

## **Systems for Improved Access to Pharmaceuticals and Services: Malaria Quarterly Updates**

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January–March 2013



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## **About SIAPS**

The goal of the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program is to assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes. Toward this end, the SIAPS result areas include improving governance, building capacity for pharmaceutical management and services, addressing information needed for decision-making in the pharmaceutical sector, strengthening financing strategies and mechanisms to improve access to medicines, and increasing quality pharmaceutical services.

## **Recommended Citation**

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## ACRONYMS AND ABBREVIATIONS

ACT	artemisinin-based combination therapy
AMDM	Anti-Malaria Drugs Management
AMI	Amazon Malaria Initiative
CAMEBU	Centrale d’Achat de Médicaments Essentiels du Burundi (Central Purchasing Agency for Essential Medicines of Burundi)
CCM	community case management
CDR	regional distribution center, DRC
CHW	community health worker
CNPV	National Pharmacovigilance Center, DRC
CRMS	continuous result monitoring system
DIGEMID	General Directorate of Drugs and Medical Supplies, Peru
DPML	Département de la Pharmacie, du Médicament et des Laboratoires (Department of Pharmacy, Medicines, and Laboratory, Burundi)
DRC	Democratic Republic of the Congo
EUV	End Use Verification
FY	fiscal year
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
HQ	headquarters
LMIS	logistic management information system
MOH	Ministry of Health
NMCP	National Malaria Control Program
ORHB	Oromia Regional Health Bureau, Ethiopia
PAHO	Pan American Health Organization
PCG	Central Pharmacy of Guinea
PHCC	primary health care center
PHCU	primary health care unit
PMI	President’s Malaria Initiative
PMIS	pharmaceutical management information system
PNILP	Programme National Intégré de Lutte contre le Paludisme, Burundi
PPMRm	planning, procurement, and monitoring reports for malaria
RDT	rapid diagnostic test
RTA	Regional Technical Adviser
SIAPS	Systems for Improved Access to Pharmaceuticals and Services
USAID	US Agency for International Development
WHO	World Health Organization



## INTRODUCTION

According to the latest estimates of the World Health Organization (WHO),<sup>1</sup> there were about 219 million cases of malaria in 2010 and an estimated 660,000 deaths. Africa is the most affected continent: about 90 percent of all malaria deaths occur there. Between 2000 and 2010, malaria mortality rates fell by 26 percent around the world. In the WHO African Region, the decrease was 33 percent. During this period, an estimated 1.1 million malaria deaths were averted globally, primarily as a result of a scale-up of interventions. However, much remains to be done.

Working closely with the President's Malaria Initiative (PMI) both in Washington and in PMI countries, the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program aims to ensure the availability of quality pharmaceutical products and effective pharmaceutical services in support of PMI objectives. Toward this end, and based on PMI malaria program priorities, SIAPS endeavors to improve pharmaceutical governance, build capacity to manage malaria products while addressing the information needed for managing them, strengthen financing strategies and mechanisms to improve access to malaria medicines, and improve the quality of pharmaceutical services provided to malaria patients.

The SIAPS technical approach emphasizes health systems strengthening with special focus on improving metrics, monitoring and evaluation, capacitating local governments and organizations, and increasing country ownership. Through this approach, SIAPS aims to promote the availability and use of malaria products including artemisinin-based combination therapies (ACTs), rapid diagnostic tests (RDTs), and medicines for severe malaria. At the country level, SIAPS collaborates with national malaria control programs and central medical stores to develop and implement strategies to strengthen pharmaceutical management to prevent malaria and improve case management. Common areas supported by SIAPS include training, quantification, strengthening supply chain systems including logistics management information, community and malaria case management, rational use, and medication safety. SIAPS works to strengthen malaria pharmaceutical management at country levels, specifically in Angola, Burundi, the Democratic Republic of the Congo, Ethiopia, Guinea, Liberia, Mali, and South Sudan. In addition SIAPS provides regional support in Latin America.

The following report briefly describes the major activities that SIAPS carried out at the global level as well as in each of the mentioned countries and region between January and March 2013.

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<sup>1</sup> WHO Global Malaria Programme. 2012. *World Malaria Report 2012*. Geneva: World Health Organization. [http://www.who.int/malaria/publications/world\\_malaria\\_report\\_2012/wmr2012\\_no\\_profiles.pdf](http://www.who.int/malaria/publications/world_malaria_report_2012/wmr2012_no_profiles.pdf).



## MALARIA CORE

To improve coverage of malaria interventions, monthly coordination meetings were held with PMI/Washington to discuss implementation of PMI activities in countries. In addition, SIAPS presented the findings of the Liberia feasibility study on ACTs and RDTs at the first in a series of technical quarterly meetings with the PMI team.

During the quarter, SIAPS headquarters (HQ) took the lead in providing technical support to ensure that countries (Angola, DRC, Ethiopia, Guinea, and South Sudan) incorporate USAID/PMI feedback and implement activities that are consistent with SIAPS's approaches and SIAPS. Specifically, a team from SIAPS HQ traveled to Mali to provide support to SIAPS Mali and to the Malian Ministry of Health (MOH) on the redesign of Mali's logistic management information system (LMIS). In addition, SIAPS HQ provided desktop support to the SIAPS Guinea program for the strengthening of the reporting system, including introducing a new model of monthly malaria report and writing success stories on implementation of the first End Use Verification (EUV) survey and the emergency distribution of ACTs.

Plans to disseminate the malaria quantification manual to countries are under way. During the reporting period, SIAPS developed PowerPoint training materials based on the malaria quantification manual. These materials will be used during the next quarter for the training workshop in quantification in Mali and Guinea.

Support was provided in reviewing the findings and providing feedback on viable follow-up activities and interventions based on EUV survey results. To facilitate procurement decisions at PMI, SIAPS aggregated planning, procurement, and monitoring reports for malaria (PPMRm) from Angola, Burundi, DRC, Ethiopia, Kenya, Mali, and Uganda. SIAPS also reported on the supply plan for malaria commodities for Angola, Burundi, DRC, Ethiopia, Kenya, Mali, and Uganda.



## ANGOLA

### **Implementation of PMI Monitoring Tools**

SIAPS assisted the National Malaria Control Program (NMCP) to collect and analyze information to be used in the quarterly PPMRm and for estimating ACT needs. Subsequently, the NMCP with support from SIAPS visited four provinces (Cunene, Huila, Huambo, and Benguela) that are facing the most problems in reporting, overstocking, and distributing malaria products. The team sensitized the provincial malaria team on the importance of quality and timeliness in reporting. The team learned that pharmaceutical management tools, including stock cards, are not being used at municipal and health facility levels, incomplete reports are coming from facility level to provincial level, and more training in pharmaceutical management and use of the management tools is needed.

### **Supply Chain Management**

During the reporting period, a team of consultants from SIAPS HQ assisted the NMCP to review its forecasting and supplies planning. Approaches included the review of strategic documents for projections, contrasted with the current trends from analysis of reported data, and a workshop with all stakeholders to validate assumptions and data. A draft of the report is being finalized. As lessons learned, a strong need exists to review the entire reporting system so that collected data can be used during the quantification. There is also an urgent need to capture necessary pediatric data because such information was almost not available or not relevant for use. Programs should also establish a mechanism for more collaboration between all the stakeholders (internal and external). In this regard, SIAPS is advocating at the higher level of decision makers to establish a technical working group for quantification for each program that could merge and become in future the national quantification committee under the MOH's Logistics Management Unit. SIAPS will provide all the necessary support, including terms of reference, coaching, and training in quantification to these technical working groups, once established.

The draft report analysis for the Angola public health supply chain system to inform evidence-based interventions was finalized by SIAPS consultants and shared with SIAPS. The team (from field and home offices) helped validate findings and recommendations by conducting field visits to the central medical stores (CECOMA) and Huambo province. Terms of reference for a consultant to provide support to CECOMA to improve its warehouse management processes and procedures are under development.

### **Support for Policies, Guidelines, Regulations, and Partner Coordination**

Only one of three planned interagency coordination logistics subcommission meetings to improve coordination and collaboration among national programs and partners in health products logistics was held in January 2013. During this meeting, SIAPS described its areas of expertise and the support that it is providing to the Angola government. The following monthly meeting

was postponed because of the lack of quorum, and it was decided to assist this forum to review its terms of reference, propose better meeting processes, and become more action oriented.

## BURUNDI

### Implementation of PMI Monitoring Tools

The PPMRm for January to March 2013 was conducted. All formulations of ACTs and RDTs are available in sufficient quantities to cover needs for 2013.

### Supply Chain Management

During this quarter, SIAPS worked with the the Programme National Intégré de Lutte contre le Paludisme (PNILP, the NMCP); the Département de la Pharmacie, du Médicament et des Laboratoires (DPML, Department of Pharmacy, Medicines, and Laboratory); the Centrale d'Achat de Médicaments Essentiels du Burundi (CAMEBU, Central Purchasing Agency for Essential Medicines); and Secrétariat Exécutif Permanent du Conseil National de Lutte contre le SIDA (SEP-CNLS-Malaria)<sup>2</sup> to perform a pipeline analysis on malaria commodities to ensure that available stock at CAMEBU will allow consistent distribution to all 45 districts. The pipeline analysis showed that RDTs and all formulations of ACTs are available in sufficient quantities to cover needs for 2013 at national level; thereafter, all deliveries of orders from the Global Fund to Fight AIDS, Tuberculosis and Malaria were pushed back to January 2014 to avoid overstocks at CAMEBU. A quantification exercise for ACTs and RDTs for 2014 was conducted and shared with the US Agency for International Development (USAID)/PMI and the Global Fund for resource mobilization

### Information Systems Management

SIAPS assisted the DPML and the PNILP to review the existing pharmaceutical management tools. Currently, much information is collected by various tools, and duplication exists depending on the type of products. To reduce the workload of the health center staff and avoid confusion caused by use of multiple tools, the DPML appointed an LMIS committee to work on one harmonized and simple tool that can capture key information needed on logistics. The revised tools will be validated through a stakeholder consensus meeting before dissemination at peripheral level.

### Support for Policies, Guidelines, Regulations, and Partner Coordination

To support the PNILP to improve its governance, SIAPS worked closely with the PNILP and WHO to organize two retreats with appointed technical committee members to develop the PNILP strategic plan for 2013 to 2017. The strategic plan is based on preliminary results of the Malaria Indicator Survey published in March 2013, recommendations of the malaria program review held in November 2011, and findings from formative supervision conducted in 2012.

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<sup>2</sup> SEP-CNLS is responsible for the public sector response to both HIV and malaria.

Currently, a first draft is available, and once finalized, it will be validated by all Roll Back Malaria in-country stakeholders.

During the quarter, SIAPS started consultations with key departments within the MOH that will be involved in developing policies related to community case management (CCM) of malaria to support the scale-up after the evaluation of the pilot, Intermittent Prevention Treatment during Pregnancy, and other relevant policies, as needed.

SIAPS participated in a four-day workshop on the evaluation Millennium Development Goals 4 and 5 for Burundi, led by the MOH, to highlight achievements and identify priority activities, bottlenecks, and possible solutions. Implementation of Integrated Management of Childhood Illness at the community level and the Intermittent Prevention Treatment during Pregnancy for pregnant women was adopted as priority interventions. Subsequently, SIAPS worked closely with World Relief on the integration of management of diarrhea into existing tools and training modules in preparation for the integrated case management of malaria and diarrhea at community level.

To improve the governance of the DPML, SIAPS collaborated with WHO to organize monthly medicine management meetings aimed at strengthening the LMIS, establishing a strong pharmacovigilance system, improving access to ACTs in the private sector, and harmonizing procurement and distribution channels for essential medicines. Immediate steps included the formation of formal committees on LMIS and pharmacovigilance, initial contacts with Sanofi (manufacturer of ACTs) to make available an individual package of ACTs for the private sector, and creation of a logistics management office within CAMEBU to centralize the approval and signature process of district requisitions.

### **Supportive Supervision**

SIAPS continued to build the capacity of district teams to supervise and monitor distribution and consumption of medicines and commodities at the health center and community levels through formative supervision visits. From July 2012 to February 2013, the central level conducted nationwide formative supervision visits in all 45 districts and selected 288 public and faith-based health centers (30 percent of the total) to reinforce the appropriate use of the tools and help update average monthly consumption for malaria commodities so that the supply to the community level is steady. None of the district pharmacies and 90 percent of the health centers visited had had a stock-out of ACTs or RDTs during the 10 days prior to the visit.

### **Community Case Management of Malaria**

In support of the malaria CCM strategy, SIAPS completed the initial package of minimum equipment and tools (bicycle, umbrella, registers, mobile phone, security boxes, requisitions forms, ACTs, RDTs, gloves) for the 403 community health workers (CHWs). The 403 workers received refresher trainings to reinforce their ability to diagnose malaria with RDTs and correctly treat children under five years. After the requisition process to increase availability of ACTs and

RDTs was set up with minimum-maximum stock for each worker, data showed that all 403 CHWs had sufficient stock during the quarter to treat all cases diagnosed and confirmed positive with malaria.

Previously, SIAPS worked with the PNILP to set up a new database with a list of key indicators to capture all information related to the work of CHWs. To perform the data compilation and analysis at district level, SIAPS trained the two information system managers and the two focal points of malaria on the use of the new database. Data for January and February showed that of the 6,365 children seen by the CHWs, 70 percent were confirmed positive for malaria, and 97 percent of the confirmed cases were treated with ACTs.

### **Malaria Case Management**

To improve the case management of malaria, SIAPS supported the PNILP to disseminate the new malaria standard treatment guidelines. A four-day training of trainers for province- and district-level teams was organized for 226 trainers, including 46 medical doctors, 132 supervisors, 40 health information system managers, and 8 stock managers. At the end of the training, 1,229 packages of standard treatment guidelines and training materials were handed over to the 45 district heads in preparation for dissemination to and training of health center staff.

### **Capacity Building**

During the quarter, SIAPS continued to take steps toward developing a comprehensive capacity-building plan for the PNILP. A needs assessment questionnaire was developed, as well as a proposed organizational chart to meet expectations and implement correctly the strategic plan developed. A retreat of all PNILP staff is planned for June to finalize the capacity-building plan and take the opportunity to work on team-building spirit within the organization.

To improve PNILP organizational and managerial structure, SIAPS continued to organize local trainings on English and information technology basic skills and identified a potential trainer on mechanics to improve fleet management.

### **Quality Assurance and Pharmacovigilance**

SIAPS assisted the DPML and the medicines management group to organize a pharmacovigilance meeting to discuss the establishment of an operational pharmacovigilance system. After the meeting, the MOH officially appointed a national technical committee composed of 18 members representing organizations such as the MOH, vertical programs, the National University of Burundi Medical School, WHO, SIAPS, PSI, the Global Fund Principal Recipient, the Ministry of Labor, and the Pharmacy Council. The committee will develop guidelines for the pharmacovigilance system and reporting tools, adapt the training curriculum and materials, and train a core team of 20 persons as training-of-trainers participants who will assist the DPML to organize cascade training for all health care providers



## DEMOCRATIC REPUBLIC OF THE CONGO

### Implementation of PMI Monitoring tools

Two quarterly PPMRm reports have been submitted to USAID/Kinshasa and Washington. The January report highlighted good availability of ACTs during the previous quarter, the need for an emergency order of sulfadoxine-pyrimethamine, and the replenishment of the pipeline for RDTs. This report also advocated for good collaboration between SIAPS and the John Snow Inc./DELIVER project that supplies USAID implementing partners with health commodities.

To assess the malaria commodities availability and malaria case management at patient level, DRC SIAPS worked with the NMCP, the Programme National pour l'Approvisionnement des Médicaments (PNAM, National Essential Medicines Procurement Program), and the Division Provinciale de la Santé (Provincial Health Division) to conduct an EUV survey in four USAID/PMI-supported provinces; 67 health facilities and 21 others, including regional distribution centers (CDRs) and depots, were surveyed.

### Supply Chain Management

To increase the pharmaceutical management capacity of individuals, institutions, and organizations, SIAPS DRC worked continuously with the CDRs and other regional medical warehouses that store and distribute essential medicines to health zones and health facilities. In Katanga, Sud Kivu, and Kasai Oriental, SIAPS technical assistance included the enhancement of best practices related to medicine registration process, medicine availability, updating of the medicine credit lines for health zones and health facilities, setting up distribution plans, follow-up on medicine distribution, and editing and disseminating paper-based pharmaceutical management tools.

The SIAPS provincial representatives issued plans for the upcoming minor renovations and related equipment upgrades for CDRs in two provinces that will take place next quarter.

In Lodja Health District, SIAPS supported the provincial MOH to develop and disseminate the medicine requisition and delivery timetable and the medicine stock on hand report to improve the distribution process to health facilities. The medicine distributions in the quarter therefore have been realized based on these developed tools.

### Support for Policies, Guidelines, Regulations, and Partner Coordination

SIAPS DRC continued its support to the MOH to improve the coordination of supply chain management activities in three USAID-supported provinces. In Sud Kivu, the committee organized a three-day workshop for 30 attendees to work on the first version of the provincial list of essential medicines based on the 2012 provincial epidemiological profile. In Kasai Oriental, 20 provincial medicine committee members finalized the provincial list of essential medicines to

be used by health centers, general referral hospitals, and the provincial referral hospital. The Comité Provincial pour les Médicaments of Kasai Occidental printed 600 copies (of 800 needed) of the provincial list of essential medicines and distributed these to health facilities, including all Integrated Health Program–supported health facilities. Furthermore, participants discussed the harmonization and compilation of essential medicines needs supported by different donors and MOH partners in the province for the year 2013. Based on the preliminary study conducted by the European Union–funded project PAPNDS (Programme d’appui au Plan national de développement sanitaire) on medicine tariffs in a few health zones in Kasai Occidental, the provincial medicine committee participants convened to scale up the standardization of medicine pricing in the province.

SIAPS DRC provided a weekly update to the Integrated Health Program on the essential medicines from an emergency order that was placed to a local supplier after its accreditation by USAID/Office of U.S. Foreign Disaster Assistance. The delivery rate has been about 60 percent of the total amount of expected medicines. Furthermore, SIAPS provided the USAID/DRC Mission with a monthly update on a set of tracer medicines that included stock-level status.

### **Quality Assurance and Pharmacovigilance**

SIAPS DRC assisted the National Pharmacovigilance Center (CNPV) to increase adverse drug event reporting. The center received 32 adverse drug event notifications from four hospitals with Medicines and Therapeutics Committees from three USAID-supported provinces (Kasai Oriental, Kasai Occidental, and Katanga). In Lodja Health District, Kasai Oriental, SIAPS supported the quarterly inventory of notifications made from Lodja’s committee and transferred suspected quinine oral solution for quality control to the provincial health authority. The CNPV gave feedback on how to manage five identified events to two hospitals. In addition, SIAPS continued providing needed support to the CNPV for publishing its newsletter.

The baseline study conducted between March and May 2012 in eight general referral hospitals with Medicines and Therapeutics Committee recommended the design and publishing of standard therapeutic guidelines to improve rational use of medicines. SIAPS contracted the CNPV to develop the standard therapeutic guidelines, and the draft is expected to be issued in the next quarter.

## ETHIOPIA

### Implementation of PMI Monitoring Tools

Using the continuous result monitoring system (CRMS) checklist and tools, data on antimalarial medicine management was collected from 39 of the 44 sentinel PMI sites in Oromia in January 2013. Based on these data, an EUV report and a CRMS quarterly report were provided to partner organizations and to PMI headquarters.

Two CRMS review meetings were conducted for 56 participants in Arsi, West Arsi, Bale, Jimma, and Illuababora zones during the quarter. Participants included health managers and pharmacy and malaria professionals from zonal and district health offices, hospitals and health centers, regional Pharmaceutical Fund and Supply Agency hub managers, and SIAPS and PMI staff.

CRMS findings have been presented and discussed with health facility Drugs and Therapeutics Committees, and feedback was given to improve antimalarial services, follow-up of adverse drug reaction reporting related to antimalarials and other pharmaceuticals, rational prescribing, dispensing, and patient use. In most health facilities, patient education is initiated and pharmacy personnel are actively involved on providing pharmaceutical-related information directly to patients.

The PPMRm data were compiled and sent to the head office before the deadline. These data are collected every quarter; the data showed sufficient stocks of malaria products, and there is no risk of stock-out in the coming six months. Moreover, adequate resources are allocated for the next procurement of ACTs and RDTs. Seven million doses of ACTs with Millennium Development Goal funds, 3 million doses of ACTs from PMI, and 18 million RDTs with resources from the Global Fund are being procured, and they will be delivered before the quantities at hand are fully used.

### Information System Management

To meet PMI information requirements in Oromia, 11 antimalarial drug dispensing registers were given to PMI sites. Based on these forms, the health facilities reported malaria burden and drug use information.

SIAPS provided hardware and software maintenance to 13 Electronic Dispensing Tool sites in Oromia, Afar, Dire Dawa, and Harar regions. Some on-the-job and refresher training was also provided in the health facilities to sustain the service and build the capacity of health facility staffs.

A new monthly malaria medicine stock status tracking system was prepared and distributed to SIAPS Ethiopia Regional Technical Advisers (RTAs) for implementation.

## **Supportive Supervision**

To improve quality and effectiveness of the supportive supervision program for pharmaceutical services in Oromia region, an integrated supportive supervision checklist has been developed in collaboration with Oromia Regional Health Bureau (ORHB).

Three rounds of supportive supervision have been conducted in collaboration with the Pharmaceutical Supply and Services Sub-process, Malaria Prevention and Control Units, respective Zonal Pharmacy Experts, and SIAPS Ethiopia PMI/Anti-Malaria Drugs Management (AMDM) RTA to assess the availability of antimalarial medicines and to provide technical and managerial support in strengthening the AMDM at the health facilities. The supervisions were carried out in health facilities in East Hararghe, West Hararghe, Arsi, West Arsi, Bale, Borena, and Guji zones of Oromia. During these support supervisions, technical support and mentoring were provided on the following—

- The need for stock transfer and exchange between the health facilities to address stock-outs and shortages of antimalarial medicines and reduce expiry at health facilities that are overstocked or have products near expiry.
- Products near expiry seen at some of the health centers and indicated the need for mentoring on stock rotation practices (FEFO, FIFO).
- Reduction of clinical malaria treatment at health facilities has been addressed.
- Prompt distribution of the stocks from zonal and district health office stores to health facilities was promoted. Segregation of expired products for ultimate disposal of the products was promoted.

## **Support for Policies, Guidelines, Regulations, and Partner Coordination**

To support the revision and updating and proper implementation of guidelines, facilities in need of the National Malaria Diagnosis and Treatment Guidelines (NMDTG) were identified in collaboration with ORHB. Distribution of the guidelines will soon start either from already printed NMDTG in stock from the Malaria Consortium, a USAID/Ethiopia PMI implementing partner organization, or if enough copies are not available, by duplicating more copies of the original print.

The USAID/Ethiopia PMI Implementing Partners Meeting was held on February 21, 2013, at the Harmony Hotel in Addis Ababa. The main agenda of the review meeting focused on the following—

- National and Oromia region malaria status update
- PMI Ethiopia program update

- Presentation by each implementing partner, focusing on fiscal year (FY) 12 achievements, planned activities for FY 13, and progress for FY 13 first quarter, challenges encountered

The USAID/Ethiopia and SIAPS Ethiopia PMI/AMDM monthly Joint Activity Review Meeting was held on March 6, 2013, at the USAID/Ethiopia PMI Program Office, US Embassy. Present from USAID/Ethiopia PMI were Ms. Tsion Demissie, USAID/Ethiopia Program Manager, and Mr. Desalegne Tesfaye, USAID/Ethiopia HAPN Pharmaceutical Logistic Specialist; Hailu Tegegnework and Fikadu Deme attended from SIAPS Ethiopia PMI/AMDM. The main agenda of the review meeting was a program activities update and planned activities for the coming months.

A USAID/Ethiopia team consisting of Elise Jensen, HAPN Office Chief, and Gunawardena Dissanayake and Joe Malone, USAID PMI/Ethiopia, visited SIAPS Ethiopia PMI/AMDM sites in Dire Dawa Administration and West Hararghe zone of Oromia, March 25–28, 2013. Accordingly, they visited Dilchora hospital and Legehare health center in Dire Dawa Administration and Hirna health center in West Hararghe zone. They also held discussions with the management of the Dire Dawa Administration Health Bureau. Their visit to the health facilities focused on overall SIAPS Ethiopia program support, in particular the availability of ACTs, antiretrovirals, and other program medicines, as well as storage conditions; in dispensing rooms, dispensing activities, arrangement of medicines, record keeping, use of pharmaceutical management information system (PMIS) tools were observed. Health managers at the facilities explained the general health services in the facilities as well as the support provided by USAID/SIAPS Ethiopia through both the US President's Emergency Plan for AIDS Relief and PMI funding. At the end of the visit at Hirna Health Center, Mr. Dissanayake expressed his satisfaction at the support provided by SIAPS Ethiopia, especially with regard to proper medicine storage and handling, record keeping, availability of antimalarial medicines, and recording of malaria medicine dispensing activities. He also thanked the SIAPS team for arranging the visits on such short notice and acknowledged the cooperation and recognition SIAPS has developed with the regional and local health administration and managers.

### **Community Case Management**

Support has been provided to the Federal MOH and Pharmaceutical Fund and Supply Agency in the production and distribution of Integrated Community Case Management kits for health posts. In the quarter, antimalarial products have been collected from different sources and enough kits for 2,000 health posts have been prepared. Currently these kits are being distributed to health posts in Amhara, Oromia, and the South regions

### **Supply Chain Management**

Discussions were held with Mrs. Tsion Demissie, the USAID/Ethiopia PMI program manager, on the improvement of dispensing and storage facilities in PMI sites. The USAID/Ethiopia PMI office has instructed SIAPS that the renovation and provision of supplies to 20 health facilities

during FY 13 will be limited exclusively to Oromia region. Any further support to new expansion regions will be carried out only if extra money is available after renovation of the 20 health facilities in Oromia.

Identification of needy health facilities for both the minor renovations and provision of supplies was carried out through the RTAs in the regions, and the first batch of health facilities was identified. Soon Mr. Tibebe Taye, the program engineer, is to start site visits to do the planning and cost estimation for each minor renovation. The procurement process for the supplies will also start soon.

## **GUINEA**

### **Implementation of PMI Monitoring Tools**

One of the targets of the quarter was to conduct data analysis and present results to PMI/USAID and the appropriate in-country stakeholders from the baseline EUV survey conducted in December 2012 at 25 facilities in PMI zones. This was done in conjunction with the NMCP's monitoring and evaluation team and several of the data collectors who served as presenters or facilitators during the March health directors' meeting. At the meeting, recommendations were discussed; these recommendations provided focus to the meeting in general and solidified the need to strengthen and automate the data collection process and to establish a pull system for antimalarial products, informed by the data collected. Planning for the second EUV survey in April 2013 began during this quarter.

### **Information Systems Management**

The health directors' meeting that took place in Conakry in March 2013 was a success in that all recommendations from the national PMIS workshop from November 2012 were discussed and ultimately adopted with few changes. These recommendations include the new monthly malaria report and the new product delivery and order form; reporting to be done in Excel and transmitted via email to a new dedicated NMCP email address, RapportPalu@gmail.com, which is monitored daily by the NMCP's monitoring and evaluation team; improvements to the circuit of information, such as consolidating reports from hospitals and military clinics under the umbrella of the health district (these are currently sent separately to the central level, or not sent at all); continuation of quarterly review meetings regarding the malaria reports at the regional level and tied to quarterly product orders to be placed by the health districts on behalf of their facilities.

### **Supply Chain Management**

One of the main targets of this quarter was to guide the NMCP and Central Pharmacy of Guinea (PCG) in establishing and agreeing on how the routine distribution of PMI products to the regions can continue. The importance of such an agreement is reflected by the need to avoid emergency distributions caused by frequent stock-outs throughout the country and to encourage the smooth functioning of the supply side, in addition to the demand side (as represented by good reporting and product orders from facilities). During the quarter, the NMCP and PCG drafted a convention between them to guide the storage, management, and distribution of PMI products to the regions. This convention/memorandum of understanding was submitted to USAID/PMI and is waiting for funding. A similar convention exists for Global Fund products; however, the Global Fund is just starting to deliver products in Guinea again after a long break, and the products, with the exception of ACTs, will be dedicated to non-PMI zones. By supporting such an agreement, USAID/PMI will ensure an efficient supply chain management system in Guinea and ultimately the success of the PMI program.

One of the objectives of Year 2 is for SIAPS to provide technical assistance and training to a task force that will coordinate procurement and supply chain management of malaria commodities. This activity is intended to ensure that the data received from the newly improved PMIS will be adequately used for quantification and procurement planning.

Although formal quantification training has not been conducted during this quarter, an intermediary exercise was undertaken in collaboration with NMCP's pharmacy team and monitoring and evaluation team. A database was created to capture the key consumption and stock data of facilities in PMI zones. The database provided a formula for quantifying ACT needs, which was used to supply health facilities with a new tranche of products. The ultimate goal is to build on this database, using standardized information from the new monthly malaria reports as a way to continuously monitor stock status and verify whether product orders are calculated in a rational manner at the health facility and district levels.

An important goal for this quarter was to ensure access by health facilities in PMI zones to additional quantities of PMI products, including all formulations ACTs, plus sulfadoxine-pyrimethamine, injectable quinine, and RDTs. In the absence of a convention between the NMCP and PCG, a temporary solution was to distribute a new tranche of products for approximately four months to the districts during the health directors' meeting. ACT distribution was done based on monthly consumption reports since November, while the other products were allocated in equal quantities to the health facilities because of long stock-out periods leading to the impossibility of calculating the average monthly consumption. The quantification and distribution process was closely coordinated with the NMCP and PCG. Because product orders will be placed quarterly from now on, it is hoped that by then, the convention between the NMCP and PCG will be fully funded and operational, thus facilitating product deliveries through the regional PCG warehouses (rather than the central warehouse in Conakry). This will save time and resources for all involved.

### **Support for Policies, Guidelines, Regulations, and Partner Coordination**

SIAPS is currently supporting the National Medicines Regulatory Authority (DNPL) in developing an implementation plan for Guinea's National Pharmaceutical Policy. This work has been initiated and will take place in the next quarter through a series of development and validation meetings

## LATIN AMERICA AND THE CARIBBEAN: AMAZON MALARIA INITIATIVE

### Support for Policies, Guidelines, Regulations, and Partner Coordination

SIAPS consultants and Pan American Health Organization (PAHO) malaria focal persons have followed up and supported the implementation of activities agreed on at the Quito meeting of September 2012. In collaboration with PAHO local consultants, SIAPS developed the final versions of antimalarial requisition and dispatch standard operating procedures and tools for Honduras and Colombia. The implementation was supported in all endemic departments in Colombia during this quarter. In addition, SIAPS consultants visited Georgetown, Guyana, and Madre de Dios and Lima, Peru, to participate in a meeting to discuss the situation of malaria pharmaceutical management and agree on the interventions required from the Amazon Malaria Initiative (AMI)/SIAPS to confront the problems that were identified

### Information Systems Management

With SIAPS's assistance, the General Directorate of Drugs and Medical Supplies in Peru (DIGEMID) issued the quarterly bulletin that reports the availability of antimalarials in AMI countries. Eight countries, including some in Central America, provided data. SIAPS and PAHO assisted the transfer of the coordination from DIGEMID to PAHO, and PAHO will handle collection of information and development of the bulletin for the first quarter of 2013.

SIAPS finalized rapid assessments of malaria control strategies (using an adequacy approach) for Nicaragua, Panama, and Brazil. The final versions of these studies were distributed to national counterparts. SIAPS organized a training workshop to replicate the adequacy study in eight Brazilian states. SIAPS also completed a baseline study on malaria pharmaceutical supply in Choco, Colombia, and a progress evaluation on SIAPS's support to the integration of malaria pharmaceutical supply to a unified pharmaceutical system in Bolivia. In addition, SIAPS finalized the study of procurement bottlenecks through the PAHO Strategic Fund. The final version was distributed to all AMI partners and interested parties in AMI countries. SIAPS also finalized and distributed to all AMI partners a literature review on malaria diagnosis and treatment in low-incidence areas.

SIAPS consultants finalized a research protocol to assess the access and use of antimalarials in Brazilian gold mining areas (*garimpos*). The collection of information is scheduled for next quarter.

### Capacity Building

SIAPS supported the introduction of malaria pharmaceutical management guidelines for primary health professionals in Colombia and Bolivia. It also reviewed implementation progress in revising programming criteria in low-incidence areas. Information collected from six countries demonstrates that these criteria have been applied for procurement planning and distribution.

During this quarter, the SIAPS consultants addressed problems in the supervision system identified during the Quito meeting. Corrective interventions were introduced in Colombia, Bolivia, and Brazil.

SIAPS consultants visited Honduras to support a training of MOH personnel that will assess the structural conditions of the regional medical stores. The collection of information started during this quarter.

## **LIBERIA**

### **Implementation of PMI Monitoring Tools**

SIAPS collaborated with the NMCP to identify counties and health facilities for the next EUV assessments in line with PMI-approved sampling methodology. The implementation of the activity has been suspended until approval by USAID/Liberia of the overall work plan.

### **ACTs and RDTs in the Private Sector**

SIAPS continued to support the national private sector ACT Technical Working Group coordination activities with technical inputs on the overall design of common reporting tools for rollout. SIAPS worked with the NMCP and the working group to finalize the mentoring and supervision strategies and referral forms for the private sector ACT rollout.

SIAPS finalized a memorandum of understanding for engaging the National Drug Service and private sector outlets to roll out ACTs and RDTs during this quarter.



## **MALI**

### **Implementation of PMI Monitoring Tools**

SIAPS submitted one PPMRm report to USAID/Washington. These data were shared with decision makers to facilitate procurement decisions for malaria commodities and helped the NMCP to make distribution plans for malaria commodities received in the country.

### **Supply Chain Management**

This quarter, SIAPS continued advocating for a national technical coordination committee to be led by the Directorate of Pharmacy and Medicines and to include all partners involved in the Malian supply chain. The scope of work for this committee (including supply plan revisions, forecasting, sharing stock levels, monitoring supply plans, analyzing logistics data reports, and making decisions to avoid stock-outs and overstocks) was discussed with the MOH.

SIAPS also assisted the NMCP to make distribution plans for malaria commodities.

### **Support for Policies, Guidelines, Regulations, and Partner Coordination**

To build institutional capacity in the National Drug Regulatory Authority and NMCP to improve quantification and supply planning and coordination among actors, SIAPS helped national stakeholders review, update, and disseminate key guidance documents to facilitate better coordination, monitoring, and performance. These documents include the Essential Medicines Supply and Distribution Plan, the list of tracer drugs used in monitoring and supervision of health facilities and pharmaceutical warehouses, and the inventory list and mapping of all pharmaceutical retail facilities.

SIAPS assisted the MOH to organize a national workshop in March 2013 with the key actors of Malian supply chain from all levels of the health system (central, regional, district, and community). USAID implementing partners such as PSI, ATN Plus, and PKCII also participated. Roles and responsibilities regarding a Malian logistic information system for pharmaceuticals were specified. All the participants agreed on tools, frequency, and mechanisms to report logistics data from the community level to the central level. The output of this workshop was the development of a standard operating procedures manual for the management of pharmaceuticals logistics information system in Mali.

During the manual development workshop, CHWs were recognized and included as actors at the operational level. Their role and responsibilities in the information and logistics management system were determined; data collection and reporting tools for logistics management were identified; the reporting period was fixed; and aide-memoires for the use of these tools were created. This allowed quality assurance for the implementation of CHW interventions toward the

continuous availability of essential medicines. The next steps will be to develop training modules and training for each level of the health system according to this redesigned LMIS system.

### **Information Systems Management**

During this quarter, SIAPS Mali focused on building on the Malian LMIS assessment conducted in the first year of the project by supporting Mali's MOH to redesign the LMIS to improve inventory management, recording and transmitting data, ordering and order fulfillment, reducing stock-outs, and availability of health commodities at all levels of the health system.

## **SOUTH SUDAN**

### **Implementation of PMI Monitoring Tools**

SIAPS provided the stock status of antimalarials through the PPMRm data request, by consolidating all procurements from partners and the MOH, including pipeline data. This aims at ensuring uninterrupted supply of antimalarials in the country and helps partners provide timely action in an event of imminent stock-outs.

### **Information Systems Management**

SIAPS shared with USAID the concept notes of the Logistics Management Unit for discussion of the modalities of its full implementation.

### **Capacity Building**

SIAPS conducted on-the-job training on the PMIS tools in primary health care units (PHCU) and primary health care centers (PHCC) in Juba County. Five personnel were trained in general PMIS tools during these exercises. This is part of capacity-building efforts at the facility level to ensure accurate reporting and prepare for the implementation of the pilot pull system. Availability of the tools has led to improved inventory management and stock information in the facilities.

### **Supply Chain Management**

SIAPS provided technical assistance to the NMCP in requesting for the about 400,000 doses of ACTs to be used as buffer stock during the rainy season and for other emergency or humanitarian situations.

SIAPS also supported the NMCP in finalizing the procurement supply management section of the Malaria Program Review thematic reports for program management and case management thematic areas.

SIAPS conducted and shared the results of the supply chain mapping to highlight the need for team effort and clarify the roles and responsibility of all players supporting the national supply chain.

To ensure uninterrupted testing and analyses of products at the Minilab sites, SIAPS worked with the MOH staff (Deng Machock) to carry out an inventory of reference standard reagents for procurement planning purposes.

During the period of delayed distribution of kits from the county to some facilities, SIAPS supported the MOH with transport of medicines and supply kits to the following facilities in Lobonok payam, Juba County (Maremu PHCU, Sindiru PHCU, Pager PHCU, Karpeto PHCU, Morsak PHCU, and Yapa PHCU).

During the quarter, SIAPS provided technical assistance to the MOH/Directorate of Pharmaceuticals and Equipment in reviewing and responding to queries regarding the Emergency Medicines Fund procurement from DELIVER and in supporting DELIVER in understanding the country's needs and requirements to ensure that the timeline set for the arrival of these commodities is maintained to avoid any stock-out of essential medicines in the country.

SIAPS continued its support to the central medical stores to expedite completion of the distribution plans for essential commodities to the various counties through engagement of other partners; as a result, medicines at the central medical stores were delivered to the respective counties and hospitals on time to prevent stock-outs.

### **Support for Policies, Guidelines, Regulations, and Partner Coordination**

The project held several meetings with USAID/South Sudan to review work plan implementation progress. As a result, the project reviewed and prioritized its activities in the FY12 SIAPS work plan. The meeting also discussed areas of future focus to inform development of future work plans.

SIAPS continued to coordinate with the other Management Sciences for Health–implemented project (TB-Care) on operational issues. Currently SIAPS continues to meet program operations cost for SIAPS and NMCP offices, including cost-sharing arrangements with TB-Care. These cost-sharing activities include provisions for local office operations and all associated costs, such as office supplies and stationery, Internet connectivity for the NMCP office and the new pharmaceutical prefabricated office, vehicle maintenance and operations, and finance and administrative support functions.

In collaboration with USAID and the NMCP, SIAPS reviewed shortlisted candidates' profiles and scheduled a visit for the nominated Malaria Adviser to visit the South Sudan for a final face-to-face interview with the NMCP and USAID in April 2013.

SIAPS also participated in the ceremony leading to the signing of the aide-memoires, which was aimed at ensuring that government and partners will be committed to making sure that malaria elimination is achieved to improve the quality of life of the people of South Sudan.

### **Supportive Supervision**

SIAPS in its regular supportive supervision exercises conducted on-the-job training for commodity managers' facilities in Juba County in store and inventory management. The facilities visited and number of persons trained were as follows: Lobonok PHCC (one nurse), Pager PHCU (one nurse and one CHW), and Yapa PHCU (one clinical officer and one CHW). The staff was trained on how to correctly fill the stock cards and dispensing registers to track consumption and to request new supplies. This ensured uninterrupted supply of malaria commodities and other essential medicines.