access to quality-assured, safe, and effective medicines. Topics that received greater attention under SPS included good governance in the pharmaceutical sector, pharmaceutical care, pharmacovigilance, and commodities management to support effective laboratory services. As with the previous programs, SPS’s approach took into consideration all pharmaceutical system functions and was patient-centered, two additional features that differentiated them from the commodities donations programs managed from the other offices within the GH.

The design of the SIAPS program was guided by the understanding that despite the gains made in health outcomes under the Millennium Development Goals (MDGs), health system constraints threaten their sustainability. Accordingly, the SIAPS innovative results framework was based on
the WHO health systems framework. It includes five health system “inputs,” governance, human and institutional resources, information systems, finance, and service delivery, as they relate to medical products, with governance concerns cross-cutting all other inputs. The results framework pre-dated the USAID Vision for Health System Strengthening. It is worth noting that although the notion of system strengthening was widely recognized and accepted as an important objective, there was no broadly accepted operational definition. Therefore, an important focus of SIAPS was the development of a measurement framework with corresponding indicators of pharmaceutical system strengthening. Such a framework and measurement tool could be used to define system-strengthening activities and demonstrate the value of investments in system strengthening. The SIAPS program design also embraced the operating principles of the Global Health Initiative that stressed approaches to support sustainability such as the promotion of country ownership and “smart integration” of systems to complement technical solutions.

Table 1. SIAPS Antecedents

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Start</th>
<th>End</th>
<th>Notes</th>
<th>Prevailing Initiatives/Issues/Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPM</td>
<td>1992</td>
<td>2000</td>
<td>Cooperative agreement; No extension</td>
<td>Impact of health sector reforms on availability of medicines, antimicrobial resistance (AMR)</td>
</tr>
<tr>
<td>RPM Russia</td>
<td>1995</td>
<td>1999</td>
<td>Cooperative agreement; No extension</td>
<td></td>
</tr>
<tr>
<td>RPM Plus</td>
<td>2000</td>
<td>2007</td>
<td>Cooperative agreement; Two-year extension and ceiling increase</td>
<td>Advent of various global initiatives to improve access to medicines, PEPFAR, MAC/PMI, WHO Good Governance in Medicines Program, SEAM, MeTA</td>
</tr>
<tr>
<td>SPS</td>
<td>2007</td>
<td>2012</td>
<td>Leader with Associates; no-cost extension</td>
<td>Scale-up of successful interventions, increased focus on transparency and accountability, and globalization of trade in medicines, pharmacovigilance, AMR</td>
</tr>
<tr>
<td>SPS Afghanistan</td>
<td>2011</td>
<td>2017</td>
<td>Associate award</td>
<td></td>
</tr>
<tr>
<td>SPS Kenya</td>
<td>2011</td>
<td>2016</td>
<td>Associate award</td>
<td></td>
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<tr>
<td>SPS Ukraine</td>
<td>2010</td>
<td>2012</td>
<td>Associate award</td>
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<tr>
<td>SPS Multi-award</td>
<td>2010</td>
<td>2012</td>
<td>Associate award</td>
<td></td>
</tr>
<tr>
<td>SIAPS</td>
<td>2011</td>
<td>2017</td>
<td>Extension &amp; ceiling increase, primarily to accommodate funding for Ebola</td>
<td>Global Health Initiative, establishment of Office of Health Systems, market-shaping approaches, A Promise Renewed/EPCMD, AFG, PCID, UHC and SDGs, and Ebola</td>
</tr>
</tbody>
</table>

Management Structure

The SIAPS program has a senior management team led by a Program Director and three Deputy Directors. It has 360 staff members, 75 percent of whom are technical, and most of these staff members have some project management responsibility. According to SIAPS senior management, the management structure of the SIAPS program changed during the third year of the program so as to be more responsive to the topical areas of the SIAPS framework and to
promote better cross-fertilization and communications amongst the various technical and country portfolio teams. The Deputy Director for Country Programs oversees a team of country portfolio managers, and the Technical Deputy Director oversees a team of specialized technical experts, some of whom serve as Intermediate Result (IR) Leads. Under the guidance and leadership of these deputy directors, country portfolio managers and technical experts develop annual work plans and are responsible for their timely implementation within established budgets, and for reporting on progress and lessons learned.

In addition to the technical teams, a team of analysts and program associates led by the Deputy Director of Finance and Operations supports the development of budgets, tracks expenditures, and provides assistance with all related operational issues to help ensure the effective implementation of technical programs. Staff members generate financial reports and help track performance on sub-awards and contracts to partners.

There is also a team responsible for results management and reporting led by the Pharmaceuticals and Health Technology Group’s Deputy Director for Monitoring and Evaluation (M&E). SIAPS created the M&E framework for the program and the plan to support reporting against those indicators. This team works with counterpart staff in headquarters and in the field to ensure that work plans include rational and coherent monitoring matrices. They also include indicators so that results can be tracked and global program progress reports are consistent. There is also a Results Management & Reporting team led by the Senior M&E Advisor that is responsible for synthesizing and interpreting the data for the global program.

**Headquarters (HQ) and Field Reporting**

Most SIAPS staff members (85 percent) are based in one of 17 country offices. Staff members working in a country office are mostly local hires who report to a Country Program Director (CPD), who, in turn, reports to the SIAPS country portfolio manager based at headquarters. Each SIAPS work plan includes a section describing staffing, including an organizational chart with roles and responsibilities of staff.

The field staff and the headquarters-based M&E team coordinate closely to ensure complete and timely results reporting. For the more mature country programs, such as South Africa and Ethiopia, work plans are strongly country-driven and field staff reported little need for technical assistance from HQ for developing work plans. HQ administrative and editorial staff assists the field to draft and edit presentations and international meetings abstracts and technical manuscripts.

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10 In countries where MSH has more than one program, MSH appoints a country representative who oversees all programs. All management functions are harmonized within the country through the Country Operations Management Unit (COMU), which links with operational teams at the corporate level in MSH headquarters.
III. EVALUATION METHODS & LIMITATIONS

This evaluation was conducted between September 3, 2015 and December 31, 2015, by a three-person team: Constance Carrino, Ph.D. (team lead), a former senior executive with USAID with experience as a manager and policy advisor; Maria Miralles, Ph.D., a pharmaceutical management expert and former MSH staff member and former OHS staff member, who works with a variety of international agencies in Africa, Latin America, and Asia; and Regan Whitworth, Ph.D., J.D., a multi-sectoral development and academic professional with experience in the Newly Independent States (NIS), Africa, and Afghanistan. Signed conflict of interest agreements for the team are attached as Annex VI.

The evaluation team used multiple sources of data for a mixed-methods approach, with information to support evaluation of SIAPS gathered from documents, key informant interviews, field visits, a survey, and their own direct observation.

The review of activity documentation, relevant literature, and country presentations began at the inception of the evaluation and extended throughout the evaluation until preparation of this report. The program provided extensive briefing materials and there is a considerable amount of documentation relating to SIAPS and pharmaceutical systems in low and middle-income countries. A list of documents reviewed is in Annex IV.

Key informant interviews were held with program leadership and staff in Washington and the field, the USAID AOR and program management team, other key USAID stakeholders and clients of the program, global stakeholders, CA partners, and, in the field site countries, government officials and donors. Interviews were held individually and in groups. All informants were advised that their responses were voluntary and would be kept confidential. Lists of persons interviewed appear in Annex III and Interview Guidelines appear in Annex V.

Field visits to Bangladesh, Ethiopia, and South Africa were conducted between October 10 and November 5, 2015. The evaluation team visited a wide range of locations targeted by SIAPS system strengthening efforts and interviewed individuals engaged in the work of those sites. Locations visited included policy-level offices of host governments and service delivery facilities (ranging from central warehouses to neighborhood clinics), in addition to SIAPS field offices, USAID missions, and other key donors and stakeholders.

A web-based survey was used to gather information about mission experience with pharmaceutical system strengthening efforts. The survey was sent to 55 Health Officers, including those from the 29 missions that use SIAPS. Informants were advised that their responses were voluntary and anonymous. Seventeen responses were received, with eight from countries presently using SIAPS. With the small number of respondents, no useful aggregate analysis of survey results was possible. Comments provided by those who did answer the survey are used as individual responses. A more detailed description of the methods including limitations of this evaluation appears as Annex II. Survey questions appear in Annex V.
IV. FINDINGS

Effectiveness of Technical Approach

What is the approach?
SIAPS takes a holistic, system-wide approach to meeting disease-specific objectives while strengthening pharmaceutical systems. The program uses a results framework to represent its overall strategy and outcome expectations. This framework, used to inform planning and management, is structured around the familiar five health system components: governance, human and institutional resources, information systems, finance, and services. The SIAPS approach embraces the GHI principles, especially those related to the promotion of country ownership and engagement with all local public and private sector stakeholders, and the "smart integration" of complementary systems.

The general flow of the approach, which guides both field and global activities, is to move from analysis to evidence-based strategies, to work deliberately and systematically in any or all of the five systems IRs that form the technical approach. The intent of a formalized approach was to differentiate it from predecessor programs and explicate technical assistance in pharmaceutical system strengthening. The IRs and sub-IRs appear in Figure 1.

Figure 1. SIAPS IRs and sub-IRs (2011-2016)

This work is intended to lead to improved system capacity and performance and subsequently to improved coverage and access to medicines and drug-related services. Intended results
include conditions to support sustainable health outcomes and impact. The program work plans describe the application of the approach, and progress reports document its implementation through descriptions of activities and results, and through monitoring indicators organized around the IRs.

The evaluation team saw and heard that the “daisy” graphic depicted in Figure 2 below is used as a schematic both centrally and in the field by SIAPS staff and USAID clients to characterize the SIAPS approach to working through the various IRs.

**Figure 2. SIAPS Technical Framework**

The SIAPS framework and approach to implementing it are generally considered to be unique and appropriate by SIAPS core and resource CA partners (see page 2) and clients. For example,

“It is an appropriate approach as it allows for thinking about medicines as more than just commodities. It is a consistent framework that is systems based. Other programs do not have this kind of approach.” (SIAPS Partner)

“The SIAPS approach of thinking about the system as a whole is the right way to go. It is holistic.” (SIAPS Partner)

“Regarding the daisy wheel, it makes a lot of sense, it is intuitive. You can see how it can be carried forward operationally” (SIAPS Partner)

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11 A more comprehensive description of the SIAPS technical framework is documented in: *The SIAPS Approach to Strengthening Pharmaceutical Systems*. June 2014 (for internal distribution only).

12 Ibid.
It is worth noting, however, that while many informants perceived uniqueness in the SIAPS approach, some did not.

“SIAPS is perceived as a follow-on to SPS, no real difference in approach, and it is a very similar approach to Abt’s.” (SIAPS Partner)

“They have an approach that is not unique. They have a “tick in the box” or cookie cutter approach, much like JSI. For example, they work with government to strengthen systems even if the system cannot stand on its own.” (USAID respondent)

While the same technical approach is applied for each country program, entry points and work plans are crafted to meet USAID priority concerns and funding availability, and what the country needs and can absorb, and then evolve over time as capacity develops and opportunities arise. For example:

• **In Bangladesh**, SIAPS’ first task was to continue work started under SPS to help the Family Planning Directorate in the Ministry of Health and Family Welfare (MOHFW) strengthen family planning logistics management after concerns about stocks outs. SIAPS was brought in as a more comprehensive partner to develop the governance and systems structures in the areas of procurement reform, a centralized information system for health, and assessing, standardizing lists and tracking equipment down to the lowest health facility levels. Today, the flow of drugs and commodities is transparent and no stock-outs have been reported since a new nation-wide information system became operational. SIAPS has also been working to development management systems and training for the National TB Program (NTP). SIAPS is presently assisting USAID and donor partners pre-position the MOHFW for the upcoming 2016-2021 Health Sector Wide Approach Plan 3 (SWAP3).

• **Guinea** followed a similar path when complex issues in the country’s supply chain led the President’s Malaria Initiative (PMI) to expand SIAPS’ usually constrained scope under PMI. The project’s role became more important and it is now assisting with scale-up and addressing capacity building, training, reforms, and governance issues.

• In the **Dominican Republic**, SIAPS received funds to support TB and PEPFAR programming to improve the availability of key commodities. SIAPS leveraged the newly established Unified Pharmaceutical Management System (SUGEMI) and coordinated with the Global Fund to support strengthening of an integrated health delivery system that includes diagnosis and treatment of HIV/AIDS. This involved improved Standard Operating Procedures (SOPs) for product selection, quantification, and procurement for all commodities as well as changes in storage and information systems.

• In **Ethiopia**, the predecessor program SPS worked with regional and lower level entities on issues of pharmaceutical services. With the Ministry of Health completing the Business Process Reengineering (BPR) in 2011, the roles and responsibilities of various entities in health were defined. With this, SIAPS began working to develop tools that would be useful to those who would now be responsible for managing their own budgets and facilities. Beginning with the ideas and efforts of a single hospital, SIAPS helped to develop what is now known as the Auditable Pharmaceutical Transaction and Services (APTS) program and
was adopted as a national priority in 2015. Optimal use of the data from a system will require further investments in developing analytic capacity and skills for management as well as clinical services. In parallel, SIAPS has been working with the regulatory authorities’ information system so that the regulatory authority can be better positioned to support users of APTS.

- In South Africa, based on previous MSH work in a bilateral program and SIAPS expertise, the project was asked to develop pharmaceutical systems in the country’s Provincial Departments of Health (PDoHs). Working in partnership with the PDoHs and key academic institutions (Nelson Mandela Metropolitan University, the University of Limpopo and the University of the Western Cape), SIAPS assisted in the development of Drug and Therapeutics Committees (DTCs), a pharmacy leadership and development program (PLDP), and training and installation of stock and dispensing modules of RxSolution. Pharmacists in PDoHs tend to have long tenures in their positions, or at least in their provinces, so the human resource (HR) investment was considered appropriate. The evaluation team found the people and institutions who received this capacity building and tools to be independently capable of managing and making improvements to their programs with minimal technical assistance (TA) from SIAPS. At present SIAPS is working with the National Department of Health (NDoH) to install the inventory management module of RxSolution throughout the provinces as part of a national tracking program. NDoH is relying on SIAPS to work with other CAs in the provinces and encourage provincial compliance with the new government mandate that includes developing guidance to link to a national information program, closing out depots for more direct delivery of medicines, and incorporate the RxSolution’s inventory management module throughout their facilities.

Is the approach effective?

The lack of an obvious operational definition for success of the program makes it difficult to objectively assess its effectiveness in terms of system strengthening. As discussed below, although the program’s M&E and progress reporting system includes numerous indicators reporting on activity outputs, there are fewer that report on outcomes, and there is no clear overall framework that captures a larger system strengthening objective. Nevertheless, we can point to other types of evidence that indicate that the SIAPS approach has been largely effective and that important outcomes have been achieved at the country level. Most critically, perhaps, is that missions largely reported that SIAPS has accomplished what was expected and often referenced the satisfaction of country counterparts as key, and all missions reported that the approach was critical for government engagement.

Stakeholders in the field – USAID missions, government, and donors – described elements of the comprehensive technical approach as key to their country and attribute the larger approach for improvements in quality and efficiencies in public sector pharmaceutical systems. Countries such as Bangladesh, the Dominican Republic, Ethiopia, Namibia, and South Africa have taken advantage of a full range of SIAPS pharmaceutical strengthening technical assistance (TA) and are showing progress in improvements in patient satisfaction (shorter lines, more time for counseling, privacy) and quality (AMR and active pharmacovigilance (PV) programs).

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Countries with existing capacity for pharmaceutical management but with particular needs received highly specialized assistance from SIAPS. For example, in Ukraine the Ukrainian Centers for Disease Control (UCDC) have taken on oversight of e-TB Manager, and the Philippines PV definitions are being developed by the country’s Food and Drug Administration. In both cases SIAPS provided specific, targeted field assistance to help make this happen.

Global stakeholders see the program’s contributions to the field primarily through technical convening, expert advice, and TA in the development of international consensus around issues, priorities, and tools. Examples cited in interviews as being particularly important include:

- **UHC**: SIAPS funds were used to support a seminal international meeting led by MSH in 2013 in Washington, DC entitled “UHC and Medicines: Initiating a Dialogue,” which convened major stakeholders, donors, and thought leaders, as well as country-level policy-makers, to address various issues and concerns around medicines in UHC. A follow-up SIAPS-led meeting was held in South Africa targeting selected Southern African countries to discuss the specific issue of pharmacy benefits management under insurance-based approaches for UHC. While further technical leadership activity in medicines for UHC has not been fully articulated under SIAPS, there is recognition that a platform for further work in this area has been established – for example, in 2014 a chapter on medicines and UHC that highlighted progress in China, Ghana, and Mexico and an editorial on quality and use of medicines within the context of universal health coverage. More recently, MSH published a manual/primer on medicines benefit programs in low- and medium-income settings. According to the SIAPS AOR team, there is a plan to apply the method in selected USAID supported countries.

- **PV**: Building on assessments of country regulatory systems conducted initially by the predecessor program, SPS, with support from an interagency agreement with U.S. Food and Drug Administration (USFDA), SIAPS advocated and provided direct technical assistance for regulatory system strengthening, especially in the area of pharmacovigilance. With access to countries and influential decision-makers at the global and regional levels, SIAPS regulatory system strengthening tools and approaches have been introduced in the West African Health Organization (WAHO) sub-regional regulatory harmonization initiative, the East African Community Medicines Regulation Harmonization (EAC-MRH) Program’s PV agenda, and New Partnerships for Africa’s Development’s (NEPAD’s) African Medicines Regulatory Harmonization (AMRH) program technical working groups. From the perspective of the USFDA, an entity with limited in-country presence, the intent of this partnership with USAID was just this – to catalyze discussion and action on this issue of global concern.

- **Ending Preventable Child and Maternal Deaths (EPCMD) and A Promise Renewed**: SIAPS was the primary technical advisor on pharmaceutical issues for the UN Commission on Life Saving Commodities (UNCoLSC) leading the supply chain technical

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reference team, and providing valued technical inputs to several work streams. This work, which was lauded by Commission leadership as being highly collaborative, resulted in numerous key research and review documents, tools, and in-country initiatives. SIAPS broad access to countries allowed USAID to use SIAPS to conduct various country level data collection efforts to inform the development of market-shaping strategies and other related EPCMD initiatives.

Why does the approach work?

Overall approach. The SIAPS approach was described as collaborative and facilitative, working with counterparts and other stakeholders, and not “doing for” them. According to one in-country key informant, SIAPS does not “just support the system, but they also help to build the system.” Similarly, through its facilitating and convening roles, SIAPS was appreciated by global stakeholders for SIAPS’ ability to provide “ground truth” to more academic approaches to help shape or inform global initiatives such as the UNCoLSC and the GFATM. As one SIAPS partner noted, “The black and white academic view and the reality on the ground sometimes do not correspond to each other.”

Qualified and experienced technical staff. Background materials, interviews, comments from the survey and direct observation demonstrate that SIAPS is led and staffed by a team of very experienced, respected, international pharmaceutical management and public health experts. Staff working on technical leadership portfolios are internationally recognized for their expertise in governance, and pharmaceutical information systems and services, as well as priority public health initiatives and technical areas of relevance to health systems worldwide: AMR, PV, and the rational use of medicines and technologies.

CPDs are seasoned professionals from the country or region. Thus, for the more mature country programs, such as South Africa and Ethiopia, staff was very familiar with the country issues and reported minimal need for technical assistance from headquarters. For the most part, staff members are well known to the missions and to country counterparts, and tend to have a good understanding of how to communicate with and support them. In the few cases where a CPD was not a good fit for the assignment, SIAPS management corrected the situation.

Application of the SIAPS approach ensures that staff considers all aspects of the system in which they were working, the strengths and the limitations, and that programming was built on this understanding. Staff learned how a particular government bureaucracy works and accomplishes tasks either within given lanes or by bringing disparate government and non-government actors together to achieve a task. Several government officials we spoke to noted that what they did with SIAPS was successful because they did not bring “cookie-cutter” solutions or that they began by explaining to the government what they were hired by USAID to do.17 The difference is more than one of respect for or politeness with the host government. As one high-level government official explained, he wanted to push through some reforms and could use SIAPS people because they could work within the complicated system that existed as opposed to bringing in a solution that would not fit.

17 A notable exception to this point is Neglected Tropical Diseases (NTDs) where it is felt that a systems strengthening approach itself is an inappropriate “cookie cutter” approach in an area where campaign programs are the key strategy.
**Mix of regional and country level activities.** Some activities have been carried out as regional rather than country level in recognition that the issues to be addressed are common to multiple countries and would require similar technical solutions. Rather than addressing them one country at a time, a regional approach was taken. For example, SIAPS provided technical assistance on a regional platform for several West African countries for the development of regionally appropriate weight bands for children to promote appropriate dosing, and for the improvement of national malaria program medicines management practices. Regional solutions to common concerns were also addressed through technical assistance to existing regional entities. Examples include work on regulatory capacity building with NEPAD/AMRH Regional Centers of Regulatory Excellence, capacity building with Ecumenical Pharmaceutical Network (EPN) related to training in pharmaceutical management and services for personnel for member organizations, and pooled procurement management with EPN. Regional approaches allowed for optimal sharing of knowledge and experience among colleagues from different countries and appeared to be a more efficient use of international technical expertise.

**Approach to training and capacity building.** Perhaps it is to be expected that training and capacity building would constitute a major focus of activity for a system strengthening program. Indeed, there has been a lot of training activity under SIAPS, with 33,332 people having received training as of June 2015.\(^ {18} \) However, government officials, academic institutions, and professional associations are increasingly concerned about the development of sustainable human capacity to support the growing demand for more and more sophisticated pharmaceutical services. What is most important about these trainings is that the multi-faceted approach that SIAPS has taken seems to have addressed much of this concern. In addition to being timely and relevant, other factors mentioned by stakeholders that contribute to appropriate and more sustainable capacity building efforts include:

- **SIAPS engages professional and academic organizations.** It establishes relationships with the appropriate existing institutions to identify curriculum needs and to develop programs accordingly rather than offering its own independent training. Examples of development of diploma programs include Southern Africa Nazarene University in Swaziland; working with Schools of Pharmacy from four Ethiopian universities, to include clinical pharmacy services in a diploma course; and working with the University of Namibia to develop a strategic plan for pre-service and continuing professional development training. In all cases, SIAPS also engaged with related professional regulatory entities.

- **SIAPS works side-by-side with government** to improve inappropriate or outdated practices. For example, in Bangladesh, and the Dominican Republic, SIAPS supported the work with health ministries to develop new or revise existing SOPs, as well as how to deliver training on their implementation. By far, the Bangladesh country program, which has had to deal with perhaps the greatest system “overhaul” under the SIAPS award, reported the most number of people trained, and most of them would have been involved in this type of activity. At the same time, however, SIAPS supported the more senior Ministry of Health (MOH) staff to receive specialized training on issues such as pharmacovigilance to support the capacity of the system to address new areas of need.

\(^ {18} \) SIAPS Quarterly PMP review: PY4 Quarter 3, page 31.
- To address in-service capacity, SIAPS offers a learning approach. For example, in South Africa, the SIAPS problem-based learning\(^{19}\) for regional, district, and facility level pharmacy managers, which was adapted from MSH’s own Leadership and Management Program (LMP), was particularly appreciated by key informants in South Africa. This approach is geared to the development of analytical skills to help managers identify and tackle real life problems in their place of work, and to track their progress accordingly. The training was also considered to be very practical because it directly addressed responsibilities of trainees, and activities even became part of their institution’s scope of work. According to one informant, “Before the training, I did not know what my job was or how to do it. Now I have confidence because I know what I need to do and I know how to do it.”

- In addition to working with government entities, SIAPS also worked with and developed existing capacity in the NGO sector through the EPN, a global network of faith-based organizations working in 31 countries to build its capacity in strengthening pharmaceutical services in church health systems. SIAPS worked to introduce new curriculum on AMR and an M&E system to help EPN evaluate its own performance.

**Thorough documentation.** Documentation includes both project deliverable (e.g. work plans, progress reports) as well as technical documents, (e.g., technical reports, guidelines, SOPs, training materials.) The careful documentation and quality of the work SIAPS completes was cited by stakeholders as valuable for understanding the nature of the technical work, especially with documentation of system processes and steps taken in policy development. In one country, for example, a key counterpart had all SIAPS documents at hand during the key informant interview and several others referred to key documents during interviews. Since his was a position that was fairly frequently rotated to other personnel, this documentation served to help bring new staff up to speed on ongoing activities.

Even though SIAPS documents its activities well, including tallying indicator data, documentation rarely draws attention to evidence of system strengthening. For example, SIAPS has documented its performance in training of trainers (ToT), but there is almost no reporting of those trainers going on to train local personnel. Similarly, there is little reporting on whether improved governance functions are maintained or further improved after SIAPS involvement phases down or out. Also, while some health element teams noted improvements in timeliness, formal papers prepared by SIAPS, especially those not in English, can take a long time, due to the extensive headquarter review and editorial process.

**Responsive program management.** Country program staff, including CPDs, reported that there are no restrictions on reaching out to their colleagues in headquarters, even to the Program Director, when needed and they received good and responsive support. Field teams coordinate with the M&E and Results and Reporting teams\(^{20}\) at headquarters to ensure complete and timely quarterly and annual reporting. In addition, HQ administrative and editorial staff is considered to be helpful with drafting presentations and international meetings abstracts and technical manuscripts. Senior management addressed program bottlenecks appropriately.

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\(^{19}\) Problem-based learning (PBL) is a student-centered pedagogy developed at McMaster University Medical School in Canada in the mid-1960s in which students learn about a subject through the experience of solving an open-ended problem. The intention is that the student leaves with both knowledge in a subject and thinking strategies.

\(^{20}\) In field interviews respondents referred to both teams as M&E.
All core SIAPS management and administrative support teams (e.g., financial management, contract management, human resources management) were responsive to headquarters and field requests, although at times they were constrained by slow turnaround times within USAID’s Office of Acquisitions and Assistance (OAA).

**AOR technical oversight.** The contributions by the AOR are seen by key donors and USG counterparts as important in global efforts to improve the availability and safety of medicines and medical technologies. Despite the popularity of the program, the AOR is careful not to take on country work outside the scope of the program, and intervenes when clients attempt “scope creep.” USAID clients find the AOR to be responsive to field and central program needs and concerns in an effective manner.

**Challenges for the SIAPS approach**

**Clients who do not prioritize system strengthening.** The challenge for the SIAPS country programs has been to make optimal use of all funding sources available in a country to “knit together” a rational program of activities that would yield a more integrated and stronger system overall while still addressing the particular priorities of the directives. Some country programs, such as Angola, Mali, and Democratic Republic of the Congo (DRC) received funds from several directives and their programs are accordingly diverse and complex. Some USAID health element teams focused less on the SIAPS approach and objectives than they did their own programmatic needs. This was the case for PMI when they asked SIAPS to conduct End Use Verification (EUV) exercises, and for the NTD program, when they needed a mechanism that understood how to support campaign-based and donations programs as opposed to system strengthening.

These health element teams, both in-country and in Washington, reported that SIAPS sometimes included irrelevant and extraneous information and activities in their work plans, and sometimes they seemed to “miss the point.” As one health element team said, “The challenge with working with SIAPS is the tension between what PMI wants and what others demand or what is needed. SIAPS is not always able to prioritize to PMI needs.” In countries where SIAPS received funding from multiple directives, some activity managers from these health elements found it easier to have SIAPS develop separate work plans for each directive and the different managers often managed them independently so that they could control activities and report more easily to health element leads in Washington. Although a practical solution to a management challenge for USAID, this posed a programmatic challenge for SIAPS country teams.

**Taking interventions to scale.** Ironically, SIAPS’ successes in policy and tool development can become a problem for the program. In Ethiopia, the Minister of Health has decreed a national roll-out via regions of a locally developed SIAPS information system that can help staff improve system performance, cost recovery, transparency, and rational use of medicines. In South Africa, the Minister of Health has decreed that part of a management information system developed under a bilateral is to be rolled out nationwide. In Bangladesh, SIAPS is continuing to roll out an inventory management information system for medicines and equipment used by the Health side of the MOHFW and to roll out e-TB Manager. Additionally, the SIAPS team in Bangladesh is

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21 A tracker to follow progress of OAA approvals was developed and it is now used by the project, the AOR and OAA.
about to be asked to develop an asset management system by type of facility for all levels of the health system.

While welcome from a standpoint of government commitment, increasing access to quality health services, the roll-out of APTS in Ethiopia, RxSolution in South Africa, and the management systems to be rolled out in Bangladesh presents a programmatic challenge for SIAPS and a budgetary and sustainability challenge for USAID. Additional funding was or will be required to meet the scale of SIAPS involvement in all three countries. These roll-outs also require larger and more concrete financial and human capacity commitments by governments (or other donors) and, in the cases of South Africa and Ethiopia, regional level buy-in to attain and sustain the objectives. For SIAPS, country teams in South Africa and Ethiopia were not thinking differently, as they were thinking bigger. There was a need to help countries figure out how to harness and build adequate institutional capacity to address the technological and administrative challenges of scale up.

**Not telling the system-strengthening story.** There is a general belief that SIAPS is effective, but that the program doesn’t tell its story well. One mission was pleased with the response from the Embassy to a Success Story that described SIAPS’ work through the eyes of a patient seeking care. However, much of what is reported though scheduled reports is organized by IRs, with a heavy focus on activity outputs, with little written explanation to describe how systems are strengthened. Informants who reported reading the reports say they are well written but it is hard to follow a stream of work that moves across the entire technical approach. In addition, a SIAPS staff member in-country noted that much of the work is reported under three separate IRs and it is hard to track to which IR the results should be attributed. Country sections of the report cover accomplishments over a particular time period, making it hard to track what happened before, or what did not get done.

The need to develop a stronger understanding of pharmaceutical systems within USAID becomes more apparent as countries move towards UHC, and as we heard from SIAPS IR leads, when more informed field officers move out of countries in the middle of SIAPS activities. The SIAPS CA calls for the development of a pharmaceutical management/systems strengthening training course for USAID health officers; however, the course has not been finalized.  

As countries move towards UHC, and as we heard from SIAPS IR leads, when more informed field officers move out of countries in the middle of SIAPS activities, the need for more information and better understanding of the issues becomes more apparent and pressing. For example, although SIAPS published a white paper on how pharmaceutical care can support health systems dealing with the burden of non-communicable diseases, SIAPS partners involved in its development could not say what had happened since it was published.

Other key activities that were to be completed in the first year were the communications strategy and the knowledge management strategy for the project. USAID managers see that the failure to complete these activities contributed to the project’s challenges in demonstrating the effectiveness of the SIAPS technical approach.

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22 A web-based course on AMR was finalized in November 2015.

While the IR system was outlined in the RFA for SIAPS and soon detailed by HQ, the Knowledge Management (KM) strategy for SIAPS was finalized only in September 2015 and focused on the information needs of project close-out without a plan for how collect the information. An earlier version of the KM strategy included more information about the project’s approach but did not include a roadmap for KM activities and how they would be evaluated.

The SIAPS/USAID website presents a clear and professional presentation of the expertise and tools provided by the project. Counts of web and other social media “hits” are kept as well as the number of downloads and the average time users spend on the web in one sitting. No analysis of these data are provided.

The impact of the SPS and SIAPS overlap could also be observed in the poor implementation of key first year activities such as the timely development of a pharmaceutical system strengthening framework and corresponding metrics and a training course on pharmaceutical system strengthening.

**Divergent opinions on system strengthening priorities.** While the “daisy wheel” approach was described as being intuitive and appropriate by many, it was also noted that what is not so apparent is how one decides to emphasize any particular area from an operational perspective. The examples provided at the beginning of this section are illustrative of how different solutions came from applying the approach in different countries. Factors driving the decisions about starting points or a long-term course of action could not always be purely technical and necessarily included mission and funding directive priorities as well as country priorities, giving rise to potential conflicts.

Even health elements that used SIAPS for discrete activities understood the SIAPS approach and could see how the project gets pulled in different directions as a result. For example, when the work plan in South Africa pivoted towards the roll-out of the stock module of RxSolution the project did not drop what it was doing and focus on the mission and NDoH priority for the project. The PMI team members saw SIAPS pulled in different directions in countries when their concern was stock-outs. Regarding TB, one country felt SIAPS focused on the launch of e-TB Manager over the quality of the data coming in and out of the system.

**Agreed needs versus targeted funding:** Even though the AOR team and core technical teams note the importance of central, global technical leadership activities, most SIAPS funding comes from mission funds targeted to disease-specific activities in country. Global and USAID stakeholders, including central health element leads, say there is insufficient funding and/or GH commitment for global initiatives in pharmaceutical systems strengthening. Further, the program management team in OHS notes that funding from the various disease-specific programs is hard if not impossible to cobble together into coherent and meaningful engagement strategies in global and cross-cutting concerns such as AMR and regulatory system strengthening, despite the expertise provided by USAID and SIAPS.

**Challenges beyond manageable control.** SIAPS technical approach outlined the above calls for close interaction with government, providers, and the community; however, in some cases factors beyond the control of the project challenge the implementation of the technical approach. Examples of these challenges include: local political standoffs (e.g., national and provincial governments disagreeing on who makes decisions about the placement of information systems), human resource constraints (rapid turnover of central health leaders in Bangladesh,
weak capacity in South Sudan), and the lack of transparency. As noted by one of the core technical teams: “With respect to policy level work . . . It is difficult to work at this level because things can change quickly, NMCs may have new direction or priorities, and this is no one’s fault, but it poses problems.” (Malaria team)

Evidence of Strengthening Systems

When asked what technical areas are necessary to strengthen pharmaceutical systems, missions, program managers, and technical experts listed technical areas of intervention, e.g. regulation, licensing, logistics, essential medicines, RU and PV. They also mentioned key issues in their countries or globally, such as counterfeiting, lack of transparency, AMR, costs of medicines and systems, manpower development, private sector engagement and inclusion, harmonization of approaches, and the need for the collection and use of data for decision-making.

Respondents felt the SIAPS scope covered most areas. The responses so closely mirrored SIAPS vocabulary that it may be safe to say that many respondents within USAID and country programs learned about pharmaceutical systems strengthening from their experiences with SIAPS and its predecessor projects. Respondents who said there were areas of pharmaceutical systems strengthening that SIAPS did not cover noted that little attention was given to the private sector, specifically pharmacies. Two interview respondents who elaborated on their response mentioned the SHOPs project, managed out of GH/Population and Reproductive Health (GH/RH), as their source for work with the private sector. Respondents also noted a lack of work in financing and pharmacoeconomics for pharmaceutical systems strengthening, though three respondents to the survey said SIAPS worked on financing strategies in their programs.

As SIAPS began, there were no broadly accepted operational definitions of pharmaceutical systems or pharmaceutical systems strengthening. As part of the SOW, beginning in the first year of operation, SIAPS was to develop a measurement framework with corresponding indicators to define strengthening activities and demonstrate the value of investments. USAID reports that some work on indicators began in the first year of the project. The discussion paper that was used for achieving consensus was produced in 2013, global experts were convened in September 2014, and SIAPS reports that finalization of indicators is currently underway. Concurrently, SIAPS developed, launched, evaluated, and improved the quality and timeliness of reporting for its Performance Management Plan (PMP) to track progress towards meeting work plans centrally and in the field.

Indicators. In the absence of operational definitions of pharmaceutical systems or pharmaceutical systems strengthening, it was not possible to develop a corresponding measurement framework. It was not until September 2014 that SIAPS convened a technical advisory meeting on “Defining and Measuring Pharmaceutical Systems Strengthening.” The meeting had participants from 13 different organizations, including USAID and World Health Organization (WHO) as well SIAPS partners. Working from a background paper reviewing literature on the topic, the participants agreed that:

“The pharmaceutical system consists of all structures, people, resources, processes, and their interactions within the broader health system that aim to ensure equitable and timely access to safe, effective, quality pharmaceutical products and related services that promote their appropriate and cost-effective use to improve health outcomes.”
Participants also produced consensus definitions of pharmaceutical systems and pharmaceutical systems strengthening that highlights the complexity of institutions required to address a country’s use of pharmaceutical products and services. They agreed that pharmaceutical systems strengthening is:

“The process of identifying and implementing strategies and actions that achieve coordinated and sustainable improvements in the critical components of a pharmaceutical system to enhance responsive and resilient system performance for achieving better health outcomes. The critical components of a pharmaceutical system are its core functions, structures, the supporting health system resources, and an enabling policy, legal, and governance framework.”

When the evaluation team conducted interviews, a few USAID informants expressed frustration and confusion about how long pharmaceutical systems strengthening takes and whether in some instances it is even worth it. Several GH respondents, including health element leads and team members, see countries such as Angola and DRC as places where systems strengthening may not be worth the investment.

There is general agreement that it takes time to accomplish policy and program change, yet few make a distinction between SIAPS and its predecessor programs. Some respondents made statements to the effect that MSH has spent 10 to 15 or more years in countries trying to accomplish the same objectives. SIAPS and USAID mission informants note that making distinctions between SIAPS and the predecessor SPS program was particularly difficult because the two program overlapped by more than a year and there was in fact considerable continuation of SPS work in that first year of SIAPS.

SIAPS leadership acknowledges that systems strengthening takes time and straddles multiple projects and implementing partners; however, in fact, they did not have 10 or more years to implement a program. Various projects funded by USAID and implemented by MSH have had different foci and objectives based on how the prevailing situations and country programs are impacted by the priorities of the local mission and governments. SIAPS evolved from earlier projects and is the first mechanism to formally present a systematic approach to pharmaceutical systems strengthening.

**Reporting.** SIAPS field programs track numerous IR and sub-IR indicators in the PMP with the intent of demonstrating evidence of achieving the system-strengthening objective. Countries report quantitative changes demonstrating improved performance. Examples include:

- **Bangladesh – procurement reform:** Time it takes to procure in health commodities was reduced from 78 to 54 weeks; family planning procurement times were reduced from 78 to 33 weeks.

- **Burundi – malaria:** Capacity building improved malaria management: 92 percent of fevers diagnosed and confirmed in 2014, up from 70 percent in 2011. EUV surveys provided facility-level data on capacity building needs; stock-out of ACTs at facility level dropped from 24 percent to 6.45 percent between 2012 and 2013.

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• **DRC – essential drugs:** Average number of days to evaluate medicine registration application decreased from 82 to 65 by December 2014; percent of items on essential drugs list that are registered rose from 44 percent in 2011 to 72 percent at present; percent of surveyed facilities with stock outs of a pre-selected group of medicines for 3 days or more decreased from 100 percent at baseline to 38 percent today.

• **Dominican Republic – HIV:** Reduction in treatment schemes from 78 to 54 for adults and 190 to 98 for pediatric; availability of ARVs in facilities from 64 percent in 2012 to 100 percent in 2015; cost per patient treated from $371 in 2011 to $164 in 2014; 52 percent of posts with stock out of at least 1 ARV in 2010 to none in 2014; ARVs dispensed from pharmacies/nurse s. ARV clinics to protect confidentiality.

• **Guinea – malaria:** In PMI-supported districts, reporting rates on anti-malarial commodities increased from 30 percent to 95 percent between December 2012 and December 2013.

• **Lesotho – HIV:** In 2013, 43 percent of facilities used ART daily dispensing tally sheet (DDTS) – now 100 percent do; lab accuracy increased from 42 percent to 78 percent between October – December 2012 to October – December 2013; lab reporting rates increased from 61 percent to 87 percent between same period.

• **Mali – information for decision-making:** Following a coup d’état and political isolation, Mali had virtually no functional pharmaceutical system components. After elections in 2013, SIAPS was able to work with the Government of Mali. From this base of a degraded system, Mali has procurement planning and monitoring, EUV, LMIS SOPs, medicines stock card, logistic data reporting (CRGS).25

• **Namibia – capacity building:** scores on Supportive Supervision Visits (SSVs) were 55 percent in 2011 rising to 61 percent in 2014; 91 percent of Pharmacy Assistant posts filled compared to 86 percent in 2013.

• **South Sudan – data for decision-making:** Percent of facilities receiving feedback on reports/data increased from 44 percent at baseline to 81 percent currently.

• **Swaziland – PV:** One hundred percent of SIAPS sites have medical safety or passive PV activities; 67 percent of targeted sites have active PV activities.

• **Ukraine – TB:** 90 percent of new TB/MDR cases are in e-TB Manager.

These types of improvements in system performance do not, of course, occur in a vacuum. They were seen in field visits and reports to have been preceded or accompanied by activities addressing areas that may not individually impact performance directly, such as governance, individual and institutional capacity building, and information systems, and are therefore regarded by government officials and USAID clients as achievements in systems strengthening.

Nevertheless, a continuing challenge for a USAID project is to have the opportunity to document and report on a strengthened system after project assistance diminishes or ends.

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25 This is a unique example of starting from scratch. SIAPS reports that Mali’s reporting rate is at 32% and stock-outs at 73%, indicators that did not previously exist.
SIAPS and USAID Initiatives
The SIAPS program began before the launch of EPCMD, AFG, and Protecting Communities against Infectious Diseases (PCID). Survey respondents were asked whether SIAPS was relevant to the goals of the initiatives of EPCMD and AFG. Of the eight missions that responded to a survey question about relevance, six felt SIAPS was either relevant or very relevant to EPCMD goals, and six felt that SIAPS was relevant, very relevant or extremely relevant to achieving AFG.

Health element leads agree that SIAPS is relevant, useful, and at times critical, in meeting GH objectives, and that the project was able to provide critical expertise and field support specific to the needs of the sector. Examples of this work are found in MNCH, TB, and HIV:

**EPCMD:** MNCH teams are challenged by small budgets with the Maternal Health team who see signs of complacency among governments that have achieved MDGs, and the Child Health team concerned about donors providing medicines with little attention to supply chains. SIAPS is seen as a relevant partner at the global, regional, and country levels. Assistance with the UN Commission on identifying key issues in MNCH commodity security, and quantifying the medicine list were mentioned above. Beyond that, the project provided EPCMD assistance such as:

- The participation in the development of four concept notes for the GFATM to integrate MNCH into country grants, three of which went forward as formal concept notes.
- Producing what infant and child experts called a “very targeted and important work” when they assisted with the development and harmonization of “weight bands” for children – the dose of medicine for a child by age and weight.
- Participation in the Integrated Community Case Management (iCCM) task force where SIAPS is credited with excellent leadership and presentation in the iCCM meeting in Ghana.
- Implementation of a costing tool on iCCM.

At present, members of the Maternal, Neonatal, and Child Health Technical Team are working together with WHO, UNICEF, USAID, and the Gates Foundation to develop an international forum where the major donors can collaborate and they see SIAPS’ technical approach and its experience in MNCH as integral to such a process. As a health element lead noted:

“We can’t talk about supply chains for child health without talking about the rest of health systems. We need to start pushing for considering health systems issues. You can’t separate out iCCM and IMCI so we expect change in coming years. A change in the global dialog; SIAPS will be included in the discussion.”

**PCID:** In TB, SIAPS helps National TB Programs implement appropriate technologies for tracking the diagnosis, treatment, and follow-up of TB and MDR-TB into their programs. e-TB Manager has been fielded in 11 countries and 15 countries have introduced QuanTB, a complementary tool to e-TB Manager, promulgated by the
Global Drug Facility. SIAPS works with governments and USAID bilateral programs and CAs on the role of these systems and SIAPS assists in the development of policies and guidelines at the global and country level, and often acts as a technical advisor and facilitator on TB issues.

Centrally, the TB program is supporting regional SIAPS advisors for TB in Tanzania, Nigeria, Kenya, Myanmar, and DRC. These advisors are usually stationed in a country with a SIAPS or MSH office and travel to neighboring countries. Advisors come from the regions and are accepted by the governments they serve. For example, Malawi had a shortage of TB drugs, the advisor visited a few times, and the issue was ironed out.

SIAPS has been able to bring its specialized expertise to bear on special TB initiatives. One informant explained that when USAID and Johnson & Johnson engaged in a donation with GDF in 2014 the medicine had not passed Phase 3 clinical trials and the product was not WHO-prequalified, yet advocates wanted access to the medicine. SIAPS developed a PV program and mobilized TA to enable the public-private partnership to proceed.

**AFG:** SIAPS has received very little support to carry out core activities for HIV. SIAPS does use some of its cross-bureau funds to support activities at the global level, such as participation in global technical meetings and workshops in support of the AIDS Medicines and Diagnostics Services (AMDS). At the country level, the bulk of the field support for SIAPS is from PEPFAR for activities requested in mission Country Operation Plans (COPs) under the systems strengthening budget code. As PEPFAR underwent a pivot two years ago to focus on the unmet need for HIV services, SIAPS helped with the design of indicators for evaluating how medicines were handled at the facility level in the Site Improvement through Monitoring System (SIMS) evaluations conducted by country PEPFAR teams. Despite contractions in PEPFAR systems strengthening budgets in general, AMR and PV remain important at a global and country level.

Respondents stressed the importance of increased emphasis in some areas as opposed to adding new areas to meet the needs of GH objectives, such as promoting the appropriate use of medicines to combat the emergence of antimicrobial resistance, and strengthening civil society organizations (CSOs) to better advocate for and monitor implementation. Health element teams, especially for MNCH, noted funding constraints for system strengthening activities affecting how broadly SIAPS could be used.

**SIAPS and GHSC**

Awards under the new Global Health Supply Chain Program were beginning to be announced as this evaluation began and OHS asked the evaluation team to explore how the goal and objective of SIAPS related to that of the new sets of projects.

SIAPS’ results framework is structured around the other five health system functions (“building blocks”): governance, human and institutional resources, information systems, finance, and services as they relate to the medical products function. It was also guided by the operating

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26 “SIAPS Software Tools by Country” contained in Briefing Book for SIAPS Evaluation and searches on SIAPS web page.
principles of the Global Health Initiative that promoted country ownership and investment in health systems, efficient approaches, and investment in innovation. The SIAPS program goal explicitly includes pharmaceutical services within the scope in recognition of their role in achieving desired health outcomes and avoiding preventable adverse outcomes. As discussed above, SIAPS’ results framework and technical approach demonstrates a holistic, system-wide approach to meeting disease-specific objectives while strengthening pharmaceutical systems. Both field and global activities move from analysis to evidence-based strategies, to work in any or all of the five systems IRs – governance, human and institutional resources, information systems, finance, and services – that form the SIAPS technical approach. The project sits in OHS, USAID’s focal point for health systems strengthening that leadership, research, training, tool development, and technical assistance at the global and country level.

In contrast, in the SOWs of the GHSC, the technical assistance components group supply chain activities into categories, reflecting a difference in approach in addition to an apparent difference in scope. The goals and objectives of the new PSM project (the Green Box) as outlined in the solicitation focus on “the availability of health commodities through supply chain system strengthening to address sustainability and country ownership.” The project objectives focus on improving supply chain performance although commodity security is also mentioned. The goal of the technical assistance multi-award component (Red Box) is also to improve the long-term availability of health commodities in public and private services. This component has “system strengthening technical assistance” and “global collaboration” as its higher-level objectives.27

Annex VI presents a comparison of SIAPS and GHSC system strengthening goals. The SOWs for the three GHSC awards include words, phrasing, and issues found in the SIAPS results framework and that one would see in a SIAPS work plan, such as health commodities selection, standard treatment guidelines, procurement, forecasting/quantification, inventory management, warehousing and transportation, as well as addressing issues to improve the enabling environment, such as governance, policies, and stewardship, strategic planning, commodity financing, human resources and capacity building. Potential activity in the private and public sectors are mentioned for all programs. The QA award (Orange Box)28 includes country-level technical assistance to regulatory authorities for product registration and for strengthening pharmacovigilance. Global collaboration, advocacy, and working to support the introduction of new health technologies are also mentioned in all project SOWs.

There are areas covered by the SIAPS systems strengthening framework that are not explicitly included in the GHSC solicitations. These include variety of capacity building activities for improving prescribing and dispensing practices, advocacy against antimicrobial resistance, promoting rational use, developing of medicines/pharmacy benefits programs, promoting patient safety, and effective pharmaceutical services. It is possible, however, that these areas are considered included under the general subject of commodity security, a concept that has been broadly applied to address various factors impacting on availability and access to various categories of commodities. For example, commodity security has been applied to HIV/AIDS

commodities “to improve routine availability and to help rationalize the selection and use of hundreds of essential health products for HIV prevention, treatment, and care.”

Aside from these specific words, the GHSC solicitation leaves room for longer-term trends and flexibility. For example, the RFP for the multi-award Red Box contains language that, albeit couched within the context of “commodity availability” and “supply systems” is very comprehensive and expansive:

“...The contractor must demonstrate a capacity to improve performance, as well as to support greater country ownership in ensuring commodity security. The contractor must not only support the commodity availability required in the near- to medium-term to support country health plans and global initiatives such as Family Planning 2020, PEPFAR, PMI, and A Promise Renewed, but also help position supply systems to face the challenges and seize the opportunities of longer-term trends, such as economic transitions, demographic shifts, evolving disease burdens, and public health priorities. The contractor must apply the knowledge of these trends, their implications for supply systems and commodity security, and determine what can be done within the duration of their performance period to prepare supply systems and country environments for the future.”

Pharmaceutical Systems Strengthening in Universal Health Coverage

Most USAID-assisted countries are moving, or planning to move, towards UHC. All 194 WHO member countries endorsed UHC as a guiding principle in 2011 and more than 100 are actively seeking this goal. While USAID, other donors, and governments focus on the financial and service delivery ramifications of UHC, the unique role of medicines in UHC had not received the same, merited level of global attention. Medicines account for a larger share of health expenditures in countries with lower per capita incomes, and are 30 percent of health expenditures in low-income countries, even though these countries account for only 1 percent of all pharmaceutical expenditures.

SIAPS funds contributed to the MSH-led initiative of positioning the issue of medicines in UHC in the global agenda by convening donors, experts, and governments in two global meetings, one in Washington, DC in 2013 and another in Cape Town, South Africa in 2014. SIAPS partners and global stakeholders credited the Washington, DC meeting for putting medicines on the UHC agenda. The second, for which only selected Southern African countries were invited, focused on managing medicines in the context of UHC roll-out (e.g., designing and managing medicines benefits, financing medicines, managing a medicines program, information systems, and stakeholder partnerships). Non-SIAPS-funded work published around this time by SIAPS partners included a chapter on medicines and UHC that highlighted progress in China, Ghana, and Mexico and an editorial on quality and use of medicines within the context of universal

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32 WHO, The World Medicines Situation 2011, p. 5, 6
health coverage. Subsequently, MSH published Management of Medicines Benefit Programs in Low- and Middle-Income Settings. SIAPS partners participated as reviewers for the MSH publication. The report includes a plan for fieldwork and the AOR team reports that SIAPS plans to apply the method in USAID-supported countries. SIAPS also plans to participate in upcoming UHC and Health Systems Research meetings, and continue to participate in a joint cross-bureau technical activity by SIAPS/HFG that looks at how to develop medicines benefits packages.

Global stakeholders and SIAPS partners view developing clear, country-appropriate methodologies for country level work on medicines and UHC as critical at this time and those already involved in medicines and UHC work note the importance of coordinated international efforts that include country health leaders.

At the field level, SIAPS supports improvements in the quality of the medicines and the services provided, seeing both as key to successfully reaching UHC. In interviews, USAID missions and governments note the importance of improved information systems for decision-making and tracking, rational distribution and use of medicines, and the need to better educate, regulate, and monitor the private sector as they move towards UHC. In the three countries visited by the evaluation team, it was evident that government officials were preparing to take on large, new, complex initiatives to pre-position themselves for UHC, and SIAPS governance contributions were considered to be especially significant to those initiatives:

- **South Africa’s HIV program** intends to improve transparency and the delivery of Antiretrovirals (ARVs) by moving away from Central Medical Stores and linking semi-autonomous regions with varied political affiliations into a national information and tracking system. SIAPS has helped the national government develop the legal framework to implement this new national system by linking the national program directly with districts. SIAPS contributed to the government’s National Health Initiative (NHI) White Paper. This paper outlines the move towards districts and direct delivery as a way to reduce stock-outs and ensure clients are served, and announces the government’s plan to impose penalties for suppliers who hold or use what the government purchases elsewhere. One NDoH leader summed it up by saying: “Their business isn’t coding, it’s setting up the regulations,” and then went on to say that SIAPS provides excellent legal and regulatory assistance.

- In **Ethiopia**, SIAPS worked with officials of Food, Medicines and Healthcare Administration and Control Authority (FMHACA) to develop a series of regulations and programs regarding the quality of health care delivery and to position the government as the steward of the entire health system. Through cooperating with training institutions, journalists, and CSOs, SIAPS has helped the government train stakeholders and disseminate information on AMR and PV. The project helped launch a whistleblower line for substandard drugs that has received over 8,000 calls and led to investigations of 14 drugs. SIAPS also helped construct a health regulatory information system for manufactures, and an on-line drug registration system.

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In **Bangladesh**, the MOHFW and the donors group, presently chaired by USAID, turned to SIAPS to assess equipment procurement practices and what to do about old and unused equipment. As a very low-income country, Bangladesh has been “blessed” with generous private, religious, and government donors who want to help but often provide equipment donations completely out of context for the level of facilities or a facility’s capacity to absorb – or need – the donation. Similarly, health facilities are targeted by private companies and don’t always request appropriate technology. After the assessment, SIAPS was asked to develop an asset plan for government health facilities by their size/number of beds, and the government is now asking SIAPS assistance for a full asset management system to control costs and quality throughout the health system. It is expected that this work will be articulated in Bangladesh’s upcoming five-year Sector Wide Approach Plan (SWAP) for health.

### UHC and Future Challenges

As the environment for the medicines function of developing country health systems emerges, SIAPS experience and informant input suggest three major challenges that will be important:

1. **Measurement** of pharmaceutical systems strengthening programs, especially as related to maintaining the sustainability of results
2. **Game-changing pharmaceutical events** that will affect global and country systems
3. **Ensuring future programs** are adequately designed to meet both roll-out and hand off operational objectives

**Measurement.** SIAPS was designed under the GHI during the era of the MDGs. As noted above, the project’s IR system provided clear performance indicators and a comprehensive technical approach considered effective for pharmaceutical systems strengthening.

In June 2015, the Health Finance and Governance (HFG) project undertook a literature review of the HSS functions (i.e., the WHO blocks), to examine the documented effects of 13 HSS interventions.36 “Effects” found in the literature under “Medicines, Vaccines and Technology” were only found for “improved service provision and quality,” while evidence for other HSS functions were found in increased financial protection, increased service utilization, uptake of healthy behaviors, and reduced morbidity or mortality. This HFG analysis was brought into USAID’s Vision for HSS as the major review of effectiveness.37

Going forward, OHS sees USAID’s newly released vision statement for the next five years as a tool for USAID colleagues conceptualizing and designing HSS programs. More broadly, informants within and outside of USAID see the Sustainable Development Goals with indicators that governments could use as proxies to measure sustainability as relevant to any future systems strengthening work.

**Emerging issues.** As countries approach UHC, missions, Health Element team leads, and in-country donors are increasingly concerned about governance and participation of the private sector. According to a 2015 WHO report: “The complexity of new medicines and medical


37 USAID’s Vision for Health Systems Strengthening. p. 29.
products and the internationalization of production and distribution of medical products pose increasing challenges to regulatory systems. In the case of antimicrobials, inappropriate prescription and use of medicines also leads to growing problems with resistance.”

Government respondents agree that the private sector will be important for UHC. SIAPS already provides assistance in governance and quality issues relevant to the oversight of the private sector and NGO services. Countries like Ethiopia and Bangladesh that have made commitments to expanding their pharmaceutical industry are developing systems to cull substandard drugs out of the system and are looking to tackle the quality of services provided in private sector retail pharmacies and drug outlets. It is expected that the need for governments to address private sector issues will necessarily increase as private industry continues to expand, in regions of Africa and Asia in particular, and with the potential for engaging the private sector to support the goals of UHC. The focus of this work would include the cost of medicines and other health technologies, information collection and sharing internationally, attention to substandard drugs and patient safety, and AMR.

A corollary to this is an expressed value of working through regional forums, as was done in SIAPS’ 2014 meeting with selected Southern African countries on designing pharmacy benefits management schemes. The value of using regional forums to encourage South-South learning and exchange of information is also recognized.

Global stakeholders and government officials warn that the disease profiles of countries in Africa are changing quickly and that weak pharmaceutical systems already have to address the needs of infectious diseases and chronic non-communicable diseases. Pharmacists in facilities visited by the evaluation team noted the demand for hypertension and cancer drugs, and the importance of setting up separate systems for the delivery of medicines for chronic diseases. SIAPS helped facilitate this work in South Africa and Ethiopia. Government officials and health providers noted the need for increased capacity to conduct Health Technology Assessments, diagnostics, new treatments, and PV. There is special concern in cases where new products are launched without an evidence-based safety profile for the populations in developing countries or with special needs.

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38 WHO, Health in 2015: from MDGs to SDGs, p. 46.
V. CONCLUSIONS AND RECOMMENDATIONS

SIAPS’ technical approach is effective and there is evidence that it helps countries strengthen their pharmaceutical systems and services. Nevertheless, there are present and future challenges in terms of better measurement of pharmaceutical systems strengthening and programming to meet the needs of countries moving towards UHC and working to achieve their specific SDGs. The Conclusions and Recommendations below are provided with a view to framing and suggesting next steps when addressing those challenges.

Conclusion 1: SIAPS approach to pharmaceutical systems strengthening

OHS led the development of USAID’s Vision for Health System Strengthening 2015-2019. The Office is the Agency’s hub for health systems strengthening, managing projects on governance, health financing, quality, and medicines, and recently brought in GH’s program dedicated to human resource capacity. Along with the SIAPS and PQM projects, OHS has on staff subject specialists in pharmaceutical management.

System strengthening is, by definition, an ongoing activity, inherently rooted in continuous improvement of diverse processes where governance issues are ubiquitous. Many successes under SIAPS have taken years to achieve, with SIAPS work often becoming an extension of previous USAID projects. Engaging multiple constituencies, building institutions across multiple functions, and making interactions among the institutions more effective, is a complex and time-consuming process, and SIAPS has succeeded in these efforts.

SIAPS should be commended for its work in strengthening the medicines function and the approach it takes. SIAPS’ technical staff has an in-depth understanding of the bureaucracies and technical resources and opportunities in developing and post-conflict countries. This is important for identifying constraints and working across system elements to solve them as well as to reach global objectives. Local support for reform will often dictate which functions can be addressed initially. SIAPS has a demonstrated capacity to find those entry points and capitalize on them, though at times USAID clients do not always prioritize system-strengthening, and stakeholders at various levels do not always agree on the entry points for system strengthening.

Countries visited by the evaluation team all have a continued desire and need for pharmaceutical systems strengthening assistance for critical national program roll-outs related to meeting SDGs, the growing demands on health systems of health and economic transitions, and moving towards UHC. This is likely to be the case for other country programs as well, based on the review of the SIAPS country summaries of technical activities and literature review of seminal recent publications.

Recommendation 1

When designing future programs, GH should undertake strategic analyses to foresee bottlenecks and to support prioritization in today’s changing environments, and should consider the recommendations made by those interviewed in this evaluation in the project design process.
Conclusion 2: Global Leadership

MSH and the SIAPS program are respected technical experts, contributors, and conveners at the global level in UHC, AMR, regulatory system strengthening, and PV, as well for USAID contributions in MNCH and the GDF in TB. This leadership is noted and appreciated but the need to “knit together” disease-specific and GH cross-cutting funding dramatically constrains improvement in this participation and it certainly precludes expansion.

SIAPS did not have an expert advisory panel early in the program to support key core activities, such as the system strengthening framework and metrics. This had repercussions for other aspects of the project as well. For example, an advisory panel could have served to recommend and effectively advocate and/or find matching funding for global initiatives. Further, OHS staff does not have travel funding to participate fully in international forum.

Overarching areas where OHS and SIAPS staff can make significant contributions globally and in Africa include AMR, PV and patient safety, regulatory system strengthening, and the role of medicines in UHC. These are issues of global significance.

Recommendation 2

OHS and GH should develop and prioritize a Bureau-level strategy for global engagement on improving access to medicines and medical technologies focused on the needs of UHC. They should consider establishing an international Technical Advisory Group under OHS to inform this work.

Conclusion 3: Use of SIAPS Partners

MSH engaged an excellent team of partners to form SIAPS. Unfortunately, it does not appear that the partners were fully integrated into the project. Of the partners that were interviewed, all expressed some confusion about and dissatisfaction with the process for getting engaged in the work, including defining scopes of work. Some lacked information about ongoing SIAPS activities at the field and global levels, and respondents consistently felt their expertise was not adequately tapped within the project.

There may have been a serious missed opportunity by not having partners brought in to work on operationalizing the system-strengthening framework early on in the program. Given that the complexities of pharmaceutical systems strengthening work are increasing, partnerships with institutions with specific expertise will be become even more important in future programs.

Recommendation 3

SIAPS should review whether they are using their core partners optimally, including the process for engaging the partners.

Conclusion 4: Describing and Measuring Pharmaceutical Systems Strengthening

While the project’s M&E system is quite developed, SIAPS M&E and Results Reporting teams are diligent, and clients feel they are able to show results, the system is not sufficient for the purpose of capturing more definitive evidence of system strengthening. It is unfortunate that SIAPS had a slow start on the work related to developing a framework for measuring pharmaceutical systems strengthening as such a framework could be used to better evaluate the effectiveness of the SIAPS’ comprehensive technical approach. With the definition developed in
September 2014, the expectation is that corresponding process-oriented measures will be
developed to reflect the various system components, outcomes, and attributes of
pharmaceutical systems strengthening.

**Recommendation 4**

GH and SIAPS should continue efforts to explicitly identify characteristics of pharmaceutical
system strengthening and better tell the system-strengthening story. Particular attention should
be given to ensuring that activities designed to strengthen the medicines function of the health
system include substantial communication and knowledge management to build a wider
awareness of technical activity objectives and intended outcomes.

With broader agreement on characteristics of systems strengthening, it should be possible to
move toward indicators for system strengthening. OHS should consider this exercise as part of
a larger effort to objectively capture the contributions to system strengthening of other
projects.

**Conclusion 5: Scaling-Up Interventions (conclusion only)**

Some of the more complex and innovative activities in SIAPS’ portfolio at the moment, such as
the APTS, RxSolution, QuanTB and e-TB Manager, and the PLDP, have received recognition and
support. SIAPS was able to offer relevant solutions and health leaders decided the solutions
were important enough to scale up, and to do so rapidly – in particular, to keep step with
government policies and plans moving towards UHC. Throughout this process, SIAPS has
helped governments identify weakness and appropriate solutions.

Nevertheless, neither SIAPS nor USAID were prepared for the unprecedented national roll-outs
and policy pivots as those witnessed in South Africa, Ethiopia, and Bangladesh. SIAPS was not
prepared with strategic or creative solutions, partnerships, and appropriate technologies needed
to support scale-up of their interventions within the time frames provided. And while USAID
missions changed SIAPS work plans and restructured their budgets to meet these new
opportunities, they will need to secure clear financial and human resource commitments from
governments to fully implement and sustain these roll-outs. For example, in the three countries
visited, national governments have proposed or promised human resource contributions to
national roll-outs. If these contributions are not actually made, roll-outs and sustained systems
will not be possible.

Endnote: Additional findings, conclusions and recommendations related to future USAID work
in strengthening the medicines function of the health system were provided to USAID directly.
ANNEX I. SCOPE OF WORK

Global Health Program Cycle Improvement Project -- GH Pro
Contract No. AID-OAA-C-14-00067

EVALUATION OR ANALYTIC ACTIVITY STATEMENT OF WORK (SOW)
Amendment #1: February 5, 2016

I. TITLE: Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Mid-Term Evaluation (083)

II. Requester / Client
☐ USAID/Washington
Office/Division: Bureau for Global Health (GH) / Office of Health Systems (OHS)

III. Funding Account Source(s): (Click on box(es) to indicate source of payment for this assignment)
☐ 3.1.1 HIV
☐ 3.1.2 TB
☐ 3.1.3 Malaria
☐ 3.1.4 PIOET
☐ 3.1.5 Other public health threats
☐ 3.1.6 MCH
☐ 3.1.7 FP/RH
☐ 3.1.8 WSSH
☐ 3.1.9 Nutrition
☐ 3.2.0 Other (specify): Office of Health Systems

IV. Cost Estimate: GH Pro will provide a final budget based on this SOW

V. Performance Period
Expected Start Date (on or about): July 2015
Anticipated End Date (on or about): April 2016

VI. Location(s) of Assignment: (Indicate where work will be performed)
The Evaluation Team will be based in Washington, DC, but can work remotely. This evaluation will also include trips to 2-3 countries, such as Bangladesh, Ethiopia and South Africa, but final selection of field visit sites will be determined by USAID/GH/OHS.

VII. Type of Analytic Activity (Check the box to indicate the type of analytic activity)
EVALUATION:
☐ Performance Evaluation (Check timing of data collection)
☐ Midterm ☐ Endline ☐ Other (specify): Performance evaluations focus on descriptive and normative questions: what a particular project or program has achieved (either at an intermediate point in execution or at the conclusion of an implementation period); how it is being implemented; how it is perceived and valued; whether expected results are occurring; and other questions that are pertinent to program design, management and operational decision making. Performance evaluations often incorporate before-after comparisons, but generally lack a rigorously defined counterfactual.
assessments or evaluation, with or without a comparative intervention/program.

☐ Other Analytic Activity (Specify)

### PEPFAR EVALUATIONS
*PEPFAR Evaluation Standards of Practice 2014*

**Note:** If PEPFAR funded, check the box for type of evaluation

- **Process Evaluation** (*Check timing of data collection*)
  - ☐ Midterm ☐ Endline ☐ Other (specify):

  Process Evaluation focuses on program or intervention implementation, including, but not limited to access to services, whether services reach the intended population, how services are delivered, client satisfaction and perceptions about needs and services, management practices. In addition, a process evaluation might provide an understanding of cultural, socio-political, legal, and economic context that affect implementation of the program or intervention. For example: Are activities delivered as intended, and are the right participants being reached? (PEPFAR Evaluation Standards of Practice 2014)

- **Outcome Evaluation**

  Outcome Evaluation determines if and by how much, intervention activities or services achieved their intended outcomes. It focuses on outputs and outcomes (including unintended effects) to judge program effectiveness, but may also assess program process to understand how outcomes are produced. It is possible to use statistical techniques in some instances when control or comparison groups are not available (e.g., for the evaluation of a national program). Example of question asked: To what extent are desired changes occurring due to the program, and who is benefiting? (PEPFAR Evaluation Standards of Practice 2014)

- **Impact Evaluation** (*Check timing(s) of data collection*)
  - ☐ Baseline ☐ Midterm ☐ Endline ☐ Other (specify):

  Impact evaluations measure the change in an outcome that is attributable to a defined intervention by comparing actual impact to what would have happened in the absence of the intervention (the counterfactual scenario). IEs are based on models of cause and effect and require a rigorously defined counterfactual to control for factors other than the intervention that might account for the observed change. There are a range of accepted approaches to applying a counterfactual analysis, though IEs in which comparisons are made between beneficiaries that are randomly assigned to either an intervention or a control group provide the strongest evidence of a relationship between the intervention under study and the outcome measured to demonstrate impact.

- **Economic Evaluation** (*PEPFAR*)

  Economic Evaluation identifies, measures, values and compares the costs and outcomes of alternative interventions. Economic evaluation is a systematic and transparent framework for assessing efficiency focusing on the economic costs and outcomes of alternative programs or interventions. This framework is based on a comparative analysis of both the costs (resources consumed) and outcomes (health, clinical, economic) of programs or interventions. Main types of economic evaluation are cost-minimization analysis (CMA), cost-effectiveness analysis (CEA), cost-benefit analysis (CBA) and cost-utility analysis (CUA). Example of question asked: What is the cost-effectiveness of this intervention in improving patient outcomes as compared to other treatment models?

### VIII. BACKGROUND

Background of project/program/intervention:

**BACKGROUND**

The USAID Systems for Improved Access to Pharmaceuticals and Services (SIAPS) project is a 5-year, centrally managed cooperative agreement with a $197.9 million ceiling, under award number AID-OAA-A-11-00021. The project prime awardee is Management Sciences for Health (MSH); the award also includes a consortium of core partners (Accreditation Council for Pharmacy Education, Harvard University, Logistics Management Institute, and University of Washington) and resource partners (African Medical and Research Foundation, Ecumenical Pharmaceutical Network, Results for Development, IMPERIAL Health Sciences, VillageReach, and William Davidson Institute). Annex 4 provides more detail on partner roles and contributions to SIAPS. The project is managed by OHS and accepts both directed and cross-
bureau core and field support funds from HIDN, OHA, and PRH and including for malaria (18%), tuberculosis (19%), HIV (38%), maternal and child health and nutrition (15%), reproductive health (8%), and neglected topical disease (0.2%). SIAPS has received field support from regions and 27 country Missions.

**Context:**
USAID has long recognized that the regular availability and appropriate use of quality-assured essential medicines and other health technologies are critical to achieving improved health outcomes for its priority health programs. Indeed, in the last decade there have been unprecedented levels of funding for pharmaceutical procurement through several USG and international global health initiatives and to a far lesser extent corresponding funding to support their appropriate use and assure patient safety. Great strides have been made toward achieving important treatment targets. In addition, USAID and other donors have invested in new medical treatments and other technological advancements that will be introduced in the coming years. This will likely require rethinking strategic approaches and interventions to ensure effective management and use of medicines. It is generally recognized, however, that inadequate attention has been paid to ensuring that investments have contributed to sustainable country-owned pharmaceutical systems. SIAPS was intended to contribute to the development of more coherent and robust approaches to health system strengthening programming by addressing these challenges from the perspective of the medical products building block, employing “systems thinking.”39, 40 The results of this evaluation will help inform decisions around the need for a follow-on project after the SIAPS program ends and the need for USAID to address key technical focus areas within the context of a new architecture for pharmaceutical and supply chain projects within the Bureau for Global Health.

**History:**
The purpose of the SIAPS program is to promote and utilize a systems strengthening approach to pharmaceutical management. SIAPS was designed to be consistent with the objectives of the Global Health Initiative (GHI) to support the continued achievement of improved health outcomes. This was expected to be accomplished by supporting sustainable systems improvements that enhance access to and the appropriate use of pharmaceuticals of assured quality in the public and private sectors in developing countries. SIAPS was designed to provide “next generation” technical leadership and assistance to developing countries with a deliberate patient-centered focus, complementing other GH mechanisms working in the area of the Medical Products Building Block that support the USAID pharmaceutical and other health commodities donations, all of which have a particular emphasis on Supply Chain Management. SIAPS was intended to work more broadly to address comprehensive pharmaceutical system strengthening and to contribute to the further development of USAID’s larger health systems strengthening strategy.

The **SIAPS goal** is to assure the availability of quality-assured pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes. The **SIAPS objective** is to promote and utilize a systems strengthening approach that will result in improved and sustainable health impact. The **SIAPS approach** comprehensively embraces the intersections and interactions of five health systems components (governance, human resources,

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The formalization and validation of the SIAPS approach was expected to result in a framework and objective metrics to describe and quantify the value of investments in pharmaceutical system strengthening, as a subset of health systems strengthening. At the country level, USAID expected that SIAPS would be able to assist USAID and partner countries to reconcile the long-term goals of country ownership, system strengthening, and sustainability with the immediate requirements for continuing scale-up and expansion of prevention and treatment programs without adversely affecting health outcomes. Importantly, SIAPS aims to sustainably strengthen systems instead of providing temporary “systems support.” For example, it is possible to artificially improve systems performance (e.g., reduced stock outs) but to have this performance collapse when outside support is removed.

The five SIAPS result areas are:

1. **Strengthen pharmaceutical governance:** The governance capacity of all pharmaceutical system actors -- including Ministries of Health, regulatory authorities, managers, providers, civil society organizations, and professional and trade associations, among others -- impacts on the ability of the pharmaceutical system to achieve its objectives. Strong and effective governance frameworks can assure that appropriate medicines policies and standards are in place and implemented to safeguard public health, combat corruption, promote efficiency, and ensure equitable access to quality-assured medicines and pharmaceutical services through both the public and private sectors. Best practices for pharmaceutical management incorporate the principles of good governance such as transparent processes that allow for accountability and responsiveness to stakeholders, and participatory approaches to decision-making and priority-setting that promote inclusiveness.

2. **Build individual, organizational, and institutional capacity for pharmaceutical supply management and services:** The supply of qualified personnel to meet the demand for public sector pharmaceutical supply management and services is insufficient under the current models of care due to attrition caused by disease burden, burnout, competition with the private sector, brain drain to other countries, and the time and capacity required for educating and training traditional health cadres. Expanded, enhanced, and complementary approaches are needed to address the short, medium and longer term human resource needs of health systems. In addition, the pharmaceutical management capacity of institutions, organizations and networks must be strengthened to support local empowerment, sustainability, and country ownership.

3. **Address the information for decision-making challenge in the pharmaceutical system:** Having reliable and timely financial, human resource, service delivery, pharmaceutical product and patient data readily available for decision-making is a hallmark of an effective pharmaceutical management system. Policy-makers, managers, pharmacy and health workers at all levels of the health care system require information to anticipate needs, use resources wisely, identify interventions to correct or improve performance, and to ensure achievement of desired health outcomes. Significant challenges need to be addressed including harmonizing existing national and international data and information requirements and assuring effective communications, knowledge management, and utilization of system information.

4. **Strengthen financing strategies and mechanisms to improve access to medicines:** Addressing financing issues from a pharmaceutical system strengthening perspective must include not only patient level financial barriers to access to medicines, but also issues related to the
efficient use of existing resources for procurement and other pharmaceutical management functions. Resource mobilization to support increased coverage, enhanced service delivery, and access to care and treatment for the most vulnerable populations must be addressed as well.

5. **Improve pharmaceutical services to achieve desired health outcomes:** Effective pharmaceutical services require a patient-centered focus and systems in place to support product availability, report adverse events, and monitor therapeutic effectiveness. Systems are also needed for better case management and follow-up, integrated laboratory services, active surveillance of selected medicines and patient cohorts, and adherence approaches that improve treatment outcomes and combat the emergence and spread of antimicrobial resistance. In addition, strategies and implementation plans may be needed for the effective introduction and use of new diagnostics, fixed-dose combinations therapies, vaccines, and other health technologies.

USAID expected that SIAPS would identify issues associated with each health system component as it relates to the pharmaceutical system as well as consider its necessary contribution to potential interventions supporting the different USAID health elements. For example, for the design and implementation of a pharmacovigilance system, SIAPS would have systematically considered governance issues such as transparency and accountability in processes and structures, prevailing medicines laws and regulations, and professional practice standards; human resource issues such as adequately staffed and skilled workforce within the national regulatory authority and other stakeholders and the availability of supportive training programs and materials on how to identify and address preventable medicines-related problems; information systems requirements for linking product management with patient issues and timely data collection, analysis and interpretation at all levels of the health system; operational costs and financial sustainability opportunities and constraints; and development of systems to monitor adherence to therapy, detect adverse events, identify medication errors, and discover product quality issues.

SIAPS activities are determined by client priorities (whether Mission or core health element) in approved work plans, taking into consideration implementation of the SIAPS approach described above. Client priorities were commonly determined through interaction with stakeholders (e.g., host country government counterparts). The effectiveness of SIAPS in implementing its technical approach within this context and the lessons learned this presents to the Agency within the area of pharmaceutical systems strengthening is the subject of this evaluation.

SIAPS has a Monitoring and Evaluation (M&E) system in place that includes central program (“Level I”) and country (“Level II”) indicators (see Annex 8) and targets. M&E Plans are in place for both levels (central and country specific). Baseline and periodic data has been collected and is available to the evaluation team for analysis. A schematic of SIAPS M&E process is included in Annex 7.

Relevant projects that were operational at the time that SIAPS was designed and awarded, including those managed from other offices within the Bureau for Global Health, are summarized below. Those that have since closed and where follow-on projects have been awarded are also noted. See Annex 6 for a listing of technical areas for key mechanisms supporting medical products and technologies.

- **The Strengthening Pharmaceutical Systems (SPS) project (2005-2011).** A “first generation” pharmaceutical system strengthening project, also managed by MSH, the SPS project was a predominantly field-based project and provided technical support that
embraced supply chain management as well as other technical areas with a focus on the expansion and scale-up of prevention and treatment programs. Building on the solid conceptual and empirical foundation for understanding pharmaceutical systems created by the predecessor projects, Rational Pharmaceutical Management (RPM) and RPM Plus, SPS was at the forefront in developing new tools and approaches supporting all the health elements, including access to medicines and pharmaceutical services for post-partum hemorrhage, childhood diarrhea, acute respiratory infections, malaria, TB, and HIV/AIDS programs. A Leader with Associates cooperative agreement, SPS provided guidance to all the major global health initiatives including the Global Fund, the Global Drug Facility (GDF), the Green Light Committee (GLC), Roll Back Malaria, and the Stop TB Partnership. It also implemented up to 20 country programs, with four associate awards. SPS and predecessor projects were managed through the HIDN and SIAPS was designed to be the logical follow-on to the SPS project, with greater emphasis on integration with larger health system strengthening frameworks.

- **The Promoting the Quality of Medicines (PQM) project (2009–2019).** A cooperative agreement with the United States Pharmacopeial Convention (USP), PQM’s objective is to help assure the quality and safety of medicines of priority to USAID health projects. Also managed from OHS, the PQM has a technical mandate that complements the SIAPS program through its focus on strengthening national medicines quality assurance systems, supporting international pre-qualification mechanisms, and selected manufacturers to increase the supply of quality-assured medicines of relevance to priority USAID health projects, detecting counterfeit and substandard medicines throughout the supply chain including at the point of care, and providing technical leadership and global advocacy regarding the importance of medicines quality assurance systems. PQM works with directed core funding from all of the health elements and also cross bureau core funding as well as field support from approximately 20 Missions. PQM was awarded a five-year extension along with a ceiling increase in 2013 with no substantive change in the overall project mandate.

- **Supply Chain Management Systems (SCMS) project (2009–2015).** The SCMS contract was designed to provide one-stop shopping for HIV/AIDS-related commodities and supplies for HIV/AIDS programs funded by PEPFAR. Managed by the OHS Division of Supply Chain for Health, SCMS also provides technical assistance to national supply chains to ensure availability of ARVs and related commodities, including support for quantification, warehousing, and distribution. Activities include training and development of information systems to ensure long-term sustainability of distribution systems in participating countries.

- **USAID|DELIVER II project (2009–2015).** An indefinite quantity contract (IQC) with eight task orders, the USAID|DELIVER project is managed from the PRI and implemented by JSI. USAID|DELIVER, the most recent of a series of similar projects that has been in existence for over a decade, has developed and offers training courses on supply chain management and has conducted seminal research on modeling supply chain development and assessments of alternative supply chain systems, including innovative approaches to sustainability. Through the various task orders and with field support, the project supports the actual procurement of commodities for reproductive health and family planning and malaria, including quantification, warehousing, and distribution. Technical assistance is also provided to partner country governments and non-governmental and private voluntary organizations to develop supply chains for essential health supplies.

- **The Strengthening Health Outcomes through the Private Sector (SHOPS) project (2009–2014).** Managed from the Office of Population and Reproductive Health, SHOPS aims to increase the role of the private sector in programs that address family planning (FP)/reproductive health (RH), HIV/AIDS, and other health information,
products, and services. The focus of technical activities is to promote the expansion of public sector health services by increasing private sector involvement to serve those who can pay for private health services and medicines, thereby complementing the SIAPS result areas related to financing and access to quality-assured pharmaceutical products and services.

- The **Central Contraceptive Procurement (CCP) project (1990-2018)** provides a mechanism for consolidated USAID purchases of contraceptives, including condoms, and the independent testing of these products.

- The **Global Health Supply Chain Program (“the new architecture”)**. Both SCMS and the USAID|DELIVER projects will end in 2016. A new follow-on project is replacing both SCMS and USAID|DELIVER and will be managed under a new architecture within the Bureau for Global Health that includes a suite of intersecting contracts, which are outlined below (see Annex 5 for schematic):

  - **Green Box**. The “Green Box” contract is a single-award IDIQ that focuses on commodity procurement/logistics (donor-funded) and on technical assistance for in-country supply chain systems. The objectives are 1) Global (donor) commodity procurement and logistics to improve provision of essential health commodities, 2) Systems strengthening technical assistance for in-country supply chain systems, and 3) Global collaboration – strategic engagement to improve long-term global supply of health commodities. The overall goal of the Green Box is to improve availability of health commodities and provide supply chain technical assistance.

  - **Red Box**. The “Red Box” contract is a multi-award IDIQ (primarily field support task orders) that focuses on technical assistance for in-country supply chain systems. The objectives are 1) Systems Strengthening Technical Assistance for in-country supply systems and 2) Global Collaboration – strategic engagement to improve the long-term availability of health commodities. The overall goal of the Red Box is to improve the long-term availability of health commodities in public and private services.

  - **Orange Box**. The “Orange Box” contract focuses on quality assurance for USAID commodity procurements, global technical leadership, and technical assistance for in-country quality assurance systems. The objectives are 1) Establish a comprehensive Quality Assurance Program (QAP) for the USAID Bureau for Global Health 2) Design and implement a Quality Control (QC) strategy to be approved by USAID that provides for appropriate monitoring of the quality of health commodities procured on behalf of USAID, 3) Provide technical leadership and technical assistance for in-country quality assurance systems and for other donors and partners, 4) Collaborate with global partners and contractors under the Global Health Supply Chain Program.

  - **Yellow Box**. The “Yellow Box” contract focuses on procurement/logistics for HIV rapid diagnostic test kits (RTKs) using a global procurement strategy (e.g., donor-funded/procured). The objectives include 1) Procurement of approved RTKs, 2) Logistics, 3) Quality assurance and quality control, 4) Metrics, 5) Data visibility, and 6) Collaboration related to HIV RTKs.

  - **Purple Box – aka the Business Intelligence and Analytics (BI&A) contract**. The BI&A contract is the only contract already awarded. It is focused on information management and analysis across the entire GHSC Program and on technical assistance on data management for in-country supply chain systems.

  - **Blue Box**. The “Blue Box” is yet to be competed, but will include up to four assistance agreements and will focus on research on a focused set of health
supply chain systems and related commodity security issues in low and middle income countries. The objectives include 1) Improve health supply chain systems through transformative changes that use industry best practice; 2) Improve the quantity, reliability, and efficiency of financing for health commodities and supply chain systems; 2) Improve governance and accountability for commodity security.

In addition to working with other projects that relate directly to the Medical Products Building Block, SIAPS was also expected to work with GH projects that focus on other health systems building blocks, including:

- **Health Systems 20/20, now the Health Finance and Governance (HFG) project (2013-2018).** A cooperative agreement with Abt Associates managed from OHS, with a focus on improving health financing, governance, and operations and building sustainable developing country institutional capacity in these areas. HFG is a follow-on to the HS 20/20 project, which helped to increase access to priority services by implementing evidence-based approaches to reduce financial barriers, increase financing for health, and ensure that health resources are rationally allocated to maximize health impact, which is complementary to the SIAPS result areas related to finance and governance.

- **The Health Care Improvement (HCI) project, now the ASSIST project (2013-2018).** ASSIST is a cooperative agreement was awarded to URC in 2013 to continue the trajectory established by the HCI project of using modern improvement methodologies adapted from the U.S. health care system to identify and test changes in health care that may improve clinical quality, efficiency, and patient-centeredness. ASSIST provides a range of services related to other quality improvement strategies, most notably the establishment of improvement collaboratives. This project is managed from OHS, and shares with SIAPS a focus on services delivery and an approach to capacity building grounded in the principles of continuous quality improvement.

- **The CapacityPlus project (2009-2015).** A cooperative agreement managed from PRH, this project aims to improve the quality of health services in the developing world by strengthening the health care workforce to help reach the MDGs. In countries where both CapacityPlus and SIAPS work, the projects should be coordinating and collaborating on activities related to policy and planning for human resources for health, including strengthening human resource management and information systems, and improving health workforce development, including pre-service, in-service, and continuing professional education programs.

- **The Leadership, Management and Governance (LMG) project (2011-2016).** LMG supports health systems strengthening by addressing the gap in sustainable leadership, management, and governance capacity of health care providers, program managers, and policy makers to implement quality health services at all levels of the health system. SIAPS and LMG share complementary mandates and at the country level the expectation is that these projects work together to develop strategies and plans for strengthen the governance, leadership, and stewardship capacity of in-country organizations and institutions to assume greater responsibility for their health and pharmaceutical systems.

- **The MEASURE Evaluation Phase III project (2008-2014).** The MEASURE Evaluation project has a long-standing mandate to develop new tools and methodologies to support project monitoring and evaluation in addition to conducting evaluation research. Increasingly important, MEASURE Evaluation has been strengthening routine health information systems in countries and building host country institutional capacity to perform these vital functions. At the county level, SIAPS is expected to coordinate with
MEASURE Evaluation when working on routine health information system strengthening efforts.

It should be noted that SIAPS was designed and awarded as a project of HIDN. In 2013, the project was subsequently transferred to the newly established OHS, together with the PQM, ASSIST, and HFG projects.

Describe the theory of change of the project/program/intervention.

The SIAPS approach embraces the development theory that desired system performance (e.g., reduced stock outs) can be sustainably achieved (i.e., the system is strengthened) through an approach that embraces all health systems components (governance, human resources, information, financing, and service delivery) and their interactions with each other and with the medical products building block. Much is known about how to measure pharmaceutical systems performance but methods and evidence to measure the true strength of pharmaceutical systems is lacking.

A graphic depiction of SIAPS theory of change is below:

SIAPS Pharmaceutical System Strengthening Approach

Strategic or Results Framework for the project/program/intervention (see Annex 1 for complete SIAPS Results Framework)
IX.SCOPE OF WORK
A. Purpose: Why is this evaluation or analysis being conducted (purpose of analytic activity)?

The purpose of this performance evaluation is to provide the United States Agency for International Development (USAID) Bureau for Global Health (GH) Office of Health Systems (OHS) with an objective assessment of USAID’s Systems for Improved Access to Pharmaceuticals and Services (SIAPS), a centrally-managed five-year cooperative agreement (AID-OAA-A-11-00021) between USAID and Management Sciences for Health (MSH), managed by OHS. SIAPS was awarded September 23, 2011 and runs through September 22, 2016.

What is the geographic coverage and/or the target groups for the project or program that is the subject of analysis?

SIAPS works globally, with an in-country office in: Angola, Bangladesh, Burundi, Cameroon, Democratic Republic of the Congo, Ethiopia, Guinea, Haiti, Lesotho, Liberia, Mali, Mozambique, Namibia, Philippines, Tajikistan, South Africa, South Sudan, Swaziland, Ukraine, and Uzbekistan. Activities are also conducted in selected LAC Amazon Malaria Initiative countries (Brazil, Colombia, Ecuador, Guyana, Honduras, Peru, Nicaragua) and West Africa Regional Mission countries (Benin, Burkina Faso, Cameroon, Guinea, Togo, and Niger).
Specifically, this evaluation is being conducted to:

- **Determine the effectiveness of SIAPS technical approach in achieving the project goal and objectives**, including its ability to generate evidence that implementing the comprehensive SIAPS approach has contributed to the strengthening of pharmaceutical systems, and assess how the project’s management structure, processes, and staffing patterns have helped or hindered progress toward achieving the project goal and objectives. This includes evaluation of the level of client satisfaction, including satisfaction of GH Offices/Health Elements, Missions, and other clients/partners/counterparts with progress toward achieving work plan objectives and prioritized recommendations that can be feasibly incorporated into the remainder of the existing SIAPS program; and

- **Provide recommendations for potential future pharmaceutical systems strengthening projects**, whether centrally managed or bilateral, to comprehensively address the areas of technical focus related to pharmaceutical systems strengthening necessary to sustainably achieve desired health outcomes. Identify issues in pharmaceutical systems strengthening that future projects may encounter and need to address.

This evaluation will take place approximately two-thirds of the way through the expected performance period of SIAPS and will be instrumental for identifying accomplishments and challenges in implementing the project, potential for follow on projects, and to a more limited extent, opportunities for SIAPS program implementation adjustments both in terms of current technical activity and program management. The assessment will gather and synthesize information from multiple sources, including the GH Bureau Office of Health Infectious Disease and Nutrition (HIDN), Office of HIV/AIDS (OHA) / PEPFAR, Office of Population Reproductive Health Office (PRH), Missions, USAID agreement officer, SIAPS resource partners, and other key stakeholders.

### B. Audience

**Who is the intended audience for this analysis? Who will use the results? If listing multiple audiences, indicate which are most important.**

Findings from the evaluation will be used by the Office of Health Systems and the Bureau for Global Health leadership.

### C. Applications and use

**How will the findings be used? What future decisions will be made based on these findings?**

Management decisions that will be made using evaluation data include:

1. Whether to continue the SIAPS pharmaceutical systems strengthening approach or some variation of the SIAPS approach in another project.
2. Whether the technical focus areas of SIAPS continue to be relevant to the Agency for pharmaceutical systems strengthening, and whether additional technical areas should be included in a new project design.

### D. Primary Tasks

The scope of work for the assessment team will consist of three main tasks. The approximate distribution of LOE for the team is indicated in parentheses.

**Task 1: Evaluate the effectiveness of SIAPS technical approach in achieving the project goal and objectives.** *(60%)*

- Assess the effectiveness of project’s comprehensive technical approach, including in-country (field support) and core work (with USAID Missions and health elements, host
country governments, other counterparts, international and local partner organizations, and other donors and technical agencies) **key question**

- Evaluate SIAPS’ ability to generate evidence (metrics etc.) demonstrating that implementing the SIAPS approach has contributed to the strengthening of pharmaceutical systems. **key question**
- Analyze how the technical mandate of SIAPS relates to the technical mandate of the USAID Global Health Supply Chain program contracts. **key question**
- Assess how the project’s organization, staffing, management, and interface with the USAID SIAPS AOR team have helped or hindered the progress of the project and achievement of the project goal and objectives.
- Assess how well SIAPS field-support addresses the needs of Missions in meeting in-country programming and technical objectives, including the level of client satisfaction.
- Assess how well SIAPS core health element (e.g. MNCH, TB, etc.) technical activities meet the needs of the health elements’ objectives.
- Make recommendations for the highest priority adjustments in the management and implementation of the SIAPS program.

**Note to evaluators:**

As part of a succession of pharmaceutical systems projects, SIAPS was designed as a “next generation” project that fully embraces a system strengthening perspective and a formalized approach to measuring impact. The project is now approximately two-thirds of the way through the performance period.

Project success is influenced by various internal factors, including the design and use of supportive communication and management strategies. External contextual and enabling factors are also relevant (e.g., availability of funding to support the design of needed approaches and tools) as is the relationship between the AOR team and SIAPS management team. SIAPS has enjoyed considerable directed core health element and field support funds presumably because the project has demonstrated value-added to the various health element and field support clients. The measures of success for these different clients, however, are different.

- **Cross-bureau** (formerly known as Common Agenda) funds are provided to the project primarily to address global and thought leadership concerns. For example, cross-bureau funds may be used for participation on global level working groups on improving access to medicines, promoting the appropriate use of medicines, protecting patient safety through pharmacovigilance, and combating antimicrobial resistance, or for global advocacy activities promoting pharmaceutical system strengthening. These funds may be also be used to develop performance metrics for pharmaceutical systems strengthening and new tools and approaches to solving pharmaceutical management challenges to advance USAID’s priority health goals, or to conduct research to be able to better understand what these challenges are. Developing training on state-of-the-art topics in pharmaceutical system strengthening would also be considered an appropriate activity with these funds.

- **Directed core health element** funds are provided by malaria, neglected tropical diseases, maternal and child health, nutrition, HIV/AIDS, and tuberculosis. Health elements seek technical assistance from SIAPS to help them address specific pharmaceutical-related challenges they face with respect to introducing or scaling up interventions. This may include research or tools development as well as participation in element-specific fora where pharmaceutical management and pharmaceutical system strengthening are discussed.

- **Field support** (country and regional) funds are provided to SIAPS to support the design and implementation of activities that will help Missions achieve their health program
objectives. Field support funds come from the health elements and as such will also reflect the technical priorities of the health elements. SIAPS is charged with developing and implementing country-specific pharmaceutical system strengthening plans based on the SIAPS approach that take into consideration these various priorities; some health elements are more prescriptive and restricted in scope than others. Country work plans provide stated objectives and detailed performance measures/indicators that are used to support program management and to monitor for the results of technical activities.

The evaluation team will need to consider these differences in funding and types of activities that the funding supports, in completing Task 1.

Although less than two years remain in SIAPS, there may be some important opportunities for the project to continue to make significant contributions to the field of health systems and pharmaceutical systems strengthening. These opportunities may derive from advances in the thought leadership in these areas, or from shifts in the global community regarding priorities for pharmaceutical system strengthening that can impact on the success of USAID health programming in general. The evaluators should consider and prioritize these opportunities.

**Task 2. Provide recommendations for potential future pharmaceutical systems strengthening projects, whether centrally-funded or bilateral (40%)**

- Assess whether SIAPS comprehensive pharmaceutical systems strengthening objectives are still relevant to support USAID’s priority health goals of EPCMD and AFG, particularly in the context of Universal Health Coverage. Are the SIAPS areas of technical focus related to pharmaceutical systems strengthening those that are necessary to sustainably achieve desired health outcomes? Are there others to consider? **key question**
- Identify issues, challenges, and opportunities related to pharmaceutical systems strengthening that the Agency, both core and Mission teams, may encounter and need to address at the global, regional, and country level.

**E. Evaluation questions:** Evaluation questions should be: a) aligned with the evaluation purpose and the expected use of findings; b) clearly defined to produce needed evidence and results; and c) answerable given the time and budget constraints. Include any disaggregation (e.g., sex, geographic locale, age, etc.), they must be incorporated into the evaluation questions. **USAID policy suggests 3 to 5 evaluation questions.**

<table>
<thead>
<tr>
<th>Evaluation Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How effective is project’s technical approach, including in-country (field support) and core work (with USAID Missions and health elements, host country governments, other counterparts, international and local partner organizations, and other donors and technical agencies)?</td>
</tr>
<tr>
<td>2. What is SIAPS’ ability to generate evidence (metrics, etc.) demonstrating that implementing the SIAPS approach has contributed to the strengthening of pharmaceutical systems?</td>
</tr>
<tr>
<td>3. Are SIAPS’ pharmaceutical systems strengthening objectives aligned with and still relevant to support USAID’s priority health goals of EPCMD and AFG, particularly in the context of Universal Health Coverage?</td>
</tr>
<tr>
<td>4. What areas of technical focus related to pharmaceutical systems strengthening are necessary to sustainably achieve desired health outcomes? Does SIAPS currently incorporate these areas or are there others to consider?</td>
</tr>
</tbody>
</table>

**Other Questions [OPTIONAL]**

*(Note: Use this space only if necessary. Too many questions leads to an ineffective evaluation.)*

N/A
F. **Methods:** Check and describe the recommended methods for this analytic activity. Selection of methods should be aligned with the evaluation questions and fit within the time and resources allotted for this analytic activity. Also, include the sample or sampling frame in the description of each method selected.

The Evaluation Team will be based in DC to work closely with the SIAPS/USAID team, but some work can be done remotely as determined during the Team Planning Meeting. Additionally, there will be field visits to 2-4 country projects. Considerations for country selection include: scope of the project (in terms of breadth of technical areas covered), complexity/number of health elements supporting technical activities, size of the project (in terms of value), and interest of the Mission in participating in the evaluation. Countries with such comprehensive projects that may be considered for field visits include Bangladesh, Ethiopia, South Africa, Namibia, and Mali. The final selection will be made in consultation with the AOR team and will be weighed against available budget and timeline for completion of the evaluation. USAID Missions in Bangladesh, Ethiopia, and South Africa have concurred and look forward to possible evaluation visits.

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### Document and Data Review (list of documents recommended for review)

The following documents will be made available to evaluators to provide background information, and data on project performance:
- SIAPS goal and results framework are provided in Annex 1 and 2
- Current funding profile provided in Annex 3
- The RFA, SIAPS proposal, SIAPS cooperative agreement, project M&E Plan, country M&E plans, quarterly and annual reports, trip reports, other financial tracking reports, Knowledge Management strategy, success stories, SIAPS training materials and evaluations of SIAPS trainings, etc.
- Work plans (core- and field support-funded). Note that SIAPS receives funding from a variety of sources, including directed core health element funds from virtually all of the health elements as well as cross-bureau core funds (formerly known as Common Agenda) and field support funds. Activities are implemented as global technical leadership, research and innovation, or support to the field.
- SIAPS self-assessment reports may be available from the SIAPS/USAID AOR

Additional project-related information and technical reports can be found at the SIAPS program website (http://siapsprogram.org), on the website of other projects (PQM, SCMS, DELIVER, etc.), and on the USAID Development Experience Clearinghouse (https://dec.usaid.gov).

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### Secondary analysis of existing data (list the data source and recommended analyses)

<table>
<thead>
<tr>
<th>Data Source (existing dataset)</th>
<th>Description of data</th>
<th>Recommended analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIAPS M&amp;E Data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other relevant data sources as determined by</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Key Informant Interviews  

A list of interviewees and key stakeholders will be provided by USAID prior to the assignment’s inception. During the Team Planning Meeting, the list will be finalized in consultation with the USAID Mission and Washington DC-based commodities leads from malaria, HIV/AIDS, TB, NTD, and MNCH for each country.

The evaluation team will conduct in-depth key informant and/or group interviews, at a minimum, with the following organizations/staff:

- SIAPS program staff (senior management as well as technical leads)
- SIAPS core partners:
  - Accreditation Council for Pharmacy Education
  - Harvard University
  - Logistics Management Institute
  - University of Washington
- SIAPS resource partners:
  - African Medical and Research Foundation
  - Ecumenical Pharmaceutical Network
  - Results for Development, IMPERIAL Health Sciences
  - VillageReach
  - William Davidson Institute
- USAID Mission activity managers and health officers in selected countries with SIAPS field support (see below regarding field survey and field visits)
- USAID Washington health element commodities point persons for MNCH, malaria, TB, NTDs, HIV/AIDS
- USAID Washington SIAPS AOR management team and OHS leadership
- Subject matter experts, outside stakeholders, and other identified partners:
  - World Health Organization,
  - US Food and Drug Administration,
  - AIDS Medicines and Diagnostic Services (AMDS),
  - African Medicines Regulatory Harmonization (AMRH) initiative,
  - Global Fund,
  - Global Drug Facility
  - The World Bank (to be discussed with AOR team)

During Field Visits the following interviews will be conducted:

- SIAPS staff
- USAID Mission activity managers
- Key local stake holders from the Ministry of Health and other relevant institutions

Focus Group Discussions  

Some of the key informants listed above can be clustered together in a group interview.
- **Client/Participant Satisfaction or Exit Interviews** (list who is to be interviewed, and purpose of inquiry)

- **Facility or Service Assessment/Survey** (list type of facility or service of interest, and purpose of inquiry)

- **Verbal Autopsy** (list the type of mortality being investigated (i.e., maternal deaths), any cause of death and the target population)

- **Survey** (describe content of the survey and target responders, and purpose of inquiry)

  A brief survey will be conducted among field Missions where SIAPS has worked to gather information on SIAPS technical performance and client satisfaction and determine the extent to which the project’s technical focus and objectives continue to be relevant for the achievement of Mission priorities in addressing country health system needs. The survey will solicit input about technical areas of concern related to pharmaceutical systems strengthening. Web-based survey tools are recommended for this. It may be necessary to develop this survey in multiple languages.

- **Observations** (list types of sites or activities to be observed, and purpose of inquiry)

- **Data Abstraction** (list and describe files or documents that contain information of interest, and purpose of inquiry)

- **Case Study** (describe the case, and issue of interest to be explored)

- **Rapid Appraisal Methods** (ethnographic / participatory) (list and describe methods, target participants, and purpose of inquiry)

- **Other** (list and describe other methods recommended for this evaluation, and purpose of inquiry)

If impact evaluation –

Is technical assistance needed to develop full protocol and/or IRB submission?

- Yes
- No

List or describe case and counterfactual:

<table>
<thead>
<tr>
<th>Case</th>
<th>Counterfactual</th>
</tr>
</thead>
</table>
X. ANALYTIC PLAN
Describe how the quantitative and qualitative data will be analyzed. Include method or type of analyses, statistical tests, and what data it to be triangulated (if appropriate). For example, a thematic analysis of qualitative interview data, or a descriptive analysis of quantitative survey data.

The evaluation team will be responsible for coordinating the data analysis. The analysis will use social science approaches to answer the evaluation questions outlined above. The Evaluation Team should propose a detailed analysis plan that would generate robust evidence needed to answer the evaluation questions. Each team member will participate in the analysis and contribute to the interpretation of the data, as their area of specialty allows.

The evaluation will utilize both qualitative and quantitative data related to SIAPS in order to answer the evaluation question stated within this SOW.

Quantitative data will be analyzed primarily using descriptive statistics. Data will be stratified by demographic characteristics, such as location and sex, when appropriate. Other statistical test of association (i.e., odds ratio) and correlations will be run as appropriate. In the report the Evaluators will describe the statistical tests used.

Thematic review of qualitative data will be performed, connecting the data to the evaluation questions, seeking relationships, context, interpretation, nuances, homogeneity, and outliers to better explain what is happening and the perception of those involved. Qualitative data will be used to substantiate quantitative findings, provide more insights than quantitative data can provide, and answer questions where other data do not exist.

Use of multiple methods that are quantitative and qualitative, as well as existing data (e.g., project performance indicator data and county specific DHS) will allow the Team to triangulate findings to produce more robust evaluation results.

XI. ACTIVITIES
List the expected activities, such as Team Planning Meeting (TPM), briefings, verification workshop with IPs and stakeholders, etc. Activities and Deliverables may overlap. Give as much detail as possible.

**Desk Review** – Several documents are available for review for this evaluation. These include the SIAPS RFP, proposal, contract with modifications, annual work plans, M&E plans with performance monitoring plan (PMP), progress reports, routine reports of project performance indicator data, evaluation reports, and other project generated reports and materials. This desk review will provide background information for the Evaluation Team, and will also be used as data input and evidence for the evaluation.

**Team Planning Meeting (TPM)** – A three-day team planning meeting (TPM) will be held at the initiation of this assignment and before the data collection begins. The TPM will:
- Review and clarify any questions on the evaluation SOW;
- Clarify team members’ roles and responsibilities;
- Establish a team atmosphere, share individual working styles, and agree on procedures for resolving differences of opinion;
- Review and finalize evaluation questions;
- Review and finalize the assignment timeline and share with other units.
- Develop data collection methods, instruments, tools and guidelines;
• Review and clarify any logistical and administrative procedures for the assignment;
• Develop a data collection plan;
• Draft the evaluation work plan for USAID’s approval
• Develop a preliminary draft outline of the team’s report; and
• Assign drafting/writing responsibilities for the final report.

**Evaluation Plan** – By the close of the TPM, the evaluation team will prepare a detailed evaluation plan in response to SOW requirements and evaluation questions. In consultation with the USAID/GH/OHS team, the detailed evaluation plan should identify the countries for site visits and individuals and stakeholders for in-depth interviews and should include each of the proposed data collection instruments (i.e., structured interview guides, surveys, observation forms, etc.). A draft of the detailed evaluation plan and data collection instruments should be submitted to the USAID/GH/OHS team for input prior to finalization.

**Briefing and Debriefing Meetings** – Throughout the evaluation the Team Lead will provide briefings to USAID. The In-Brief and Debrief are likely to include the all Evaluation Team experts, but will be determined in consultation with USAID/GH/OHS. These briefings are:

• **Evaluation launch**, a call/meeting among the USAID/GH/OHS, GH Pro and the Team Lead to initiate the evaluation activity and review expectations. USAID will review the purpose, expectations, and agenda of the assignment. GH Pro will introduce the Team Lead, and review the initial schedule and review other management issues.

• **In-brief with USAID/GH/OHS**, as part of the TPM. This briefing may be broken into two meetings: a) at the beginning of the TPM, so the Evaluation Team and USAID can discuss expectations and intended plans; and b) at the end of the TPM when the Evaluation Team will present an outline and explanation of the design and tools of the evaluation. Also discussed at the in-brief will be the format and content of the Evaluation report. The time and place for this in-brief will be determined between the Team Lead and USAID/GH/OHS prior to the TPM.

• **In-brief with SIAPS**. The Evaluation Team will meet with SIAPS to discuss the Evaluation and expectations of involvement and cooperation of SIAPS staff and partners. This meeting will also provide SIAPS an opportunity to present the Evaluation Team an overview of the project.

• The Team Lead (TL) will brief GH Pro and the USAID/ AFR/SD/HT weekly to discuss progress on the evaluation. As preliminary findings arise, the TL will share these during the routine briefing, and in an email.

• A **final debrief** between the Evaluation Team and USAID/GH/OHS will be held at the end of the evaluation to present preliminary findings to USAID/GH/OHS. During this meeting a summary of the data will be presented, along with high level findings and draft recommendations. For the debrief, the Evaluation Team will prepare a **PowerPoint Presentation** of the key findings, issues, and recommendations for selected stakeholders: one for USAID and another for MSH. The evaluation team shall incorporate comments received from USAID during the debrief in the evaluation report. A draft of the final presentations should be submitted to the AOR team prior to finalization. *(Note: preliminary findings are not final and as more data sources are developed and analyzed these finding may change.)*


- **SIAPS debrief/workshop** will be held following the final debrief with the USAID/GH/OHS. The Evaluation Team will discuss with USAID who should participate.

**Fieldwork, Site Visits and Data Collection** – The evaluation team may conduct site visits to 3-4 countries with comprehensive SIAPS program activities, possibly including Bangladesh, Ethiopia, South Africa, with the possibility of Namibia or Mali. Final decision about travel to these countries will be determined by USAID/GH/OHS during the TPM. The Evaluation Team will outline and schedule key meetings and site visits prior to departing to the field.

### XII. DELIVERABLES AND PRODUCTS

Select all deliverables and products required on this analytic activity. For those not listed, add rows as needed or enter them under “Other” in the table below. Provide timelines and deliverable deadlines for each.

<table>
<thead>
<tr>
<th>Deliverable / Product</th>
<th>Timelines &amp; Deadlines (estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Launch briefing</td>
<td>TBD – late July 2015</td>
</tr>
<tr>
<td>TPM – 3 days</td>
<td>on/abut August 19 – 21, 2015</td>
</tr>
<tr>
<td>Workplan with timeline</td>
<td>August 21, 2015</td>
</tr>
<tr>
<td>Analytic protocol with data collection tools</td>
<td>August 21, 2015</td>
</tr>
<tr>
<td>In-brief with Mission or organizing business unit</td>
<td>August 19 - 21, 2015</td>
</tr>
<tr>
<td>US Data Collection</td>
<td>September 24 – October 10, 2015</td>
</tr>
<tr>
<td>In-brief with target project / program</td>
<td>September 28 – 29, 2015</td>
</tr>
<tr>
<td>Routine briefings</td>
<td>Weekly</td>
</tr>
<tr>
<td>Field Data Collection</td>
<td>September 24 – October 10</td>
</tr>
<tr>
<td><strong>Ethiopia</strong></td>
<td>October 11 - 17</td>
</tr>
<tr>
<td><strong>South Africa</strong></td>
<td>October 18 - 25</td>
</tr>
<tr>
<td><strong>Bangladesh</strong></td>
<td>October 28 – November 3</td>
</tr>
<tr>
<td>Out-brief with Mission or organizing business unit with Power Point presentation</td>
<td>Prior to Departing each country</td>
</tr>
<tr>
<td>Findings review workshop with USAID and US Partners</td>
<td>November 2015</td>
</tr>
<tr>
<td>Secondary debrief with USAID and US Partners</td>
<td>February 2016</td>
</tr>
<tr>
<td>Draft report</td>
<td>December 2015</td>
</tr>
<tr>
<td>Final report</td>
<td>March –April 2016</td>
</tr>
<tr>
<td>Raw data</td>
<td>April 2016</td>
</tr>
<tr>
<td>Dissemination activity</td>
<td></td>
</tr>
<tr>
<td>Other (specify):</td>
<td></td>
</tr>
</tbody>
</table>

**Estimated USAID review time**

Average number of business days USAID will need to review deliverables requiring USAID review and/or approval?  **10 Business days per round of review**

### XIII. TEAM COMPOSITION, SKILLS AND LEVEL OF EFFORT (LOE)

**Evaluation team**: When planning this analytic activity, consider:

- Key staff should have methodological and/or technical expertise, regional or country experience, language skills, team lead experience and management skills, etc.
- Team leaders for evaluations must be an external expert with appropriate skills and experience.
• Additional team members can include research assistants, enumerators, translators, logisticians, etc.
• Teams should include a collective mix of appropriate methodological and subject matter expertise.
• Evaluations require an Evaluation Specialist, who should have evaluation methodological expertise needed for this activity and have advised and conducted other similar evaluations. Similarly, other analytic activities should have a specialist with methodological expertise related to the needs of the SOW.
• Note that all team members will be required to provide a signed statement attesting that they have no conflict of interest, or describing the conflict of interest if applicable.

**Team Qualifications:** Please list technical areas of expertise required for this activities

The 3-4 person team may include non-USAID team member(s) (e.g., independent consultant) and may include a USAID direct or non-direct hire staff person. The team will include a minimum of three persons, one of which will be the designated team lead. At least two team members are required to have technical background in pharmaceutical management or health systems strengthening.

It is important that one of the key staff on this evaluation have experience with centrally-funded cooperative agreements as opposed to contracts, particularly bilateral contracts, will also be extremely useful.

All team members should participate in interviews and review all documents. Not all team members will need to travel to all field sites however all team members should be appropriately engaged to ensure the reliability of interviews data such that findings may be meaningfully analyzed and compared to inform recommendations.

List the key staff needed for this analytic activity and their roles. You may wish to list desired qualifications for the team as a whole, or for the individual team members

**Team Lead:** This person will be selected from among the key staff, and will meet the requirements of both this and the other position. The team lead should have significant experience conducting project evaluations.

**Roles & Responsibilities:** The team leader will be responsible for (1) managing the team’s activities, (2) ensuring that all deliverables are met in a timely manner, (3) serving as a liaison between the USAID and the evaluation team, and (4) leading briefings and presentations.

**Qualifications:**
- Minimum of 10 years of experience in public health
- At least 5 years’ experience in M&E, preferably on USAID projects/programs
- Excellent skills in planning, facilitation, and consensus building;
- Demonstrated experience leading an evaluation team;
- Excellent interpersonal skills;
- Excellent skills in project management
- Excellent organizational skills and ability to keep to a timeline
- Good writing skills
- Familiarity with USAID funding mechanisms, particularly cooperative agreements, both centrally funded and bilateral agreements.
- Familiarity with USAID policies and practices
  - Evaluation policy
– Results frameworks
– Performance monitoring plans

Key Staff 1: Title: Pharmaceutical Systems Strengthening Specialist
Roles & Responsibilities: Serve as a member of the evaluation team, providing technical expertise on pharmaceutical systems strengthening, including pharmaceutical management, policy and governance, supply chain management, rational use, services, financing, etc. S/He will participate in evaluation planning, data collection, data analysis, and report writing.
Qualifications:
  o Expertise working with pharmaceutical system strengthening in developing countries, including management, services, rational use, supply chain management, etc.
  o Experience working on health systems strengthening (HSS), health policy and governance, and/or health sector financing
  o Experience in individual and organizational capacity development related to pharmaceutical and/or health system strengthening
  o Experience in stakeholder engagement
  o Experience in conducting USAID evaluations of health programs/activities
  o An advanced degree in public health, or related field
  o At least 5 years’ experience in USAID health program management, oversight, planning and/or implementation
  o Understands USAID contracting of centrally funded and bilateral projects preferred
  o Able to work well on a team
  o Good interpersonal communication skills
  o Strong writing skills
Number of consultants with this expertise needed: 1

Key Staff 2: Title: Health Systems Strengthening Specialist
Roles & Responsibilities: Serve as a member of the evaluation team, providing technical expertise on health systems strengthening (HSS), covering the six building blocks to HSS, and how they relate to the pharmaceutical sector. S/He will participate in evaluation planning, data collection, data analysis, and report writing.
Qualifications:
  o Expertise working with health system strengthening in developing countries, with a firm understanding of the six building block for HSS
    i. leadership/governance
    ii. health care financing
    iii. health workforce
    iv. medical products & technologies
    v. information and research
    vi. service delivery
  o Experience in individual and organizational capacity development related to health system strengthening
  o Experience working with the pharmaceutical sector
  o Experience in stakeholder engagement
  o Experience in conducting USAID evaluations of health programs/activities
  o An advanced degree in public health, or related field
  o At least 5 years’ experience in USAID health program management, oversight, planning and/or implementation
Key Staff 3: Title: Evaluation Specialist
Roles & Responsibilities: Serve as a member of the evaluation team providing quality assurance on evaluation issues, including methods, development of data collection instruments, protocols for data collection, data management, and data analysis. S/He will insure highest level of reliability and validity of data being collected. S/He is responsible for all data analysis, assuring all quantitative and qualitative data analyses are done to meet the needs for this evaluation. S/He will participate in all aspects of the evaluation, from planning, data collection, data analysis to report writing. Furthermore, this s/he will serve as a technical expert on the team to review SIAPS’ M&E efforts, including evaluations conducted under SIAPS.

Qualifications:
- At least 5 years of experience in USAID M&E procedures and implementation
- At least 8 years managing M&E, including evaluations
- Strong knowledge, skills, and experience in qualitative and quantitative evaluation tools
- Experience in design and implementation of evaluations
- Experience in data management
- Experience using analytic software
- Experience evaluating health programs/activities; with experience in health systems and/or pharmaceutical systems evaluations preferred
- An advanced degree in public health, evaluation or research or related field
- Understanding USAID contracting of centrally funded and bilateral projects preferred
- Able to work well on a team
- Good interpersonal communication skills
- Strong writing skills

Number of consultants with this expertise needed: 1

Other Staff Titles with Roles & Responsibilities (include number of individuals needed):

| Evaluation and Logistics Assistant | is needed in each country that the Evaluation Team will visit. This individual in each country will assist Evaluation Team to set up appointments in advance of their arrival, arrange transportation and provide translation as needed for data collection. They will also provide local context to assist the Team with interpreting the data as collected. |

Will USAID participate as an active team member or designate other key stakeholders to as an active team member? This will require full time commitment during the evaluation or analytic activity.

☐ Yes – If yes, specify who:
☐ No, but USAID staff may accompany Evaluation Team and observe interviews and field visits
**Staffing Level of Effort (LOE) Matrix (Optional):**

This optional LOE Matrix will help you estimate the LOE needed to implement this analytic activity. If you are unsure, GH Pro can assist you to complete this table.

a) For each column, replace the label "Position Title" with the actual position title of staff needed for this analytic activity.

b) Immediately below each staff title enter the anticipated number of people for each titled position.

c) Enter Row labels for each activity, task and deliverable needed to implement this analytic activity.

d) Then enter the LOE (estimated number of days) for each activity/task/deliverable corresponding to each titled position.

e) At the bottom of the table total the LOE days for each consultant title in the ‘Sub-Total’ cell, then multiply the subtotals in each column by the number of individuals that will hold this title.

**Level of Effort in days for each Evaluation/Analytic Team member**

<table>
<thead>
<tr>
<th>Activity / Deliverable</th>
<th>Evaluation/Analytic Team</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Team Lead / HSS Specialist</td>
</tr>
<tr>
<td><strong>Number of persons →</strong></td>
<td>1</td>
</tr>
<tr>
<td>1 Launch Briefing</td>
<td>.5</td>
</tr>
<tr>
<td>2 Desk &amp; Data Review</td>
<td>5</td>
</tr>
<tr>
<td>3 Team Planning Meeting</td>
<td>3</td>
</tr>
<tr>
<td>4 In-brief with USAID OHS</td>
<td>1</td>
</tr>
<tr>
<td>5 In-brief with SIAPS, including prep</td>
<td>1</td>
</tr>
<tr>
<td>6 Finalize data collection forms &amp; procedures for all data collectors (circulate with USAID and GH Pro for QA)</td>
<td>1</td>
</tr>
<tr>
<td>7 Prep / Logistics for data collection</td>
<td>.5</td>
</tr>
<tr>
<td>8 Data collection in US</td>
<td>10</td>
</tr>
<tr>
<td>9 Field Visits: Travel and Data Collection in SIAPS countries*</td>
<td>24</td>
</tr>
<tr>
<td>9a South Africa</td>
<td>6</td>
</tr>
<tr>
<td>9b Ethiopia</td>
<td>6</td>
</tr>
<tr>
<td>9e Bangladesh</td>
<td>6</td>
</tr>
<tr>
<td>9f Travel</td>
<td>6</td>
</tr>
<tr>
<td>10 Data analysis &amp; synthesis</td>
<td>5</td>
</tr>
<tr>
<td>11 Debrief with USAID w/ presentation, including prep</td>
<td>1</td>
</tr>
<tr>
<td>12 Incorporate USAID’s feedback</td>
<td>.5</td>
</tr>
<tr>
<td>13 SIAPS Stakeholders’ workshop, including prep</td>
<td>1</td>
</tr>
<tr>
<td>14 Draft Evaluation report</td>
<td>10</td>
</tr>
<tr>
<td>Activity / Deliverable</td>
<td>Team Lead / HSS Specialist</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>15 5</td>
<td>5</td>
</tr>
<tr>
<td>16 GH Pro Report QA</td>
<td>65.5</td>
</tr>
<tr>
<td>17 Submission of draft report(s) to Mission</td>
<td>65.5</td>
</tr>
<tr>
<td>18 USAID Report Review</td>
<td>65.5</td>
</tr>
<tr>
<td>19 Revise report per USAID comments</td>
<td>73.5</td>
</tr>
<tr>
<td>20 Finalization, format and submission of final report</td>
<td></td>
</tr>
<tr>
<td>21 508 Compliance review &amp; editing</td>
<td></td>
</tr>
<tr>
<td>22 Upload Eval Report to the DEC</td>
<td></td>
</tr>
</tbody>
</table>

**Sub-Total LOE (per person)**

**Total LOE**

---

*LOE for Field Visits is calculated assuming the Team will divide up to cover more counties at the same time.*

If overseas, is a 6-day workweek permitted? Yes [ ] No [ ]

**Travel anticipated:** List international and local travel anticipated by what team members.

Bangladesh, Ethiopia, South Africa, with perhaps one more country in Africa (i.e., Namibia or Mali)

**XIV. LOGISTICS**

**Note:** Most Evaluation/Analytic Teams arrange their own work space, often in their hotels. However, if Facility Access is preferred GH Pro can request it. GH Pro does not provide Security Clearances. Our consultants can obtain Facility Access only.

Check all that the consultant will need to perform this assignment, including USAID Facility Access, GH Pro workspace and travel (other than to and from post).

- USAID Facility Access
  - Specify who will require Facility Access:
    - Electronic County Clearance (ECC) (International travelers only)
    - GH Pro workspace
      - Specify who will require workspace at GH Pro: TPM and other Team Meetings
  - Travel - other than posting (specify):
  - Other (specify): USAID/W communicate with Missions to be visited in advance, with request to Missions to assist with introductions to IP and MOH, as needed

**XV. GH PRO ROLES AND RESPONSIBILITIES**

GH Pro will coordinate and manage the evaluation team and provide quality assurance oversight, including:

- Review SOW and recommend revisions as needed
- Provide technical assistance on methodology, as needed
- Develop budget for analytic activity
- Recruit and hire the evaluation team, with USAID POC approval and provide oversight on their performance
- Arrange international travel and lodging for international consultants
- Request for country clearance and/or facility access (if needed)
- Review methods, workplan, analytic instruments, reports and other deliverables as part of the quality assurance oversight
- Report production - If the report is public, then coordination of draft and finalization steps, editing/formatting, 508ing required in addition to and submission to the DEC and posting on GH Pro website. If the report is internal, then copy editing/formatting for internal distribution.
- Ensure that the final report and PPTs provide strong findings and actionable recommendations
- Assist with in-country consultant travel arrangement

XVI. USAID ROLES AND RESPONSIBILITIES
Below is the standard list of USAID’s roles and responsibilities. Add other roles and responsibilities as appropriate.

<table>
<thead>
<tr>
<th>USAID Roles and Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>USAID</strong> will provide overall technical leadership and direction for the analytic team throughout the assignment and will provide assistance with the following tasks:</td>
</tr>
</tbody>
</table>

**Before Field Work**
- **SOW.**
  - Develop SOW.
  - Peer Review SOW
  - Respond to queries about the SOW and/or the assignment at large.
- **Consultant Conflict of Interest (COI).** To avoid conflicts of interest or the appearance of a COI, review previous employers listed on the CV’s for proposed consultants and provide additional information regarding potential COI with the project contractors evaluated/assessed and information regarding their affiliates. (Note: GH Pro will review for COI prior to recommending consultant to USAID for assignment.)
- **Documents.** Identify and prioritize background materials for the consultants and provide them to GH Pro, preferably in electronic form, at least one week prior to the inception of the assignment.
- **Local Consultants.** Assist GH Pro with identification of potential local consultants, including contact information.
- **Site Visit Preparations.** Provide a list of site visit locations, key contacts, and suggested length of visit for use in planning in-country travel and accurate estimation of country travel line items costs.
- **Lodgings and Travel.** Provide guidance to GH Pro on recommended secure hotels and methods of in-country travel (i.e., car rental companies and other means of transportation).

**During Field Work**
- **Mission Point of Contact.** Throughout the in-country work, ensure constant availability of the Point of Contact person and provide technical leadership and direction for the team’s work.
- **Meeting Space.** Provide guidance on the team’s selection of a meeting space for interviews and/or focus group discussions (i.e. USAID space if available, or other known office/hotel meeting space).
- **Meeting Arrangements.** Assist the team in arranging and coordinating meetings with stakeholders.
- **Facilitate Contact with Implementing Partners.** Introduce the analytic team to implementing partners and other stakeholders, and where applicable and appropriate prepare and send out an introduction letter for team’s arrival and/or anticipated meetings.

**After Field Work**
- **Timely Reviews.** Provide timely review of draft/final reports and approval of deliverables.
**XVII. ANALYTIC REPORT**

Provide any desired guidance or specifications for Final Report. (See How-To Note: Preparing Evaluation Reports)

This report should describe the findings from the technical evaluation as well as findings related to the big picture and overarching issues. The report should separately and comprehensively address each of the objectives and questions listed in the SOW and the findings, interpretations, conclusions, and recommendations that should be clearly supported by the collected and analyzed data. Findings should be presented graphically where feasible and appropriate using graphs, tables, and charts. The final report should make recommendations for future action, including recommendations that may be relevant to SIAPS and for potential future projects in terms of both technical and managerial aspects. The report should ideally not exceed approximately 40 pages in length (not including appendices, list of contacts, etc.). The final report should contain an executive summary, table of contents, main text including findings, conclusions, and recommendations. Annexes should include the Scope of Work, description of the methodology used, lists of individuals and organizations consulted, data collection instruments (questionnaires, discussion guides, etc.) and bibliography of documents reviewed. The executive summary should accurately represent the report as a whole and should not exceed two pages.

The **Evaluation Final Report** must follow USAID’s Criteria to Ensure the Quality of the Evaluation Report (found in Appendix I of the USAID Evaluation Policy, and copied below).

| a. | The report must not exceed 40 pages (excluding executive summary, table of contents, acronym list and annexes). |
| b. | The structure of the report should follow the Evaluation Report template, including branding found here or here. |
| c. | Draft reports must be provided electronically, in English, to GH Pro who will then submit it to USAID. |
| d. | For additional Guidance, please see the Evaluation Reports to the How-To Note on preparing Evaluation Draft Reports found here. |

**Reporting Guidelines:** The draft report should be a comprehensive analytical evidence-based evaluation report. It should detail and describe results, effects, constraints, and lessons learned, and provide recommendations and identify key questions for future consideration. The report shall follow USAID branding procedures. **The report will be edited/formatted and made 508 compliant as required by USAID for public reports and will be posted to the USAID/DEC.**

The preliminary findings from the evaluation will be presented in a draft report at a full briefing with USAID/GH/OHS and at a follow-up meeting with key stakeholders. The report should use the following format:

- Executive Summary: concisely state the most salient findings, conclusions, and recommendations (not more than 2 pages);
- Table of Contents (1 page);
- Acronyms
- Evaluation Purpose and Evaluation Questions (1-2 pages)
- Project [or Program] Background (1-3 pages)
- Evaluation Methods and Limitations (1-3 pages)
- Findings
- Conclusions
- Recommendations
- Annexes
- Annex I: Evaluation Statement of Work  
- Annex II: Evaluation Methods and Limitations  
- Annex III: Data Collection Instruments  
- Annex IV: Sources of Information  
  o List of Persons Interviews  
  o Bibliography of Documents Reviewed  
  o Databases, etc.  
- Annex V: Disclosure of Any Conflicts of Interest  
- Annex VI: Statement of Differences [if applicable]

The evaluation methodology and report will be compliant with the USAID Evaluation Policy and Checklist for Assessing USAID Evaluation Reports.

All data instruments, data sets, presentations, meeting notes and report for this evaluation will be presented to USAID electronically by the Evaluation Program Manager. All data will be in an unlocked, editable format.

**XVIII. USAID CONTACTS**

<table>
<thead>
<tr>
<th></th>
<th>Primary Contact</th>
<th>Alternate Contact 1</th>
<th>Alternate Contact 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Anthony Boni</td>
<td>Lisa Ludeman</td>
<td>Anwer Aqil</td>
</tr>
<tr>
<td>Title:</td>
<td>Pharmaceutical Management Specialist (SIAPS AOR)</td>
<td>Pharmaceutical Management Advisor</td>
<td>Senior M&amp;E Advisor</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:aboni@usaid.gov">aboni@usaid.gov</a></td>
<td><a href="mailto:eludeman@usaid.gov">eludeman@usaid.gov</a></td>
<td><a href="mailto:aaqil@usaid.gov">aaqil@usaid.gov</a></td>
</tr>
<tr>
<td>Telephone:</td>
<td>571-551-7207</td>
<td>571-551-7186</td>
<td>571-551-7306</td>
</tr>
<tr>
<td>Cell Phone (optional)</td>
<td>703-395-1242</td>
<td>571-214-3542</td>
<td>571-217-9547</td>
</tr>
</tbody>
</table>

List other contacts [OPTIONAL]

<table>
<thead>
<tr>
<th></th>
<th>POC South Africa</th>
<th>POC Ethiopia</th>
<th>POC Bangladesh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USAID Office/Mission</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Telephone:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell Phone (optional)</td>
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</tr>
</tbody>
</table>

**XIX. REFERENCE MATERIALS**
Documents and materials needed and/or useful for consultant assignment, that are not listed above

See Desk Review section above.

NOTE: The following annexes have been removed from the SOW as it appears in the Final Report

1. SIAPS Results Framework
2. SIAPS Approach (The Daisy)
3. SIAPS Funding Profile (as of February 25, 2015)
4. SIAPS Core and Resource Partners
5. Overview of USAID Global Health Supply Chain – New Architecture
7. SIAPS Monitoring and Evaluation Data Flow Process
8. SIAPS List of Performance Indicators
9. Potential Interview Assessment Question
ANNEX II. EVALUATION METHODS AND LIMITATIONS

Overview

The evaluation used multiple sources of data for a mixed-methods approach, with information to support evaluation of SIAPS gathered from documents, key informant interviews, field visits and a survey. The evaluation places SIAPS in the broader context of health systems strengthening efforts by USAID, with consideration of some emerging issues and policy directives.

Review of activity documentation and relevant literature began with inception of the evaluation and extended throughout the evaluation until preparation of this report. The evaluation team conducted interviews with individuals and groups in Washington and at field locations in Bangladesh, Ethiopia, and South Africa, with telephone interviews where necessary. Field visits included SIAPS program offices, host government offices receiving SIAPS support, and facilities subject to strengthening efforts through SIAPS. An online survey was administered to USAID Missions using SIAPS and to selected Missions not using SIAPS.

Document Review and Analysis

An impressive amount of documentation is available relating to SIAPS and pharmaceutical systems in low and middle income countries. SIAPS itself has itself produced a very substantial amount of documentation; in addition to annual and quarterly reports, the program has produced documents on topics as diverse as “Defining and Measuring Pharmaceutical Systems Strengthening” (the result of a 2014 workshop of SIAPS partners) and “Practical Difficulties of Delivering Medicines Where Infrastructure Does Not Exist” (presented at the International Pharmaceutical Federation (FIP) World Congress in 2015).

SIAPS staff generously provided file documentation, discussed at several SIAPS staff presentations, briefings and follow-ups. Other documents came from a variety of sources. Evaluation team members familiarized themselves with the documentation, and a cloud site was established to facilitate sharing of documents and information. The desk review, while time-consuming, provided a rich source of information on SIAPS activities and the operating environment.

Interviews

Key informants for interview were identified with input from USAID/W, SIAPS HQ, SIAPS field offices and USAID Missions, in addition to outreach by the evaluation team. This range of input ensured that the evaluators held discussions with a core group of activity partners, collaborators and stakeholders. The team interviewed 155 key informants representing USAID (Washington and Missions), international agencies, other donors, host country governments, SIAPS staff (HQ and field offices) and SIAPS partners. The interviews (individual and group), documented with notes, followed standardized structured qualitative interview guides aligned with the evaluation questions.
The interview guides were designed to preserve the potential for a relatively free-flowing conversation, while creating a standardized format to facilitate a reliable, comparative analysis of data. The evaluation team received informational presentations and conducted interviews with individuals and groups in Washington and at field locations in Bangladesh, Ethiopia and South Africa. The team also conducted telephone interviews with individuals who were unavailable in locations where the evaluation team was present.

In Washington and during field visits, SIAPS points of contact were asked not to attend interviews with government, USAID mission and other stakeholders to guard against respondents being influenced by the presence of project staff during the interview.

**Field Visits and Interviews with Field Personnel**

The evaluation team conducted field visits in Bangladesh, Ethiopia and South Africa. Country selection was based on the size and diversity the SIAPS program in country and each Mission’s ability to host the visit. There was, not surprisingly, a substantial overlap between site visits and interviews. The evaluation team visited wide range of locations targeted by SIAPS system strengthening efforts and interviewed individuals engaged in the work of those sites. Locations visited included policy-level offices of host governments and service delivery facilities (ranging from central warehouses to neighborhood clinics), in addition to SIAPS field offices, USAID Missions, and other important stakeholders.

**Web-based Survey of Selected USAID Missions**

A web-based survey was used to gather information about Mission experience with pharmaceutical system strengthening efforts. Extensive feedback was provided by the AOR team on the survey before it was sent to the field. An initial email inviting responses was sent by the director of the Office of Health Systems. The evaluation team sent, a week later, a follow-up email to Missions that had not responded. Both emails, as well as the introduction to the survey itself, made clear that the survey was voluntary and confidential.

The survey asked all responding Missions to identify issues important in selecting a mechanism for pharmaceutical system strengthening, the mechanisms considered, the mechanisms selected and the funding source used for system strengthening. Missions that used SIAPS were asked more detailed set of questions addressing SIAPS implementation, perceived effectiveness and related issues.

The survey was sent to 55 Missions, of which 17 responded. Of the 17 responses, nine were from missions that did not use SIAPS and eight were from missions with SIAPS programs.

**Limitations**

The broad range of information available in program documents, combined with the diverse perspectives of the interviewees and survey responses, illuminates the SIAPS evaluation. The evaluation questions, addressing effectiveness of the SIAPS technical approach and looking forward to changes in operating environment for future programs, are primarily qualitative and do not lend themselves to quantitative analysis.

The interviewees were people with some exposure to SIAPS and, almost unavoidably, consisted largely of individuals either involved in SIAPS implementation or with organizations benefitting from SIAPS implementation. Despite this potential for bias in favor of SIAPS, interviewees
offered opinions that included suggestions for improvement in SIAPS design and operation, as well as recognition of the useful role of SIAPS.

Small group interviews were conducted with health element teams and SIAPS HQ and in-country management teams. Technical Responses in these group settings appeared to be unforced and several members of these groups were interviewed individually to ensure respondents shared information freely.

Washington based technical teams, expect for OHA representatives, received presentations from SIAPS prior to interviews. In one country visited government officials used presentations prepared with SIAPS assistance in discussions with the evaluation team. This preparation of respondents did not impact the discussion of interview questions and project results contained in the various power points were already available in existing project documentation.

For the web-based survey, comments collected in the survey are presented in the report as individual responses. With the small number of respondents, no useful aggregate analysis of survey results was possible.

Assessing effectiveness of pharmaceutical system strengthening is hampered by the absence of widely accepted metrics for strengthening the medicines functions of the health system, or even a widely accepted definition of pharmaceutical systems and pharmaceutical systems strengthening. SIAPS organized a workshop on metrics and concluded that “The starting point for identifying metrics for its measurement is better conceptual clarity on what a pharmaceutical system is, including its key components and performance objectives, and clearly delineating what its strengthening entails. … Agreeing on common indicators, whether individual or composite, is a key step towards having a common understanding of pharmaceutical systems.” There has not been, as of yet, agreement (even within SIAPS) on common indicators for pharmaceutical systems strengthening. Notwithstanding the absence of commonly accepted indicators, it is possible to have a meaningful discussion, and assessment, of pharmaceutical system strengthening.

Prior to conducting the evaluation, all evaluation team members certified that they had no conflicts of interest related to the evaluation; these forms are on file with the GH Pro office.
ANNEX III. PERSONS INTERVIEWED

Washington D.C. and Global Interviews

USAID/Washington
Anthony Boni, Pharmaceutical Management Specialist, SIAPS AOR, GH/OHS
Elisabeth Ludeman, Pharmaceutical Management Specialist, GH/OHS
Tobey Busch, Pharmaceutical Management Specialist, GH/OHS
Karen Cavanaugh, Director, GH/OHS
Kathryn Panther, Deputy Director, GH/OHS
Sweta Saxena, Analyst, GH/OHS
Bob Emrey, Lead Health Systems Specialist, GH/OHS
Joe Naimoli, Health Systems Research Lead, GH/OHS
Anwer Aqil, Senior M&E Advisor, GH/OHS
Cheri Vincent, Division Health, GH/HIDN/TB
Thomas Chiang, Pharmaceutical Technical Advisor, GH/HIDN/TB
Deborah Armbruster, Maternal Health POC, GH/HIDN/MCH
Malia Boggs, Child Health POC, GH/HIDN/MCH
Kerry Ross, Child Health Technical Advisor, GH/HIDN/MCH
Helen Petach, Maternal Health Technical Advisor, GH/HIDN/MCH
Alexis Leonard, Malaria POC, GH/HIDN/PMI
Linda Gutierrez, former Malaria POC, GH/HIDN/PMI
Christie Hershey, PMI Technical Advisor, GH/HIDN/PMI
Thomas Hall, Malaria Team Lead, Africa Bureau
Laurel Fain, Global Fund Liaison, GH/HIDN/PMI
Kama Garrison, NTD Team Senior Technical Advisor, GH/HIDN/NTD
Penny Smith, NTD POC, GH/HIDN/NTD
John Crowley, Chief GH/OHA/SCMS
Mark Rilling, Chief GH/PRH/C
Sherif Mowafy, COR for GHSC
Linda Beth Doby, Technical Advisor, GHSC
Linda G, GH/GHSC
Lexis Lenard, GH/GHSC
Michael Hope, former SIAPS POC in GH/OHA/SCH
Xaver Tomsej, Senior Logistics Advisor, GH/OHA/SCH
Kamiar Khajavi, Principal Strategy Advisor, GH/AA
Elise Jensen, Director, GH/OCS

USAID Implementing Partners
Jude Nwokike, Director, Promoting the Quality of Medicines Program

Global Stakeholders
Charles Preston, Medical Officer, Office of International Programs, USFDA
Brenda Waning, Chief, Global Drug Facility
Andre Zagorski, Deputy, Global Drug Facility
Richard Laing, Professor, Center for Global Health and Development, Boston University (formerly WHO/EMP)
Andreas Seiter, Senior Health Specialist, World Bank
SIAPS Partners
Dennis Ross-Degnan, Professor, Department of Population Medicine, Harvard Medical School, and Co-Director, WHO Collaborating Center in Pharmaceutical Policy
Anita Wagner, Professor, Department of Population Medicine, Harvard Medical School/Harvard Pilgrim Health Care Institute
Catherine Vialle-Valentin, Professor, Department of Population Medicine, Harvard Medical School/Harvard Pilgrim Health Care Institute
Danny Addison, Senior Consultant, Logistics Management Institute
Michael Rouse, Director, International Services, Accreditation Council for Pharmacy Education
Sylvi Kastrati, International Coordinator, Accreditation Council for Pharmacy Education
Andrew Stergachis, Director, Global Medicines Program, University of Washington
Brittany Johnson, Senior Research Associate, William Davidson Institute
Emily Bancroft, Vice President, VillageReach

Management Sciences for Health, Pharmaceuticals and Health Technologies Group
Douglas Keene, Vice President
Michael Cohen, Deputy Director, Monitoring and Evaluation
Kofi Aboagye-Nyame, Director, SIAPS
Sameh Saleeb, Deputy Director, Technical, SIAPS
David Mabirizi, Deputy Director, Country Programs, SIAPS
Mohan Joshi, Principal Technical Advisor, SIAPS
Helena Walkowiak, Principal Technical Advisor, SIAPS
Melissa Thumm, Senior Technical Advisor, SIAPS
Kyle Duarte, Director for Systems Analysis and Software Products, SIAPS
Kwesi Eghan, Portfolio Manager, SIAPS
Beth Yeager, Principal Technical Advisor, SIAPS
Mavere Tukai, Principal Technical Advisor, SIAPS
Wonder Goredema, Senior Technical Advisor, SIAPS
Mark Morris, Portfolio Manager, SIAPS
Linda Zackin, Portfolio Manager, SIAPS
Zubayer Hussain, Portfolio Manager, SIAPS

Bangladesh
SIAPS Bangladesh
Zahedul Islam, Country Program Director
Dr. Abu Zahid, Team Lead-Procurement
Dr. Sheikh Asiruddin, Team Lead-HSS
Mr. Md. Abdullah, Senior Technical Advisor (STA) - Logistics (DGFP)
Mr. Mohammad Kibria, STA-Quantification & MIS
Dr. Josephine Aimiwu, STA-DGDA
Ms. Fatema Samdani Roshni, STA – Procurement (DGHS)
Dr. Sanaul Bashar, STA – TB
Mr. Md. Fazle Karim, STA-M&E
Mr. Md. Mahmudul Hasan, STA-TB (PSM)
Mr. Md. Azim Uddin, STA-Field Operations

USAID/Bangladesh
Ms. Melissa Jones, Director, Office of Population, Health, Nutrition & Education (OPHNE)
Dr. Niaz Chowdhury, SIAPS, Activity Manager, OPHNE
Dr. Sukumar Sarker, Senior Technical and Policy Advisor, OPHNE
**MOHFW – Tejgaon Warehouse (family planning)**
Ms. Halima Khatun, Thana Family Planning Officer
Mr. Md. Mofizul Uslam, Assistant Thana Family Planning Officer
Mr. Mamunur Rashid, Thana Family Planning Assistant

**Nari Maitree Urban Health Clinic (program of Local Government Division MOLGRD&C)**
Ms. Maduda Begum, Director for Health
Dr. Merina Mustari, Physician
Mr. Mawoulo Hossain Khan, Paramedic

**Bangladesh Association of Pharmaceutical Industries (BAPI)**
Mr. S.M. Shafiuuzzaman, Managing Director, Hudson Pharmaceuticals Ltd.
Mr. Md. Harunur Rashid, Chairman, Glob Pharmaceuticals
Mr. M Masaddek Hossain, Managing Director, UniMed & UniHealth Mfg. Ltd.
Mr. Rabbur Reza, Chief Operation Officer, Beximco Pharmaceuticals Ltd.
Mr. Mojibul Islam (Panna), Amico
Dr. Mohammad Zakir Hossain, Delta Pharma Ltd.

**World Bank – Bangladesh**
Dr. Bushra Binte Alam, Senior Health Specialist, HNP Global Practice

**DFID-UKaid**
Dr. Shehлина Ahmed, Health and Population Advisor

**Global Fund WHO TB Team – Bangladesh**
Mr. Richard Conliffe, Portfolio Manager (in Geneva)

**WHO – Bangladesh**
Dr. Sabera Sulatana, National Professional Officer (TB-DR)

**Save the Children – MaMoni Health Systems Strengthening Program**
Mr. Joby George, Chief of Party

**Johns Hopkins University-Center for Communication Programs – BKMI**
Ms. Rebecca Arnold, Program Director

**MEASURE Evaluation**
Dr. Karar Zunaid Ahsan, Senior Research Associate, M&E Advisor

**Engender Health – Bangladesh**
Dr. S. M. Nizamrul Haque

**Ethiopia**

**SIAPS**
Mr. Hailu Tadeg, Country Program Director
Mr. Edmealem Ejigu, Deputy Country Program Director
Mr. Antenane Korra, Planning, M&E
Mr. Fikadu Demi, Regional Technical Advisor for Oromia Regional Health Bureau (RHB)
Ms. Sue Putter, Cluster Manager, MIE & Governance
Ms. Ntefeleng Nene, Senior Technical Advisor
Ms. Tiwonge Mkandawire, Senior Technical Advisor
Mr. Dan Putzier, Manager of Software Development

**USAID/South Africa**
Ms. Kerry Pelzman, Director, Office of Health
Mr. Paul Mahana, Deputy Director, Office of Health
Mr. Derek Sedlacek, Health System Strengthening (HSS), Office of Health
Mr. John Kuehnle, HSS Lead, USAID/Zambia (formerly HSS lead for USAID/South Africa)

**National Department of Health**
Mr. Gavin Steele, Chief Director, Sector Wide Procurement
Ms. Khadija Jamualoodien, Director, Affordable Medicines

**Gauteng Department of Health**
Ms. Nocawe Thipa, Acting Chief Director, Pharmaceutical Services & Chair, Gauteng Provincial Pharmaceutical Therapeutics Committee (PTC)
Ms. Shereen Ramroop, Policy Specialist & Gauteng Provincial PTC member (former Drug Controller at Helen Joseph Hospital)
Ms. Jackie Visser, Assistant Manager, West Rand District (Krugersdorp)
Ms. Vhorani Mutongusa, Pharmacist - ARVs, West Rand District
Mr. Okey Ezebrike, Pharmacist, West Rand District

**City of Tshwane Metro Department of Health**
Ms. Ria Pretorius, Acting Head of Pharmaceutical Services

**KwaZulu Natal Department of Health**
Mrs. SL Hlongwana, Manager for Pharmaceutical Services Monitoring, Evaluation and Research, KwaZulu Natal

**Limpopo Department of Health**
Ms. Mavis Shivambu, Pharmacy Manager

**North West Department of Health**
Mrs. Fadeela Motara, Pharmacy Manager, Potchestroom Hospital

**Western Cape Department of Health**
Mr. Johan van Niekerk, Manager, Pharmaceutical Services, Khayelisha/Eastern Subregion
Ms. Lientjie Pretorius, Manager, Pharmaceutical Services, Northern Tygerberg Sub-region
Ms. Yasmina Johnson, Policy Specialist, Pharmaceutical Services & Secretariat Western Cape Provincial PTC

**Supply Chain Management Systems – South Africa**
Mr. Dion Guy

**Health Systems Trust**
Ms. Helecine Zeeman, Central Chronic Medicines Distribution and Dispensing (formerly Director of Affordable Medicines, National Department of Health)

**Sefako Makgatho Health Sciences University**
Ms. Hannelie Meyer, Senior Lecturer Sefako
ANNEX IV. SOURCES OF INFORMATION

IV.A. lists references beyond those provided by SIAPS
IV. B. lists references provided by SIAPS

IV.A. Documents consulted (beyond what SIAPS provided)


Bigdeli, Maryam, Bart Jacobs, Goran Tomson, Richard Laing, Abdul Ghaffar, Bruno Dujardin and Wim Van Damme 2012 “Access to Medicines from a Health System Perspective” Health Policy and Planning 2012;1–13

Bigdeli, Maryam, David H. Peters, Anita K. Wagner, eds. 2014 Medicines in Health Systems: Advancing access, affordability and appropriate use WHO

Bossone, Biagio and Larry Promise. 1998 Strengthening Financial Systems in Developing Countries: The Case for Incentives-Based Financial Sector Reforms World Bank

Chee, Grace, Nancy Pielemeier, Ann Lion and Catherine Connor 2013 “Why differentiating between health system support and health system strengthening is needed” International Journal of Health Planning Management: 28:85–94


de Savigny, Don and Taghreed Adam, eds. 2009 Systems Thinking for Health Systems Strengthening WHO


**IV.B. Documents provided by SIAPS**

<table>
<thead>
<tr>
<th>Program Documents</th>
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<td>Agreement Documents</td>
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<td>Organogram (June 2015)</td>
<td>SIAPS</td>
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<td>SIAPS Cooperative Agreement</td>
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<td>Knowledge Management</td>
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<td>Knowledge Management Plan: Systems for Improved Access to Pharmaceuticals and Services, January 2014</td>
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<td>Saviom Summary</td>
<td>Newdea Summary</td>
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<td>SAVIOM Resource Management Features Overview-- company informational sheet</td>
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## Monitoring & Evaluation

*SIAPS Monitoring and Evaluation Plan Revised, May 2013*

### Guidance for incorporating SIAPS-Global Indicators into Portfolio PMPs

**CPD Training Year 5: Overview of SIAPS M&E System**

#### Global Results Dashboards

1. **MOST RECENT_SIAPS Quarterly PMP Review: PY4Q3**
   - SIAPS Quarterly PMP Review: PY3Q1
   - SIAPS Quarterly PMP Review: PY3Q2
   - SIAPS Quarterly PMP Review: PY3Q3
   - SIAPS Quarterly PMP Review: PY3Q4
   - SIAPS Quarterly PMP Review: PY4Q1
   - SIAPS Quarterly PMP Review: PY4Q2

#### Performance Indicator Reference Sheets (PIRS)

- IR1
- IR2
- IR3
- IR4
- IR5

### Annual and Quarterly Reports

**Annual Reports**

- SIAPS Annual Report, Program Year 1 (2011-10 - 2012-09)
- SIAPS Annual Report, Program Year 2 (2012-10 - 2013-09)
- SIAPS Annual Report, Program Year 3 (2013-10 – 2014-09)

**Quarterly Reports**

- SIAPS PY1Q1 Report (October-December 2011)
- SIAPS PY1Q2 Report (January-March 2012)
- SIAPS PY1Q3 Report (April- June 2012)
- SIAPS PY1Q4 Report (July-September 2012)
- SIAPS PY2Q1 Report (October-December 2012)
- SIAPS PY2Q2 Report (January-March 2013)
- SIAPS PY2Q3 Report (April- June 2013)
- SIAPS PY2Q4 Report (July-September 2013)
- SIAPS PY3Q1 Report (October-December 2013)
- SIAPS PY3Q2 Report (January-March 2014)
- SIAPS PY3Q3 Report (April- June 2014)
- SIAPS PY3Q4 Report (July-September 2014)
- SIAPS PY4Q1 Report (October-December 2014)
- SIAPS PY4Q2 Report (January-March 2015)

### Selected Training Reports

- Training Completion Report on Upazila Inventory Management System (UIMS-v2) of DGFP (313 New Upazila). [Bangladesh]
- Hhohho Region Supportive Supervision Site Visits Report [Swaziland]
- Rapport de l'atelier de formation des formateurs sur le Manuel des Procédures Opératoires Standard pour la gestion du système d'information logistique des médicaments essentiels et intrants des programmes de santé au Mali
- Report of the Pharmacy Management Information System Training Workshops, Namibia
Medicine Dossier Evaluation, Good Manufacturing Practices, Quality Control, and Good Distribution Practices Training, Namibia
Manzini Laboratory Clinic LMIS Training Report [Swaziland]
Training of ART health facilities HIV and Aids commodities managers: storekeepers, pharmacy attendants (commis) and data managers (ACRR) on pharmaceutical management and reporting tools [Cameroon]
Report on 7th to 8th Rounds Clinical Pharmacy: In-service Training [Ethiopia]
Summary Report on Training Course in Auditable Pharmaceutical Transactions and Services (APTS) /EHRIG, Pharmacy chapter (June 2014) [Ethiopia]
Northern Tygerberg Sub-structure LDP Sustainability Project: Coaching Visit [South Africa]
SIAPS Field Report – South Africa
Building Local Capacity for Clinical Pharmacy Service in Ethiopia through a Holistic In-Service Training Approach

Technical Strategies
Pharmaceutical System Strengthening Strategy Document
CPM Frameworks
Enhancing Health Outcomes for Chronic Diseases in Resource-Limited Settings by Improving the Use of Medicines: The Role of Pharmaceutical Care.
Managing Access to Medicines and Health Technologies

Work plan Guidance
SIAPS FY16 Work plans: Checklist for Performance Monitoring Matrix (PMM)
SIAPS Guidelines for development of Year 5 Work Plans
SIAPS Work plan Template
SIAPS Summary of Intermediate Results
SIAPS FY16 Work plans: Technical Checklist for Work Plans
SIAPS PSYS Work plan Template and Process Finalization Presentation

Country and Regional Portfolios

Angola

M&E Plans
SIAPS Angola Monitoring and Evaluation Plan
• SIAPS Angola Overview for Performance Evaluation Team
• SIAPS 2013. Quantification of Malaria Commodities for Angola: Report

Technical Reports

Work Plans
4 loaded

Bangladesh

M&E Plans
SIAPS Bangladesh Monitoring and Evaluation Plan
• SIAPS Bangladesh Overview for Performance Evaluation Team
• Assessment of the Regulatory Systems and Capacity of the Directorate General for Drug Administration in Bangladesh
• Proposed Warehouse Improvement Plan for the Government of Bangladesh, Directorate General of Family Planning
• TB Pharmaceutical Management in Bangladesh, June 24–July 12, 2012: A Rapid Assessment Report
• Saving Lives of Women and Children: Systems Strengthening Approaches to Improve Access to Contraceptives in Bangladesh
<table>
<thead>
<tr>
<th>Country</th>
<th>M&amp;E Plans</th>
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<tr>
<td>Brazil</td>
<td>• Implantação da metodologia de supervisão local dos postos de diagnostico e tratamento de malária como reforço da estratégia de controle no Brasil&lt;br&gt;• Monitoramento do fechamento das lacunas na implementação de estratégias de controle da malária em nove estados do Brasil, utilizando critérios de adequação</td>
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<td>Burundi</td>
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<td>• Burundi Portfolio Presentation&lt;br&gt;• Evaluation of community case management of malaria in the pilot health districts of Gahombo, Gashoho, and Mabayi&lt;br&gt;• Scaling Up CCM: Evaluation of CCM for Malaria in Burundi</td>
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<td>Central Asia</td>
<td>SIAPS Central Asia Monitoring and Evaluation Plan</td>
<td>• SIAPS Central Asia Overview for Performance Evaluation Team&lt;br&gt;• (Tajikistan) Tool for the collection on MDR-TB patient and their treatment regimens for use in QuanTB&lt;br&gt;• (Tajikistan) PMIS assessment report&lt;br&gt;• (Tajikistan) GDF country monitoring mission -2013&lt;br&gt;• TA to NTP Tajikistan in different aspects of PM – November, 2013: folder with multiple files&lt;br&gt;• Extensive review of tuberculosis prevention, control and care in Tajikistan, 15–24 July 2013&lt;br&gt;• National Strategic Plan for Tuberculosis Control in the Republic of Tajikistan&lt;br&gt;• Draft Protocol for Assessment of TB Pharmaceutical Management Systems in Republic of Uzbekistan: folder with multiple files&lt;br&gt;• Training report and an action plan for piloting of e-TB Manager in Turkmenistan</td>
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<td>DRC</td>
<td>SIAPS DRC Monitoring and Evaluation Plan</td>
<td>• SIAPS DRC Overview for Performance Evaluation Team</td>
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• Quantification of Malaria Commodities in the Democratic Republic of the Congo – Training Report

• Report on quantification of life-saving commodities

• DRC Pharmacovigilance Bulletin: July 2013

**Work Plans**

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<td>• Management of Laboratory Reagent Supplies in the Dominican Republic Ministry of Health; SIAPS Program, February 2014</td>
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<td>• Incorporation of the Supply of Antiretrovirals into the Dominican Republic’s Integrated Management System for Pharmaceuticals and Medical Supplies;</td>
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<td>• Evaluation of the Logistics System for Transporting Tuberculosis and HIV Samples and Delivering Test Results in the Dominican Republic’s Public Health Referral Network</td>
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<td>• The Organization of a National Pharmaceutical System</td>
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<td>Technical Reports</td>
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<td>• Rapid Situation Analysis of the Five East, Central, and Southern Africa Countries on TB Data and Commodity Management</td>
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<td>• ECSA Health Community Strategy on TB Commodity and Data Management, 2015–2019</td>
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<td>• SIAPS Ethiopia Overview for Performance Evaluation Team</td>
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<td>• USAID/SIAPS-Ethiopia, Annual Progress Report for Fiscal Year 2012 (October 2011 to September 2012) and 2013 (October 2012 to September 2013), Addis Ababa, Ethiopia.</td>
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<td>• Pharmacy Services in Ethiopia: Current Challenges and Role of APTS in Addressing the Challenges, PowerPoint Slide, presented at the National Consultative workshop on APTS, organized by FMOH in collaboration with USAID/SIAPS, February 22, 2014, Ethiopia Hotel, Addis Ababa.</td>
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<td>• Geremew, Elias; Worku, Fikadu. November 2013. “Assessment Report on the Status of Clinical Pharmacy Service Provision at Hospitals that Received Clinical Pharmacy In-service Training.” SIAPS/Ethiopia and PFSA.</td>
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<td>• Hailu Tadeg and Negussu Mekonnen, Dispensing based information system at ART pharmacies and it’s potential for enforcing treatment guidelines in resource limited settings: The Ethiopian Experience, a poster presented at the annual conference of International Aids Society, 30 June – 3 July 2013, Kuala Lumpur, Malaysia.</td>
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<td>• PFSA, WHO and USAID/SIAPS, Assessment on Operational Status and Effectiveness of Drug and Therapeutics Committees at Public Hospitals in Ethiopia, October 2013, Addis Ababa, Ethiopia.</td>
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<td>• Development of the National Minimum Standards for Healthcare Facilities in Ethiopia: A Milestone for Country Ownership and Sustainability of Best Practices</td>
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</table>
• Establishment of Medicines Waste Management and Disposal System in Ethiopia: A Report on Progress and Achievements
• 5 loaded (Year 1 separated by funding)

• SIAPS Guinea Monitoring and Evaluation Plan
• SIAPS Guinea Overview for Performance Evaluation Team
• SIAPS Guinee. 2013. Saving Lives through Emergency Distribution of Antimalarial Medicines. Success story
• Impact of the Ebola Epidemic on Malaria Activities in Guinea- Update for PMI : March 2015
• 3 loaded

• National Pharmaceutical Policy Fact Sheet
• Haiti Supply Chain Options Analysis Draft Technical Report
• Politique Pharmaceutique Nationale
• Synthèse des résultats de l’atelier de révision de la Politique Pharmaceutique Nationale
• Haiti Pharmaceutical Sector Technical Assistance Priorities: Technical Report
• 1 work plan and 1 SOW loaded

• Technical Brief: Antimicrobial Stewardship
• Improving Antibiotic Prophylaxis in Hospitals: SIAPS Technical Report Cesarean Section in Jordanian
• 1 loaded

• SIAPS LAC AMI Monitoring and Evaluation Plan
• SIAPS LAC AMI Overview for Performance Evaluation Team
• Situacion de la gestion del suministro de medicamentos para el tratamiento de la malaria en los paises que comparen la cuenca Amazonica y Centroamerica, Febrero 2013
• Managing the Supply of Antimalarials in Low-Incidence Regions; Jaime Chang and Edgar Barillas, March 2013
• Identification of Bottlenecks Affecting Consolidated Purchases of Antimalarial through the Strategic Fund; Walter Flores, February 2013
• Criteria for Planning and Distributing Medicines in Areas with a Low Incidence of Malaria; Henry Espinoza and Edgar Barillas
• Tecnicas Para: Reducir la Temperatura en Farmacias y Mantener la Calidad de los Medicamentos
• Success story: Guidelines at the Primary Level of Care Help Strengthen Antimalarial Supply Management of the Malaria Diagnosis and Treatment Network in Choco, Colombia
• Evaluation of the Performance of Malaria Control Strategies in Latin America, Using Adequacy Criteria
• Boletín trimestral de Información Estratégica del SUGEMI
• 4 loaded

• Success story: Temperature Reduction in Pharmaceutical Storage Areas in Madre de Dios (Peru), Using Low-Cost Technology
• Adaptation of Tuberculosis Control Strategies to Serve Populations Living in Special Circumstances
• Manejo de medicamentos antituberculosis en establecimientos de salud del primer nivel de atención en Madre de Dios, Mayo 2012
• 1 loaded

• SIAPS Lesotho Monitoring and Evaluation Plan
• SIAPS Lesotho Overview for Performance Evaluation Team
• Capacity Needs Assessment for Pharmaceutical Services for the ART Program in Lesotho
• Supportive Supervision and Mentoring (SSM) Program for ART Services
• Rx Solution Success Story
• Accurate stock reporting: Ensuring the availability of laboratory commodities for HIV testing in Lesotho
• Emergency procurements of HIV rapid test kits avert stock-outs in Lesotho
• 4 loaded

• President’s Malaria Initiative: Private Sector Distribution of Artemisinin-Based Combination Therapies in Liberia
• Feasibility of Introducing ACTs and RDTs in Private Sector Pharmacies and Medicine Shops in Montserrado County, Liberia: A Qualitative Study
• 2 loaded

• SIAPS Mali Monitoring and Evaluation Plan
• SIAPS Mali Overview for Performance Evaluation Team
• Mali End Use Verification Survey Report, June 2013
• Rapport de l’atelier de formation en quantification, Bamako, le 07 au 09 Mai 2013
• Rapport de l’atelier de formation des utilisateurs régionaux et de district de Mopti sur le manuel des POS pour la gestion du système d’information logistique des médicaments essentiels et intrants des programmes de santé au Mali
• Integration of Oxytocin into the Cold Chain of the Expanded Programme on Immunization: Case of Mali
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• Mozambique
• SIAPS Mozambique Monitoring and Evaluation Plan
• SIAPS Mozambique Overview for Performance Evaluation Team
• Strengthening Medicines Pricing System in Mozambique, 2013
• Systems Requirements for Computerized Medicines Registration, July 2014
• SIAPS Trip Report Mozambique - Establishment of DTCs - Terry Green September 2013
• Assessment of the Regulatory System for Medicines in Mozambique- DRAFT
• Revision of the Mozambique National Essential Medicines List - Technical Committee Guidelines April 2014
• SIAPS Namibia Monitoring and Evaluation Plan
• SIAPS Namibia Overview for Performance Evaluation Team
• Jonas et al 2013. HIV Drug Resistance Early Warning Indicators in Namibia for Public Health Action (Manuscript published in in PLOS One)
• Mazibuko, G. 2014. Namibia Quarterly ART Adherence and Retention Report for the period October to December 2013.
• Enhancing the Delivery of Antiretroviral Treatment Using Mobile Dispensing Technology in Namibia’s Kavango and Zambezi Regions
• Improving the Professional Registration Process of Pharmacy Personnel through Streamlining the Assessment Framework, Methods, and Tools in Namibia
• Medicine Dossier Evaluation, Good Manufacturing Practices, Quality Control, and Good Distribution Practices Training, Namibia

Country-specific sections including Power Point presentations with timeline and key documents for review, Work plans, and M&E information for:

Guinea
Jordan
Haiti
LAC
AMI
Lesotho
Liberia
Mali
Namibia

Philippines

M&E Plans
SIAPS Philippines Monitoring and Evaluation Plan
SIAPS Philippines Overview for Performance Evaluation Team
NTP Surveillance Report (WHO publication)
- Helping Frontline Health Workers Improve TB Supply Chain Management in the Philippines

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<td>• Analysis of the Regulatory Capacity to Assure the Countries of the Greater Mekong Sub-region of Asia Quality of Antimalarial Medicines in Selected</td>
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<td>• Pharmacovigilance training workshop: Rwanda National Medicine Safety Committee. Ruhengeri, Rwanda</td>
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<td>• Unmet Need for Oxytocin in Rwanda</td>
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<td>• SIAPS Bangladesh Overview for Performance Evaluation Team</td>
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<td>• Improving prescription compliance with standard treatment guidelines (STGs) for non-steroidal anti-inflammatory drugs (NSAIDs) in Ilembe district. Poster presentation.</td>
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<td>• Reducing the waiting time of CDU patients at Kraaifontein CHC - SIAPS LDP. (2012) Presentation for the Western Cape Government.</td>
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<td>• Patients at Umzinto Clinic in KwaZulu-Natal have better access to medicines for chronic diseases. SIAPS South Africa success story.</td>
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<td>• Understanding the factor influencing the duration on first line regimens in the context of an aging ART programme. Poster presentation, 17th ICASA Conference</td>
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<td>• Understanding the factor influencing the duration on first line regimens in the context of an aging ART programme. Poster presentation, 17th ICASA Conference</td>
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<td>• Development of national norms and standards for benchmarking and monitoring pharmaceutical service delivery in nine provinces in South Africa. Poster presentation, 3rd Global Health Symposium</td>
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<td>• SIAPS South Sudan Overview for Performance Evaluation Team</td>
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<tr>
<td>• Creating Order from Disorder: De-junking Pharmaceutical Stores in South Sudan</td>
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<td>• Improving Health Outcomes in South Sudan: Managing Information to Maximize Resources</td>
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| Swaziland | 6 loaded   | SIAPS Swaziland Monitoring and Evaluation Plan               | • SIAPS Swaziland Overview for Performance Evaluation Team  
• Active surveillance for HIV/TB – protocol  
• LMI Warehouse optimization analysis  
• Pharmacy Diploma & Certificate curriculum  
• Reproductive Health Commodities Quantification 2013 – 2018 |
| Ukraine   | 4 loaded   | SIAPS Ukraine Monitoring and Evaluation Plan                 | • SIAPS Ukraine Overview for Performance Evaluation Team  
• e-TB Manager, official approval, government of Ukraine  
• e-TB Manager transition plan  
• e-TB Manager Master User’s Guide  
• PSM Gaps Analysis  
• Framework Contracting in Public Procurement: Table of Contents  
• Protocol for the Development of an Active Surveillance System for the AIDS/HIV Public Health Program in Ukraine  
• Pharmacovigilance Standard Operating Procedures (7 documents)  
• Guidelines for Implementing DR TB DUR |
| West Africa Regional | 2 loaded | SIAPS WARP Monitoring and Evaluation Plan                   | • SIAPS WARP Overview for Performance Evaluation Team  
• Sites readiness assessment prior deployment of the Electronic Dispensing Tool (EDT) in Togo  
• Training on for lab and long term forecasting and supply planning of HIV and AIDS related lab commodities in Cameroon- DRAFT |

Core Portfolios and Cross Bureau

Power Point Presentations for:
- Cross Bureau
- Malaria Core
- MNCH Core
- Neglected Tropical Diseases
- TB Core
- USFDA
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<td>• SIAPS Malaria Core Overview for Performance Evaluation Team</td>
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<td>• Manual for quantification of malaria commodities</td>
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<td>• Guide for Malaria Commodities Logistic Management System</td>
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<td>• Malaria Flyer- SIAPS</td>
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<td>• Malaria Core presentation for the 2013 SIAPS Global Meeting</td>
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<td>• Estimating the In-Country Distribution Costs of Malaria Commodities in Benin and Kenya.</td>
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<td>• Costing the Supply Chain for Delivery of ACTs and RDTs in the Public Sector in Benin and Kenya.</td>
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<td>Technical Reports</td>
<td>• SIAPS NTD Core Overview for Performance Evaluation Team</td>
</tr>
<tr>
<td></td>
<td>• Assessment of Supply Chain Management Systems for Neglected Tropical Disease Drugs in Cameroon, Mali, Tanzania, and Uganda</td>
</tr>
<tr>
<td></td>
<td>• Supply Chain Management Manual for Health Managers of Neglected Tropical Diseases</td>
</tr>
<tr>
<td>Work Plans</td>
<td>2 loaded</td>
</tr>
</tbody>
</table>
### TB Core M&E Plans
- SIAPS TB Core Monitoring and Evaluation Plan

### Technical Reports
- Preventing and Minimizing Risks Associated with Antituberculosis Medicines (2013)
- Understanding Private Retail Drug Outlet Dispenser Knowledge and Practices in Tuberculosis Care in Tanzania (2014)
- Regional Approach Presentation: GDF Workshop, Union Conference (2013)
- Sample Quantification Training Agenda (2013)

### Work Plans
4 loaded

### USFDA

#### Technical Reports
- Pharmacovigilance Systems in Five Asian Countries: Final Report
- Executive Summary: Pharmacovigilance Systems in Five Asian Countries
- Safety of Medicinal Products in Thailand: Assessment of the Pharmacovigilance System and its Performance
- Safety of Medicinal Products in Philippines: Assessment of the Pharmacovigilance System and its Performance
- Safety of Medicinal Products in Nepal: Assessment of the Pharmacovigilance System and its Performance
- Safety of Medicinal Products in Cambodia: Assessment of the Pharmacovigilance System and its Performance
- Safety of Medicinal Products in Bangladesh: Assessment of the Pharmacovigilance System and its Performance

#### Work Plans
1 loaded

### Knowledge Management and Communications

#### Flyers
- Swaziland’s Innovative Approach to Improving Access to Quality Logistics Data for Decision Making
- SIAPS: Providing Solutions to Maternal and Child Health Challenges
- SIAPS: Providing Support to Malaria Control Programs
- SIAPS Newsletter [January 2015]
- SIAPS Newsletter [June 2014]
- SIAPS Newsletter [February 2013]
- SIAPS Newsletter [March 2014]
- SIAPS: Pharmaceutical Management for Tuberculosis
- Antimicrobial Stewardship: Ensuring the continued effectiveness of medicines through appropriate use
- SIAPS Fact Sheet
- SIAPS Launch Brochure
- SIAPS Pocket Brochure
- SIAPS Technical Area Cards

#### Journal Articles

• Mazibuko et al.: Incorporating pharmaceutical supply management modules in the pre-service curriculum of the Bpharm program, of the University of Namibia, School of Pharmacy. Journal of Pharmaceutical Policy and Practice 2014 7(Suppl 1):P12.

• Rutta, et al.; Understanding private retail drug outlet dispenser knowledge and practices in tuberculosis care in Tanzania. INT J TUBERC LUNG DIS 18(9):1108–1113


Success Stories

• The West Africa Regional Project Dashboard: Better information for Better Decision Making

• Better Patient Data, Better Supply Chain, Better Treatment Outcomes

• SIAPS Support with New Tool Speeds up Reporting at Pharmaceutical Depot in Limpopo

• Shorter Queues for Patients with Chronic Diseases at Kraaifontein Community Health Centre

• Accurate stock reporting: Ensuring the availability of laboratory commodities for HIV testing in Lesotho

• Enhancing the Delivery of Antiretroviral Treatment Using Mobile Dispensing Technology in Namibia’s Kavango and Zambezi Regions

• Helping Frontline Health Workers Improve TB Supply Chain Management in the Philippines

• Using Medicine Carefully Saves Money

• Strengthening Patient-Centered Pharmacovigilance in South Africa

• Using Quantimed software to estimate Mali’s commodities needs

• Improving Medicine Availability at Clinics in South Africa

• Improving Access to Medicines by Filling the Information Gap

• Creating Order from Disorder: De-junking Pharmaceutical Stores in South Sudan

• Improving Health Outcomes in South Sudan: Managing Information to Maximize Resources

• The Drug and Therapeutics Committee: An Agent of Change at St. Mary’s Hospital

• Monitoring Tool Helps Track Availability of Medicines in Limpopo

• Empowering Swaziland CMS Managers to Improve Operations Efficiency in the Warehousing and Distribution of Pharmaceuticals

• Clinics in North West Improve Compliance with National Core Standards

• Patients at Umzinto Clinic in KwaZulu-Natal Have Better Access to Medicines for Chronic Diseases
ANNEX V. DATA COLLECTION INSTRUMENTS

The Survey Instrument (V.A.) and Guidelines for Interviews (V.B.) appear below.

V. A. SURVEY INSTRUMENT

The Office of Health Systems (OHS) in USAID’s Bureau for Global Health has contracted for an external evaluation of the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) project. The contract is through the Global Health Program Cycle Improvement Project (GH Pro). This survey is part of that evaluation.

We would like one consolidated response per Mission, reflecting input from relevant colleagues. We ask that you consult, where applicable, Activity Managers for each funding stream (MCH, PEPFAR, etc.) as well as others with relevant knowledge of SIAPS implementation. Participation in this survey is completely voluntary, but important. Your Mission’s participation will contribute to our ability to provide quality assistance to the field. We expect the survey to take less than ½ hour. Responses will be kept confidential; individual responses will not be reported with any identifying information or characteristics, and will not be made available beyond the evaluators. The objective of the evaluation is to assess the effectiveness of the project’s technical approach, progress to date, how the project addresses the needs of clients, as well as its relevance to key global health challenges and opportunities now and in the future. The survey is being sent to Missions that have used SIAPS and to selected Missions that have not. You are in one of those Missions.

Please complete the survey by November 1. If you have any questions, or are having trouble accessing the survey, please contact Regan Whitworth at regan.whitworth@gmail.com.

Q1
For which Mission are you responding? (No individual country responses will be identified. We ask so that 1) we can avoid blanket emails to encourage responses and 2) so that we can, if necessary, follow up for clarification of (anonymous) responses.)

Q2
Which technical assistance mechanism(s) is/are working on issues related to the pharmaceutical sector, whether in the public or private, in your country(ies)?

| Systems for Improved Access to Pharmaceuticals and Services (SIAPS) |
| Supply Chain Management System (SCMS) |
| Promoting the Quality of Medicines (PQM) |
| USAID|DELIVER |
| Health Finance and Governance (HFG) |
| Applying Science to Strengthen and Improve Systems (ASSIST) |
| None |
Q3
Which mechanisms did your Mission consider for technical assistance for the pharmaceutical system in your country(ies)?

- Promoting the Quality of Medicines (PQM)
- Supply Chain Management System (SCMS)
- Systems for Improved Access to Pharmaceuticals and Services (SIAPS)
- USAID|DELIVER
- Health Finance and Governance (HFG)
- Applying Science to Strengthen and Improve Systems (ASSIST)
- Other (please specify)

Q4
What were the most important factors in your decision to select a mechanism (or mechanisms) to work on pharmaceutical systems?

- Focus on specific pharmaceutical system inputs/technical area (e.g., governance, human resources, finance, information etc.) of special importance
- Focus on specific pharmaceutical system functional area (e.g., pharmacovigilance, procurement, warehousing, distribution, appropriate use of medicines and other health technologies) of special importance
- Emphasis on comprehensive pharmaceutical system strengthening approach
- Capacity to work in both the public and private sectors
- Capacity to work at all levels of the health system
- Confidence in mechanism personnel
- Experience with predecessor program
- Ability of the Mission to manage the program
- Ease of accessing the mechanism
- Other (please specify)

Q5
What funding sources does your Mission use for health systems strengthening, whether SIAPS or any other mechanism?

- Maternal and Child Health
- HIV/AIDS
- Family Planning/Reproductive Health
- Other Infectious Diseases
- Nutrition
- Vulnerable Children
- Malaria
- Tuberculosis
Q6
What funding sources, by percentage (approximately), does your Mission use for SIAPS?

| Maternal and Child Health | HIV/AIDS | Family Planning/Reproductive Health | Other Infectious Diseases | Nutrition | Vulnerable Children | Malaria | Tuberculosis | Other |

Q7
Overall, how effective has SIAPS been in addressing the programmatic needs of the Mission?

| – | Not effective | Slightly effective | Effective | Very effective | Extremely effective |

Q8
What are the one or two most useful features of SIAPS as part of your portfolio?

| Emphasis on systems strengthening (consideration of various aspects of governance; human resources; information; financing; and service delivery) | Comprehensive scope that includes various aspects of pharmaceutical management | Engagement of government counterparts in the development of workplan activities | Specialized expertise | Flexibility of a cooperative agreement | Technical competence of SIAPS personnel | Responsiveness of SIAPS personnel | Other (please specify) |

Q9
The SIAPS results framework explicitly addresses five health system building blocks or technical results areas. These are described in the SIAPS work plans. Which of these technical results areas has been addressed in your Mission’s use of SIAPS?

| Strengthening pharmaceutical sector governance | Capacity increase for pharmaceutical management and services | Information for decision-making in the pharmaceutical sector | Financing strategies and mechanisms to improve access to medicines | Improving pharmaceutical services, including supply chain |
Q10
How effective has SIAPS been in each of these areas?

<table>
<thead>
<tr>
<th>Area</th>
<th>Not effective</th>
<th>Slightly effective</th>
<th>Effective</th>
<th>Very effective</th>
<th>Extremely effective</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengthening pharmaceutical sector governance</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Capacity increase for pharmaceutical management and services</td>
<td></td>
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<tr>
<td>Information for decision-making in the pharmaceutical sector</td>
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<td></td>
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<tr>
<td>Financing strategies and mechanisms to improve access to medicines</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Improving pharmaceutical services</td>
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<td></td>
</tr>
</tbody>
</table>

Q11
Are there technical issues or concerns related to pharmaceutical services or systems strengthening that SIAPS does not address? If so, please briefly identify one or two of them.

- Area 1
- Area 2

Q13
To what extent do you agree with the following statements regarding SIAPS work plans?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Do not agree (please comment below)</th>
<th>Agree somewhat (please comment below)</th>
<th>Strongly agree –</th>
<th>N/A or don’t know –</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work plans provide clear justification and rationale for activities</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Activities are responsive to country needs</td>
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<td></td>
<td></td>
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<tr>
<td>Timelines are realistic</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Budgets are realistic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work plans are clearly written</td>
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<td></td>
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<td></td>
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<tr>
<td>Work plans are useful for monitoring the project progress</td>
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<tr>
<td>Work plans correspond to the Mission’s PMP</td>
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<td></td>
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<tr>
<td>Activities are carried out as scheduled</td>
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</tr>
</tbody>
</table>
Q14
How successful has SIAPS been in addressing the technical areas needed to strengthen the pharmaceutical system?

<table>
<thead>
<tr>
<th></th>
<th>Not successful</th>
<th>Slightly successful</th>
<th>Successful</th>
<th>Very successful</th>
<th>Extremely successful</th>
</tr>
</thead>
</table>

Q15
How would you rate the technical and managerial quality of SIAPS staff at headquarters?

<table>
<thead>
<tr>
<th></th>
<th>Very Poor</th>
<th>Poor</th>
<th>Good</th>
<th>Very Good</th>
<th>Excellent</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical, overall</td>
<td></td>
<td></td>
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<tr>
<td>Technical backstopping</td>
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<tr>
<td>(ex. Field visits)</td>
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<tr>
<td>Managerial, overall</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Responsiveness of HQ</td>
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<tr>
<td>staff</td>
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<tr>
<td>Managerial support</td>
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</tr>
</tbody>
</table>

Q16
How would you rate the technical and managerial quality of SIAPS field staff?

<table>
<thead>
<tr>
<th></th>
<th>Very Poor</th>
<th>Poor</th>
<th>Good</th>
<th>Very Good</th>
<th>Excellent</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical</td>
<td></td>
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<td></td>
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<tr>
<td>Managerial</td>
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</tr>
</tbody>
</table>

Q19
In its work, does SIAPS collaborate substantively with other USAID and USG projects/programs?

Q20
In its work, does SIAPS collaborate substantively with other donors (e.g., World Bank, Global Fund, DfID, et al.)?

Q21
In its work, does SIAPS collaborate substantively with host country government counterparts?

Q22
What changes would make SIAPS more effective?

Q24
Is significant evidence of pharmaceutical system performance gathered outside reported indicators? For example, supplemental indicators not included in reports, or anecdotal evidence?

Q25
Does SIAPS capture evidence about strengthening, as distinguished from performance, of pharmaceutical systems?

Q26
Is significant evidence of pharmaceutical system strengthening, as distinguished from performance, gathered outside reported indicators? For example, supplemental indicators not included in reports, or anecdotal evidence?
Q27
In your judgment, what would be the two most useful indicators of pharmaceutical system strengthening (as distinct from system performance, usually measured in terms of indicator such as stock out rates, procurement lead time, etc.?)

Q28
Is a significant amount of pharmaceutical system strengthening, as distinguished from system performance, evidence captured outside SIAPS in your country?

Q29
Overall, how well does SIAPS provide data on the performance and the strengthening of the pharmaceutical system?

<table>
<thead>
<tr>
<th></th>
<th>Not well at all</th>
<th>Some data, of limited usefulness</th>
<th>Fairly well</th>
<th>Very good data, with some gaps or deficiencies</th>
<th>Excellent, useful data</th>
<th>N/A, or no op’n</th>
</tr>
</thead>
<tbody>
<tr>
<td>performance</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>strengthening</td>
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</tbody>
</table>

Q30
Given what you know about the Global Health Supply Chain program (Procurement & Technical Assistance Single Award IDIQ; Technical Assistance Multiple Award IDIQ), how does SIAPS relate to that program?

<table>
<thead>
<tr>
<th></th>
<th>Very Counterproductive</th>
<th>Counterproductive</th>
<th>Neutral</th>
<th>Helpful</th>
<th>Very Helpful</th>
<th>N/A, no experience</th>
</tr>
</thead>
</table>

Q31
As you consider developments that you expect in your country related to health and pharmaceuticals (medicines and related health technologies), what do you expect would be your relative interest over the next five years in highly focused pharmaceutical technical assistance as opposed to a single, more comprehensive pharmaceutical system strengthening mechanism?

<table>
<thead>
<tr>
<th></th>
<th>Only interested in highly focused mechanism</th>
<th>Primarily interested in focused mechanisms, but might consider comprehensive mechanism</th>
<th>No clear preference between focused and comprehensive mechanisms</th>
<th>Primarily interested in comprehensive mechanisms, but might consider focused mechanism</th>
<th>Only interested in comprehensive mechanisms</th>
</tr>
</thead>
</table>

Q32
Priority health goals for USAID are Ending Preventable Child and Maternal Deaths, achieving an AIDS-Free Generation and Protecting Communities from Infectious Diseases (PCID). In your judgment, how relevant is SIAPS to these goals in your country(ies)?

<table>
<thead>
<tr>
<th></th>
<th>Not relevant at all</th>
<th>Slightly relevant</th>
<th>Relevant</th>
<th>Very relevant</th>
<th>Extremely relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPCMD</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>AIDS-Free Generation</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Q33
Do you have further thoughts on SIAPS not captured above?
Thank you for participating!

V. B. GUIDELINES FOR IN-DEPTH INTERVIEWS

The Evaluation Team used the following interview guidelines for the in-depth interview discussions. While most lines of questioning remained the same across all informants, guidelines were prepared for four major groups: A. Global Stakeholders, B. In-Country Stakeholders and Counterparts, C. SIAPS Partners, and D USAID Health Element Leads and Country Activity Managers.

Each guideline begins with the following introduction:

The Office of Health Systems (OHS) in USAID’s Bureau for Global Health has asked for an interim evaluation of the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) to assess the effectiveness of the project’s technical approach, progress to date, and to determine if it addresses the needs of clients and the objectives of key health initiatives.

Through this interview, we would like to ask you about your experience with and assessment of SIAPS work, as well as your thoughts about future directions for providing technical assistance to global initiatives concerned with pharmaceuticals and in pharmaceutical management and services in USAID assisted countries, in particular in light of the focus on the goal of universal health coverage.

Your participation is voluntary. You may refuse to answer any question in the interview or stop the interview at any time. And of course your answers are confidential. Do we have your permission to begin?

A. Interviewee group – Global Stakeholders

Interviewee title:

Global Stakeholder:

How have you been working with SIAPS (and predecessor projects, if any):

1. What is the effectiveness of SIAPS’ technical approach to system strengthening?

   a. How would you describe the approach that SIAPS uses? Is it very different than that of other projects and organizations? In what way? Please explain.

   b. What are SIAPS’ key technical strengths (e.g., the governance, human resource capacity building, information systems, financing, pharmaceutical services)? Can you give an example?

2. Is there evidence that the SIAPS technical approach has contributed to the strengthening of pharmaceutical systems?
a. How would you define success for your organization’s work with respect to pharmaceutical management or pharmaceutical strengthening? In what way does SIAPS contribute to your goals?
b. What kind of evidence do you believe is important for demonstrating success for your organization? In what way does SIAPS contribute to obtaining evidence?
c. In many countries SIAPS built on the work of predecessor projects (e.g. SPS, RPM+). How important is continuity in this kind of work? How important are time frames?

3. What technical areas are necessary for a project that strengthens pharmaceutical systems? Does SIAPS currently incorporate all these areas? Are there any additional areas that should be considered to meet USAID objectives in EPCMD, AFG or PCID?

a. Since SIAPS was designed, USG launched three new initiatives related to maternal, newborn and child health, HIV and infectious diseases (EPCMD, AFG, PCID). Have you worked with SIAPS on these initiatives? Please describe.
b. Are there technical areas that SIAPS does not currently cover that would be helpful to you? What would they be? (for example, research/innovation, or trade issues)?
c. Does SIAPS cover areas that are unique from other programs? Does it cover areas that other programs or projects could handle? Can you give examples?

4. The key technical areas that SIAPS focuses are include governance, capacity building, increase availability to and use of information, improved financing, and access to pharmaceuticals and services. Are these relevant to the pharmaceutical systems strengthening needs of countries as they move towards Universal Health Coverage (UHC)?

a. What is the role of medicines and other health technologies in UHC? How would you rate the need for pharmaceutical system strengthening in the achieving UHC? Please explain.
b. Are some areas that SIAPS works in more relevant to supporting UHC than other areas? Describe.

5. How does SIAPS manage its work with clients and partners?

a. Do you feel that the collaboration with USAID/SIAPS has been useful? Have they been easy to work with? What examples stand out for you?
b. How can SIAPS improve their work and collaboration with you?

6. Closing Comments

a. What health and pharmaceutical issues are on the horizon?
b. Is there anything else you would like to share with us about SIAPS or working with USAID?

14 Questions
B. Interviewee group – In-country Stakeholders/Counterparts (MOH, etc.)

Interviewee title:

Country:

Your relationship to SIAPS (and predecessor projects, if any):

1. **What is the effectiveness of SIAPS’ technical approach to system strengthening? Why did the approach work, or not work?**
   
   a. Can you describe the role of SIAPS in your country? What aspects of the pharmaceutical system, or pharmaceutical system strengthening, has SIAPS been addressing for your country? Please describe.
   
   b. How would you describe the approach that SIAPS uses to address issues of pharmaceutical management and system strengthening? How important has it been that SIAPS uses this approach?
   
   c. Given your experience working with SIAPS, what would you say are the key technical areas (e.g., the governance, human resource capacity building, information systems, financing, pharmaceutical services) that SIAPS excels at? Can you give an example?
   
   d. Has the SIAPS approach been as useful as you expected? Can you provide an example?
   
   e. Where there any instances for when you could say that the SIAPS approach did not work as expected? Explain.
   
   f. Can you tell us how the SIAPS plan of activities was developed for your country?
   
   g. Do you have any comment about the work plan development process or the work plan itself? For example, did you find it useful? Was it efficient?
   
   h. How have you used the work plan? What about the reports? Did you find these useful? What did you find to be the most/least useful?
   
   i. Are there activities that SIAPS did not include in the work plan that you would like to see them work on? Please describe.

2. **Is there evidence that the SIAPS technical approach has contributed to the strengthening of pharmaceutical systems?**
   
   a. How would you define success for SIAPS in your country?
   
   b. Based on your definition, how successful has SIAPS been?
   
   c. What improvements have you observed? Explain.
d. (For where SIAPS followed a predecessor program) How important has the continuity between SIAPS and predecessor project been for obtaining lasting results? (SPS, RPM Plus, bilateral programs)

3. What technical areas are necessary for a project that strengthens pharmaceutical systems? Does SIAPS currently incorporate all these areas? Are there any additional areas that should be considered to meet USAID objectives in EPCMD, AFG or PCID?

   a. Are there technical areas that SIAPS does not currently cover that would be helpful to you? What would they be (if needed suggest, for example, research/innovation, or trade issues)?

   b. Does SIAPS cover technical work that you feel the country could take on? Explain.

   c. What are your plans for taking on these activities?

4. Are SIAPS’ technical areas relevant to the pharmaceutical systems strengthening needs of countries as they move towards Universal Health Coverage?

   a. What is the importance of medicines and other health technologies in achieving UHC in your country?

   b. Does SIAPS contribute to furthering UHC in your country/program? Are some of the areas in which they work more relevant than others? Describe.

   c. Are there any areas that you would like to see SIAPS support that it is not currently supporting that would be helpful in helping to achieve UHC? What are they?

5. How do the SIAPS goal and objective relate to those of the Global Supply Chain contracts?

   a. (Ethiopia and South Africa) Looking at SIAPS, DELIVER, and the Supply Chain Management Services (SCMS), what has been your experience working with them in the field? For example, has there been a mandate overlap? Good collaboration?

   b. Do you feel that you have an understanding of the various different new supply chain mechanisms that are (or soon will be) available?

   c. Do you feel that the technical approach employed by SIAPS to strengthen pharmaceutical systems is different from what we can expect from these other mechanisms?

6. How does SIAPS manage its work with clients and partners?

   a. How would you rate the technical quality of SIAPS staff? Explain your rating. Please provide examples.
b. How would you rate the quality of SIAPS work? Does anything stand out as good examples for you? Explain your rating. Please provide examples.

7. Concluding comments

a. What health and pharmaceutical issues are on the horizon in that should be considered in future programs?

b. Is there anything that you would to share with us that we might not have covered?

26 Questions

C. Interviewee group – SIAPS Partners

Interviewee title:

Type of partner:  Core / Resource

What can you tell us about the role you play in SIAPS? We know, for example, that you have been involved in _____ (from SIAPS list).

Was your organization also involved with any of the predecessor projects (SPS, RPM Plus, RPM)?

1. What is the effectiveness of SIAPS’ technical approach to system strengthening? Why did the approach work, or not work?

a. How is the SIAPS approach to pharmaceutical system strengthening different from other programs that you may be familiar with working with this area? Can you provide examples?

b. Has the SIAPS approach been as useful as you expected? Can you provide an example?

c. What are the strengths of the SIAPS approach to strengthening pharmaceutical systems? Are there any limitations in SIAPS’ approach to strengthening pharmaceutical systems? Please provide examples.

2. Is there evidence that the SIAPS technical approach has contributed to the strengthening of pharmaceutical systems?

a. What kinds of evidence does SIAPS provide of improvements in pharmaceutical systems? Explain. (Push for metrics, if available).

b. How well does the SIAPS M&E plan (PMP) capture critical data about pharmaceutical system improvements when they occur? Give example(s).
c. For programs where SIAPS continued to build upon the work of the predecessor programs (e.g., SPS, RPM Plus, other bilateral programs), how important do you think this continuity is for achieving lasting results?

3. What technical areas are necessary for a project that strengthens pharmaceutical systems? Does SIAPS currently incorporate all these areas? Are there any additional areas that should be considered to meet USAID objectives in EPCMD, AFG or PCID?

   a. What do you think SIAPS does well that is necessary to strengthen pharmaceutical systems? Please provide specific examples.

   b. Since SIAPS was designed, the Agency launched three initiatives to focus investments in health, namely Ending Preventable Maternal and Child Deaths (EPCMD) Aids Free Generation (AFG), and more recently, Protecting Communities from Infectious Diseases (PCID). How are the activities you are working on with MSH under SIAPS supporting these?

   c. Are there any technical areas that SIAPS does not currently cover that would be helpful to the Agency achieving the goals of these initiatives? What would they be (if needed suggest, for example, research, innovation, or trade issues)?

4. Are SIAPS’ technical areas relevant to the pharmaceutical systems strengthening needs of countries as they move towards Universal Health Coverage (UHC)?

   a. From your perspective, what is the importance of medicines and other health technologies in UHC? How would you rate the need for pharmaceutical system strengthening in achieving UHC? Can you provide examples?

   b. In what ways does your work under SIAPS contribute to furthering UHC? Describe.

   c. Are there any technical areas that SIAPS does not currently cover that would be helpful to countries as they strive for UHC? What would they be?

5. How does SIAPS manage its work with clients and partners?

   a. Can you tell us how you have been engaged in the development of work plan activities?

   b. Do you have any comment about how activities are defined or how work plans are developed?

   c. Do you have access to all of SIAPS’ work plans? Regular reports? Technical documents?

   d. What has been your experience working with SIAPS management at headquarters and in the field (e.g. responsive, timely, accurate)?

16 Questions
D. Interviewee group -- USAID – health element leads and mission activity managers

Interviewee title:

Health element (if applicable):

Global / Country:

Your relationship to SIAPS (and predecessor projects, if any):

Can you describe the role of SIAPS in your program? In what ways has the SIAPS been contributing to your program (e.g., global technical leadership versus in-country)?

1. What is the effectiveness of SIAPS' technical approach to system strengthening? Why did the approach work, or not work?

   a. How would you describe the specific approach that SIAPS uses to address issues of pharmaceutical management and system strengthening? Do you see this approach as very different from other programs working with pharmaceutical related issues?

   b. How important was it to your program that SIAPS uses this approach?

   c. Given your experience working with SIAPS, what would you say are the key technical areas (e.g., the governance, human resource capacity building, information systems, financing, pharmaceutical services) that SIAPS excels at? Can you give an example?

   d. Has the SIAPS approach been as useful as you expected? Can you provide an example?

   e. Where there any instances for when you could say that the SIAPS approach did not work as expected? Are you able to identify the specific constraints or other factors that influenced a poor result (e.g., lack of staff, poor government responsiveness)?

   f. Can you tell us how the SIAPS plan of activities was developed for your program?

   g. Do you have any comment about the work plan development process or the work plan itself? For example, did you find it useful? Was it efficient?

   h. How have you used the work plan? For example, have you used it to monitor SIAPS work? Have you found the work plan useful for other purposes? Please describe.

   i. What about the quarterly and annual reports? Did you find these useful? What did you find to be the most/least useful?

2. Is there evidence that the SIAPS technical approach has contributed to the strengthening of pharmaceutical systems?
a. How would you define success for your program with respect to pharmaceutical management or pharmaceutical system strengthening? What kind of evidence do you think is important?

b. Does SIAPS provide evidence of improvements? Explain. (Push for metrics, if available). If so, do you feel that the SIAPS M&E plan (PMP) captures critical data that demonstrates improvements when they occur? Give example(s).

c. For programs where SIAPS continued to build upon the work of the predecessor programs (e.g., SPS, RPM Plus, bilateral projects) how important do you think this continuity is for obtaining lasting results?

3. What technical areas are necessary for a project that strengthens pharmaceutical systems? Does SIAPS currently incorporate all these areas? Are there any additional areas that should be considered to meet USAID objectives in EPCMD, AFG or PCID?

   a. Since SIAPS was designed, the Agency launched three initiatives to focus investments in health, namely EPCMD, AFG, and more recently, PCID. How is SIAPS currently supporting these for your area/program?

   b. Are there technical areas that SIAPS does not currently cover that would be helpful to you? What would they be (if needed suggest, for example, research/innovation, or trade issues)?

   c. Does SIAPS cover areas that are not covered by other programs? Does it cover areas that other programs or projects could handle? Explain.

   d. What health and pharmaceutical-related issues are on the horizon in that should be considered in future programs?

4. Are SIAPS’ technical areas relevant to the pharmaceutical systems strengthening needs of countries as they move towards Universal Health Coverage?

   a. What is the importance of medicines and other health technologies in UHC? How would you rate the need for pharmaceutical system strengthening in achieving UHC in your country? What is your experience working with them in the field? For example, has there been a mandate overlap? Good collaboration?

   b. Do you feel that you have an understanding of the various different new supply chain mechanisms that are (or soon will be) available? If yes, please explain. Are there any areas of uncertainty?

   c. Do you feel that the technical approach employed by SIAPS to strengthen pharmaceutical systems is different from what we can expect from these other mechanisms? Why? How important is this to your program?

5. How does SIAPS manage its work with clients and partners?
a. How does SIAPS work with other USAID mechanisms/partners of importance to your program? Can you give an example?

b. How does SIAPS work with your global stakeholders? Can you give an example?

c. How much guidance or input do you receive from the AOR team in implementing the SIAPS activities for your program?

d. What has been your experience working with SIAPS management at headquarters and in the field (e.g. responsive, timely, accurate)?

e. How would you rate the technical quality of SIAPS staff at headquarters/in the field/consultants?

f. How would you rate the quality of SIAPS deliverables? Do any stand out as good examples for you?

25 Questions
### ANNEX VI. SIAPS AND GHSC GOALS AND RESULTS AREAS/OBJECTIVES DATA COLLECTION INSTRUMENTS

**Mapping of SIAPS and GHSC Goals and Results Areas/Objectives**

<table>
<thead>
<tr>
<th>SIAPS Cooperative Agreement</th>
<th>Single Award Procurement and Technical Assistance IDIQ (Green Box) (Objectives 2 and 3 for this comparison)</th>
<th>Multiple Awards for Technical Assistance IDIQ (Red Box) (Objective 1 for in-country TA, and Objective 2 for Global Collaboration)</th>
<th>Quality Assurance (Orange Box) (TA Objectives 3 and 4 for this comparison)</th>
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<tbody>
<tr>
<td>Objective 1: Global Commodity Procurement and Logistics</td>
<td>Objective 1: Global Commodity Procurement and Logistics</td>
<td>Objective 1: Systems Strengthening TA – Strengthen in-country supply systems</td>
<td>Objective 3: Technical Leadership/Technical Assistance – Provide technical leadership and assistance</td>
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<tr>
<td>Objective 2: Systems Strengthening</td>
<td>Objective 2: Systems Strengthening</td>
<td>Objective 2: Global Collaboration – Strategic engagement to improve the long-term availability of health commodities</td>
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<td>Objective 3: Global Collaboration</td>
<td>Objective 3: Global Collaboration</td>
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**Goal**

Assure availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes, *by promoting and utilizing a systems strengthening approach* consistent with the GHF that will result in improved and sustainable health impact.

Improve the availability of health commodities and provide supply chain technical assistance.

Improve the long-term availability of health commodities in public and private services.

Establish and implement a comprehensive Quality Assurance Program (QAP) compliant with Federal regulations and USAID policies and procedures that is cost-effective, high-performing, transparent, and flexible and provides the best value for the USG.

**Results Area/Objective**

**Pharmaceutical sector governance strengthened (IR1)**

1.1 Good governance principles embodied across all health system components; 1.2 Medicines policies, legislation, regulations, norms and standards improved; 1.3 transparent and accountable pharmaceutical management systems; 1.4 National pharmaceutical sector development plans are strategic and evidence-based.

**Strategic Planning – provide strategic planning and design assistance (Obj. 2.1)**

**Strengthen enabling environments to improve supply chain performance - governance and leadership (Obj. 2.4)**

**Global Collaboration – strategic engagement, advocacy, awareness (Obj. 3)**

Support the strategic planning for and implementation of activities related to supply chain management and commodity security (Obj. 1.1)

**Strengthen enabling environments to improve supply chain performance - governance and leadership (Obj. 1.4)**

**Pharmacovigilance policies, regulations, etc. (Obj. 4.3.2.2)**

**Capacity for pharmaceutical supply management and services increased and enhanced (IR2)**

2.1 Pharmaceutical management capacity of individuals,

**Capacity Building - Effective transfer of skills, knowledge and technology for improved and sustained performance (Obj. 2.3)**

**Capacity Building - Effective transfer of skills, knowledge and technology for improved and sustained performance (Obj. 1.3)**

**Strengthen enabling environments to improve**

Provide technical assistance to NDRAs, when needed and feasible (Obj. 4.3.2.1)

Provide technical assistance and capacity building to partner countries and other entities. Technical assistance may include providing support to in-country national quality.
| Results Area/ Objective | Information for decision making challenge in the pharmaceutical sector addressed (IR3) 3.1. Pharmaceutical management information systems (PMis) support both products and patients; 3.2 Innovative and proven tools broadly available and used; 3.3 Strategic information on pharmaceutical system strengthening available and used | Improve the delivery of health commodities to service sites - in-country logistics (Obj. 2.2)  
- Strengthen enabling environments to improve supply chain performance - governance and leadership; policy (Obj 2.4) | Improve in-country logistics (Obj. 1.2)  
- Strengthen enabling environments to improve supply chain performance (Obj 1.4) |
| Results Area/ Objective | Financing strategies and mechanisms strengthened to improve access to medicines (IR4) 4.1 Financial barriers to access reduced; 4.2 More efficient use of existing financial resources; 4.3 Additional financial resources generated | Strengthen enabling environments to improve supply chain performance – commodity financing (Obj 2.4)  
- Global collaboration – market intelligence (Obj 3.1) | Strengthen enabling environments to improve supply chain performance - commodity financing (Obj. 1 C.2.4) |
| Results Area/ Objective | Pharmaceutical services improved to achieve desired health outcomes (IR5) 5.1 Availability of pharmaceuticals improved; 5.2 Patient safety and therapeutic effectiveness assured; 5.3 Medication use improved 5.4 Pharmaceutical services standards | Improve delivery of health commodities to service sites (Obj. 2.2)  
- Strengthen enabling environments to improve supply chain performance – policy (Obj 2.4)  
- Global Collaboration – new technologies | Improve in-country logistics, including selection, procurement, storage and distribution, and waste management) (Obj.1.2)  
- Pharmacovigilance (Obj. 4.3.2.2) |
<table>
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<tr>
<th>Level of engagement</th>
<th>Country, regional, global</th>
<th>Country, regional, global</th>
<th>Primarily in-country, potentially regional and global</th>
<th>Global, regional, country</th>
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<td>defined, adopted and implemented; 5.5 Emergence of AMR slowed</td>
<td>advocacy and awareness (Obj. 3)</td>
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**INTERIM EVALUATION OF THE SIAPS PROJECT**
ANNEX VI. DISCLOSURE OF ANY CONFLICTS OF INTEREST

USDA NON-DISCLOSURE AND CONFLICTS OF INTEREST AGREEMENT

GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT PROJECT

I, the undersigned, hereby agree to the terms and conditions contained in this Agreement and acknowledge receipt of a copy of the agreement. I agree to abide by all terms and conditions of this Agreement and to notify the U.S. Department of Health and Human Services, Office of Global Health Programs, of any changes in my status as an authorized recipient of non-disclosure information.

1. I, the undersigned, hereby agree to the terms and conditions contained in this Agreement and acknowledge receipt of a copy of the agreement. I agree to abide by all terms and conditions of this Agreement and to notify the U.S. Department of Health and Human Services, Office of Global Health Programs, of any changes in my status as an authorized recipient of non-disclosure information.

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GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT PROJECT

9. Notwithstanding the foregoing, I shall not be restricted from disclosing or using Sensitive Data that: (i) is or becomes generally available to the public other than as a result of an unauthorized disclosure by me; (ii) becomes available to me in a manner that is not in contravention of applicable law; or (iii) is required to be disclosed by law, court order, or other legal process.

ACCEPTANCE
The undersigned accepts the terms and conditions of this Agreement.

Signature

Date

August 28, 2015

Name
Constance A. Carrino

Title
Consultant
GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT PROJECT

Sensitive Data; or (c) upon the conclusion of my employment or other relationship that requires access to Sensitive Data.

9. Notwithstanding the foregoing, I shall not be restricted from disclosing or using Sensitive Data that: (i) is or becomes generally available to the public other than as a result of an unauthorized disclosure by me; (ii) becomes available to me in a manner that is not in contravention of applicable law; or (iii) is required to be disclosed by law, court order, or other legal process.

ACCEPTANCE
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Signature ___________________________ Date 04/13/2015

MARIA A. MIRALLES
Name

CONSULTANT
Title
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<td>Regan Whitworth</td>
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INTERIM EVALUATION OF THE SIAPS PROJECT
For more information, please visit ghpro.dexisonline.com