

## **SIAPS Quarterly Report**

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Project Year 4, Quarter 1

October 2014–December 2014



This report is made possible by the generous support of the American people through the US Agency for International Development (USAID), under the terms of cooperative agreement number AID-OAA-A-11-00021. The contents are the responsibility of Management Sciences for Health and do not necessarily reflect the views of USAID or the United States Government.

## **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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Systems for Improved Access to Pharmaceuticals and Services. 2015. *Systems for Improved Access to Pharmaceuticals and Services Program Quarterly Report: Project Year 4, Quarter 1: October 2014–December 2014*. Submitted to the US Agency for International Development by the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program. Arlington, VA: Management Sciences for Health.

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## ACRONYMS AND ABBREVIATIONS

AAH	Action Against Hunger
ACT	artemisinin-based combination therapy
AIDS	acquired immunodeficiency syndrome
AMI	Amazon Malaria Initiative
AMR	antimicrobial resistance
APTS	Auditable Pharmaceutical Transactions and Services (Ethiopia)
ART	antiretroviral therapy
ARV	antiretroviral
CAMEBU	Central Essential Medication Purchasing Agency (Burundi)
CDC	US Centers for Disease Control and Prevention
CECOMA	Central Medical Stores (Angola)
CENAME	National Essential Drugs Procurement Center (Cameroon)
CHAI	Clinton Health Access Initiative
CMS	central medicine store
CNLS	AIDS Control Program (Cameroon)
CRMS	Continuous Results Monitoring System
DGFP	Directorate General of Family Planning (Bangladesh)
DIGEMID	General Directorate of Drugs and Medical Supplies (Peru)
DNME	National Directorate of Medicines and Equipment (Angola)
DPML	Department of Pharmacy, Medicines, and Laboratory (Burundi)
DRA	drug regulation authority
DRC	Democratic Republic of the Congo
DTC	Drug and Therapeutics Committee
EDT	Electronic Dispensing Tool
EHRIG	Ethiopian Hospital Reform Implementation Guideline
EMF	Emergency Medicines Fund
EUV	end-use verification (survey)
FDA	US Food and Drug Administration
FMHACA	Food, Medicines and Health Care Administration and Control Authority (Ethiopia)
FP	family planning
FY	fiscal year
GDF	Global Drug Facility
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
HCW	healthcare worker
HIV	human immunodeficiency virus
IMCI	Integrated Management of Childhood Illness
JSI	John Snow, Inc.
LMIS	Logistics Management Information System
M&E	monitoring and evaluation
MCH	maternal and child health
MDG	Millennium Development Goal
MDR	multidrug resistant
MNCH	maternal, neonatal, and child health

MOH	Ministry of Health
MOHFW	Ministry of Health and Family Welfare
MOHSS	Ministry of Health and Social Services
MSH	Management Sciences for Health
NDoH	National Department of Health
NHTC	National Health Training Centre (Namibia)
NMCP	national malaria control program
NMRC	Namibia Medicines Regulatory Council
NTP	national TB program
PAHO	Pan American Health Organization
PEP	post-exposure prophylaxis
PEPFAR	US President's Emergency Plan for AIDS Relief
PFSA	Pharmaceutical Fund and Supply Agency (Ethiopia)
PMI	President's Malaria Initiative
PMIS	pharmaceutical management information system
PMTCT	prevention of mother-to-child transmission
PNILP	national malaria control program (Burundi)
PNLP	national malaria control program (Guinea)
PNLS	national AIDS control program (DRC and Togo)
PNME	Program for Essential Medicines (Angola)
PPMRc	procurement planning and monitoring report for contraceptives
PPMRm	procurement planning and monitoring report for malaria
PSI	Population Services Inc.
PSM	procurement and supply management
PTCs	Pharmaceutical and Therapeutics Committees
PV	pharmacovigilance
RDT	rapid diagnostic test
SCMS	Supply Chain Management System (project)
SIAPS	Systems for Improved Access to Pharmaceutical Services
SOP	standard operating procedure
SPS	Strengthening Pharmaceutical Systems [Program]
STG	standard treatment guideline
SUGEMI	national pharmaceutical management system (Dominican Republic)
TB	tuberculosis
TIPC	Therapeutics Information and Pharmacovigilance Center (Namibia)
TOR	terms of reference
TOT	training of trainers
UCDC	Ukrainian Center for Disease Control
UNAM	University of Namibia
UNCoLSC	UN Commission on Life-Saving Commodities
UNICEF	United Nations Children's Fund
USAID	US Agency for International Development
WAHO	West Africa Health Organization
WHO	World Health Organization
XDR-TB	extensively drug-resistant tuberculosis



## INTRODUCTION

The Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program, awarded by USAID in September 2011, strengthens the management of essential medicines and health supplies so that more people can access the health care they need. Now in its fourth year, SIAPS works with local counterparts and partners in 23 countries, and 2 regional programs in, Latin America and West Africa. SIAPS takes a comprehensive approach to improving pharmaceutical systems: enhancing countries' capacity to procure and distribute high-quality medicines and health technologies, while working with local partners to develop strong systems for health financing, human resources, governance, information, service delivery, and pharmacovigilance. By promoting local ownership of wide-ranging initiatives, stronger, more sustainable health systems overall are fostered.

The program's five result areas are as follows—

- Intermediate Result 1: Pharmaceutical sector governance strengthened
- Intermediate Result 2: Capacity for pharmaceutical supply management and services increased and enhanced
- Intermediate Result 3: Information for decision-making challenge in the pharmaceutical sector addressed
- Intermediate Result 4: Financing strategies and mechanisms strengthened to improve access to medicines
- Intermediate Result 5: Pharmaceutical services improved to achieve desired health outcomes

This report presents highlights of SIAPS' activities organized both by intermediate result area, representing multiple countries where we work, as well as by our global, regional, and country portfolios for the October through December 2014 period.

## SELECT PROGRESS TOWARD RESULT AREAS

### IR 1. Pharmaceutical Sector Governance Strengthened

The SIAPS approach to improving governance focuses on establishing policies and legislation supported by rule of law; organizational structures that can facilitate appropriate decision making, authority, and oversight; transparent, ethical, accountable systems and processes that are based on best practice norms and guidelines; and human resource management systems that promote effective performance and ethical practices.

One of our primary strategies for improving governance in the pharmaceutical sector is to strengthen regulatory systems, which ensure the safety, quality, and effectiveness of medicines by regulating pharmaceutical products, establishments, professionals, and practices. SIAPS provides support to national medicine regulatory authorities to build their technical capacity; reform processes to make them more efficient and transparent; and upgrade information management systems for improved transparency, oversight, and accountability to enable timely access to medicines and other health supplies.

#### ***Policy, Legislation, and Contractual Agreements***

SIAPS received anticorruption funding from USAID in **Ukraine** to assist oblast-level procurement authorities to establish framework contracts to buy health products in accordance with 2012 regulations. Authorities can use framework contracts to achieve better pricing as well as reduce opportunities for kickbacks, which can occur with separate tenders for multiple, small, and frequent medicines purchases. SIAPS designed a training curriculum to deliver two three-day trainings in the Poltava oblast to address the practicalities of framework contracting, issues related to good governance and the prevention of corruption, and best international procurement practices. Demand for the training was twice that expected, and 84 members of tendering committees in the oblast attended the two trainings.

In **Swaziland**, we continued to support the Ministry of Health (MOH) in its efforts to finalize the Medicines and Related Substances Control Bill and the Pharmacy Bill, which will replace the existing legislation dating back to 1929. SIAPS worked with the chief pharmacist's office and the parliamentary health portfolio committee to complete the committee's report on the public comments received last quarter.

#### ***Standards, Guidelines, and Procedures***

SIAPS is assisting the MOH in the **Democratic Republic of Congo (DRC)** to introduce three priority life-saving medicines—oxytocin, misoprostol, and chlorhexidine gel—in line with recommendations from the UN Commission on Life-Saving Commodities for Women and Children. After helping to register the products and include them in the national essential medicines list (NEML), we supported the MOH's technical working group to finalize the norms and guidelines for using these medicines in maternal and neonatal care. The Permanent Secretary endorsed the guidelines and introduced them to health providers, government officials, and the



public. As a member of Guinea's Roll Back Malaria Committee, SIAPS assisted the national malaria control program (NMCP) to develop new guidelines for malaria case management in the context of the Ebola epidemic.

SIAPS is using anticorruption funding to help the government of **Ukraine** update the NEML, which will now be used as the sole list to guide public procurements. When multiple, non-harmonized lists of medicines are available, as is the current case, and procurement procedures are not well described, procurements can become vulnerable to duplications, inefficiencies, and potential conflicts of interests or corruption. SIAPS initiated this work by conducting an assessment to compare the existing lists and associated legislative frameworks, the processes used to select medicines, and the ways that various procurement entities use the lists. SIAPS will present the findings of this situation analysis to a stakeholder review and consensus workshop.

Also in this quarter, the technical assistance we have been providing in **Angola** culminated in the finalization and submission of the NEML to the MOH for approval. As secretariat of the ad hoc commission constituted by the National Directorate of Medicines and Equipment, SIAPS synthesized inputs from the public health programs to finalize the NEML.

With support from SIAPS this quarter, several countries developed, revised, and adopted a wide variety of standard operating procedures (SOPs) that promote good governance and better practices.

- In **Cameroon**, SIAPS helped the HIV quantification committee develop the first-ever SOPs for HIV and AIDS commodities quantification, which have been submitted to the MOH for validation.
- In **Ethiopia**, SIAPS collaborated with the Pharmaceutical Fund and Supply Agency, regional health bureaus (RHBs), health facilities, and university schools of pharmacy to develop SOPs for providing clinical pharmacy services on in-patient wards. SIAPS also helped revise the SOPs for managing information on antiretroviral (ARV) dispensing and patient medication records and provided training on their use in collaboration with the Oromia RHB.
- As part of continued efforts to improve efficiency of the tender process for pharmaceuticals and medical supplies in **South Africa**, SIAPS supported the National Department of Health (NDoH) to develop two SOPs for the extension of current contracts and verification and preparation for the bid evaluation process.
- In the **Dominican Republic**, SIAPS helped develop SOPs to integrate hospitals into the unified national pharmaceutical management system and to transport laboratory clinical samples and deliver results.
- In **Swaziland**, SIAPS worked with the chief technologist to finalize laboratory warehouse SOPs to improve warehouse management and increase availability of commodities.

## ***Transparency and Accountability***

In **Guinea**, SIAPS assisted the central medical store to launch an international tender for essential medicines, prequalify products and suppliers, and review bids. As a result, the procurement process became more transparent, equitable, and competitive. SIAPS also continued to help the **Ethiopian** government institutionalize the auditable pharmaceuticals transactions and services initiative, which was developed to increase transparency and accountability in the management of pharmaceuticals and related finances. In this reporting period, the Southern Nations, Nationalities and Peoples' Region also enacted auditable pharmaceuticals transactions and services legislation and directives that enforce implementation of transparent and accountable transactions at health facilities. In two additional regions (Tigray and Oromia), SIAPS conducted workshops to finalize similar regulations.

In **Ukraine**, SIAPS continued working with civil society organizations to use price referencing and monitoring mechanisms to increase transparency in medicines pricing. During the quarter, SIAPS conducted a workshop for representatives of the UN Development Program (UNDP) and five civil society organizations on best practices in price setting and referencing. Participants also discussed possible benchmarks that the organizations could use in their advocacy efforts and that could be incorporated into the Price Referencing Observatory, an on-line price reference tool that SIAPS will help develop.

## ***Coordination, Partnership, and Advocacy***

In the **Philippines**, SIAPS has been helping Quezon City develop and scale-up a model for grassroots leadership, governance, and management of the tuberculosis (TB) control program in urban poor settlements. The first Barangay Health Management Council was introduced in 2012 in Payatas, a large urban slum community; since then, two more councils have been established to improve TB services through enhanced program stewardship, community health management, and participation. SIAPS support to the health councils, whose members include community-based groups, officials, and health providers, has helped improve their skills in TB program planning, oversight, advocacy, and coordination. The councils' activities include establishing smearing stations for TB microscopy in difficult-to-reach areas of the settlement, which has contributed to a 27% increase in the number of TB suspects tested and a 23% increase in smear-positive cases given treatment. Better collaboration among stakeholders has helped to prevent stock-outs of anti-TB medicines. In this reporting period, the Quezon City Council, inspired by the results achieved to date, passed a city ordinance to establish Barangay Health Management Councils in all urban poor settlements to increase community ownership of TB programs city-wide.

We collaborated with the World Health Organization's (WHO) Essential Medicines Program and UNICEF to assess the impact of the Ebola epidemic on **Guinea's** central medical store and identify urgent actions needed to support its role of coordinating national logistics for Ebola among the increased number of international and local partners now working in the country. Also, the new working group for malaria commodities management in Guinea, established with assistance from SIAPS, held its first meeting this quarter. SIAPS previously

helped to develop and finalize the terms of reference for the group, which brings together all malaria program partners.

### ***Strategic Planning***

In **Guinea**, SIAPS collaborated with WHO, UNICEF, UNDP, and other partners to support the central medical store to revise its five-year strategic plan in the context of the Ebola epidemic and develop an implementation budget. The strategic plan was presented at a WHO meeting in Geneva, which brought together technical and financial partners and MOH delegations from Guinea, Sierra Leone, and Liberia.

### ***Regulatory Systems Strengthening***

As a part of our ongoing effort with the Directorate General of Drug Administration (DGDA) to improve the medicine registration system in **Bangladesh**, SIAPS conducted two trainings with 39 DGDA officials to build their capacity in the review process of common technical document-based dossiers. The trainings outlined requirements for assessing the active pharmaceutical ingredients and emphasized critical areas to ensure the medicines registered are safe, effective, and good quality. In addition, SIAPS and DGDA co-facilitated a workshop with representatives from seven local manufacturers on common technical document-based dossier submission for medicine registration. During the workshop, we trained participants on the online application process offered through the new medicine registration software, Pharmadex, being introduced with our assistance. SIAPS will incorporate the participants' feedback into the final development of the software and its rollout plans. Also in this quarter, SIAPS assisted the DGDA to upgrade its website to a "web portal" that will enable DGDA field inspectors to submit post-marketing surveillance reports. SIAPS held two workshops for 70 DGDA inspectors to address issues that can arise during data entry and solicited feedback on the portal. This web portal will ultimately be integrated with the regulatory information system software.

A notable achievement of DGDA this quarter was the submission of the requisite 20 adverse drug reaction (ADR) reports to secure full membership in the WHO Programme for International Drug Monitoring. Since the DGDA and SIAPS launched the national pharmacovigilance program and ADR reporting system last year, the program has received 100 ADR reports, 46 of which have been uploaded into VigiFlow, the global database at the WHO Uppsala Monitoring Center.

In **DRC**, SIAPS continues to provide assistance to the medicines registration committee to ensure that the average number of days to register a medicine remains in compliance with SOPs. During this quarter, the average number of days it took the committee to register a medicine went down from 68 to 64.6 days. Out of 318 applications submitted, 235 (74%) were approved and authorized; 7 (2.2%) were rejected; 38 (11.9%) were put on hold because of incomplete data; and 38 (11.9%) were deferred to the next session. SIAPS also finalized the review of the medicine registration database and helped the regulatory authority produce the second edition of the national directory of registered medicines. The directory will be printed and distributed to all inspectors in January 2015.

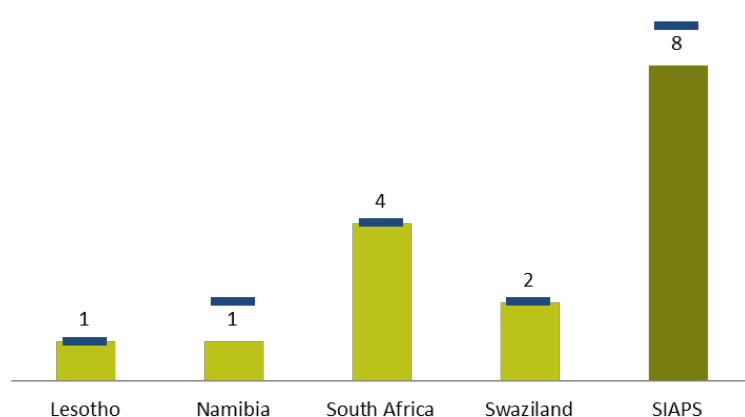
SIAPS supported the **Namibia** Medicines Regulatory Council by mentoring technical staff in evaluating medicine registration applications. This quarter, 132 medicine registration dossiers—19% of the three-year dossier backlog—were screened or evaluated. Subsequently, 46 new products were approved for registration in November 2014. The new products included the preferred first-line, fixed-dose combination of ARVs, 3TC/TDF and ATV/r. SIAPS also helped the council conduct medicines quality surveillance in 24 public health facilities located in 8 of 14 regions. A total of 172 samples, of which 25% were ARVs, were collected and submitted to the Quality Surveillance Laboratory for testing.

## IR 2. Capacity for Pharmaceutical Supply Management and Services Increased and Enhanced

Sustainable access to medicines and other health technologies critically relies on the availability of skilled workers to provide and manage pharmaceutical services. Lack of qualified pharmaceutical professionals, institutions for pharmaceutical training and updated curricula are challenges faced by resource-constrained countries. To enhance countries' human resource capacity, SIAPS collaborates with stakeholders to assess their capacity to manage pharmaceuticals at all levels, and then identifies areas for improvement and develops interventions to strengthen the system and build capacity.

### Pre-service Training

Figure 1 summarizes the number of pre-service training curricula for pharmaceutical management developed under SIAPS compared to targets through the end of December.



**Figure 1. Pre-service training curricula developed by SIAPS through 2014**

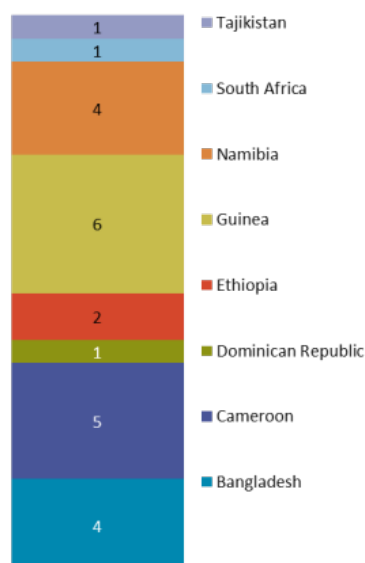
**Angola** organized a pre-service training for 32 final-year pharmacy students at the Private University of Angola. To promote local ownership, SIAPS worked closely with the National Directorate of Medicines and Equipment and university facilitators to revise the materials and to facilitate the sessions. In addition, in partnership with the Universidad Central del Este, we helped organize the third certified course (diploma) on pharmaceutical supply

management in the **Dominican Republic**. This course builds capacity in healthcare providers so they can effectively manage the country's national pharmaceutical management system. In October 2014, SIAPS staff in **Namibia** collaborated with the University of Washington to train 16 healthcare workers and a lecturer from the University of Namibia School of Pharmacy to

conduct pharmacovigilance trainings; SIAPS **South Africa** trained 82 pharmacy students at the University of KwaZulu-Natal in pharmacoconomics.

## In-service Training

Through the end of 2014, 24 in-service health professional training curricula from 7 countries had been developed or revised with SIAPS assistance (Figure 2). Highlights from last quarter include 57 health professionals, including physicians, pharmacists, nurses, midwives,



**Figure 2. In-service curricula developed or revised through 2014**

anesthetists, and laboratory technicians, being trained on the pharmacy chapter of the **Ethiopian** Hospital Reform Implementation Guidelines. The areas covered included rational medicine use, drug and therapeutics committees, drug information services, pharmacovigilance, and clinical pharmacy services. These healthcare providers will, in turn, provide training and mentorship to other staff. Additionally, in collaboration with the Oromia RHB, we provided training to 64 pharmacy personnel on SOPs for ARV management at health facilities.

As part of capacity-building efforts, SIAPS staff in **Mali** helped MOH authorities organize training workshops on pharmaceutical management and logistics reporting tools for 95 staff members from 48 health facilities in Tominian and Bandiagara health districts. As result, the number of health workers trained in the country increased to 896 (220 female/676 male) out of 946 planned for SIAPS program year 4.

To support the decentralization of antiretroviral therapy (ART) services in **Namibia**, SIAPS helped update the medicines supply chain management manual for primary healthcare facilities. SIAPS collaborated on building the capacity of 22 regional pharmacists and primary healthcare supervisors to serve as master trainers in the management of ARVs and TB and malaria medicines and supplies in the public sector. SIAPS **Swaziland** helped train 30 healthcare workers to roll out Option B+. We also trained 41 healthcare workers on warehousing and distribution of medicines and 16 warehouse personnel on operations performance improvement. In **South Sudan**, SIAPS collaborated on training 24 participants including facility supervisors, program managers, and facility staff in pharmaceutical management. SIAPS also provided on-the-job training to 15 healthcare workers in 8 facilities in inventory management and reporting quality.

At the international level, SIAPS facilitated a training session on pharmaceutical management for TB at the WHO course, Implementing New Stop TB Strategy: Skills for Managers and Consultants in Italy. The session was attended by 22 participants from 15 countries.

## **Supportive Supervision and Mentoring**

SIAPS in **Lesotho** conducted 67 supportive supervision and mentoring visits to health facilities in 5 districts and helped facilities form clusters for peer-to-peer mentoring. A total of 133 healthcare workers were mentored in inventory management and pharmaceutical management information systems using both the cluster and health-facility visit approaches. SIAPS support to these districts has resulted in Lesotho's progress in two indicators with 90% targets: 85% of availability of tracer medicines and 98% of health facilities that keep complete patient information as per national standards. In addition, 100% of SIAPS-supported sites had ARVs stocked according to minimum-maximum stock levels. At the national level, only 15% of assessed health facilities (9/61) experienced stock-outs of ARVs for more than 3 days.

In the **Philippines**, SIAPS participated in field monitoring visits to mentor staff on data collection and interpretation and provided recommendations on how to improve the management of pharmaceuticals and supplies. Using the monitoring tools developed by SIAPS, program managers regularly include pharmaceutical supply monitoring in their routine activities. SIAPS carried out a supportive supervision visit to two county medical stores in **South Sudan**. We worked with the implementing partners, the counties' medical officers and monitoring and evaluation officers, and store in-charges to discuss the root causes and possible solutions of the problems identified. SIAPS **Swaziland** also provided mentorship to 46 health facilities providing HIV treatment and care services and to 15 laboratories with the focus on stock management, treatment adherence monitoring, managing ADRs, and information management.

## **Institutional Capacity Building**

SIAPS **Namibia** facilitated the development of a pharmacy training strategic plan to guide the transition of the University of Namibia Department of Pharmacy to a full-fledged School of Pharmacy. SIAPS has provided technical assistance to the school to develop an educational workshop program for lecturers and a continuing professional development training program for preceptors and interns. Furthermore, SIAPS Namibia helped staff document and present a poster on incorporating pharmaceutical supply management into the B.Pharm. curriculum. The poster was presented at the People that Deliver conference in October and subsequently published in the *Pharmaceutical Policy Journal* in December 2014. SIAPS is working with the lecturers to develop manuscripts for the medicine use-related indicator data to submit to journals.

In **South Africa**, 26 pharmacy, clinical, and facility managers completed the Leadership Development Program in Western Cape Province. The participants addressed a range of challenges in nine facilities. Four of the nine teams achieved their desired results by the end of the program. In Limpopo, 26 pharmacists are in the advanced stages of completing the program. SIAPS also conducted coaching visits to support 92 healthcare workers on district teams in KwaZulu Natal.

Other activities to build institutional capacity include the following—

- Last quarter, SIAPS staff in **Angola** facilitated sessions for more than 600 participants during a two-day conference Access to Pharmacists is Access to Health. The conference

was organized by the Pharmacy Council of Angola and took place as part of the first-ever Angola Pharmacy Week.

- As part of **Guinea's** ongoing efforts to restructure its central medical stores, SIAPS trained approximately 20 staff members on new SOPs.
- Two countries had adopted task-shifting approaches within the health system, **Burundi** and **South Africa**, with over 500 health workers taking on new tasks in malaria case management in Burundi.
- To increase the capacity of Government of **Bangladesh** officials to oversee, monitor, and coordinate all procurement and supply chain functions, SIAPS assisted the Ministry of Health and Family Welfare to create a cadre of master trainers from the Directorate General Family Planning (DGFP) who now provide support to all 64 districts and 488 sub-districts. As a result, 97% of DGFP logistics reports from the sub-district level had been directly uploaded to the Supply Chain Information Portal (SCIP).
- SIAPS **Cameroon** helped the Directorate of Pharmacy conduct a workshop to address logistics management bottlenecks and develop a unique and standardized codification system for the procurement and distribution of health products in the public sector. Workshop participants included representatives from government and donor entities.

### ***Tools for Capacity Building***

In **Namibia**, SIAPS helped the Ministry of Health and Social Services (MOHSS) update the mobile version of the Electronic Dispensing Tool (EDT) for 13 primary healthcare facilities and train 21 health workers to use the device to collect dispensing information for ARVs. This support has enabled 98% of the 50 ART main sites to continue using the EDT to document and report data and to ensure that Namibia's system for requesting and receiving pharmaceutical sector information remains functional. In addition, SIAPS provided technical assistance to the National Health Training Center to orient 22 pharmacy assistant students on the EDT and EDT mobile in preparation for their field studies and eventual placement at public health facilities after graduation. SIAPS also helped the National Medicines Regulatory Council test and train on Pharmadex for medicine registration applications.

SIAPS **Burundi** helped the NMCP develop a guide that covers supervision methods, steps of supervision for each aspect of malaria-related activities, and feedback methods. We also validated three job aids on good dispensing practices, information delivery to patients, and medicine dispensing labels, with the aim of improving patients' medication adherence. SIAPS generally reached its targets of 90% for two key indicators—88% of children under five years were seen by a community health worker within 24 hours of onset of fever and, of those with positive RDTs, 91% were treated with ACTs within 24 hours of onset of fever.

Other tool-related achievements include the following—

- SIAPS oriented 15 **Tanzanian** TB commodities coordinating committee members and 6 **Malawian** national TB program staff members on how to use the new QuanTB tool to forecast TB medicines and as an early warning tool.

- SIAPS provided technical assistance to the national AIDS control program of **Togo** to deploy EDT in five ART sites as a pilot. We helped train six trainers who, in turn, trained nine dispensers from the sites.
- In **South Africa**, SIAPS trained 63 facility users on RxSolution in the Eastern Cape PEPFAR-supported partners; the partners ANOVA Health Institute and BroadReach Healthcare were also trained. Partners are assisting the country's implementation of RxSolution.

### **IR 3. Utilization of Information for Decision-making Increased**

SIAPS activities focus on capture, aggregation, analysis, presentation, and dissemination of information to support evidence-based decision making. Through our tools, software solutions, and pharmaceutical management information system activities, SIAPS helps ensure that quality information is available to formulate pharmaceutical policy and plans and monitor supply chain systems and pharmaceutical services. To address these areas, SIAPS strategies include assessing and evaluating local information needs; leveraging mobile phone and other technologies in designing tools; harmonizing tools to help integrate pharmaceutical management information systems; and strengthening local organizations to customize, maintain, and take ownership of the tools and also to analyze, manage, and use the resulting data. As a result, SIAPS country partners use innovative and proven tools to generate accurate and timely information on pharmaceutical systems to improve access to products and services. Currently, RxSolution, Pharmadex, EDT, e-TB Manager, and QuanTB are used in more than 15 countries.

The end of the quarter showed 1,417 health facilities in 9 SIAPS countries are using country-appropriate tools for reporting logistics and patient data. SIAPS efforts to improve the pharmaceutical management information systems has increased the total number of health facilities providing feedback on submitted reports from 5% to 64% in participating countries. SIAPS has already exceeded the year 4 target for indicators related to the functionality of pharmaceutical management systems: the percentage of health facilities that completed and submitted a logistics management information system report for the most recent reporting period (year 4 target 85%, 91% achievement to date) and percentage of health facilities that used consumption data to inform ordering at last assessment (year 4 target 76.8%, 88.6% to date).

#### ***Data Quality***

In **Guinea**, the NMCP, SIAPS, and Stop Palu developed a common strategy to actively verify the quality and validity of data from monthly malaria reports that health facilities generate and report electronically via the districts. The strategy involves supervision visits that compare data recorded in patient registers and stock cards with the data reported to the malaria program. A three-day workshop in mid-December established common reporting forms for collecting consumption data. As a result, monthly reporting rates continue to improve with 99% of facilities in President's Malaria Initiative (PMI) zones reporting and over 80% of the reports coming in on time. SIAPS uses supportive supervision and mentoring to improve data quality.



SIAPS provided technical assistance to set up and use QuanTB, an early warning and quantification tool, in Tajikistan. The regional TB pharmaceutical management coordinators submit patient data monthly to the national coordinator for analysis. When the Kulob region constantly submitted poor-quality data, SIAPS helped the national TB coordinator visit 12 regional TB sites to explore the reasons for poor reporting and mentor staff to improve the accuracy and completeness of the data collection. In **Lesotho**, SIAPS mentored 133 healthcare workers (109 female and 24 male) in how to use the pharmaceutical management information system through supportive supervision visits at the cluster and health facility.

In addition, SIAPS supported the MOHSS in **Namibia** to integrate hand-held EDT mobile devices at the primary healthcare facility level with the desktop EDTs on computers in main ART sites to ensure completeness, accuracy, and reliability of the data. EDT mobile is a tool used to manage EDT data in remote sites where ART services are offered. SIAPS helped the Ministry update the mobile EDT software at health facilities in 2 regions and trained 21 health workers in how to use it correctly.

### ***Information System Design and Collaboration***

As a part of its TB portfolio activities, SIAPS continues to adapt the e-TB Manager desktop application for case management, which will synchronize with the web-based version. Also, through our global collaboration focused on forecasting and early warning, the **Global Drug Facility** adopted QuanTB as its official tool for TB medicine data collection and analysis. SIAPS conducted a workshop during the International Union Conference on Tuberculosis to demonstrate QuanTB and share experiences of its implementation. SIAPS has also provided ad hoc support for Global Drug Facility staff on quantification, forecasting, and early warning in their supported countries. In **Tajikistan**, Project HOPE is implementing QuanTB in the Sogd region and asked SIAPS to support and train their staff. As a starting point, the Project HOPE staff will collaborate with SIAPS to collect patient treatment data and send it to the national pharmaceutical management coordinator. SIAPS will continue collaboration with Project HOPE as it starts a new USAID-funded TB project in the country, thereby promoting the sustainability of SIAPS' interventions.

We collaborated with the National Drug Service Organization and the Clinton Health Access Initiative to help the **Lesotho** Ministry of Health increase the national availability of ARVs, HIV test kits, and other ART-related commodities by conducting Ministry-facilitated monthly stock status meetings with stakeholders. In **Swaziland**, SIAPS redesigned the commodity tracking system at the request of the MOH. We arranged a visit by the system developer to finalize user requirements and analyze the existing tools (e.g., RxSolution ). In **South Africa**, SIAPS is collaborating with the Supply Chain Management System Project to implement the RxSolution “control tower” that helps manage direct deliveries to hospitals in two provinces. Through the use of this system (now called RxPMPU), over 3,800 line items have been processed.

## **IR 4: Financing Strategies and Mechanisms Strengthened to Improve Access to Medicines**

SIAPS continues to work on strengthening financing strategies and mechanisms through a three-pronged approach based on making efficient use of existing financial resources, generating additional financial resources, and addressing the financial barriers in accessing medicines. During the first quarter of project year 4, SIAPS provided technical assistance to secure additional funds from governments and from major donors such as the Global Fund. SIAPS helped countries analyze and track their expenses on pharmaceuticals as well as to use financial information to support decision making and design interventions. Furthermore, SIAPS kept up its support of country efforts to achieve universal health coverage by participating on advisory committees.

### ***Generate Additional Financial Resources***

In **Burundi**, SIAPS and MSH's Leadership, Management, and Governance Project provided technical and logistical assistance to the NMCP to develop a concept note for a Global Fund grant under the new funding mechanism. For example, SIAPS supported four in-country workshops on developing the concept note and recruited an international consultant to guide the process. As a result, in December 2014, the Global Fund designated the NMCP as the Principal Recipient for malaria grants. This designation is a major capacity-building benchmark for the program and SIAPS. SIAPS **Cameroon** continues to work with the AIDS control program to comply with Global Fund requirements related to forecasting and managing health commodities. For example, the program enlisted SIAPS' support to review a quantification of ARVs and lab commodities as part of a Global Fund concept note development. However, inadequate planning for SIAPS' involvement, resulting in last-minute requests had a negative impact on some of the outcomes and also on the routine activities of Cameroon's AIDS control program. SIAPS South Africa provided technical support to the NDoH Global Fund unit by reviewing the quarterly central procurement unit report for compliance with Global Fund requirements. SIAPS developed a review checklist in an effort to standardize the process and identify any gaps in the reports.

In the last two quarters, SIAPS provided assistance to the **Swaziland** Health Laboratory Services to advocate for the timely release of their government budget allocation, which was successful. As a result, funding was available to procure laboratory commodities and pay for services during the last two quarters of the year. SIAPS also helped advocate for funding for **Guinea's** central medical store to distribute commodities for Ebola; this effort was successful in securing the funds needed from the eHealth Africa project funded by the CDC Foundation.

### ***Tracking and Analyzing Costs***

SIAPS provided technical support to **South Africa's** Gauteng province in finalizing a VEN (vital, essential, necessary) analysis for pharmaceuticals which in turn supports informed decision making and setting procurement priorities. The analysis was approved by the provincial Pharmacy and Therapeutics Committee (PTC). Similarly in **Ethiopia**, with SIAPS' support, Hossana and Butajira Hospitals conducted ABC value analysis for pharmaceuticals to identify

medicines that accounted for a significant proportion of the budget. SIAPS also helped the two hospitals with medicines accounting management (cash, credit, and free sales) and compiling monthly financial and service reports. Consequently, the two hospitals are conducting internal audits and taking follow-up corrective measures as needed, improving the management of pharmaceutical transactions and consistently generating monthly finance and service reports. Furthermore, all 11 hospitals in East Amhara are consistently generating reports that show improvements in financial and clinical outcomes, such as increased revenue, decreased expiry/wastage of medicines to less than 2%, improved management of pharmacy workforce, decreased risk of polypharmacy, and improved availability and affordability of medicines.

## **IR 5. Pharmaceutical Products and Services Improved to Achieve Desired Health Outcomes**

SIAPS improves pharmaceutical services by using a holistic approach that ensures that patients receive medicines optimized to their clinical needs in doses that meet their individual requirements, for an adequate time and at the lowest cost to them and their community. During this quarter, SIAPS supported countries through various technical areas and strategies including supply planning and management, community case management, pharmacovigilance, rational medicine use, essential medicines lists, formularies, standard treatment guidelines (STGs), treatment adherence, drug information and patient education, antimicrobial resistance, drug and therapeutics committees, and medicine use reviews.

### ***Supply Management***

SIAPS **Cameroon** has helped the MOH adopt SIAPS' recommendation to integrate HIV commodities for Option B+ into the national supply chain system. By having the regional medical stores distribute Option B+ commodities, pregnant women will have better access to ART. SIAPS also collaborated with UNFPA to work with the central and regional medical stores to standardize codes and descriptions of essential medicines as part of an effort harmonize logistics management information at the regional and central levels. SIAPS has also supported the MOH to develop SOPs to quantify HIV and AIDS commodities. The SOPs define the staff members involved, their roles and responsibilities, and processes to be followed within the newly established Quantification Committee. Furthermore, the percentage of public health facilities that have adopted pharmaceutical logistics management tools has increased from 35% to 79%. With these activities and increased support through SIAPS' regional advisors, Cameroon's availability of safe and efficacious medicines in the supply system should increase.

Last quarter, with assistance from SIAPS, **South Africa's** NDoH was able to achieve a 98% conformity rate of procured medicines to forecast, surpassing the 80% target and making a huge leap from the 25% baseline rate two years ago. Over the past two years, the time taken to award tenders ranged from 8 to 26 weeks, with the NDoH's target being 16 weeks. This quarter, SIAPS helped draft SOPs on the improved tender process and helped evaluate the ARV and condom bids. The SIAPS team has also been expanding use and training on RxSolution, with more than 359 sites now using the tool to facilitate electronic inventory management, with easy access to data on consumption trends and stock on hand. Working with the NDoH, SIAPS has developed

the RxPMPU version of RxSolution to allow a more efficient tender review and the management of a direct delivery procurement model. Implementing RxPMPU has facilitated efficient supplier payments, with 1,081 transactions. SIAPS also finalized and helped disseminate the master procurement catalogue, which standardizes all product specifications and facilitates accurate procurement plans and sharing of contract information.

SIAPS **DRC** is helping the Kasai Occidental province and regional depot to improve storage conditions by ensuring they receive temperature and humidity control equipment, including dehumidifiers and thermos-hydrometers. These materials allow for better control of high humidity rates. In addition, because SIAPS has helped produce the procurement planning and monitoring reports for the malaria program, this quarter the team was able to inform partners of the overstock of antimalarial commodities and take action to avoid expiry. Furthermore, SIAPS recorded a decrease in the percentage of stock-outs reported at health facilities for three days or more, from 50% to 45%.

In **Guinea**, while the main focus remains malaria, SIAPS has broadened its scope of work to expand the logistics management information system to other priority disease programs and to carry out activities in response to the Ebola outbreak. SIAPS helped the NMCP finalize its terms of reference for a new working group focused on managing malaria medicines, and the group held its first meeting during the quarter. At PMI's request, SIAPS drafted a concept note that defines the activities and budget for malaria commodity distributions that the central medical stores will carry out with technical support from SIAPS starting in 2015. In addition, SIAPS, along with Stop Palu and the World Food Programme, helped the NMCP develop and implement a process to distribute long-lasting insecticide-treated bed nets to pregnant women and children under five years through the health centers. SIAPS also collaborated with WHO and the UNICEF regional office to assess the impact of Ebola on the national medical stores' operations, with particular emphasis on its role in coordinating national logistics for Ebola.

This quarter in **Lesotho**, only 1% of ART sites and 3% of TB treatment sites experienced stock-outs of the respective tracer commodities. In the SIAPS-supported sites, there were no ARV stock-outs, and 100% of sites maintained optimum stock levels. In addition, only 6% of hospital laboratories experienced stock-out of HIV test kits this quarter. These achievements are attributed to better coordination through the supply chain management technical working group's monthly stock status meetings, quantification exercises, regular mentoring and supportive supervision, and more effective use of information from the logistics management information systems.

SIAPS also provided technical assistance to **Lesotho's** MOH to place an accelerated order for an ARV (TDF-3TC-EFV 300/300/600 mg), averting an anticipated national stock-out. SIAPS and the Global Fund Coordinating Unit conducted an emergency quantification of HIV RTKs in time to source the funding needed to procure both ART and TB pharmaceutical commodities and meet government deadlines. The well-planned sourcing and mobilization of resources is expected to decrease costs.

In **Mali**, 37% of health facilities are implementing good storage practices as a direct result of coaching sessions for 182 supply chain managers that SIAPS conducted in the regions of Kayes,

Sikasso, and Mopti. SIAPS assessed ACT and RDT availability and found that there were no stock-outs of any malaria commodities at the central warehouse. However, some stock levels were below the minimum, therefore SIAPS recommended that donors and implementing partners take action to avoid any stock-outs. In addition, SIAPS helped the HIV technical working group quantify HIV and AIDS commodities in December 2014 to ensure the availability of HIV and AIDS medicines at the central medical stores and health centers. Quantimed and Pipeline tools were used for forecasting and supply planning of the commodities, respectively. Similarly, the malaria technical working group updated its supply plans, which will be used by MOH and partners to inform 2015 procurement decisions.

In **Swaziland**, 90% of the health facilities had good storage practices, which was a significant improvement from the 58% rate last quarter and surpassed the quarter's target of 85%. The achievements came from effective supportive supervision, formal trainings, mentorships, and on-the-job trainings. During the last quarter, SIAPS provided technical support and mentorship at 46 health facilities and 16 laboratories with a focus on proper stock management. We also finalized the laboratory warehouse SOPs to improve operations. As a result, stock card update rates at facilities increased; for example, Zombodze clinic improved from 53% in February 2014 to 100% last quarter. SIAPS helped increase the availability of laboratory commodities from 1.9 months of stock in the last quarter of fiscal year 2014 to 2.9 months of stock in the first quarter of fiscal year 2015. To further ensure availability of funding and to prepare for the next annual tender cycle, SIAPS helped the MOH develop the annual forecast and supply plan for HIV, TB, and laboratory commodities.

This quarter, SIAPS helped **Burundi's** NMCP update its quantification of ACT, quinine, clindamycin, injectable artesunate, sulfadoxine-pyrimethamine, and RDTs. This update helped the NMCP determine the required budget for its Global Fund concept note. Regular stock status monitoring helped SIAPS identify potential stock-outs of RDTs and recommend expediting delivery from PMI. In addition, to ensure smooth and timely introduction of intermittent preventive treatment for malaria in pregnancy, SIAPS worked with the NMCP to secure an importation waiver for sulfadoxine-pyrimethamine.

### ***Community Case Management***

SIAPS continued to assist **Burundi's** NMCP implement community case management for malaria in Gashoho and Gahombo districts. In September and October, 5,831 children under five with fever sought care from community health workers. Among those children, 3,632 tested positive for malaria with an RDT. Of those who tested positive for malaria, 3,610 (99%) were treated with ACTs and 3,561 (98%) received treatment within 24 hours of the onset of fever. This quarter saw a 49% decrease in the use of community health worker services compared to the previous quarter, which can be attributed to unavailability of RDTs for two weeks and mass distribution of long-lasting insecticide nets in June 2014. This quarter, SIAPS transferred this activity to USAID's Integrated Health Project Burundi. We reached our targets for the overall implementation period: 88% of children under five sought care from community health workers within 24 hours of the onset of fever, and of those who tested positive for malaria with an RDT, 91% were treated with ACTs within 24 hours of the onset of fever.

## **Pharmacovigilance**

In **Ethiopia**, SIAPS continued to help raise awareness of pharmacovigilance among healthcare providers. During this quarter, 197 healthcare providers participated in face-to-face discussions at 7 health facilities in Addis Ababa and the Tigray region. In addition, SIAPS distributed 280 adverse drug event reporting forms, 210 copies of the national pharmacovigilance framework, 350 allergy cards, 280 newsletters, and 280 preventable adverse-event bulletins to health facilities and RHBs.

SIAPS worked with the National Pharmacovigilance Center in **South Africa** to implement the decentralized pharmacovigilance system in Mpumalanga and North West provinces. SIAPS is helping the center to develop a pharmacovigilance district support team made up of nurses, doctors, and pharmacists to monitor and support the pharmacovigilance clusters. During the quarter, the center reviewed 256 adverse drug reaction reports, for a total of 11,503 reports since January 2014. SIAPS also developed a technical report on decentralized HIV and AIDS and TB pharmacovigilance in North West province.

In **Swaziland**, SIAPS continued to work with the MOH's pharmacovigilance unit to strengthen monitoring and reporting of adverse events. SIAPS visited six sites implementing the TB/HIV active surveillance system to help them with challenges, ensure timely and accurate data entry into the surveillance database, and develop a risk management strategy. Also during this quarter, SIAPS helped organize a stakeholder forum to disseminate preliminary findings from the active surveillance project, review successes and challenges, and share best practices.

During this quarter, SIAPS worked with **Namibia's** Therapeutics Information and Pharmacovigilance Center and the University of Washington to bring the active surveillance study and data capture at Windhoek Central and Katutura Intermediate Hospitals to a close. A technical report summarizes active surveillance of first-line ARV medicines at both sites, which found that 16% of patients (n = 413) experienced at least one adverse event. Also during this quarter, the center received 22 spontaneous ADR reports. This number remains below target, largely due to reporting fatigue and limited or delayed feedback from the Therapeutics Information and Pharmacovigilance Center.

Following the launch of the national pharmacovigilance program in **Bangladesh** in the previous quarter, SIAPS continued to raise awareness to enhance reporting of adverse events. Since the previous quarter's training for hospitals and pharmaceutical companies, an additional 100 ADRs have been reported to the Adverse Drug Reaction Monitoring Cell. SIAPS and ADR Monitoring Cell representatives discussed adverse event reporting with representatives from three hospitals. SIAPS presented on strengthening pharmacovigilance monitoring and distributed adverse event reporting forms to more than 60 doctors and nurses at each hospital. Additionally, as a result of SIAPS's support to the DGDA the regulatory body has secured full membership in the WHO Uppsala Monitoring Center in Sweden and is now the 120th member.

### ***Essential Medicines Lists, Formularies, and Standard Treatment Guidelines***

In **Namibia**, SIAPS worked with the MOHSS to make STGs available to private practitioners through a cost-recovery mechanism. During this quarter, MOHSS provided copies to the Health Professions Council of Namibia who agreed to charge 400 Namibian dollars per copy when practitioners register through one of the five professional councils. In **Swaziland**, SIAPS collaborated with the South Africa Nazarene University to conduct a STG/NEML post-implementation survey at 33 health facilities throughout the country. According to findings, an average of 3.2 medicines was prescribed per encounter and injections were prescribed in 16% of encounters. Further, 84% of medicines prescribed were listed on the NEML, indicating acceptable compliance. A concern was that only 34% of medicines were prescribed using generic names and that an antibiotic was prescribed in 54% of encounters. This information will allow interventions to be planned to address problems. The National Essential Drug Program in **South Africa** is helping to review the adult NEML, and during this quarter, SIAPS contributed to a technical review of the chapter dealing with conditions of the eye. SIAPS also helped update the Gauteng province provincial formulary and develop the Limpopo province provincial formulary. In addition, SIAPS helped a Gauteng province formulary sub-committee prepare a rationale to the PTC for imiglucerase (Cerezyme<sup>®</sup>), which is used to treat Gaucher's Disease.

To fully implement malaria STGs in **Burundi**, SIAPS helped the NMCP develop a plan for the scale-up of injectable artesunate to treat severe cases of malaria and of clindamycin for second-line treatment of uncomplicated cases of malaria. The plan was presented to partners and scale-up is scheduled to begin in the next quarter. In addition, SIAPS participated in field visits during this quarter to assess the status of malaria services. Baseline data on the availability of and compliance with malaria STGs and patient knowledge about medication were measured in March 2014. During this quarter, analysis revealed increases in all the indicators from baseline: 40 to 62% for availability, 77 to 94% for compliance, and 51 to 92% for patient knowledge.

With SIAPS support, the **Dominican Republic's** 2014 revision of the NEML was finalized. In **Angola**, SIAPS helped finalize the NEML by collecting missing data from different public health programs and classifying essential medicines by type of health facility. In **Guinea**, SIAPS collaborated with the NMCP, Stop Palu, and Catholic Relief Services to revise the malaria treatment guidelines in light of the Ebola outbreak. New case management protocols and tools were adopted.

### ***Treatment Adherence***

In response to an MOHSS report that identified retention in care and ART adherence as gaps in ART service delivery in **Namibia**, SIAPS worked with the MOHSS to assess service quality in selected regions during this quarter. Specifically, the MOHSS assessed the quality of clinical care, documentation of outcomes and process, and compliance to national guidelines. SIAPS also helped develop a document on the ART SMS reminder system. Implementation of the system was delayed this quarter because of challenges in organizing an HIV Adherence Technical Working Group meeting.

### ***Drug Information and Patient Education***

During this quarter, SIAPS supported 7 **Ethiopian** hospitals to establish drug information services, for a total of 76. Each hospital received reference books, stationary supplies, notice boards, office equipment, and on-site training. In addition, SIAPS provided supportive supervision to previously established drug information services units and resupplied them with necessary materials. Also during this quarter, service providers organized 88 medicine use education events at 8 health facilities based on the patient education guideline developed and distributed by SIAPS.

### ***Antimicrobial Resistance***

During this quarter, SIAPS participated in a regional meeting in Suriname organized by the Pan American Health Organization to discuss strategies to prevent the emergence of ACT resistance in the Americas. Based on recommendations made in the previous quarter, SIAPS organized a meeting with local counterparts in **Brazil** to discuss interventions to improve access to diagnosis and treatment in two of the country's gold mining camps. In **South Africa** this quarter, SIAPS helped the NDoH hold an antimicrobial resistance summit. Afterward, a working group of local stakeholders including SIAPS drafted an implementation plan for antimicrobial stewardship in the country.

### ***Medicine and Therapeutics Committees***

During this quarter, SIAPS introduced a pilot program in the **DRC** to implement MTCs in general and referral hospitals in USAID-supported provinces. Hospitals with active MTCs have seen improvements in medicine use; in South Kivu province, for example, the number of essential medicines and other related items used at Katana Referral Hospital has decreased by one-third, resulting in a one-third budget savings.

### ***Medicine Use Review***

With SIAPS support, the drug and therapeutics committee at a health center in **Ethiopia** carried out a prescription review that revealed incomplete drug- and patient-related information, inappropriate use of antibiotics and injections by healthcare providers, unavailability of standard labeling materials and poor labeling practices, and inadequate patient knowledge of the dose, frequency, indication, and duration of treatment. The drug and therapeutics committee will design intervention strategies based on these gaps. A total of 24 health facilities have now completed prescription reviews.

Using guidelines developed with technical assistance from SIAPS in 2013 to establish PTCs in Gauteng province, SIAPS assisted the West Rand District PTC in **South Africa** to conduct a medicine use evaluation. The data collection tool was based on the latest STGs for HIV and AIDS. The district evaluated the use of abacavir tablets in nine clinics; findings demonstrated that 62.5% of the treatments complied with the STGs. Other provinces are being encouraged to conduct medicine use evaluations.



SIAPS launched *Drug use reviews: a practical strategy to ensure the rational use of anti-tuberculosis medicines* at the 45th Union World Conference on Lung Health. This publication is an important resource for decision makers, program managers, and pharmacists who are responsible for managing MDR-TB programs. The manual describes the steps involved in conducting a medicine use review. It also provides detailed drug information on WHO's recommended medicines for the treatment of drug-sensitive and drug-resistant TB. Additionally, the manual provides criteria for reviewing medicines used for TB treatment and also some suggested performance benchmarks or targets for illustrative purposes. Generic data collection forms are also included for local adaptation and use.

**Portfolios and SIAPS IRs in the Year 3 Quarter 4 Report**

COUNTRY/PORTFOLIO	IR1	IR2	IR3	IR4	IR5
<b>Africa</b>					
Angola	•	•	•		•
Burundi	•	•	•		•
Cameroon	•	•	•	•	
Democratic Republic of Congo	•	•	•		•
Ethiopia	•	•	•	•	•
Guinea	•	•	•	•	
Lesotho		•	•		•
Mali	•	•	•		
Mozambique	•		•	•	
Namibia	•	•	•	•	•
South Africa	•	•	•	•	•
South Sudan	•	•	•	•	•
Swaziland	•	•	•	•	•
West Africa Regional	•	•	•		
<b>Asia and Middle East</b>					
Bangladesh	•	•	•		•
Philippines	•	•			•
<b>Europe and Eurasia</b>					
Tajikistan		•	•		•
Turkmenistan	•	•			
Ukraine	•	•	•		•
Uzbekistan	•		•		•
<b>Latin America and the Caribbean</b>					
Dominican Republic	•	•	•	•	•
Amazon Malaria Initiative	•		•		•
<b>Core Portfolios</b>					
Cross-Bureau	•	•	•	•	•
Malaria Core		•	•		
MCH Core		•	•		•
NTD Core	•	•			•
TB Core	•	•	•		•
<b>Total Portfolios</b>	<b>23</b>	<b>24</b>	<b>24</b>	<b>10</b>	<b>20</b>

## CROSS BUREAU

### ***Overall Quarter Progress***

Much of the work this quarter has focused on finalizing the core content or the review of many of the technical leadership planned deliverables such as the Governance and the AMR e-learning courses, the accreditation framework for in-service pharmaceutical education, and the guidance for standard treatment guidelines. SIAPS worked with the Ecumenical Pharmaceutical Network (EPN) to ascertain the impact of some of SIAPS assistance to the network in previous years in the area of antimicrobial resistance (AMR). Gathered information was utilized to develop a success story. Several discussions were held with the New Partnership for Africa's Development (NEPAD)/ African Medicines Regulatory Harmonization (AMRH) to identify areas for SIAPS future technical assistance to this regulatory initiative. Draft reports were developed for the Universal Health Coverage (UHC) conference and for the Metrics Consultative group meeting, both held last quarter. SIAPS continued to participate and present its experiences at key global meetings and initiatives including the People that Deliver conference in Copenhagen, the TB Union conference in Barcelona, and the stakeholder meeting on the emergency response to artemisinin resistance for countries of the Greater Mekong Sub-region held in Phnom Penh, Cambodia.

### ***Objective 1: Strengthen pharmaceutical sector governance***

In this quarter, SIAPS continued to develop the USAID e-Learning module on good governance in pharmaceutical systems. The Knowledge for Health (K4H) project staff reviewed and formatted the course content, animations, photos, and glossary that had been developed and uploaded onto the Global Health e-Learning website by SIAPS in the previous quarter. The graphics have now been finalized by K4H contractors and are ready for uploading. K4H suggested some rearrangement of the course content with SIAPS staff and then made agreed upon changes and completed the formatting at the end of the quarter. In the next quarter, SIAPS will review the changes made, develop course test questions, and then share the course with USAID Bureau of Democracy, Rights, and Governance and WHO staff working on WHO Good Governance for Medicines (GGM) program for review.

Also in the area of governance, the program continued to collaborate and participate with international organizations on key pharmaceutical governance themes. SIAPS had been invited by the World Health Organization (WHO) to join a working group that assists WHO's GGM Program to update their assessment instrument for measuring transparency in the public pharmaceutical sector. In this quarter, SIAPS responded to a request from WHO to comment on the objectives and proposed scope to guide the revision of the GGM assessment tool. SIAPS will continue to provide support to the working group as requested by WHO in the next quarter.

### ***Constraints to progress***

It took some time, but agreement has been reached on the approach to organizing the content of this course enabling SIAPS to move forward with this activity.

### *Partner contributions*

K4H contributed substantially to development of the governance e-learning course this quarter. Their inputs on e-course formatting and graphic design have been particularly helpful to this activity.

### **Objective 2: Increase and enhance capacity for pharmaceutical management and services**

SIAPS program continued to provide support to the (NEPAD)/(AMRH) and the West African Health Organization to strengthen regulatory capacity in Africa. In Year 3, SIAPS, the USAID AOR team, and NEPAD Planning and Coordinating Agency discussed opportunities for collaboration and identified potential SIAPS-supported activities to help the NEPAD/ AMRH operationalize the Regional Centers of Regulatory Excellence. The proposed activities aim to promote synergy and leverage between SIAPS technical assistance to AMRH (using modest Cross Bureau funding) and a SIAPS technical assistance plan that uses a different stream of core funding aimed at providing support to the Eastern African Community (EAC)/Medicines Regulatory Harmonization (MRH) initiative. Approval of these plans is still pending discussion with USAID and with other donors participating in the World Bank-managed Trust supporting the EA initiative. Related to this activity, in this quarter SIAPS leveraged other earmarked EAC funding to respond to their request to review the draft proposal of the EAC/MRH Initiative for a regional project on strengthening and harmonization of pharmacovigilance and post marketing surveillance of medicines, medical devices, and diagnostics in the EAC partner states.

Working with the Accreditation Council for Pharmacy Education (ACPE), SIAPS completed in this quarter the development of the “Accreditation framework for pharmaceutical in-service education and training in LMIC.” The document has been edited and is being finally reviewed and branded for publishing and dissemination in the next quarter. SIAPS also continued to work with EPN to pilot a pooled procurement activity among some of its members in Cameroon. The activity aims to establish a pooled procurement mechanism among interested three church entities to rationalize procurement, reduce medicine costs, and ultimately improve financial access to essential medicines. A progress report on the key activities accomplished by EPN has been submitted to SIAPS. Implementation of the activity is continued in the next quarter

### *Constraints to progress*

SIAPS’s further collaboration with NEPAD to support the standard pharmacovigilance curricula and to establish selection criteria for the Regional Centers of Regulatory Excellence are still pending discussion with other stakeholders.

### *Partner contributions*

ACPE, EPN, and AMRH continue to contribute to SIAPS’s work in this quarter.

***Objective 3: Increase the utilization of information for decision-making in the pharmaceutical sector***

The program continued to focus on producing the how-to manual for standard treatment guidelines (STG) development and implementation. During this quarter, feedback from an internal peer review of the STG how-to manual was incorporated into an advanced draft. In addition, a log of all of the reviewers' comments was developed to clearly show how each comment was addressed. This log will be shared with the team of reviewers. The immediate next steps are to finalize the draft manual and submit it to editorial for editing, layout, and final design in preparation for publishing.

Work continued to develop a framework and metrics for measuring pharmaceutical systems and evaluating systems strengthening interventions. SIAPS drafted the report of the SIAPS partner meeting held in the previous quarter that agreed on a working definition and the components of a measurement framework for pharmaceutical systems strengthening. The report includes the meeting discussion paper that synthesized the findings of the literature search on definitions, frameworks, and approaches that have been proposed or used to characterize a pharmaceutical system and pharmaceutical systems strengthening and tools; and the domains/categories therein that have been used to assess a pharmaceutical system or to track pharmaceutical strengthening initiatives. The report will be edited and disseminated in the next quarter. SIAPS also developed the first draft of a framework for pharmaceutical systems strengthening based on the definitions and components identified at the meeting for review. The draft framework will be shared with partners during the next quarter for comment and SIAPS will then work with partners to identify associated metrics.

Also during this quarter, SIAPS continued to collaborate with the Harvard School of Public Health on the study aimed at identifying facility level practices/behaviors that affect central supply chain performance and at developing related indicators to measure these behaviors. The report was completed and the findings were presented in a brown bag session at USAID's Ronald Reagan Building on December 9, 2014. The final draft report has been shared with USAID for inputs/feedback. After addressing received comments, the report will be finalized and disseminated in next quarter.

***Objective 4: Strengthen pharmaceutical financing strategies and approaches***

Working with R4D, SIAPS continued to collaborate in developing a pharmaceutical expenditure tracking approach. The bulk of the document describing the approach was finalized and the document was edited. During the next quarter, recommendations for next steps will be developed and the product will be finalized and published.

The program continued this quarter to collaborate with the University of Washington (UW) on the development of pharmacoeconomics training materials. During this reporting period, the materials were received back from UW with their updated inputs/feedback. Consequently, SIAPS staff is conducting a final technical review incorporating UW's inputs, and will be sending the curriculum for editorial review in the coming quarter.

In the area of UHC, SIAPS worked on the finalization of the report from the “Universal Health Coverage: Considerations in Designing Medicines Benefits Policies and Programs” conference, held September 2014 in Cape Town. A dissemination plan for this report was also finalized and will be implemented in the next quarter.

***Objective 5: Improve quality of pharmaceutical products and services***

SIAPS continued to develop a guidance document for establishing and monitoring local medication adherence programs in resource-constrained settings. During the quarter, further revisions were made to the advanced draft of the medication adherence guidance document. The next step is to send the draft to internal peer reviewers.

Similarly, the program continued to finalize all components of the USAID e-Learning course on antimicrobial resistance (part 2). This includes course content, knowledge check and recap questions, final exam, glossary of terms, and references. The course was handed over to K4H for review and feedback. As soon as that review is complete, the immediate next step is to address K4H’s feedback and suggestions. The final step will be review by USAID before publication.

In addressing the activity related to options analysis, SIAPS drafted a new outline for the Options Analysis Guidance Document based on pending case examples. The outline was presented to key technical staff for comments. Based on the feedback from SIAPS staff, the scope of the paper was broadened to go beyond the examples of options analysis for supply chain to include applications to regulatory affairs, information systems, systems strengthening approaches, and pharmaceutical services. Meantime, the overall options analysis framework was revised and will be used to structure the document. Next quarter, the restructured outline will be populated with case examples aligning to the new framework, and SIAPS technical leads will begin to contribute unique circumstances to be considered when applying the options analysis method to their specific technical area.

***Constraints to progress***

The options analysis document has taken longer than anticipated because of lack of specific case studies necessary to inform the paper and other competing priorities. Now that we have concrete next steps, progress should accelerate and continue.

***Objective 6: Contribute to the generation of new knowledge and dissemination of evidenced-based approaches and best practices***

To support knowledge sharing through the WHO EMI portal, SIAPS continued to support the IT contractor responsible for the software platform and document management approach. This quarter, the purchase order was renewed and the document collection grew from 4,529 to 4,660 documents, roughly 40 per month from all sources. The latest submissions from SIAPS to the portal included two key publications—the first in the area of rational use for medicines and the second in the area of quantification of priority maternal and child health commodities. SIAPS supported the IT contractor’s updates to the platform including the development of a low-bandwidth option for accessing the site to improve global access in developing countries and

restructuring the document management web pages to automate document cataloging, where possible, for a savings in labor to maintain the site.

Also during this quarter, SIAPS attended several conferences. One staff member presented our work in active TB surveillance at the community level in Swaziland at the 45th Union World Conference on Lung Health in Barcelona, Spain. This activity is particularly opportune given that the global TB community and WHO are exploring available approaches to support the implementation of new TB drugs in countries. Because of the global audience at this conference and the relevance of this activity, it was selected to be featured during a workshop co-led by SIAPS and the Stop TB Partnership Global Drug Facility. There were 57 participants at this workshop where SIAPS highlighted the approach for implementation of active surveillance, tools used, and preliminary results.

Additionally, two SIAPS staff attended the second People that Deliver Conference in Copenhagen, Denmark. At the conference, SIAPS presented a poster on “Incorporating pharmaceutical supply management modules in the pre-service curriculum of the BPharm program, of the University of Namibia, School of Pharmacy.” SIAPS also participated in the 15th People that Deliver board meeting which focused on opportunities for collaboration with GAVI, JSI, and UNICEF to advance supply chain leadership in countries supported by SIAPS.

SIAPS attended the stakeholder meeting in Phnom Penh, Cambodia, on pharmaceutical systems strengthening in the context of emergency response to artemisinin resistance for countries of the Greater Mekong subregion. SIAPS was invited to participate to help finalize a three-year action plan to strengthen pharmaceutical systems and to ensure universal access to quality assured malaria commodities in the subregion by eliminating the pharmaceutical-related root causes of multidrug-resistant malaria and contribute to the elimination of malaria.

### *Constraints to progress*

SIAPS did not experience any significant constraints to site maintenance this quarter. The discussion about how to perform a gap analysis continues with resolution depending in large part on availability of funds.

### *Partner contributions*

WHO continues to coordinate document management and collections development with approximately 120 documents added this quarter, enabled by the SIAPS platform support.

## GLOBAL PROGRAMS

### **Malaria Core**

**Goal: Improve the supply, quality, and use of malaria commodities to reduce malaria burden**

#### ***Overall Quarter Progress***

To improve coverage of malaria interventions, SIAPS continued to meet with PMI/Washington to discuss activity implementation in PMI-supported countries. SIAPS contributed to improving metrics and monitoring of malaria commodities by conducting end use verification (EUV) surveys in four countries and submitting stock status of malaria commodities from Angola, Burundi, DRC, Ethiopia, Guinea, Kenya, Mali, South Sudan, and Uganda.

#### ***Objective 1: Improve coverage of malaria interventions***

SIAPS continued to hold monthly coordination meetings with PMI/Washington to discuss implementation of PMI activities in supported countries. Also, the Year 3 Annual Report for malaria was finalized. Support was provided to countries in reviewing year 4 work plans as per PMI Washington recommendations

#### ***Objective 2: Improve metrics and monitoring and evaluation of malaria interventions***

Four countries—Burundi, DRC, Mali, and Ethiopia—finalized and submitted the EUV reports for the quarter. Support was provided in providing feedback on viable follow-up activities and interventions based on survey results. To facilitate procurement decisions at PMI, SIAPS aggregated data and reported on stock status of malaria commodities from Angola, Burundi, DRC, Ethiopia, Guinea, Kenya, Mali, South Sudan, and Uganda.



## **MNCH Core**

**Goal: Assure the availability of quality medicines and supplies and effective pharmaceutical services to reduce maternal and child mortality**

### ***Overall Quarter Progress***

As we approach 2015, global maternal, newborn, and child health (MNCH) development partners are increasing momentum to accelerate progress to meet the Millennium Development Goals and planning the post-2015 development agenda. In these discussions, the global community recognizes that access to quality medicines and supplies is key to success. This quarter, SIAPS MNCH remained actively engaged in global partnerships and key initiatives aimed at ending preventable child and maternal deaths and contributed significantly to developing essential tools designed to improve availability of life-saving reproductive, maternal, neonatal, and child health (RMNCH) commodities.

Specifically, SIAPS/MNCH provided extensive comments on the concept note for the proposed World Bank's Global Financing Facility, participated in a strategic planning meeting with other development partners and USAID on the Maternal and Child Survival Program's (MCSP) newborn strategy, drafted the action plan for 2015 for the Supply Chain Management subgroup of the integrated community case management (iCCM) taskforce, and reviewed the suite of stock-out indicators being proposed by the Reproductive Health Supplies Coalition. SIAPS/MNCH further supported the iCCM Financing Task Team in developing and finalizing a procurement and supply management (PSM) check-list which was disseminated to Global Fund consultants this quarter and the PSM guidance which was sent to the Global Fund for review.

The portfolio staff members were also actively involved in the various working groups of the UN Commission on Life-Saving Commodities (UNCoLSC), especially the Supply Chain Technical Resource Team (SCTRT) and chlorhexidine working group. SIAPS/MNCH finalized the quantification guidance on the 13 UNCoLSC RMNCH commodities this quarter—a key deliverable of the SCTRT. The quantification guidance was launched at a South-to-South workshop at the Global Supply Chain Summit held in Copenhagen, which was attended by approximately 20 participants from various countries. To support the chlorhexidine working group, SIAPS/MNCH is working with the SIAPS country teams in DRC and South Sudan and the SPS country team in Afghanistan to support the introduction of chlorhexidine working group.

In addition to supporting the UNCoLSC, SIAPS/MNCH finalized the community LMIS guide in Guinea which will be validated early next quarter. SIAPS also worked with DRC and Mali to incorporate MNCH commodities in their end-use verification (EUV) exercises. The EUV reports including MNCH commodities were submitted to USAID for review.

**Objective 1: Global awareness of the importance of pharmaceutical management for MCH medicines and supplies increased**

*Quarterly Progress*

SIAPS/MNCH remained actively engaged in global partnerships, initiatives, and working groups to ensure that appropriate pharmaceutical management for medicines and supplies is included in the global MNCH agenda. Last quarter, the Global Financing Facility (GFF) was launched by the World Bank, USAID, and other partners to accelerate completion of the Millennium Development Goals and end preventable maternal and child deaths by 2030. A concept note was circulated among development partners for inputs, including SIAPS. Senior MNCH staff members reviewed the concept note and provided comments. Additionally, SIAPS/MNCH participated in the MCSP's newborn strategic planning meeting with other implementing partners and USAID. Next quarter, SIAPS will follow up with USAID and MCSP to further define the role of SIAPS in addition to the activities done under the injectable antibiotics technical resource team.

The SIAPS MNCH principal technical advisor attended the Reproductive Health Supplies Coalition (RHSC) annual membership meeting in Mexico October 20–24, 2014. During this meeting, a senior technical advisor facilitated a meeting of the Maternal Health Supplies Caucus to discuss activities of the upcoming year and moderated a panel on the two pieces of work commissioned by the caucus: advocacy briefs for coalition members and business cases for the three essential maternal health medicines (oxytocin, magnesium sulfate, and misoprostol). SIAPS staff also participated in the systems strengthening working group meeting where an update on the progress made by the Supply Chain Technical Reference Team was presented as well as planned activities for the rest of the quarter. In November 2014, senior staff participated in an RHSC meeting to discuss the stock-out indicators proposed by the RHSC. SIAPS had tested the proposed indicators in Bangladesh, using data available in the SIAPS-supported electronic logistics management information system (Supply Chain Information Portal).

SIAPS/MNCH continued to support the iCCM Financing Task Team. A senior MNCH staff member participated in calls and meetings as well as supported the task team with development of the PSM check-list with inputs from PSM members' subgroup. The checklist included two Excel<sup>®</sup> sheets—one for HIV and maternal health commodities and the other for malaria and iCCM commodities. Additionally, SIAPS staff worked to develop and finalize the PSM guidance document. Both the checklist and the guidance document have been submitted to the Global Fund; the checklist was disseminated this quarter but the guidance document is still being reviewed by the Global Fund and will be finalized and disseminated next quarter. Earlier in the quarter, SIAPS country teams in DRC, Burundi, Kenya, and Zambia were asked if they would be able to provide technical assistance to the PSM planning in grant making after the approval of the concept note; however, they were unable to do so. Through several discussions with the MSH project Uganda SURE, it is now likely that SIAPS will be able to support SURE in providing TA to the Global Fund malaria iCCM grant process. This was also discussed during a meeting with USAID.

A senior SIAPS technical staff member working with the iCCM Taskforce and its Supply Chain Management subgroup developed and presented a webinar on October 28, 2014, on the resupply tools and related job aids—the tools and aids were uploaded to CCM Central website. SIAPS MNCH also prepared a poster on supply chain management for iCCM that was displayed at the November Global Supply Chain Summit in Copenhagen. SIAPS also drafted an action plan for 2015 that was discussed in the December monthly meeting of the Supply Chain Management (SCM) subgroup; however, because of poor attendance due to the holidays, attendees decided that the plan will be discussed during the next meeting in January 2015. The draft, however, was shared with MCSP staff to use during the iCCM Taskforce steering committee meeting. SIAPS also presented the SCM subgroup update during the iCCM Taskforce meeting held December 3.

To emphasize the need of a systems-strengthening approach to expand universal access to pneumonia prevention and care, SIAPS/MNCH staff wrote a blog to commemorate World Pneumonia Day 2014: “Strengthening Systems to Ensure Universal Access to Pneumonia Care.” The blog was posted on the SIAPS and MSH websites.

## ***Objective 2: Guidance and tools for improving pharmaceutical management for MNCH developed and disseminated***

### *Quarterly Progress*

This quarter, a senior MCH staff member contacted the MNCH specialist at the UNICEF Regional Office in South Asia about possibly introducing the unmet need methodology for maternal health medicines in Nepal and Afghanistan. The UNICEF representative indicated that this may be possible in 2015. Discussions continue with SIAPS partner Ecumenical Pharmaceutical Network to discuss the possibility of conducting the workshop with one of its member organizations, potentially in Zambia or Malawi.

Piloting of the intervention guide for the management of childhood illnesses continued in the three districts in Zambia. SIAPS staff visited all three districts and each pilot district was invited to a workshop in Lusaka in December 2014 to present their progress in using the guide and implementing interventions. During the workshop, the pilot districts met and discussed their experiences with using the guide to implement interventions. Their comments and experiences were compiled into a report and will be used to finalize the guide. The intervention guide was further shared with a team at the University of Zambia School of Public Health for the students to use as a resource in their own research and projects. Discussions continue with UNICEF Lusaka to explore the possibility of the guide being included in the diagnose-intervene-verify-assess (DIVA) approach for district systems strengthening. SIAPS/MNCH will continue to follow up with UNICEF, finalize the report on the activities during the validation period, and finalize the intervention guide and validation report to document its potential uses.

Early this quarter, a senior staff member met with MCH colleagues at WHO Geneva to discuss next steps producing the review of MNCH pharmaceutical policies and practices as part of the Countdown 2015. SIAPS and WHO reviewed what data on MNCH pharmaceutical management policies and systems had been included in two recent WHO surveys and looked at how data not included in the surveys could be collected. The review’s co-authors were contacted as to what

additional data they may have as well as their availability to assist with data collecting, especially for the financing indicators.

### *Partner contributions*

Harvard Pilgrim Health Care continued to support the validation exercise this quarter.

### ***Objective 3: Evidence base for effective strategies to increase access to pharmaceuticals and services increased***

#### *Quarterly Progress*

SIAPS continued to support CCM in Guinea as well as implementing various work plans of the technical resource teams of the UNCoLSC, including those at the country level.

In Guinea, the community LMIS guide was finalized and will be validated in January 2015. The consumption data from the CHWs in the Muskoka zone has also been reviewed and analyzed and is now ready to be used for revising the quantification. Next quarter, SIAPS plans to validate the community LMIS guide, revise the quantification for iCCM commodities, and plan the diagnostic assessment of the national LMIS. For PY4, SIAPS/MNCH is considering providing support to additional countries to improve the availability of medicines for CCM. Through discussions with USAID, possible countries may be DRC in collaboration with MCSP, Uganda in collaboration with Uganda SURE, and Madagascar in collaboration with the MSH bilateral Mikolo project.

SIAPS/MNCH also worked with Mali and DRC to include MNCH commodities in the end-use verification data. This quarter, data were collected and analyzed from these two countries and the final reports were submitted to USAID for review.

Also this quarter, SIAPS continued to participate in the following working groups' meetings: the Maternal Health Technical Resource Team, the Supply Chain Technical Resource Team, the chlorhexidine working group, the newborn resuscitation working group, the injectable antibiotics working group, and the diarrhea and pneumonia working group, including the amoxicillin and zinc subgroups. SIAPS also continued to provide country support for the UNCoLSC activities in Angola, Bangladesh, DRC, Mali, Pakistan, and South Sudan.

SIAPS/MNCH continued to support the Maternal Health Technical Resource Team by participating in the monthly calls as well as the in-person meeting in early November 2014. The report on the integration of oxytocin in the EPI cold chain in Mali was finalized and sent to editing. Next quarter, the report will be disseminated and SIAPS/MNCH will draft the scope of work for an options analysis for integrating oxytocin in the EPI cold chain for Phase II work with PATH.

In October 2014, SIAPS/MNCH hosted the SCTRT meeting at the MSH office. During the meeting, the close out of Phase I activities was discussed as well as plans for Phase II. MNCH's principal technical advisor also helped prepare the SCTRT update that was presented the leads of the SCTRT at the RHSC meeting as well as provide flash drives with materials developed by the SCTRT for dissemination at the meeting. SIAPS/MNCH also attended the Global Supply Chain

Summit in Copenhagen in November 2014, during which a plenary session was allotted to discuss the UNCoLSC and specifically the SCTRT's work.

The RMNCH quantification guide on the 13 UNCoLSC commodities was finalized this quarter and SIAPS/MNCH worked closely with JSI to prepare for the South-to-South quantification workshop that was held at the summit. During the plenary session, SIAPS presented on the work of the SCTRT and facilitated sessions to familiarize participants with the quantification guide. The workshop had approximately 20 participants. Additional flash drives with SCTRT materials were prepared for this event. SIAPS also worked with the commission's communications unit to update the SCTRT pages to include additional information and resources on supply chain. In December, SIAPS had a brief meeting with JSI to debrief on the quantification workshop. Next quarter, SIAPS will reach out to the RHSC to see if a francophone South-to-South workshop can be done during an in-person meeting of RHSC's francophone forum.

SIAPS senior technical staff also attended the chlorhexidine working group meetings this quarter where they provided updates on activities in DRC, Pakistan and Angola. Starting this quarter, SIAPS will also provide support for the introduction of chlorhexidine in two additional countries: Afghanistan and South Sudan. Senior technical staff is working closely with SPS/Afghanistan and SIAPS/South Sudan country teams to plan for introduction in these countries. Additionally, the SIAPS staff provided input to the health worker technical reference team draft document on chlorhexidine.

SIAPS/MNCH staff provided support to injectable antibiotics working group by participating in a discussion on job aids and guidelines to be developed for amoxicillin for newborn sepsis. They also continued to follow up in DRC on the protocol for the landscape analysis on newborn sepsis.

SIAPS/MNCH remained actively engaged in the pneumonia and diarrhea working group and its subgroups. SIAPS senior MNCH staff and DRC country staff provided input on two activities in DRC funded by the Gates Foundation. The first activity, implemented by R4D, looked at amoxicillin supply and demand; the second, focused on integrating vaccines and treatment strategies for pneumonia and diarrhea. Senior MNCH technical staff attended the December meetings of the amoxicillin subgroup and the pneumonia and diarrhea working group—providing input for the diarrhea and pneumonia dashboard in DRC and an update on key accomplishments in 2014.

Initially, SIAPS and UNICEF discussed possible collaboration on a study of severe pneumonia in DRC as part of the amoxicillin subgroup's work plan. However, it was decided that the study is no longer needed since there is now a WHO study funded by the Gates Foundation beginning in four countries that looks at community management of severe pneumonia. Finally, WHO approached SIAPS for assistance in reviewing a product guide for iCCM that is currently under development.

### *Constraints to progress*

In Guinea, the finalization of the LMIS guide was delayed due to the Ebola epidemic.

## **Neglected Tropical Diseases**

**Goal: Assure the availability of quality medicines and supplies and effective pharmaceutical services to increase efficiency of neglected tropical diseases (NTD) control and elimination programs**

### ***Overall Quarter Progress***

The NTD portfolio is progressing according to schedule as SIAPS has attended three NTD working group meetings, and presented a poster at a scientific conference.

### ***Objective 1: Strengthen NTD global coordination and oversight mechanisms***

SIAPS attended the eighth biannual meeting of the Global Alliance to Eliminate Lymphatic Filariasis (GAELF); the first global meeting of the Soil Transmitted Helminth Coalition with the Global Schistosomiasis Alliance (GSA); and the 20th Session of the Joint Action Forum (JAF) African Programme for Onchocerciasis Control (APOC) held in Addis Ababa, Ethiopia, in December 2014. During all three meetings, SIAPS provided input on issues related to supply chain management for NTD drugs in the region.

SIAPS also participated in telephone working group on soil-transmitted helminth control run by the Centers for Disease Control. During the call SIAPS provided input on issues related to supply chain management of diagnostics for surveillance and M&E. This is an important aspect of the entire NTD control and elimination program that needs to be addressed as programs begin to scale down.

Finally, SIAPS attended the American Society for Tropical Medicine and Hygiene annual conference and presented a poster abstract on the assessment of NTD programs (previously done by SPS).

### ***Objective 2: Support NTD Capacity Building Initiatives***

SIAPS met with the Ethiopian MOH and NTD program, local SIAPS staff, RTI Ethiopia, USAID NTD staff, and supply chain focal points, and relevant partners to brief and explore SIAPS/USAID plan to conduct a three-day training workshop in Ethiopia and piloting/disseminating the supply chain management manual for NTDs developed by senior technical staff in FY14.

SIAPS contacted and consulted with representatives of NTD programs from different countries on the potential of the workshop and their suggestions on timing and participation. SIAPS also took the opportunity to identify other potential areas of collaboration and coordination and technical assistance with partners and stakeholders for strengthening supply chain of NTD drugs. Conversations with RTI International and the Bill & Melinda Gates Foundation indicated their strong interest in adding supply chain issues to their programs.

*Partner contributions*

SIAPS met with members of FMOH-Ethiopia, RTI, and USAID-Ethiopia to discuss materials to include in the workshop and how to improve the packet.

***Objective 3: Support NTD medicine safety programs***

In the previous quarter, SIAPS held a meeting with USAID personnel. In this meeting, USAID informed SIAPS to hold moving forward on this project until they have internally approved the work plan.

## **TB Core**

**Goal: Assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve global TB goals**

### ***Overall Quarter Progress***

This past quarter, SIAPS focused on finalizing presentations and materials for the 45th Union World Conference on Lung Health in Barcelona, Spain. SIAPS had a strong presence at this year's conference, organizing a workshop and multiple symposia and abstracts. SIAPS also formally released QuanTB version 2.0.0 and promoted SIAPS tools and resources at the MSH exhibition booth. In addition, this quarter, SIAPS continued planning for the Global TB Conference 2015, which will bring together USAID TB priority countries from Africa and Asia March 2–6, 2015, in Bangkok, Thailand. The conference is titled, “Building the Post-2015 Agenda: Novel Approaches to Improving Access to TB Medicines and Pharmaceutical Services.”

### ***Objective 1: Pharmaceutical governance for TB strengthened at global level and country level***

#### ***Quarterly Progress***

At the 45th Union World Conference on Lung Health SIAPS participated in a USAID and the Bill & Melinda Gates Foundation (BMGF)-organized satellite symposium titled “Programmatic Implementation of New Drugs for the Treatment of MDR-TB: Progress from the Field,” contributing pharmaceutical management expertise to the panel discussion. The symposium was the official launch of the “Policy Implementation Package for New TB Drug Introduction,” the primary output from the USAID and BMGF-funded, and WHO-led, Task Force for the Development of New Policies for the Treatment of TB. SIAPS contributed a chapter titled, “Systems Approach for Ensuring Uninterrupted Supply of Quality-Assured Drugs” based on MSH/Center for Pharmaceutical Management (CPM) frameworks; the document also references the SIAPS QuanTB tool for monitoring medicines availability and facilitating quantification for new medicines and regimens phasing in.

SIAPS also participated in the Global Drug Facility (GDF) mission to Vietnam November 24–28, 2014. SIAPS continued to provide technical leadership to the GDF in promoting and disseminating good medicines management practices and managing its operations through the secondment of the GDF Chief of Operations (Manager).

In addition to participating in Union pre-conference meetings, SIAPS conducted a full-day workshop in collaboration with the Stop TB Partnership Global Drug Facility on October 29, 2014. Titled, “How Global Mechanisms for Supply Chain Contribute to Availability of TB Medicines at Community Level,” the workshop attracted over 57 national TB program staff members, TB medicines managers, and international and local partner organizations involved in TB programs. The main objectives of the workshop were to provide participants with guidance on, and practical examples of, the use of early warning systems, active surveillance, and public-



private partnerships to improve TB case detection and access to medicines; share the GDF's new model for drug procurement and management; and present QuanTB version 2.0.0 and SIAPS's regional approach for technical assistance.

In addition to the workshop, SIAPS also coordinated or chaired two symposia, presented sessions as part of multiple symposia, and exhibited two abstracts (one oral presentation and one poster). SIAPS also formally released QuanTB version 2.0.0 and promoted SIAPS tools and resources at the MSH exhibition booth.

Planning for the SIAPS Global TB Conference 2015 is well underway. This past quarter the conference planning committee set the conference dates, secured the conference venue (Conrad Bangkok Hotel in Bangkok, Thailand), and sent "Save the Date" information to key stakeholders. The TB Core team enlisted the help of a training and facilitation expert from MSH who is guiding the conference design to ensure that the objectives of the conference are met by combining the key technical concepts with research on adult learning.

***Objective 2: Capacity for TB pharmaceutical supply management and services increased and enhanced***

SIAPS staff travelled to Cepina, Italy, to facilitate sessions on TB pharmaceutical management at the WHO Course, "Implementing New Stop TB Strategy: Skills for Managers and Consultants (TB, MDR-/XDR-TB, TB/HIV)." The pharmaceutical management training materials were updated to include recent changes in TB control strategy and supply management. The daylong session on TB/TB-HIV pharmaceutical management was attended by 22 participants from 15 countries.

This past quarter, the MSH/CPM hired a training advisor who SIAPS has begun to work with to continue progress on the e-platform for TB pharmaceutical management capacity building.

***Constraints to progress***

Progress on piloting an innovative e-platform for TB pharmaceutical management capacity building has been slowed by the lack of training and capacity building staff to help guide the activity. However, with the recent addition of a new training advisor, this work is expected to progress more quickly.

***Objective 3: Improved utilization of information for TB control decision making***

- The e-TB Manager has been continuously enhanced with general fixes and additional features for improved and expanded use worldwide. New versions have been regularly released. e-TB Manager is currently operating at a total of 2,519 sites in 10 countries. Globally, 3,093 active users are managing 298,757 patients with confirmed or presumptive TB.
- QuanTB version 2.0.0 with new features and significant enhancements was launched during the 45th Union Conference. By the end of the quarter there were more than 130 downloads of

the new version of the tool from the SIAPS website, in addition to more than 600 downloads of previous versions.

- As a part of the collaboration for global forecasting and early warning of anti-TB medicines with GDF (which adopted QuanTB as its official tool for TB medicines data collection and analysis), SIAPS conducted a workshop during the Union Conference to demonstrate QuanTB and share experiences of its implementation and impact in countries. SIAPS has also been providing ad hoc support for GDF staff on quantification, forecasting, and early warning in GDF supported countries.
- The Bangladesh NTP, with support of SIAPS staff, has been using QuanTB on a monthly basis at the central level. Based upon outputs of QuanTB, the NTP has been advised about impending issues and adequate measures have been taken to minimize the problems. By the end of the quarter, there were no reported stock-outs of TB medicines at the NTP central level. Additional information is available in the Bangladesh country update.
- SIAPS is continuing its assessment for the adaptation of the e-TB Manager desktop generic version application for case management that is able to be synchronized with the web version.
- A complete stand-alone downloadable version of e-TB Manager generic version (i.e., not reliant on internet to run) has begun to be developed. Testing for the prototype will continue in the coming quarters.
- Support combining SIAPS, TBCARE, and country funds for adapting, monitoring and implementing e-TB Manager in Azerbaijan, Brazil, Bangladesh, Cambodia, Indonesia, Namibia, Nigeria, Turkmenistan, Ukraine, and Vietnam has been continued.

At the Union World Conference, SIAPS co-chaired and presented a symposium titled, “Next generation of eHealth for TB: systems that communicate.” Government staff and local and international organizations shared experiences from 14 countries. SIAPS presented results from implementing e-TB Manager as the national system for programmatic management of TB in seven countries and QuanTB as the national tool for quantification of TB medicines in six countries. SIAPS also presented its experience using e-TB Manager to identify, monitor, and guide interventions like tailored trainings and IT support to improve performance of MDR-TB health units in a high burden Asian country. When presenting QuanTB, SIAPS highlighted results from the first six months of implementing the tool in six countries, during which time the percentage of countries that had a stock-out of at least one TB medicine decreased from 100% (6/6) to 17% (1/6). Additionally, quantification warning alerts were used to take early action to reduce overstock, avoid medicines expiries, and ultimately save over 899,000 US dollars (USD) in donor and domestic funding in an Asian country.

### *Partner contributions*

Local partners have provided important feedback for system enhancement and development of new features and derivative tools. In countries where SIAPS presence is significant, local partners’ support for system implementation, monitoring, and reporting of key activities has been crucial for gathering successful outputs.

### *Constraints to progress*

There is a lack of strong in-country champions to conduct and monitor e-TB Manager implementation activities (e.g., high turnover or deficiency of local MIS, IT, and TB specialists).

***Objective 5: Improved pharmaceutical services and access to TB products to achieve TB goals***

In October and November, stock status reports were collected and analyzed from Tanzania, Uganda, and Malawi. Country specific reports are under development which will be shared by various stakeholders for further actions.

In Tanzania, SIAPS organized a three-day TB medicines quantification review meeting and oriented members of the newly established TB commodities coordinating committee on use of QuanTB in forecasting first-line and second-line TB medicines, and as an early warning tool. The meeting was held October 22–24, 2014 in Dar es Salaam, Tanzania. A total of 15 participants were oriented, including six staff from the NTLP, three staff from the Medical Stores Department, one staff member from the Pharmaceutical Services Unit, two staff from the National AIDS Control Program, one staff member from the Tanzania Food and Drug Authority, and two staff from John Snow, Inc. (JSI). The meeting objectives were to build the capacity of the newly established committee, review and validate assumptions used for forecasting TB medicines, and analyze the current TB stock status and agree on actions to avert impending problems. The resulting quantification report was used as an annex in the New Funding Model application submitted to Global Fund as part of required supporting documents.

SIAPS also provided technical assistance to the Tanzania NTLP in quantifying bedaquiline-based XDR-TB regimen for a recently identified XDR-TB patient, and collaborated with the NTLP in revising the PSM plan to reflect these changes. In addition, SIAPS supported the NTLP in responding to the Global Fund comments related to a bridge fund application submitted in mid-2014. Finally, SIAPS participated in a three-day meeting organized by SCMS/JSI, and attended by the NTLP and other stakeholders, to review TB medicines logistic management tools and training materials.

SIAPS traveled to Malawi in October to provide technical assistance to the NTP and demonstrate the use of QuanTB as a forecasting tool and early warning system. During this trip, SIAPS trained six NTP staff on how to use the tool and provided support in the quantification of TB medicines requirements for the period of July 2015 to December 2015 using QuanTB. SIAPS then supported the NTP to analyze stock status based on the current number of patients enrolled on treatment and the number of expected cases. The process helped to highlight impending stock-related challenges which the country was advised to immediately address. These included the need to postpone or stagger delivery of some pediatric TB medicines, the need to take immediate actions to avoid expiries of some second-line TB medicines, and the need to expedite the ordering process for some adult first-line TB medicines.

SIAPS participated in the East Central and Southern Africa (ECSA) Health Community 24th Director's Joint Consultative committee (DJCC) and 8th Best Practices Forum (BPF) meeting held in Arusha, Tanzania, December 1–3, 2014. The meeting theme was "Strengthening regional cooperation for better health outcomes." SIAPS staff members attended various plenary sessions

and made a presentation titled, “TB medicines and data management in the ECSA region,” which focused on the SIAPS/ECSA proposed technical approach in improving TB medicines and data management in ECSA member states, the strategy to improve TB data and commodity management, and a proposed implementation plan. SIAPS also participated in the parallel session on control of communicable diseases and demonstrated the ECSA TB supply chain web-based portal developed with SIAPS technical support. Although the portal is still under development, the demonstration created a lot of interest and buy-in among ECSA member countries and beyond. One outcome of this meeting was the adoption of the resolution from the ECSA TB expert committee held in August 2014 on strengthening TB commodities and data management.

Two memorandums of understanding (MOU) signing ceremonies were held in Rawalpindi and Lahore, Pakistan. The events were organized by SIAPS and chaired by the District TB Officer and District Drug Controller for the respective districts. A brief refresher course was done at the start of the event on the referral mechanism and the floor was opened for a Q&A session. The MOU was signed by 115 pharmacies in Rawalpindi and 70 pharmacies in Lahore. The participating pharmacies were introduced to the coordinator from the pharmacy schools to start establishing a relationship between pharmacies and the team who will be undertaking the M&E and data collection work. In addition, SIAPS had an in-person meeting and follow up discussions with IRD on the feasibility of a joint collaboration between SIAPS, IRD, and the Provincial TB Control Program in Karachi. Referrals have started in Lahore and Rawalpindi.

SIAPS conducted a stakeholders’ meeting to disseminate the findings to date from the sentinel sites. A total of 905 adverse drug events have been reported by 1,691 TB and HIV patients. The three most frequently reported adverse events were peripheral neuropathy, rash, and vomiting. Stakeholders agreed that a causality assessment should be done by next quarter to determine if adverse effects reported are directly linked to any of the medicines used for treatment. Other actions to improve data quality and reporting were also agreed upon by stakeholders. SIAPS also developed a request for proposal to adapt the SSASSA and DCAT tools into both an internet-based tool as well as an offline tool with mobile/tablet functionality to improve reporting and data quality. SIAPS is working with its procurement unit to identify a vendor for this activity. Additionally, at the Union World Conference, SIAPS presented an abstract describing its work in patient safety, titled, “Improving Patient Treatment Outcomes for Tuberculosis using a Risk Minimization Based Approach.”

SIAPS launched the document, “Drug use reviews: a practical strategy to ensure the rational use of anti-tuberculosis medicines” at the Union World Conference on Lung Health at the end of October. Additionally, SIAPS developed and facilitated a high-level symposium at the Union titled, “Community-driven psychosocial support: don’t forget medication counselling!” The symposium brought together speakers from five diverse settings and globally recognized personnel as chairs. SIAPS presented two tools that support medication counseling and improved patient care: “Preventing and minimizing risks associated with anti-tuberculosis medicines to improve patient safety” and “Drug use reviews: a practical strategy to ensure the rational use of anti-tuberculosis medicines.” Lastly, SIAPS wrote a piece summarizing the value of the symposium which was published in the global health blog Science Speaks.

SIAPS participated in a workshop titled, “Meeting on preparing for introduction of new TB drugs based on WHO policy and inter-regional workshop on pharmacovigilance for new drugs and novel regimens for the treatment of drug-resistant TB” in Hanoi, Viet Nam, 10–14 November 2014. WHO’s Regional Office for the Western Pacific and the Global TB Programme (GTB) organized the workshop to assist NTPs with strengthening their pharmacovigilance systems. The workshop brought together key stakeholders including government staff, health care providers, technical partners, and donors to discuss collaboration and define roles, particularly with regard to bedaquiline and shorter regimens.

### *Constraints to progress*

- Bangladesh: The activity is on hold in Bangladesh until the position to lead the Drug Utilization Review activity is filled. Originally posted as a consultancy, the team is considering changing it to a full-time position in order to attract candidates.
- Ukraine: Progress in Ukraine has been delayed because the stakeholders are in the process of revising the previously agreed upon objectives. SIAPS staff in Arlington and Ukraine are providing technical assistance to the process.

## **TB Core Add On**

### ***Objective 5: Improved pharmaceutical services and access to TB products to achieve TB goals***

SIAPS continued to provide going support to select NTPs in monitoring TB medicines stock status using QuanTB. In October and November, stock status reports were collected and analyzed from Zambia, Zimbabwe, Kenya, and the Philippines. Country specific reports are under development, and will be shared by various stakeholders for further actions.

Next steps will be to continue to support selected countries in implementing QuanTB as a forecasting and early warning tool, and provide ongoing remote support on use of QuanTB upon request and based on the QuanTB output shared quarterly.

The Philippines has been using QuanTB outputs to guide the final quantification of second-line drugs. Additional updates are included in the country portfolio update.

In Kenya, SIAPS conducted a biannual TB quantification review for 2014/15 in October 2014, where key stakeholders discussed quantification results and TB medicine pipeline data. QuanTB was used to generate the revised estimates for both first-line and second-line anti-TB medicines. Upon agreement on next steps, QuanTB dashboards and order quantities for pediatric medicines were shared with GDF procurement. Fifteen new participants were orientated on QuanTB.

In addition, SIAPS held a meeting with Kenya’s national Health Information System Unit about the urgency to finalize information tool with suggested changes, which is a prerequisite before nationwide sensitization of the tool and new data requirements can begin. SIAPS also provided technical input to TB sections of a tool being developed by HCSM project to support primary

commodity data collection at the periphery. The tool is an enhancement of the ART Electronic Dispensing Tool developed earlier by RPM Plus. As part of support to counties, the tool's functionality is being expanded beyond ART to essential medicines.

- SIAPS provided graphics for the revised LMIS tools to CHS and NTLD to print and disseminate the tools. . This is part of recommendations by the GDF mission in March 2014.
- At the 45th Union World Conference, SIAPS Kenya presented at the joint GDF and SIAPS workshop on “Evidence-based decision making, the Kenya experience.” The presentation highlighted how Kenya used QuanTB as an early warning system to avoid stock-outs during the transition to decentralized governments.

The next steps for Kenya will be—

- Support procurement efforts for TB pediatric medicines from GDF and first-line TB medicines using the 3 million USD set aside by government of Kenya
- Plan for nationwide sensitization for county and sub-county pharmacists
- Print and distribute the LMIS tools (Daily Activity Register and Facility Consumption Data Report and Request Form)
- Verify and validate QuanTB data

At the Union Conference, SIAPS met the South Sudan deputy NTP manager together with the Challenge TB project team. An agreement was reached on how to start SIAPS TB Core work in South Sudan. The original plan was to visit South Sudan in December; however, this was later postponed by the USAID Mission in South Sudan until January 2015. Next steps for South Sudan will be to prepare for a planned visit to South Sudan.

SIAPS conducted short-term technical assistance to Mozambique to collect, validate, and encode data needed for accurate quantification into QuanTB. SIAPS demonstrated QuanTB, comparing it with the existing spreadsheet currently used for forecasting and quantification, during the National Quantification Review meeting of all partners and donors. The National Quantification Committee has decided to adopt QuanTB along with other tools to strengthen the NTP capacity of data analysis for decision making. In the coming quarters, SIAPS will support the NTP on supervisory monitoring visits to provinces and districts, which have faced problems on reporting TB medicine consumption and stocks. SIAPS will also support NTP staff in priority provinces that are in need of additional TB medicine management training of trainers for further replication at the facility level.

## REGIONAL PROGRAMS

### LAC AMI

**Goal:** The key malaria control strategy is for AMI countries to institutionalize national and regional mechanisms to assure a continuous supply of antimalarials, particularly in low-incidence areas.

#### ***Quarter Overall Progress***

AMI countries have continued reporting their stock of antimalarials at central and regional warehouses. Nine countries shared data for the last quarterly bulletin (July–September). The availability of antimalarials in central warehouses has marginally increased from 85% (last quarter) to 86%. SIAPS has concluded the collection of information and finalized the reports in seven AMI countries for an in-depth analysis of malaria pharmaceutical management in the Americas (Honduras, Colombia, Ecuador, Peru, Brazil, Nicaragua, and Guyana). The consolidated regional report will re-orient SIAPS technical assistance.

#### ***Objective 1: Pharmaceutical sector governance strengthened***

Nine states in Brazil are carrying out strategies to close the gaps for an adequate implementation of the malaria control strategies. A workshop to assess the strategies' progress was carried out on the first week of December 2014. During this workshop, all states developed “gap closure plans,” based on the deficiencies identified during the monitoring exercise conducted by SIAPS. During this quarter, a SIAPS senior technical advisor visited national counterparts in Colombia to discuss the terms of reference for implementing a similar intervention in the Colombian departamentos with high malaria incidence.

#### ***Partner contributions***

Data collection for the study on the antimalarial pharmaceutical management situation in Honduras was coordinated with PAHO.

#### ***Objective 2: Pharmaceutical management information available and used for decision making at different levels of the health system***

The technical report on the situation of malaria pharmaceutical management for Honduras was finalized and distributed. Seven national assessment and reports have been completed. During this quarter, SIAPS processed and analyzed the consolidated data. For the next quarter, SIAPS will finalize and distribute the technical report to counterparts.

#### ***Objective 3: Pharmaceutical services improved to achieve desired health outcomes***

SIAPS participated in a regional meeting organized by WHO/PAHO in Paramaribo, Suriname (November 11–13), to discuss strategies to prevent the emergence of ACT resistance in the

Americas. SIAPS hired a short-term consultant in Brazil to systematize the interventions to improve access to malaria diagnosis and treatment in mining camps located in Para and Roraima.

During this quarter, SIAPS organized a meeting in Brasilia, Brazil, to discuss and agree with local counterparts on what activities should be implemented to document the results/impact of the interventions to improve access to diagnosis and treatment in gold mining camps. SIAPS also assessed the situation of malaria pharmaceutical management in the remote areas near Loreto, Peru. A technical report will be shared with AMI partners in the next quarter. Additionally, SIAPS visited Colombia to facilitate a workshop leading to the agreement on the criteria for programming and distributing antimalarials in low incidence areas. This criteria will be immediately used to adjust procurement estimates and for the distribution of medicines to departmental warehouses.



## **West Africa Regional**

**Goal: Facilitate the availability of quality pharmaceutical products especially those related to HIV and AIDS to achieve high level desirable health outcomes in target Western and Central Africa countries.**

### *Overall Quarter Progress*

SIAPS provided technical assistance to the National AIDS Control Program of Togo (PNLS) to deploy the Electronic Dispensing Tool (EDT) in five ART pilot sites selected after the site readiness assessment conducted in June 2014. During a three-day workshop, SIAPS trained six PNLS staff members to be trainers. Then, with supervision of SIAPS staff members, the trainers trained nine dispensers coming from the five ART sites to use EDT for dispensing activities to improve availability of quality data. After the training, the EDT tool was then deployed at the five pilot sites.

SIAPS worked closely with Benin, Togo, and Cameroon to develop country specific approaches for keeping the HIV and AIDS regional dashboard (OSPSIDA.org) up to date and user friendly. In Benin, The Global Fund has approved the recruitment of three PNLS data clerks to enter data into OPSIDA. In Cameroon, the USAID health team has allowed SIAPS Cameroon to support the national AIDS Control Program to organize a workshop with all regions for data validation and data entry into OPSIDA. While in Togo, SIAPS West Africa supported the recruitment of a PNLS data clerk help enter data into OPSIDA.

To ensure the sustainability of the regional dashboard and allow its roll out in the rest of West African countries, SIAPS initiated strategic discussions with West African Health Organization (WAHO) on how to prepare for transferring the dashboard to the organization by September 2015. A letter was sent to WAHO to describe all steps required to make the handover successfully. WAHO Director General has responded positively and assigned a focal person to work in close collaboration with SIAPS on this transition.

To coordinate their interventions in Niger where both programs are active, SIAPS and SOLTHIS (Solidarité Thérapeutiques et Initiatives contre le VIH/SIDA) held a meeting to review what each program achieved in 2014 and what activities were planned for 2015. Despite the current support from SIAPS and SOLTHIS, Niger appears to be still facing lot of challenges in commodity management because the support from both programs is quite limited due to budget constraints.

### ***Objective 1: Increase the use of pharmaceutical management information for decision making at national and regional levels***

SIAPS provided technical assistance to the PNLS to deploy the Electronic Dispensing Tool (EDT) in five ART pilot sites. Training for EDT implementation was in two stages—the first session was training PNLS staff to become trainers (TOT) for other staff members and be in charge of EDT activities in Togo. The second stage was training for dispensers from the five sites selected for pilot implementation.

The TOT was held December 1–3, 2014, at the PNLS office for the program procurement and supply chain (PSM) officer, the Information Technology specialist from Monitoring and Evaluation Unit, and four other PSM staff members. With support from SIAPS team, the training followed the same methodology as the TOT. Each identified pilot site sent two staff members for training, except the nongovernmental Espoir-Vie-Togo which sent only one dispenser. After the training, an overall evaluation of EDT functions was given to each participant and the results were reviewed during a group discussion.

Following the conclusion of dispensers' training, the SIAPS team along with the Togo PNLS staff scheduled site visits to four sites out of the five pilot sites. EVT Togo site visit was postponed until additional training and practice on EDT use is provided to the dispenser.

SIAPS worked closely with Benin, Togo, and Cameroon to develop country specific approaches required to keep the OSPSIDA HIV and AIDS regional dashboard up to date and make the tool user friendly.

In Benin, SIAPS supported National AIDS Control Program to develop a scope of work for the recruitment of three data clerks. The scope of works was submitted to the Global Fund which approved them. The clerks have been recruited and trained in December 2014 by the OSPSIDA country managers in Benin with remote support from SIAPS during a workshop organized in Cotonou. As of December 31, 2014, at least 80% of data from March to July have been entered into OSPSIDA and published and at least 70% and 40% of LMIS data for respectively August and September have been entered into OSPSIDA and published. This represents a large step forward as of September 30, 2014, only January 2014 data have been entered and published.

In Cameroon, the USAID country health team allowed SIAPS Cameroon to support the national AIDS Control Program to organize a workshop with all regions for data validation and data entry into OSPSIDA in January 2015.

Because of the lack of logistics data at central level, the regional workshop will offer a major opportunity to get and validate all data that are not submitted yet to National AIDS Control Program by regions.

In Togo, SIAPS supported the recruitment of a data clerk based at the PNLS to assist in data entry into OSPSIDA. The data clerk has been trained by OSPSIDA country manager in Togo in November 2014 with remote support from SIAPS. As of December 31, 2014, LMIS data from March to October 2014 had been entered into the system and published, whereas by September 30, 2014, (before the recruitment of data clerk) only January and February data had been entered and published.

### *Partner contributions*

The Global Fund's assistance with hiring additional data entry employees for Benin greatly contributed to updating and maintaining the regional dashboard.

### *Constraints to progress*

Minor challenges encountered during EDT training include the following—

- The meeting was slightly delayed due to conflicting work projects of the PNLS
- Lack of sufficient computers for all training participants for EDT practice (participants had to work in groups of two with laptops and share their working time).
- The EVT Lome dispenser did not perform as well as his peers during the training—this might affect the start date of the pilot in this site.

Despite significant progress made with Benin, Cameroon, and Togo to keep OSPSIDA up-to-date by developing country specific approach, we are still facing challenges with the two remaining countries where OSPSIDA has been deployed. These countries (Burkina Faso and Niger) have not been very responsive to working together with SIAPS to contribute to updating data to keep OSPSIDA current and more useful as early warning system.

### ***Objective 2: Improve coordination among regional and national stakeholders involved in ensuring ARVs and HIV and AIDS commodity availability***

To ensure the sustainability of the regional dashboard and allow its rollout in the rest of West African Countries, SIAPS initiated strategic discussions with West African Health Organization (WAHO) to prepare for transition and handover of the dashboard operation to WAHO by September 2015. SIAPS suggested the following steps and timeline to ensure a successful handover. They include—

- Appoint a WAHO focal person for dashboard—December 2014
- Agree on transition dates, roles and responsibilities—January 2015
- Assessment of the e-information management capacity (logistic and HR) and gap for WAHO to be able to handle this role.
- Identify critical TA areas during the initial phase on the EWS management by WAHO (February to April 2015)
- Training of WAHO team on dashboard— January 2015
- Regional stakeholders meeting facilitated by WAHO and SIAPS – February 2015
- Final handover to WAHO—September 2015

WAHO Director General has responded positively and assigned the Professional Officer in charge of essential medicines and vaccines program to work in close collaboration with SIAPS on this transition and handover.

To coordinate their interventions in Niger where both programs are active, SIAPS and SOLTHIS (Solidarité Thérapeutiques et Initiatives contre le VIH/SIDA) held meeting where each project has presented its achievements in 2014 and planned activities for 2015. Despite the current support from SIAPS and SOLTHIS, it appears that Niger is still facing lot of challenges in commodity management because both supports are really limited and not able to fill gaps encountered.

*Partner contributions*

WAHO is one of the key partners SIAPS is working with since we started developing the HIV and AIDS regional dashboard to set an early warning system to improve products availability in West African Region.

SIAPS has established strong relationship with SOLTHIS in countries where both projects are active.

## COUNTRY PROGRAMS

### Angola

**Goal: Improved availability of quality products for effective pharmaceutical service delivery and better health outcomes**

#### ***Overall Quarter Progress***

During this first quarter of FY15, SIAPS facilitated an ICC committee meeting for the revitalization of the Sub-commission for Logistics. SIAPS continued to participate in the finalization of the National Essential Medicines List (NEML) as the secretariat of an ad-hoc committee within DNME by collecting the missing data from different public health programs and classifying the retained essential medicines by type of health facilities. The national pharmaceutical sector strategic plan report was presented to DNME for final inputs and SIAPS supported and participated in the two-day conference organized by the Pharmacy Council of Angola under the patronage of MOH, October 7–8, 2014. The conference coincided with the first Angolan Pharmacy Week to mark the first anniversary of the establishment of the Pharmacy Council of Angola. More than 600 people attended the opening ceremony of this conference, which was officiated by the Secretary of State for Health and was closed by the Minister of Health. SIAPS facilitated two presentations in selection and quantification of medicines and in best medicines warehousing practices.

During this quarter, a pre-service training in pharmaceutical management was carried out at Universidade Privada de Angola (UPRA) under the leadership of DNME. In total, 32 final year students and 7 facilitators (4 from DNME, 2 from UPRA, and 1 from SIAPS) participated in this five-days training, which was officially opened and closed by the University Rector in presence of DNME National Director. SIAPS continued to provide technical support to INLS to monitor stock levels of ARVs and other HIV and AIDS commodities in collaboration with INLS logistics unit and UNDP/Global Fund principal recipient. At one review meeting, participants provided recommendations to INLS management on findings of ARVs stock analysis done by SIAPS. In addition, SIAPS continued to provide TA support to INLS to monitor stock levels of ARVs products in all 18 provinces and in the central procurement agency for medicines and medical supplies (CECOMA).

One PPMRm quarterly report was elaborated and submitted to PMI Washington and to Global Fund Geneva (through the national technical coordination unit of Global Fund,) and one semi-annual end user verification was carried out in 5 provinces—Luanda, Uíge, Malange, Benguela, and Huila. In total SIAPS visited 5 provincial warehouses, 10 municipal warehouses, and 27 health facilities.

SIAPS conducted a field visit to Benguela Province to get baseline data on the current HIV and AIDS health commodity situation to assist the provincial team with identifying, priorities and design strategies for the coming period. SIAPS continued to participate in the finalization of the National Malaria Control program concept note for the new funding mechanism of Global Fund

as a technical member. SIAPS also participated in the national dialogue of all the stakeholders in the areas of HIV and AIDS, malaria, and tuberculosis control as a prerequisite to provide inputs on the Angola concept notes to the Global Fund. This workshop was organized by the Ministry of Health and the Country Coordination Mechanism for Global Fund and was attended by a significant number of participants including 4 Secretaries of State, representatives of WHO and USAID, the Vice Governor of Luanda Province in charge of social affairs, national public health programs directors, and civil society. Under the coordination of the National Reproductive Health Program and in collaboration with Pathfinder and UNFPA, SIAPS participated in forecasting of family planning commodities and the forecasted quantities were submitted to the National Public Health Department for approval. Finally, in collaboration with USAID | Deliver, SIAPS facilitated the issuance of necessary documents for receiving family planning, mosquito nets, ACTs, and other malaria diagnostic products, and ensuring exemption of customs duties.

### ***Objective 1: Pharmaceutical supply chain system governance strengthened***

In the first quarter of FY15, SIAPS provided technical and logistical support to DNME to organize the bimonthly Interagency Coordination Committee/Revitalization's (ICC/R) logistics, procurement, and operations subcommittee to facilitate information sharing, optimizing utilization of resources, and follow-up on the recommendations of the previous meeting. In this quarter, 1 out of 2 meetings were organized since the ICC meeting of October was substituted by the events of Angolan Pharmacy week. SIAPS was also the secretariat of an ad-hoc commission constituted by DNME in the final review of the National Essential Medicines List. The commission collected all the suggestions from public health programs and incorporated them into the final draft that is pending final approval by MOH. The same list was presented in the routine Advisory Council of MOH in December. The mid-term review of the Pharmaceutical Strategic Plan was submitted this quarter to DNME for final inputs and all changes were incorporated by the consultant. The document was then translated into Portuguese. The DNME work plan for 2015 was also finalized and translated and sent to DNME for final review and input.

SIAPS used the opportunity of the ICC/R meeting to present its 2014 achievements and continued its advocacy efforts to get buy-in of principal stakeholders in the development of the national supply chain strategy. Participants expressed their support to this important tool that is in line with the National Health Development plan 2012–2025. SIAPS will continue to follow up with DNME to assume the full leadership and ownership throughout the entire process of this strategy.

### ***Constraints to progress***

The biggest challenge this quarter was other pending activities and priorities inside the MOH that slowed the finalization of the key documents (NEML, national supply chain strategy).

### ***Partner contributions***

MOH/DNME provided the facilities for the ICC meeting at PNME. MOH/DNME provided staff to review the report of mid-term review of the Pharmaceutical Strategic Plan and DNME 2015

work plan and to finalize the NEML.

***Objective 2: Local capacity for pharmaceutical management enhanced***

During this quarter, the program organized a pre-service training for 32 final-year students from the Faculty of Pharmacy at UPRA University in Talatona, Luanda. SIAPS adapted training materials in pharmaceutical management for the students in collaboration with facilitators from SIAPS, Universidade Privada de Angola (UPRA), and DNME. For ownership, SIAPS worked closely with DNME and UPRA facilitators to revise and adapt the materials. The program started to adapt other training material from other countries in pharmaceutical management for HIV and AIDS control program. As part of the first-ever Angola Pharmacy Week, the SIAPS Angola team facilitated two sessions for more than 600 participants in the conference with the theme “Access to pharmacists is access to health.” The two-day forum was organized by the Pharmacy Council of Angola, opened by the Secretary of State for Health Dr. Alberto Masseca, and closed by the Minister of Health Dr. José Vieira Dias Van-Dúnem. SIAPS will continue to provide its technical assistance to the MOH to implement key symposium recommendations such as setting up a national medicine registration system and advocate for defining the national pharmaceutical pricing policy.

***Partner contributions***

The Government and UPRA made facilitators available for the pre-service training (free of charge) while UPRA provided the training facilities. Students paid their own transport.

***Objective 3: Information for pharmaceutical management decision making promoted***

In line with the national supply chain strategy and the work plan of the National Essential Medicines Program (PNME), SIAPS proposed in FY15 to support MOH through DNME, PNME, CECOMA, and national public health programs to conduct a comprehensive situational analysis on the current bottlenecks that negatively affect LMIS, facilitate a forum to discuss findings from the situation analysis, and propose a way forward to improve LMIS. SIAPS began discussions with relevant LMIS technical staff at HQ.

During this quarter, SIAPS conducted EUV activities in five selected provinces—Luanda (Belas and Kilamba Kiayi municipalities), Uíge (Uíge, Negage, and Damba municipalities), Malange (Caculama and Cancandala municipalities), Benguela (Benguela, Lobito and Balombo municipalities) and Huila (Lubango, Humpata, Chibia municipalities). SIAPS collaborated with MOH DNME, NMCP, INLS, and the RH/FP program to conduct this biannual EUV survey and with participating government staff to regularly monitor case management and availability of selected malaria, HIV and AIDS, RH/FP, and other essential medicines in those provinces covering the provincial and municipal level.

During the field visit to Bengueela, more specific data on the current logistic situation of HIV and AIDS commodities were collected to serve as baselines to inform SIAPS actions in this PEPFAR target province. SIAPS met the HIV and AIDS provincial team and findings were

shared with USAID mission.

SIAPS continued to support the NMCP in monitoring ACTs, rapid diagnostic tests (RDTs), and sulphadoxine-pyrimethamine used in intermittent preventive treatment for malaria at national and in all 18 provinces. A summary of the situational analysis showing some stock-outs at provincial warehouse level was presented to NMCP leadership. Following this finding, NMCP prepared a distribution plan for CECOMA to distribute the available stock in selected provinces. Although not sufficient, the distribution of this stock helped in preventing deaths due to malaria, including pregnant women and maternal and child deaths. SIAPS provided TA to NMCP to submit the quarterly PPMRm report to USAID | DELIVER that is compiled in all PMI countries. The same report was shared with the technical management unit (Unidade Tecnica de Gestão) for Global Fund at national level. Discussions were held with CECOMA to mobilize the necessary funds to launch an emergency order for ACTs. This emergency order has been approved and will be done in the first quarter of 2015.

In the efforts to ensure an AIDS-free generation through commodity security for HIV and AIDS commodities, SIAPS provided its technical support to INLS to revise its stock status and to project the available stock to prevent any stock-outs or excess in the future. Findings and recommendations were discussed in a meeting organized by INLS and in the presence of UNDP/Global Fund principal recipient for HIV and AIDS commodities in Angola.

#### *Partner contributions*

The Government (DNME, NMCP, and provincial teams) participated in EUV activities with staff. NMCP collaborated on the PPMRm.

#### ***Objective 4: Pharmaceutical service to achieve desired health outcomes improved***

During this quarter the program continued to provide support to Malaria TWG to revise the national forecast and develop supply plans to ensure that antimalarial products are purchased according to the forecasted data.

During the reported period, SIAPS met with CECOMA to discuss current priorities regarding the newly promulgated presidential decree 268/14 as of September 22, 2014. One major priority is to support CECOMA in developing annual and strategic work plans that will reflect its new expanded role and attributions. SIAPS continued to provide TA in monitoring selected key performance indicators to improve CECOMA warehouse management and distributions systems and to update the developed dashboards. SIAPS also helped facilitate weekly technical meetings with CECOMA key staff and leadership.

In efforts to eliminate malaria in Angola, SIAPS participated in the finalization of the NMCP concept note to be submitted to Global Fund in line with the new funding mechanisms. In coordination with UNFPA, Pathfinder, and the MOH/Reproductive Health program, SIAPS participated in the 2015 national forecasting of contraceptive products. The availability of these commodities will contribute to the national efforts to end preventable maternal and child deaths.



The final results were submitted to the national public health department for approval. SIAPS assisted USAID | Deliver to obtain the necessary letters to allow PMI-funded products into Angola without paying the customs duties and to facilitate their reception at the airport. The tentative date of the arrival of these products is set in mid-January 2015. The same support was also provided for long lasting insecticide-treated nets.

A specific meeting was held with INLS Deputy Director to get the approval for the HIV and AIDS quantification technical working group (TWG) and its terms of reference and to seek the director's approval in allowing SIAPS to work with INLS's HIV and AIDS center of excellence (Esperanca Hospital) to analyze patients and logistics data for the past 12 months. It was agreed that SIAPS will work with the hospital team to propose the approach of this analysis to INLS management. It is anticipated that findings from this analysis will provide evidence-based information that will improve program and patient management at large. INLS expressed also its need for SIAPS to provide its expertise in medicine safety and pharmacovigilance of HIV and AIDS commodities and in preventing viral resistance that lead to treatment failure and increased deaths due to HIV and AIDS. Two monthly physical inventories of family planning products were carried out at CECOMA in collaboration with UNFPA, Pathfinder and MOH/RH Program.

### *Constraints to progress*

Administrative delays in securing approval of TWG establishment remains the major constraints.

### *Partner contributions*

UNFPA, Pathfinder, and DNSP/RH Program participated to the inventory activities.

## Bangladesh

**Goal: Improved availability of quality pharmaceuticals and effective pharmaceutical services to contribute achieving desired health outcomes**

### Overall Quarter Progress

SIAPS has been actively engaged in supporting the Procurement and Logistics Management Cell (PLMC) in the Ministry of Health and Family Welfare (MOHFW) to oversee, monitor, and coordinate the procurement and supply chain functions, resulting in timely completion of procurement processes for all procuring entities including the Directorate General of Family Planning (DGFP) and the Directorate General of Health Services (DGHS) during 2014-15. The MOHFW has submitted the proposal to the relevant ministry to create the permanent post and office set up for PLMC, headed by the additional secretary for development and medical education. This will be a major step toward creating a sustainable PLMC.

There was a good progress in SIAPS' advocacy with the MOHFW in handing over the Supply Chain Management Portal (SCMP) as part of long-term sustainability. MOHFW assigned three officials to guide the hand over and is processing the paperwork to make this permanent.

SIAPS made big strides in extending the scope of the service delivery points (SDPs) to contribute to the nationwide contraceptive security system, i.e., prevention of stock-outs, through an enhanced SDP module in the DGFP Supply Chain Information Portal (SCIP). A government circular was issued in December 2014 on a national "DGFP Inventory Tools Management Committee" headed by the additional director (drugs and stores)/Central Warehouse, DGFP. The circular included terms of reference focusing on the operation and management of tools. It was an immense milestone toward sustainability of key SIAPS-supported system strengthening tools in the DGFP.

As part of addressing long-term sustainability by increasing the capacity of the Government of Bangladesh (GOB) officials, SIAPS helped the MOHFW develop a cadre of DGFP master trainers who now cover all 64 districts and 488 sub-districts (upazilas), providing troubleshooting support to the upazila and other health-service levels, with the result that, by November, 97% of DGFP logistics reports from the upazila level were directly uploaded.

Over the past year, SIAPS assisted Directorate General of Drug Administration (DGDA) to secure associate membership in the WHO International Drug Monitoring Center by helping the DGDA establish a working relationship and complete the requirements. In December, DGDA was admitted as the 120th full-member country of the WHO program for drug monitoring, which may be considered a big success for strengthening Bangladesh's health regulatory system.

To continue contributing to Ending Preventable Maternal and Child Deaths (EPMCD), SIAPS completed an assessment on strengthening systems and hospital services in Khulna Shishu Hospital (private hospital). A technical assistance package agreed upon between SIAPS and the hospital included a hospital cost share.

As part of procurement and supply chain management capacity-building initiatives for Government officials, SIAPS facilitated regional training/workshops on the MOHFW *Procurement Operations Manual* (POM), the standard tender document of the framework agreement, and SOPs for managing TB medicines and supplies.

The mid-term 2014 review of the HPNSDP (Health, Population and Nutrition Sector Development Program) 2011-16 recognized SIAPS' technical assistance and support to the MOHFW and its key directorates. The review highlighted progresses in supply chain, drug regulatory functions (e.g., National PV Program), associate membership in WHO Uppsala Monitoring Center, and capacity building in Good Manufacturing Practices (GMP). The independent mid-term review team identified the SIAPS-supported tool SCMP as a “game changer” in improving procurement efficiency.

***Objective 1: Supply chain management systems of the MOHFW and component procuring entities strengthened***

SIAPS has been playing a vital role to strengthen the PLMC with two full-time, embedded advisors to ensure effectiveness and efficiency in procurement and supply management. With SIAPS advocacy, the MOHFW has decided to create a permanent office for the PLMC, including space, equipment, and full-time staff, and has submitted the proposal to create permanent positions to the relevant ministry. In this quarter, SIAPS facilitated two meetings within PLMC in which several important decisions were made and then implemented accordingly. The PLMC intervention expedited the signing of a memorandum of understanding between the Engineering Staff College, Bangladesh (ESCB) and SIAPS. ESCB will then facilitate procurement and supply chain management trainings for the managers in the Government health systems in the coming year. The training module has also been reviewed by PLMC and ESCB. The PLMC, as a coordinating body for procurement and supply management, issued a government order on December 23 to the civil surgeons and upazila health and family planning officer (UH&FPO) asking for a report on destruction and disposal of expired and damaged medicines and products to speed up the process.

The technical working group for developing a standardized list of medical equipment for 500-bed hospitals has come to a consensus with clear guidelines for the next steps. Several workshops to orient the civil surgeons and UH&FPO have been conducted in seven divisions. The additional secretary and joint secretary from PLMC/MOHFW attended all these workshops, demonstrating high-level support for this initiative.

SIAPS advocacy with PLMC was a big success in addressing the sustainability of the SCMP. At this time, MOHFW has engaged three officials from PLMC and given them the responsibility to maintain the SCMP. These staff members have started working, and PLMC has initiated the paperwork to earmark these positions.

From March to September 2014, SIAPS piloted its new SDP module, which was then followed by a result-dissemination workshop in September, engaging pertinent stakeholders. As part of the national-level scale-up of the SDP module, SIAPS facilitated several meetings and workshops with DGFP and USAID, which resulted in the following major decisions, with all

recommendations to be incorporated during the upgrade of the Warehouse Inventory Management System (WIMS).

- A unified item code to be used for all tools, and an orientation to be given on updated tools
- Follow-up meetings with a small ad-hoc group will be arranged when required
- Establishment of a national-level committee from the DGFP for close monitoring of the SDP scale-up

Two follow-up meetings were held at the DGFP Central Warehouse to accelerate the SDP module scale-up. A notification was issued to upgrade the WIMS with a reduced number of items in the new inventory list (297 items instead of 939). A DGFP Inventory Tools Management Committee has been formed for the purpose of managing the DGFP SCIP (within SCMP).

SIAPS conducted two joint monitoring visits with DGFP officials to address logistics-related issues such as non-functioning inventory software, disposal of unusable medicines and products, logistics reporting errors, disorganized storerooms, post-training action plan follow-up, management of SIAPS-provided storage equipment, etc. As of December, SIAPS assisted the DGFP and 254 upazila FP stores to destroy obsolete and unserviceable items, which resulted in freeing approximately 18,000 square feet of storage space.

### *Constraints to progress*

- Frequent transfer of MOHFW logistics personnel to other departments
- Delay in funding the national TB program's (NTP) Internet modem bills after SIAPS transitioned Internet modems to government counterparts
- Lack of regular and timely submission of quarterly TB medicine reports by peripheral TB sites
- Overlapping of different training programs and engagement of NTP personnel in other activities, which delayed the regular monthly Procurement and Supply Unit meeting
- Lack of adequate motivation for GOB officials to use new technologies
- Lack of experience and technical knowledge for execution of operational activities due to frequent turnover of GOB staff

SIAPS continues to advocate within the ministry and its key entities to overcome these constraints. SIAPS trained the GOB officials and organized various knowledge sharing activities.

### *Partner contributions*

NTP; WHO; Global Fund; BRAC; Damien Foundation; Health, Education and Economic Development; LEpra; and district health authorities along with divisional TB experts collaborated on TB quantification using QuanTB

## ***Objective 2: Systems for evidence-based decision making established***

SIAPS has identified five parameters to assess the site performance of the Upazila Inventory Management System (UIMS) and has enabled the eLMIS to generate automatic reports. Initial analysis shows that around 92% of total sites were maintaining high data-quality standards (timeliness, completeness, and accuracy) in November 2014. Direct logistics data uploading to the web-based DGFP/LMIS through UIMS has improved and contributed to prompt decision making at all levels.

SIAPS analyzed quarterly TB cases reported to NTP through e-TBM and those reported through the paper-based system. Observed variations in the number of reported cases were presented to the NTP for necessary actions. SIAPS will continue to support NTP to strengthen its reporting systems and set up strong mechanisms for quality control of the data.

SIAPS facilitated a workshop on routine reporting requirements for drug-resistant TB for NTP and identified gaps in the reporting system. A technical working group was formed to review and update the recording and reporting formats for MDR case management. In addition, a joint action plan was developed to strengthen the e-TBM system and to enhance the performance of MDR TB sites. NTP requested SIAPS cover all seven MDR TB sites with e-TB Manager (e-TBM) and start the medicine module to regularly monitor MDR TB medicines. It was also decided that NTP should issue a letter to civil surgeons in the 20 districts where e-TBM coverage is complete telling them to submit both the original TB quarterly report and the version of the same report generated by e-TBM, including medicine reports, in the first quarter of 2015. Eventually, no dispensing will be done without submission of the quarterly medicines report, thus encouraging the reporting rate to reach 100%.

The World Bank formally requested USAID to engage SIAPS in introducing an assets management system in the SCMP platform. In response, SIAPS organized two technical sessions with the World Bank, MOHFW, and USAID, and assisted the World Bank to prepare the concept paper.

SIAPS also worked with the USAID Routine Health Information System (RHIS) initiative team to share experience implementing HIS tools and identify gaps through joint field visits and contributed to the concept paper for strengthening the RHIS. SIAPS shared experiences piloting the SDP dashboard module with USAID implementing partners and laid the groundwork for future scale-up to the entire country in 2015.

SIAPS facilitated a brief technical session with DGFP on cross data-validation for RH commodities (HMIS and LMIS data). Next steps include forming a small technical working group to develop a technical brief on the methodology to assess and improve the quality between performance and distribution data available in routine reporting systems (paper-based MIS forms and eLMIS and Service Statistics Software). SIAPS also drafted a concept paper on DGHS LMIS to be shared with government and other relevant stakeholders for their technical inputs. The concept paper will serve as a working document for DGHS and SIAPS to strategically implement the DGHS/LMIS.

The SIAPS team worked with the Bangladesh Country Coordination Mechanism (BCCM) to undertake a requirement analysis for developing its web site, with BCCM providing all the materials to SIAPS for incorporation in the web site.

Based on lessons learned working in collaboration with MaMoni Health Systems Strengthening Project, SIAPS worked with the national technical working group on priority medicines and developed logistics reporting forms for district, upazila, and SDP levels. The reporting forms were shared with the additional director general and director MIS of DGHS.

SIAPS was asked by USAID to help improve the oxygen supply system, warehouse management, and HMIS systems for Khulna Shishu Hospital (KSH). The final assessment on improving the oxygen system at KSH was completed and an agreement for cost sharing was made.

### *Constraints to progress*

- There are still gaps in the e-TBM reporting system, especially TB 11, TB 12, and MDR TB case reporting, therefore continued support by SIAPS will be required
- Introduction of DGHS LMIS was delayed because of using the platform of DHIS 2 shared by the director, MIS, DGHS

### *Partner contributions*

MaMoni-HSS and SIAPS collaborated on the pilot assessment and developing inventory management forms for DGHS.

### ***Objective 3: Pharmaceutical regulatory systems strengthened***

As a part of the pilot implementation process for PharmaDex, SIAPS provides assistance to DGDA officials to build their capacity in the drug registration review process of Common Technical Document (CTD)-based dossiers. Two trainings (October and December) were conducted for 39 DGDA officials, with a focus on how to review the quality module (part 1) of CTD-based dossiers for medicine registration. The training focused on outlining the requirements that DGDA needs in order to assess the active pharmaceutical ingredients (APIs) component for the manufacturer of the finished drug product. The structure of the exercise emphasized the most critical areas to be assessed for the registration of medicines of good quality and effectiveness.

A consultative workshop was facilitated by SIAPS for 14 representatives of the top manufacturers in the pharmaceutical industry in November. The objectives of the workshop were to provide an orientation on the concept of CTD-based dossier submission for medicine registration and DGDA CTD guidelines and to conduct user acceptance testing and an interactive session on PharmaDex for the participants to obtain feedback and suggestions.

SIAPS assistance to the DGDA to implement a pharmacovigilance (PV) system in selected hospitals and pharmaceutical companies resulted in a functional national center in Bangladesh.

PV awareness was expanded from 20 to 30 hospitals, and covers 30 pharmaceutical companies to maximize the submission of ADR reports to the center. Following the two-day workshop on strengthening PV facilitated in September, an additional 100 ADR reports have been received by the ADRM Cell. Since 46 ADR reports have been uploaded into VigiFlow and further committed to the WHO database, DGDA has secured full membership in the WHO Uppsala Monitoring Center in Sweden and is now the 120th member.

SIAPS and ADRM Cell members visited three hospitals to meet with hospital directors and focal persons on the initiative and progress of adverse event reporting activities at DGDA. Additionally, a presentation on “Strengthening PV Monitoring in Bangladesh” was made by SIAPS at the hospitals to an audience of more than 60 doctors and nurses, and ADR forms were distributed. Another visit was also made to the NTP to discuss the strategy to include selected MDR-TB sites in PV activities. SIAPS also facilitated a half-day workshop in Chittagong and Rajshahi Divisions at the Medical College Hospital in December to highlight activities and functions of an ADR cell.

SIAPS assisted the DGDA to update their current website to a web portal which will enable DGDA field inspectors to upload post-marketing surveillance reports during pharmacy site inspections onto the website. The content management team (CMT) serves as the TOT and are obligated to continue to upload updated data to the website. A workshop was facilitated by SIAPS for the CMT to identify the existing challenges encountered during data upload, explore practical solutions, and acquaint them with effective data management strategies. As part of capacity building of the DGDA inspectors for accurate data entry and reporting, a two-day workshop was conducted in two batches for 70 officials in October. The workshops provided feedback directly from the users for the refinement of the portal and addressed the majority of the issues that arise during data entry such as lack of standard national ID for each registered pharmacy and duplication of licenses for pharmacy stores.

SIAPS also procured 35 desktop computers, modems, and printers for the DGDA. Ten computers will remain at the DGDA in Dhaka to be used primarily for PV, while the remainder will be distributed throughout the country to be used by the DGDA drug officers in the field.

### *Constraints to progress*

- Development of SOPs for ADRM Cell and ADRAC to improve their functions in ADR reporting depended on finalizing the PV guidelines which are still under review
- DGDA field inspectors lack or have outdated computers to effectively input data into the portal; this was remedied by the procurement of new computers by SIAPS

## Burundi

**Goal: To strengthen the capacity of key institutions (PNILP, DPML, CAMEBU and districts) to reduce mortality and morbidity due to malaria through strong case management and availability of malaria commodities.**

### ***Overall Quarter Progress***

Key institutions involved in reducing mortality and morbidity due to malaria made strides toward improving organization structure, governance, leadership and accountability; strengthening the supply chain mechanism for malaria commodities; and enhancing malaria services. To strengthen governance and leadership, SIAPS provided technical and logistics assistance to the National Malaria Control Program (*Programme National Intégré de Lutte contre le Paludisme*, PNILP) to develop the Concept Note for a Global Fund grant. SIAPS supported four of eight in-country workshops on the Concept Note, funded a trip for a PNILP staff member to attend a peer review workshop on country concept notes in Kampala, Uganda, and hired an international consultant to guide the concept note development process. The Global Fund has approved the designation of the PNILP as the principal recipient for Global Fund malaria grants under the new funding mechanism. This is a major accomplishment for both SIAPS and the PNILP.

SIAPS assisted the PNILP in conducting the Roll Back Malaria partners' quarterly meeting. Thus far, three Roll Back Malaria partners' coordination meetings have been conducted for the year 2013-14. The meeting established priorities and a plan for the fourth quarter of PNILP.

To strengthen the national supply chain, SIAPS assisted the PNILP and Burundi's Central Medical Store (*Centrale d'Achat des Médicaments Essentiels, de Dispositifs Médicaux, de Produits et Matériels de Laboratoire du Burundi*, CAMEBU) in monitoring stock levels at the central level and producing a procurement plan and monitoring report for malaria commodities. Regular stock monitoring allowed the PNILP and CAMEBU, with SIAPS's support, to anticipate prospective stock-outs of rapid diagnostic tests (RDTs) for adults and accelerate expected PMI deliveries in the country. SIAPS assisted the PNILP in securing an importation waiver for sulfadoxine-pyrimethamine (SP) from the Directorate of Pharmacies, Medicines and Laboratories (DPML) for the introduction of intermittent preventive treatment for malaria in pregnancy (IPTp) in Burundi.

SIAPS assisted the PNILP in developing terms of reference for the National Quantification Committee, which will serve as the platform for effectively strengthening and supporting regular forecasting and supply planning exercises so as ensure an uninterrupted supply chain with appropriate quantities of malaria products. The establishment of the committee will increase the country ownership of forecasting and supply planning exercises for malaria commodities.

SIAPS provided technical assistance to the PNILP to analyze end-user verification and supportive supervision data. Data were collected during supportive supervision visits to all 45 district stores and 643 facilities during two rounds of supervision visits in July and September 2014. These data were compared a nationally representative sample from the March 2014 joint SIAPS and Supply Chain Management System (SCMS) supply chain management assessment.



Based on preliminary findings, the supply chain recorded improvements in stock management and reporting at the district and health center levels as stock accuracy increased from 71% to 88%, and 100% of health facilities completed and submitted logistics management information systems (LMIS) reports.

Additionally, malaria services indicators improved. The availability of malaria standard treatment guidelines (STGs) in health centers rose from 40% in March to 62% during the supervision visits. Measuring the percent of prescriptions that comply with malaria STGs relies on the accuracy and completeness of facility registers. While challenges still exist in recording patient information in registers, data suggests that the percent of prescriptions that comply with malaria STGs might also have improved.

SIAPS continued to assist the PNILP to implement community case management (*Prise en Charge Communautaire a Domicile du Paludisme, PECADOM*) in two health districts: Gashoho and Gahombo. Overall, SIAPS reached its targets for the whole PECADOM implementation period: 88% of children under five years of age were seen by community health workers within 24 hours of the onset of fever, and of those with positive RDT, 91% were treated with ACT within 24 hours of the onset of fever. The target for both indicators was 90%. During the quarter, SIAPS transferred PECADOM activity to the Integrated Health Project Burundi.

### ***Objective 1: Improved leadership and governance for the PNILP***

SIAPS continued to assist key Ministry of Health (MOH) institutions involved in combatting malaria to strengthen their organizational structure and capacities related to governance, leadership, and accountability.

In October 2014, SIAPS helped the PNILP to conduct the quarterly coordination meeting for Roll Back Malaria partners. The meeting aimed to assess the progress of the PNILP's concept note development, evaluating PNILP achievements, setting priority actions and planning for PNILP Q4 and major challenges and prospects for 2015. SIAPS collaborated with the PNILP to present preliminary findings of the supportive supervision conducted from July to September 2014 to Roll Back Malaria partners. Médecins Sans Frontières (MSF)/Belgium shared their experience in the use of injectable artesunate in the treatment of severe malaria in Kirundo province, including care in hospitals and health centers, as well as referral mechanisms. The Africa Indoor Residual Spraying (AIRS) project collaborated with the PNILP to present preliminary results of the entomological survey conducted on mosquitos in the insectarium. Results covered efficiency and identification of species, their role in the transmission of malaria, and their resistance to insecticides. The PNILP presented a plan to scale up first-line treatment of severe malaria with injectable artesunate.

Within the context of seeking to become a Global Fund principal recipient under the new funding mechanism, SIAPS collaborated with the USAID-funded Leadership, Management, and Governance Project to assist the PNILP in developing the concept note to be submitted to the Global Fund to apply for a grant under the New Funding Model. SIAPS technically and logistically assisted the PNILP to conduct four of eight workshops within the framework of finalizing the PNILP concept note. SIAPS recruited an international consultant to guide this

process and funded the expenses for one PNILP staff member to participate in the peer review workshop held in Kampala, Uganda in November 2014.

A committee worked on the concept note to integrate responses to comments and recommendations from Country Coordination Mechanism (CCM), the Global Fund and experts from Roll Back Malaria, WHO (World Health Organization) and African Leaders Malaria Alliance (ALMA). In December, the Global Fund approved the designation of PNILP as the principal recipient for managing Global Fund grants under the new funding model. This Global Fund designation was a major capacity-building benchmark for PNILP and SIAPS.

### *Partner contributions*

MSF/Belgium shared experience in the use of injectable artesunate in the treatment of severe malaria. The AIRS Project assisted in sharing preliminary results of the entomological survey conducted on mosquitos in an insectarium. PNILP presented the plan to scale up the use of injectable artesunate for severe malaria.

### ***Objective 2: Put in place an uninterrupted supply chain mechanism for malaria commodities***

SIAPS assisted PNILP and CAMEBU to carry out monthly monitoring of stock status for malaria commodities at CAMEBU stores and to prepare the Procurement Planning and Monitoring Report for malaria (PPMRm) for Q3 of financial year 2014. SIAPS assisted the PNILP in sharing stock status reports with key stakeholders, including the Global Fund, UNICEF, PMI and MSF/Belgium. Reports highlighted lower stock levels of malaria commodities at CAMEBU and recommended speeding up an expected PMI delivery of 731,373 adult RDT blister packs no later than mid-December 2015 to avoid a possible shortage.

SIAPS assisted PNILP in updating quantification of ACT, quinine, and clindamycin for uncomplicated malaria; injectable artesunate for complicated malaria; sulfadoxine-pyrimethamine (SP) for intermittent preventive treatment for malaria in pregnancy; and RDTs for plasmodium falciparum diagnosis. This quantification update helped the PNILP to determine adequate budgets for malaria commodities to be incorporated in the concept note for the Global Fund's new funding model.

SIAPS assisted the PNILP in following up an importation waiver for SP 500/25 mg with DPML in order to introduce Intermittent Preventive Treatment for malaria in pregnancy in Burundi, as recommended by WHO.

SIAPS assisted the PNILP in developing the terms of reference for the National Quantification Committee for Malaria Commodities. The terms of reference cover the mandate and organization of the committee and the roles and responsibilities of MOH partner institutions and committee members. Next steps include the approval of the terms of reference by the MOH and nomination of the committee members. The Committee would serve as the platform for effectively strengthening and supporting regular forecasting and supply planning exercise so as to make appropriate quantity of malaria products ensuring an uninterrupted supply chain.

SIAPS assisted the PNILP in analyzing monthly reports and requisitions of malaria commodities from 45 health districts countrywide. As the end of the year was approaching, SIAPS coached the PNILP, CAMEBU and the health districts to implement programmed distribution and encouraged health districts to order malaria commodities for January 2015 in the first two weeks of December to anticipate lower staff levels over the holiday season. From October to December 2014, the rate of orders placed within the first two weeks of the current month for the following month shifted from 25% to 80%. As a result, by December 15, 2014, CAMEBU had already served orders for January 2015 for 80% of health districts.

SIAPS assisted PNILP in hiring a consultant to analyze EUV and supportive supervision data. The EUV report for in-country use and supportive supervision report are currently undergoing editing prior to validation by key stakeholders. During the reporting period, SIAPS assisted the PNILP in presenting preliminary findings of the supportive supervision to Roll Back Malaria partners in their quarterly coordination meeting.

Data were collected during supportive supervision visits to all 45 district stores and 643 facilities during two rounds of supervision visits in July and September 2014. These data were compared to a nationally representative sample from the March 2014 joint SIAPS and SCMS supply chain management assessment. Based on the preliminary findings, the supply chain recorded improvements in stock management and reporting at the district and health center levels as stock accuracy increased from 71% during the assessment survey to 88% during supervision visits. SIAPS work with the MOH may have contributed to this improvement. SIAPS worked with the MOH to analyze requisitions for malaria commodities and provide feedback to district managers, who in turn coached health centers. Additionally, at the time of the supervision visits 100% of health facilities had completed and submitted logistics management information systems (LMIS) reports.

### *Constraints to progress*

The quarterly update of pipeline and supply plan for malaria commodities was not accomplished as PNILP and partners, namely the Permanent Executive Secretariat for the National Program for the Fight Against AIDS (Secrétariat Exécutif Permanent du Conseil National de lutte contre le SIDA, SEP-CNLS/malaria), DPML and CAMEBU, were working on the malaria concept note to be submitted to the Global Fund as a priority.

Additionally, 2014's funding gap of 715,820 adult RDT blister packs, identified through the quantification held in February 2014, led to lower stock levels. SIAPS coordinated with USAID/PMI to accelerate delivery of ACT and RDT projected before the end of 2014 to avoid stock-out of ACT and RDT.

### ***Objective 3: Pharmaceutical services are improved to ensure best practices in the case management of malaria***

SIAPS partook in field visits with USAID and implementing partners, namely SIAPS, Integrated Health Project in Burundi (IHPB) and Population Services International (PSI), to jointly assess

malaria status and achievements at peripheral levels, and to find solutions to identified challenges together with health authorities. Heads of visited health facilities expressed their satisfaction with USAID's assistance and implementing partners' collaboration, particularly as malaria remains the main cause for health services consultation in the country.

SIAPS assisted the PNILP by analyzing supportive supervision data collected in July and September 2014 in all 45 health districts and 643 health centers. Preliminary findings have been shared with Roll Back Malaria partners in their quarterly coordination meeting. These data were compared with the March 2014 survey. The availability of malaria STGs in health centers rose from 40% in March to 62% during the supervision visits in July and September. Dissemination of the guidelines during STG training in April for the last batch of 164 facilities may have contributed to this increase. SIAPS and the MOH will distribute additional copies and encourage health centers to ensure STGs are not removed from health facilities.

Measuring the percent of prescriptions that comply with malaria STGs relies on the accuracy and completeness of facility registers. While challenges still exist in recording patient information in registers, data suggest that the percent of prescriptions that comply with malaria STGs might have improved from 77% at the time of the survey to 94% during the supervision visits.

SIAPS and the PNILP also seek to improve patient knowledge about their medication. The low number of clients available for interview at time of the supervision visit limits the conclusions that can be drawn about changes in patient recall of correct information about their medication. Despite the smaller sample size, data from the supervision visits suggest that patient knowledge may also have increased. SIAPS will continue to assist the PNILP in implementing solutions to address identified areas for improvement.

SIAPS assisted PNILP in conducting a meeting to validate three job aids. The first of these is on good dispensing practices and the second covers information delivery to patients to enhance adherence to treatment. The third is a medicine dispensing label with cells for names and age of patient, number of times per day and duration of treatment, which will reinforce the patient's ability to take treatments in accordance with prescriptions.

SIAPS assisted PNILP in efforts to fully implement malaria STGs by developing a plan for the scale-up of the use of injectable artesunate to treat severe malaria cases and the use of clindamycin to be associated with quinine for the second-line treatment of uncomplicated malaria cases. Clindamycin will be introduced in all districts, taking into account the overall prevalence rate of the first line treatment failure and co-infection rates. For injectable artesunate, a progressive scale-up is planned, starting with 50% of expected severe cases in 2015, 60% in 2016 and 70% in 2017. The plan has been presented to partners, including SEP/CNLS/malaria and WHO. The scale-up of the two products is planned for February 2015.

SIAPS assisted the PNILP to develop a supervision guide for malaria activities. The guide completes the supervision checklist developed with SIAPS assistance in 2012. It covers supervision methods, steps of supervision for each aspect of malaria-related activities (prevention, diagnosis, treatment, pharmaceutical management, data quality audit), and feedback methods.

SIAPS assisted the PNILP in following up the implementation of PECADOM in two health districts (Gashoho and Gahombo) while preparing the transfer of PECADOM activities to IHPB. Data collected among community health workers (CHW) for September and October show a decrease in CHW service utilization by the community for two reasons: unavailability of RDT during the first two weeks of September and effects of mass distribution of LLIN in June 2014. During the two months, 5,831 children under 5 years of age with fever accessed CHW services, 3,632 were confirmed malaria-positive with a RDT, 3,610 were treated with ACTs (99.3%) and of those who tested positive, 3,561 received malaria treatments within 24 hours of the onset of fever (98.0%).

Overall, SIAPS reached its targets for the whole PECADOM implementation period. Generally, 88% of children younger than 5 years have been seen by CHW within 24 hours of the onset of fever and of those with positive RDTs, 91% have been treated with ACT within 24 hours of onset of fever. The target for both indicators was 90%.

The transfer of PECADOM activities to the IHPB was effective in December. SIAPS handed over key tools and documents to IHPB, including the PECADOM database; case, requisition and reporting forms; the list of equipment held by CHWs; and the PECADOM activity report and presentation. The transfer has been an occasion to provide awards to health centers and CHWs who demonstrated the best performance in supporting PECADOM implementation.

### *Partner contributions*

SEP-CNLS/malaria and WHO provided feedback on the plan for the scale-up of the use of injectable artesunate to treat severe malaria cases and the use of clindamycin.

## **Cameroon**

**Goal: Assure availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes**

### **Overall Quarter Progress**

The MOH officially validated integration of the HIV commodities for PMTCT Option B+ through the national supply system, as part of recommendations from the supply chain options analysis that SIAPS conducted in June 2014. This validation has permitted SIAPS to define the technical support and priority activities needed to move forward with the integration. Additionally, the Central Medical Store (CENAME) and the Regional Medical Stores (CAPRs) harmonized the health commodities codification through an activity financed by UNFPA and implemented in close collaboration with SIAPS. The new codes for essential medicines will be implemented in January 2015, once CENAME and the CAPRs have their respective 2014 inventories closed, which is key to harmonize the logistics information systems at the central and regional levels.

During this quarter, SIAPS facilitated the development of SOPs for a quantification of HIV and AIDS commodities through a participatory process with stakeholders; these SOPs describe the roles and responsibilities of the involved members and the processes to be used to quantify these commodities. The next step will be to review the reporting templates for both quantification and stock monitoring to satisfy MOH, donors, and partners' needs. This review will meet the increasing MOH expectation that SIAPS will support the HIV Quantification Committee to update forecasting and supply plans for HIV and AIDS commodities on a regular basis.

At the peripheral level, this quarter's data showed a decline for some indicators. As such, the percentage of stock records that correspond to physical counts of medicines dropped from 97% to 82% at the warehouse level and from 94% to 62% at health facilities. This drop in the indicators was caused by the audit of treated-patients data that took place and disrupted planned supervision activities during Q2 and caused delays in the organization of supervision visits for Q3. However, the trend of some indicators remained good and others showed noticeable progress; for example, indicator related to the use of officially adopted tools for the medicines logistics management information system and treated patients' information increased from 35% to 79%. It is expected that, with the hiring of SIAPS regional technical advisors in January 2015 (who will be located at the CAPRs in four PEFPAR-supported regions), pharmaceutical management indicators will improve, given that more on-going support will be easily available to each of the regions, as the number of health facilities increases from 35 to 104 this year.

### ***Objective 1: Pharmaceutical sector governance strengthened***

For PY 4 this objective includes activities aimed at improving the pharmaceutical governance and transparency of management systems for HIV and AIDS commodities through a coordinated mechanism of quantification, procurement, and distribution from the national level to health facilities. It includes work with some civil society organizations involved in advocacy for access to ART; their participation ensures identifying and timely reporting of issues related to the availability of HIV and AIDS commodities.

During this quarter, the HIV Quantification Committee, which is a sub-committee of the National Coordination Committee for Health Products Procurement, developed the first manual of SOPs for HIV and AIDS commodities quantification with SIAPS support. These SOPs describe steps of the quantification process, including data collection, setting of forecasting assumptions and internal control mechanisms, and roles and responsibilities of the different members of the committee during a quantification exercise. Use of the SOPs is overall independent from the tool used, and they can be easily adapted to future needs, to changes of the quantification methods or tools, and even to quantification committees for other priority diseases. The SOPs include a special procedure related to the estimation of needs in case of shortages. The manual was finalized during a two-day workshop that took place in Ebolowa from December 2 to 4, with the relevant stakeholders including the Directorate of Pharmacy, AIDS Control Program (CNLS), CENAME, Hôpital Central de Yaoundé, CAPR representatives, and the Clinton Foundation. Although still waiting for an official validation by the MOH authorities, these procedures were adopted by the HIV Quantification Committee members.

Finally, SIAPS attended a two-day workshop that the Directorate of Pharmacy organized from December 10 to 12 in Kribi, for the National Coordination Committee in charge of Health Products Procurement. The goal of the workshop was to elaborate regional and national supply plans for the HIV, TB, and malaria programs on the basis of consolidated data on medicines consumption and stock status from the regions and CENAME. Although the objective of this workshop was only partially achieved, SIAPS needs the Directorate of Pharmacy to clarify its expectations from SIAPS so that relevant support can be provided rather than attending such a meeting as facilitator.

### *Constraints to progress*

One of the biggest challenges was the resistance of directorates in MOH to proactively seek collaboration unless there is a clear mandate from MOH itself. In this regard, SIAPS will leverage efforts with other partners at the Country Coordination Mechanism (CCM) to institutionalize the reporting requirements on procurement and supply management activities through the Strategic Monitoring Committee that is being established.

### *Partner contributions*

WHO and ESTHER-AID attended the meeting chaired by the Minister of Health on the National Pharmacy Policy and its Master Plan.

### ***Objective 2: Capacity for pharmaceutical supply management and services increased and enhanced***

Although during PY 4 most of the activities related to supply management will be focusing on the regions and health facilities, this objective includes activities to maintain some support to CENAME and CAPRs, especially human resources capacity building. Implementation of activities to improve inventory management practices at the facilities will be conducted through supportive supervisions and mostly reported under objective 3. In addition, SIAPS will report

under this objective 3 on activities jointly implemented with UNFPA related to the upgrade of LMIS in CENAME and CAPRs, which were initiated in PY3.

SIAPS actively participated in a workshop that UNFPA financed in October 2014 to validate and adopt recommendations from the LMIS assessment report conducted by AEDES. One of the recommendations addresses an important LMIS bottleneck—the need to develop a unique and standardized codification system for health products procured and distributed in the public pharmaceutical sector. Subsequently, with UNFPA funding, the MOH organized a two-day workshop (November 26 to 28) in Mbalmayo to define a new codification system to be implemented by CENAME and CAPRs. Attendants at the workshop included representatives from CENAME, CAPRs, UNFPA, the Directorate of Pharmacy, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), CHAI, Direction de la Lutte contre la Maladie et les Epidémies (DLMEP), and Inspection Générale des Services Pharmaceutiques et des Laboratoires (IGSPL). SIAPS provided technical assistance to the Directorate of Pharmacy to prepare a technical agenda and content of the workshop. Use of the new codes is expected to begin January 2015, after the closeout of 2014.

On December 24, SIAPS received an official communication from CENAME indicating the training needs for store keepers, supervisors, and procurement officers. This information was key for finalizing the training plans for this program year and ensure that SIAPS meets partners' expectations.

### *Constraints to progress*

One pending activity that was not yet completed from last year is the printing and dissemination of the SOPs for pharmaceutical management in the health facilities. The reason for this delay is that the SOPs were approved nationally but the Minister of Health has not yet written the preface, which hampers dissemination of the manual. Otherwise, the English version is being translated at HQ while waiting for the preface.

### *Partner contributions*

UNFPA, through AEDES, made a significant contribution to assess the LMIS in Cameroon, and funded a workshop to ensure consensus on the steps toward an improved LMIS in the regions and the central level. The good collaboration between the consultants and the SIAPS office was remarkable, as is the collaboration between UNFPA and SIAPS. The challenge to making significant progress in this area is the resistance of CENAME to receive technical assistance. CENAME refused the proposal of UNFPA to finance an expert to work inside CENAME to improve the LMIS. For the moment, SIAPS is playing a facilitator role between the institutions involved to move activities forward, but the context is challenging overall.

Another challenge relates to the follow up of the adopted new codification system for pharmaceutical products, beginning January 1, 2015, by all stakeholders. This activity is not in the work plan of SIAPS for this year, and although willing to contribute with UNFPA and other partners to the activity, SIAPS may have human and financial constraints to taking an active role.



### ***Objective 3: Use of information for decision making increased***

For PY 4, this objective includes activities to improve the availability of pharmaceutical and patient data so that evidence-based decisions are made at regional and central levels. It also includes implementation of the Electronic Dispensing Tool (EDT) in some pilot sites and deployment of a comprehensive dashboard to monitor availability and use of HIV and AIDS commodities and to improve supply management and the reporting system at the facility level.

During this quarter, no major activities were completed, but significant progress was made in revising ART reporting tools for patients' and inventory management data as part of the LMIS for HIV and AIDS commodities. These reporting tools for ART and PMTCT sites were revised as a routine activity before printing new books. However, during the review, with SIAPS support, current regimens and the ARVs list were revised to reflect the latest WHO recommendations, including HIV rapid diagnostic tests and some drugs for opportunistic infections. As a result, new formats of reporting tools allowed routine collection of data that had previously been lacking, which repeatedly created problems for forecasting and HIV and AIDS commodities. In addition, the revised tools included fields for facilities to report on stock outs that occurred during the reporting period. This information was previously captured only during supervision visits.

The November stock status report developed by SIAPS and CNLS was shared with the MOH and USAID. This type of report, which had been produced approximatively every two months, is increasingly requested by the Minister of Health himself. Given that the CCM is progressing toward implementation of a Strategic Monitoring Committee, there may be a need to increase the frequency and format of the stock status report to satisfy MOH, the main donors, the CCM, and other partners.

SIAPS obtained consensus from CNLS, CENAME, and the Directorate of Pharmacy to implement Outil de suivi des produits du VIH Sida (OSP-SIDA) at the regional level. A workshop is planned for the beginning of January 2015 and invitations were sent to all regions that will attend this workshop under MOH leadership. It is expected that this workshop will offer an opportunity to update OSP-SIDA with 2014 data and that the system will be kept updated during 2015.

In addition, the next supervision visit that is scheduled for mid-January 2015 will cover 104 facilities, which is a significant increase from the 34 facilities covered last year, all of them being main facilities that will be implementing a PMTCT Option B+. This first supervision will serve to gather baseline information in all new facilities. To cover the central region, SIAPS has sought collaboration with the Clinton Foundation, who agreed to join the supervision of SIAPS and CNLS and support with additional staff.

#### ***Constraints to progress***

Although evidence-based decisions on the supply chain management of HIV and AIDS commodities are made for the whole country, only six USAID-supported regions receive technical support from SIAPS and are quarterly supervised and their data monitored during joint SIAPS and CNLS supervision visits. It is expected that during supervision visits to the regional representatives of the National AIDS Control Committee (NACC), the implementation of OSP-

SIDA will be supervised as part of the routine activities only in USAID-supported regions, which may compromise the availability and quality of the information uploaded in OSP-SIDA at the national level.

In relation to supervision activities, there is a need to reconsider the supervision strategy and delink the supervision from the reporting activities. The use of regional technical advisors will be key to following up on reporting, alerting on problems, and defining sites requiring more extensive support.

#### *Partner contributions*

The Clinton Foundation is deploying 18 staff in the Central Region to follow up the ART and PMTCT activities in the health facilities. The availability of human resources contributes significantly to ensuring availability of ARVs at the ART and PMTCT sites, especially in the transition to Option B+. Currently, SIAPS and the Clinton Foundation are exploring options to strengthen collaboration in the supervision activities, but also ensuring collaboration between the Clinton Foundation staff and the SIAPS regional technical advisor in the CAPR and SIAPS offices.

WHO made free-call telephones available to CENAME, CAPRs, and the Directorate of Pharmacy to make conference calls and enable communications between these institutions in case of emergency, such as epidemic outbreaks. These telephones may eventually be used to discuss specific problems, such as logistics or stock availability, and to seek adequate solutions. Although SIAPS was not involved in this intervention, this may be an additional tool to be used in special circumstances.

#### ***Objective 4: Financial barriers reduced***

Under this objective, SIAPS Cameroon PY4 reports on contributions that are made to monitor procurement and supply management performance for HIV and AIDS commodities, and to ensure compliance with Global Fund requirements in regards to forecasting and management of these health commodities. In this sense, SIAPS plays a double role. On the one hand, SIAPS is directly providing technical assistance to CNLS which is the main Global Fund Principal Recipient for HIV, as well as to CENAME, and selected CAPRs and health facilities. In addition, SIAPS is one of the members of the CCM representing the Technical and Financial Partners.

During this quarter, CNLS requested that SIAPS review the last quantification of ARVs and lab commodities in order to include the relevant information in the concept note to the Global Fund. Although the SIAPS country office found data discrepancies and corrected them in the final figures that were included in the concept note for submission, the Global Fund did not approve the concept note and requested that the country address weaknesses found by the Technical Review Panel before the concept note could be resubmitted. These weaknesses include, among others, a need to review the health strengthening system component (which should include interventions) to improve supply chain management. In addition, during the last CCM meeting held on December 29, the CCM was informed that the Global Fund is concerned about governance issues in CENAME's board. Given the lack of partners in Cameroon with expertise in pharmaceutical management, it is expected that SIAPS will be called to participate in the sessions to address these weaknesses.

In addition, CCM is moving to adopt new procedures and establish a Strategic Monitoring Committee consisting of experts in different areas so that activities conducted by the principal recipients can be adequately monitored. In regard to procurement and supply management, the CCM proposed that SIAPS take on this role. SIAPS argued on the need to ensure continuity in this important role, and the appropriateness of assigning this function to the Directorate of Pharmacy, while SIAPS would provide technical assistance needed to ensure that the Directorate of Pharmacy assumes its role.

### *Constraints to progress*

One of the major challenges related to this activity is the difficulty to properly plan the involvement of SIAPS in Global Fund-related activities. From past experience, SIAPS is called on in emergencies to solve issues related to Global Fund or local funds agent findings, which is time consuming. Given the need to resubmit the Global Fund concept note, and the little time that the country will have for grant negotiations, it is likely that SIAPS will be called often to assist the CCM and principal recipients to finalize documents, respond to specific needs, or analyze the impact of the delays in the availability of health products.

Although the concept note needs to be resubmitted to the Global Fund, routine activities of the CNLS, such as supervision, the availability of CNLS to approve activities, and CNLS staff to participate in those planned activities, may be affected. Actually SIAPS experienced this problem during the last quarter, for example, when CNLS did not participate in the meeting with the CAPRs, and generally in the delays at the CNLS in signing letters, approving activities, or transmitting to the Minister of Health invitations for signature.

### ***Objective 5: Availability of pharmaceuticals improved***

For PY 4, this objective includes activities to implement an active distribution system for ARVs and test kits from the four regional CAPRs to targeted health facilities for PMTCT Option B+ in PEPFAR-supported regions. Initially, the health facilities that should be targeted are those corresponding to the first stages of the implementation of PMTCT Option B+, as described by the ministerial instruction of November 2014. In the PEPFAR regions concerned, the same sites are those that will receive technical assistance by SIAPS during this year.

During this quarter, following the ministerial instruction that describes the process for adoption of the new PMTCT guidelines moving into Option B+, the Directorate of Pharmacy and the CNLS organized a meeting to adopt the recommendations from the assessment entitled *Supply Chain Options Analysis: PMTCT Option B+, Family Planning, Maternal, Newborn, and Child Health Commodities*, conducted by SIAPS in August-September 2014. The recommendation that was finally adopted was the integration of PMTCT commodities which currently transition from the CAPRs to the districts, into the national essential medicines procurement system called SYNAME. This means that the CAPRs will assume the responsibility of distributing the ARVs to the health facilities, without intervention from the district in supplying the products. Unfortunately, although the recommendation has been adopted by the institutions, the MOH has not sent an instruction to officially communicate this decision.

In anticipation of the ministerial instruction, SIAPS supported the MOH to organize a meeting requested by CNLS to discuss with the CAPRs from the four PEPFAR-supported regions the implications of the new supply system in CAPR functioning. The Directorate of Pharmacy and the Clinton Foundation participated in the meeting, but unfortunately the CNLS was not represented.

The CAPRs agreed on the next steps to move toward implementation of the active distribution of PMTCT commodities with SIAPS support, including regular interventions from SIAPS regional technical advisors who will be based in each CAPR office of PEPFAR-supported regions.

As part of efforts to maintain uninterrupted availability of PMTCT commodities within the four PEPFAR-supported regions, the USAID Mission requested that SIAPS facilitate the procurement process with SCMS using the \$10 million that has been allocated for procurement of ARVs to allow the implementation of PMTCT Option B+. It was anticipated that this PEPFAR-funded procurement will contribute to closing the ART gap in the four PEPFAR regions.

SIAPS finalized the quantification of these PMTCT needs, but the order will require the approval of CNLS to strategically cover some ARVs that may be at risk of stock out. In addition, SIAPS was mandated to facilitate the memorandum of understanding between SCMS, CENAME, and CAPRs to cover storage and distribution fees. The terms of the agreement will need to include the reporting requirements with which the institutions must comply.

### *Constraints to progress*

The difference in capacity between the different regions requires that the interventions be aligned with the different contexts. As such, the CAPR of the Central Region is currently not distributing health products to the facilities, while the Littoral Region has already in place a logistics system to transport the health products to the sites and therefore, would more easily absorb the PMTCT program. In addition, CAPRs differ on the storage capacity, and the number of facilities in each region will also need to be considered when planning the distribution schedules.

Out of the four expected regional technical advisors to be placed at the CAPRs, only two of them will take their positions on January 5, 2015; the hiring process is still underway for the other two. Given the lack of candidates in the first round of interviews, a more intensive search for candidates will be needed.

SIAPS has started the procurement process for the four vehicles that will be allocated to each of the regions. Possible delays in getting final approval from USAID HQ could eventually impact the implementation of the activities at each of the regions.

The continued lack of official communication on the integration of PMTCT commodities into SYNAME may create tensions between the CAPRs and the districts. SIAPS will closely follow up this matter with the Directorate of Pharmacy. SIAPS anticipates possible challenges to coordinate SCMS with CENAME and CAPRs in relation to the memorandum of understanding for storage and distribution costs, especially in regard to the reporting requirements.

## **Democratic Republic of the Congo**

**Goal: Assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes**

### ***Overall Quarter Progress***

In line with the United Nations Millennium Development Goals, the Ministry of Health (MOH) adopted the use of the 13 lifesaving medicine products for women and child health. Therefore, SIAPS has been supporting the MOH to ensure not only the products' availability but also that they are registered for use in DRC and included in the NEML. Out of those 13 medicine products, three have been prioritized by the MOH—oxytocin 10 and 5 IU; misoprostol 200 µg; and chlorhexidine digluconate 7.1%. During this first quarter, SIAPS supported the MOH to finalize the steps to introduce these medicines for use in maternal and neonatal care by supporting development of norms and directives and guidelines. The documents were developed and adopted by the technical coordinating committee of the MOH established for that specific purpose and then introduced to health care providers, government officials, development and implementing partners, and the public by the Permanent Secretary who endorsed the guidelines.

During this quarter, SIAPS finalized the review of the medicine registration database. This activity started during the previous quarter 4 of PY3 with the objective to produce the second edition of registered medicines directory that itemizes all the medicines authorized by the drug regulation authority (DRA) in DRC. This directory will be printed and distributed to all pharmacist inspectors in January 2015.

SIAPS continues to provide assistance to the medicine registration committee to ensure that the average number of days taken to register a medicine remains at a minimum in compliance with the DRA SOPs. During this quarter, the average number of days taken to register a candidate medicine has been reduced by 4 days.

### ***Objective 1: Pharmaceutical sector governance strengthened***

In line with the United Nations Millennium Goals, the MOH adopted the use of 13 lifesaving MCNH medicines. Therefore, SIAPS assisted the MOH to estimate and quantify the national need for those 13 items.

Out of the 13 medicine products, three have been of urgent interest for the MOH—oxytocin, misoprostol, and chlorhexidine. During this first quarter, SIAPS supported finalizing the steps to introduce the use of these three medicines in maternal and neonatal care. The support consisted of developing norms and guidelines that will govern the use of the three lifesaving products. .

The adherence to the directives and norms developed with SIAPS assistance will help health care providers adopt a new approach to managing postpartum hemorrhage and umbilical cord treatment in maternal and neonatal care. Ministry officials clearly stated that the country should adhere to those norms and directives in using the three lifesaving products as it is the only way the country can reduce the maternal neonatal and child mortality. According to the DRC's

Demographic and Health Survey: Enquete Demographique et de Sante 2013 report, maternal, child and neonatal mortality rates have increased (e.g., maternal mortality rates from 500/10,000 to 750/10,000); therefore if no corrective measures are put in place, DRC will not be able to attain the Millennium Development Goals 4 and 5 by the end of 2015.

SIAPS continues to provide assistance to the medicine registration committee to ensure that the average number of days needed to register a candidate medicine remains at the minimum in accordance with the DRA SOPs. During this quarter, the average number of days taken to register a candidate medicine has gone down from 68 to 65 days, which is a significant improvement. Out of 318 applications submitted, 235 dossiers (or 74%) were approved and authorized, 7 dossiers (or 2.2%) were rejected, 38 dossiers (or 11.9%) were put on hold due to incomplete data, and 38 dossiers (or 11.9%) were deferred to the next session and included in the current backlog.

To promote and reinforce transparency and professionalism regarding the registration process, SIAPS assisted the DRA to procure a registration software named SIGIP-ARP (Système Intégré de Gestion Informatisée des Processus Réglementaires au sein d'une autorité de réglementation pharmaceutique) from Burkina Faso where it is being used successfully. This software will be installed at DRA offices next quarter under the supervision of the Burkina Faso DRA team.

In line with the USAID scope of work, SIAPS provided technical and financial assistance to Programme National d'Approvisionnement en Médicaments (PNAM) to organize and hold a preparatory meeting on developing the first SNAME strategic plan. During this meeting, held November 5–7, 2014, three documents (deliverables) were produced. They included (1) situation analysis of pharmaceutical services in DRC, (2) roadmap for the development of the first SNAME strategic plan, and (3) terms of reference for recruiting a consultant to develop the strategic plan.

In accordance with the MOP (Malaria Operational Plan for PMI), which plans to extend the PMI support to 43 new health zones, and based on the current USAID scope of work, SIAPS supported the PNLP to produce a work plan for implementing patient care activities in the new health zones. In November 2014, SIAPS provided technical and financial assistance to PNLP Katanga to hold a meeting for introducing and sharing the PMI work plan that includes malaria management activities during FY 2015. The meeting was held in Katanga Province Health Division (DPS) office with USAID representatives, chief medical officers in charge of health zones of interest, and all other implementing partners including SIAPS.

### ***Objective 2: Capacity for pharmaceutical supply management and services increased and enhanced***

During this quarter, SIAPS contributed to improve the storage conditions at two medicine stores (depots) selected for this FY 2015. In the Kasai Occidental province, the regional warehouse (called CADIMEK) received equipment for quarantine zone and dehumidifiers, and thermo-hydrometers. The latter materials will allow a better control of humidity rate which used to be higher than 95% while the recommended rate is 65% or less.

### **Objective 3: Utilization of information for decision making increased**

During this quarter, SIAPS helped produce the PPMRm country report for the period July to September 2014. The data analysis regarding the stock and distribution of antimalarial commodities was submitted in October after data was validated jointly by DELIVER, IHP, and PMI-Expansion. The results showed that some health zones had overstocks that were at risk of expiring while the other zones were understocked for malaria commodities. Therefore, SIAPS assisted the implementing partners (IHP and PMI-Expansion) to redistribute those malaria commodities (artunate-based regimen) to prevent wastage due to expiry.

### **Objective 5: Pharmaceutical services to achieve desired health outcomes improved**

During this quarter, SIAPS, jointly with the malaria disease program (PNLP) Katanga, conducted a situation analysis in 11 Lubumbashi health district zones. The aim of the analysis was to (1) assess the availability of malaria commodities and their management tools, (2) assess the consumption status of malaria commodities, (3) assess the stock management skill of the health care workers involved in the management of malaria commodities, (4) assess the storage capacity of respective district depots to before allocating the consignment of insecticide-treated mosquito nets to the respective depots, and (5) understand the level of patient care regarding malaria disease.

The findings from this situation analysis will serve as baseline for the new malaria care project to be implemented in the PMI-supported health zones in the Lubumbashi health district.

In addition, SIAPS supported the Katanga province malaria disease program (PNLP) to organize a briefing session for health zones management teams on how different stakeholders and partners should be involved in implementing the malaria activities in the additional PMI health zones.

To promote rational medicines use (RMU) in DRC, SIAPS developed a pilot program to set up Medicines and Therapeutic Committees (MTCs) in general and referral hospitals in USAID-supported provinces. Hospitals with active and effective MTCs have helped promote RMU in their hospitals and health zones, leading to better use of medicines. For example, because the MTC activities at Katana Referral Hospital in the South Kivu Province, the number of essential medicines and other related items used has been reduced by one-third, which also reduced the budget by one-third. In the Kasai Oriental Province, the MTC at Tshiamala Referral Hospital in Mwene-Ditu reported that the prescribing habits for prescribers have significantly improved i.e. the number of items being prescribed has decreased by one-third, thus improving the quality of patient care services rendered by health care providers.

As a result, the provincial health division, in Kasai Oriental province, saw that hospitals or health zones with MTCs have a better quality of patient care than those without. Therefore, the provincial health management team decided to roll out the implementation of MTCs in all the referral hospitals in the Kasai Oriental Province. SIAPS was requested to support setting up MTCs in five referral hospitals (Makota, Kabinda, Miabi, Tshilengi, and Kasansa) in the health zones supported by the European Union Project (PAPNDS). During this quarter, SIAPS provided

its technical expertise to the DPS and PAPNDS to implement four out of the five MTCs as planned. The fifth MTC will be implemented at the beginning of the second quarter. The good results obtained in the Kasai Oriental were shared with the neighboring province of Kasai Occidental, which is also supported by the PAPNDS. Therefore, in December 2014, the SIAPS team was requested to provide their expertise and support the Kasai Occidental DPS to implement MTCs) in Tshikula, Masuika, Tshibala, Bunkonde, and Mikalayi health zones).

### *Constraints to progress*

There has been a mismatch between data collection tools used at health facility level and those used at health zone level. Therefore, important data captured from health zone level are not captured at the health zone level. As a result, important information is lost which negatively affects decision making.

### *Partner contributions*

PAPNDS cost sharing (financial support) in the implementation of MTCs



## **Dominican Republic**

**Goal: Increase the availability of critical medicines and diagnostic materials including the ones used for HIV and AIDS through the implementation of the different elements of the SUGEMI system and building the capacity of national counterparts to effectively and efficiently operate the integrated system.**

### ***Overall Quarter Progress***

SIAPS supported the development of SOPs for the integration of hospitals to SUGEMI and for the transportation of laboratory clinical samples and the delivery of results, far exceeding the target originally set for development of guidelines, and SOPs.

### ***Objective 1: Pharmaceutical sector governance strengthened***

The DR's National Essential Medicines List (NEML) was finalized. The list and the technical report were presented to Minister of Public Health and technical advisors during a visit to Dominican Republic in the second week of December. During the same visit, a SIAPS consultant presented the progress being made in implementing the SUGEMI to the newly appointed Director of the Health Services. In the next quarter, the NEML will be published with the imprimatur of the Ministry.

The estimation of needs for the national pooled procurement of medicines and supplies is scheduled for May 2015. During this quarter, SIAPS supported the revision of the electronic tools and catalogs that will be used for the estimation of needs exercise.

At the "People that Deliver Conference," held in Copenhagen on October 2014, SIAPS showcased the capacity building strategies that were used for the implementation of SUGEMI. SIAPS also presented a poster "Transportation of Clinical Laboratory Samples and Delivery of Results in Dominican Republic."

### ***Constraints to progress***

The procedures for the validation and publication of the NEML in Dominican Republic are lengthy and bureaucratic. This has delayed the publication of the NEML, even after the contents have been validated by scientific committees.

### ***Objective 2: Capacity for pharmaceutical supply management and services increased and enhanced***

During this quarter, SIAPS supported the organization of the third certified course (diploma) on pharmaceutical supply management in partnership with the Universidad Central del Este. The course was inaugurated by USAID officials on November 15, 2014. SIAPS also conducted a rapid evaluation of the second course. The results will be published in the next quarter. During this quarter, SIAPS also supported a training of trainers for a basic course on pharmaceutical management to be conducted by the National Institute of Public Administration. SIAPS supported the publication of SOPs for the integration of hospitals to SUGEMI and for the

transportation of laboratory clinical samples and the delivery of results. The training for the implementation of SOPs that will improve the transportation of laboratory samples and delivery of results has been re-scheduled for the next quarter.

### *Constraints to progress*

The implementation of SOPs for the transporting of laboratory samples is on hold until its official approval and publication by the MOH.

### *Partner contributions*

The certified course has been implemented in partnership with the Universidad Central del Este.

### ***Objective 3: Pharmaceutical management information available and used for decision making at different levels of the health system***

During this quarter, SIAPS finalized a technical report summarizing the findings of the third supervision round of health facilities. The SUGEMI quarterly information bulletin was disseminated to a wide audience in November 2014, and it is also available on the MOH website. SIAPS completed a rapid assessment on the situation of the SUGEMI Pharmaceutical Information System (PIS). The results, along with those of the third supervision round, were presented and discussed with Regional Pharmaceutical Unit coordinators during a meeting in December 2014. The participants agreed on the interventions to improve the performance of the PIS.

### ***Objective 4: Improved allocation of resources for procurement and pharmaceutical management operations***

SIAPS and national counterparts assessed the lack of correspondence between the requisition of medicines and supplies made by hospitals and Regional Health Services and the actual dispatches by the Essential Medicine Program and the Center for Logistical Support (PROMESE/CAL). The report has not been completed because critical information has not been provided by PROMESE/CAL.

### *Constraints to progress*

PROMESE/CAL has not provided the necessary information to finalize the analysis on the correspondence between requisition and dispatches.

### ***Objective 5: Pharmaceutical products and services improved to achieve desired health outcomes***

During this quarter, SIAPS organized a preparatory meeting for the implementation of SOPs for transportation of laboratory samples and delivery of results. The training of trainers for the implementation is scheduled for next quarter. For next quarter, SIAPS will also extend the implementation of SUGEMI to hospitals that have fulfilled the minimum requirements (equipment, appointment of personnel).

## Ethiopia

**Goal: Strengthen pharmaceutical system to ensure access to quality pharmacy services that will lead to improved health outcomes**

### ***Overall Quarter Progress***

During the first quarter of FY15, SIAPS, in collaboration with Ethiopian stakeholders and partners, accomplished notable results as part of meeting targets planned for the year.

In this quarter, the Southern Nations and Nationalities and Peoples Region (SNNPR) enacted regulation on Auditable Pharmaceutical Transactions and Services (APTS), with a 20% achievement of the target set for FY15. Enacting this regulation helps with implementing APTS by enabling hospitals to institute a transparent and accountable medicines management system. With APTS, hospitals achieve greater efficiency in managing their medicines budget, minimize wastage, increase revenues from medicine sales, and improve availability of medicines, and quality of pharmacy services. The regulation was presented to a total of 71 participants including CEOs from all hospital, heads of zonal health departments, zonal finance heads and town administrators (50% of FY15 target). In addition, two regions (Tigray and Oromia) are in the final stages of enacting similar regulations.

Two federal hospitals began implementing APTS. Specifically, ALERT hospital assigned the required workforce (accountants, auditors, pharmacists, and cashiers) to implement APTS in all pharmacy sections. The hospital is expected to serve as a showcase for its renovations and APTS implementation for hospitals in Addis Ababa.

Based on official request from Yekatit 12 Hospital, SIAPS trained 57 health professionals including physicians, pharmacists, nurses, midwives, anesthetists, and laboratory technicians on EHRIG/Pharmacy Chapter standards. This training is part of the hospital's effort to improve quality of services by building staff capacity on implementing various national standards relevant to the hospital. The training included rational use of medicine, DTC, drug information service (DIS), pharmacovigilance, and clinical pharmacy services. It is anticipated that the health care providers that received this training will train and mentor other staff. Because the full cost of this training was covered by the hospital, SIAPS provided technical support by assigning experienced trainers.

During the quarter, patient uptake and regimen breakdown reports were collected from 675 and 380 sites, respectively. The information was compiled and shared for partners and stakeholders for decision making.

To provide evidence based medicines information to providers and patients, SIAPS has supported health facilities to establish a DIS at seven new hospitals (6 hospitals from Oromia and one hospital from SNNP regions). These sites were provided with reference books, stationary supplies, notice boards, office equipment, and onsite training. These health facilities assigned focal persons to manage DIS and began to make the evidence-based medicines-related information available to service providers and patients. The already established DIS sites were strengthened through supportive supervision and provision of such materials as reference books.

So far, a total of 76 health facilities established DIS units and all of them are providing evidence-based medicines information on regular basis.

With regard to medicines use education, 8 health facilities (23.5% of the annual target) organized 88 medicines use education events or sessions, reaching reached 5,267 patients, of which 48% were women. The patient education guideline developed and distributed by SIAPS has helped service providers during organization of the sessions.

***Objective 1: Strengthen pharmaceutical system to ensure access to quality pharmacy services that will lead to improved health outcomes***

In collaboration with the regional health and Justice Bureaus of SNNPR, APTS regulation was finalized and approved by the regional administration. A workshop on approved APTS regulation was organized in collaboration with the regional health bureau to disseminate information on the regulation. In addition, technical assistance was provided to the health bureau on developing APTS tools (models and receipts). As a result, the health bureau developed the tools, which were printed by SNNPR Bureau of Finance and Economic Development. The region invested about 1,233,446 Ethiopian birr (approximately 61,672 US dollars) from own resources to cover printing.

Tigray region's APTS draft regulation was finalized and consultative meeting was conducted with all stakeholders. Approval by the regional state president is expected to occur in a short period of time.

The Oromia Regional Health Bureau (ORHB) was supported to organize the final APTS legislation document review workshop. The draft APTS legislation was thoroughly reviewed and edited with the participation of 11 technical and managerial experts from relevant bureaus of Oromia Region including the office of the SNNPR president, Regional Legal and Justice Bureau, Regional Finance and Economic Bureau, and ORHB. The document was finalized and submitted to the Office of the President for enactment by the regional council. The next step will be to follow up on the enactment of the legislation and start working on customization and printing of the vouchers for implementing APTS in the region.

As per the request from Amhara RHB, technical support was provided for developing the Pharmacy Service part of the Region's Health Sector Transformation Plan. Technical support was provided on developing the SWOT (strengths, weaknesses, opportunities, threats) analysis (), interventions and performance measures for pharmacy service by gathering data from different sources. The draft document was communicated to the RHB Management for comment. The document is still under development.

***Constraints to progress***

- Delay of the enactment of the APTS legislation in Oromia region due to competing activities by the regional cabinets
- Delay in the procurement process because of problems clearing imported HRIC material (PBAX) from customs office

### *Partner contributions*

- The SNNPR Bureau participated and collaborated in all necessary steps needed for finalizing the regulation.
- The office of the president, Regional Legal and Justice Bureau, Regional Finance and Economic Bureau, and ORHB have actively participated during the finalization of the draft APTS legislation document

### **Objective 2: Pharmacy services at facility level improved**

Standard operating procedures (SOPs) on clinical pharmacy were finalized and communicated to SIAPS headquarters for review, editing, and finalizing. The SOP will standardize the provision of clinical pharmacy at inpatient wards. It contains sections on: assessment; development and implementation of a pharmaceutical care plan; follow up, monitoring, and evaluation; discharge planning and counseling; pharmacy only rounds and morning sessions; multidisciplinary team activities; and documenting and reporting clinical pharmacy services.

Similarly, revision of the standard operating procedures for ARV drug management at health facilities with the new title: “Standard Operating Procedures for Managing Information on ARV Drugs Dispensing and Patient Medication Records” was finalized. Training was provided on standard operating procedures for ARV drug management at health facilities for 64 pharmacy personnel (21 female and 43 male participants) in collaboration with Oromia Regional Health Bureau.

As a part of documenting best practices on clinical pharmacy services in Ethiopia, SIAPS produced two technical reports, which are undergoing in-house technical and editorial review. The technical reports are produced in an effort to document and share information about the outcomes of a successful collaborative effort among SIAPS, Pharmaceutical Fund and Supply Agency, and local universities.

SIAPS collaborated with Pharmaceutical Fund in examining the status of clinical pharmacy services at hospitals that began services during the quarter. Results revealed that 72.7% of the hospitals assigned the trained pharmacists at the ward, 68.8% documented interventions, 63.6% participated in ward rounds and morning sessions, 40.9% assigned the trained pharmacists at chronic care pharmacy, and 59.1% developed an action plan on clinical pharmacy services.

Prescription review was conducted at Addis Ketema health center in Dire Dawa. The health center’s DTC decided to conduct a review of the prescribing pattern for identifying the gaps on the rational medicines use and design intervention strategies based on the findings.

Various supportive supervision activities were carried throughout the country by SIAPS staff and its partners and collaborators. As an example, a team of experts drawn from Amhara Regional Health Bureau (ARHB) and SIAPS made an in-depth joint supportive supervision (JSS) on the status of pharmacy services (DTC, DIS, Clinical Pharmacy and Chronic care, ADR, EDT, ART, Medicine Use Health Education, and Compounding) in nine hospitals in East Amhara.

The journalists trained by SIAPS and other experts regarding RMU and AMR also produced and disseminated articles on AMR prevention and containment to educate and empower the public and to create awareness among health care providers and policy makers. In 2014 alone a total of 90 medicines use related messages were broadcasted and transmitted through the electronic and print media. These topics were transmitted in 10 different languages.

Face to face discussions on adverse drug reactions and reporting (pharmacovigilance) were carried out at seven health facilities (six in Addis Ababa and one in Tigray). A total of 197 health care providers participated in the discussions. Various pharmacovigilance tools and documents were distributed to health facilities and RHBs; this includes 280 ADE reporting form, 350 allergy cards, 210 national pharmacovigilance framework, 280 newsletters and 280 preventable adverse event bulletins. 116 ADE data were entered into the national database.

To improve storage and dispensing practices at health facilities in Oromia region, 20 dispensing Dixon type shelves, 102 store shelves, 122 pallets, and 3 lockable cabinets were supplied to 12 health centers, five 5 hospitals, and one Woreda health office.

SIAPS collaborated with Tigray RHB to mark the first graduation ceremony of two of the hospitals in Tigray region (Mekelle and St. Mary Hospitals) on November 14 at Adwa in a large conference organized by the region to review the performance of hospitals.

#### *Constraints to progress:*

- Less attention given to clinical pharmacy intervention, especially at referral hospitals resulted in delays in implementation at Gondar University and Felege Hiwot hospitals.
- Staff turnover, workload, and lack of commitment because of different factors such as lack of duty schedule for clinical pharmacy practitioners
- Supplied furniture was not assembled when received— local technical personnel were subsequently used to assemble some of the furniture

#### *Partner contributions*

- SIAPS collaborated with our partners such as health facilities, Food, Medicines and Health Care Administration and Control Authority and mass media agencies and outlets
- Most of the above activities in clinical pharmacy were performed with the strong collaboration of PFSA, RHB, and university staff.

### ***Objective 3: Capacity to use information for decision making strengthened***

During this quarter, patient uptake and regimen breakdown reports were collected from 675 and 380 health facilities, respectively, and the information generated from these facilities were compiled by SIAPS and shared with partners and stakeholders for decision making. The patient uptake report indicates that a total of 329,627 patients were receiving ART services from 675 health facilities. In addition, the regimen breakdown report covering a total of 284,068 patients (86% of those covered in the patient uptake report) was compiled as part of monitoring the

prescribing practice and adherence to treatment guidelines. Currently, this data is being regularly used to monitor the progress of switching of patients from D4T-based regimens to safer regimens in both adult and pediatric patients. During this reporting period, the phasing out of patients on D4T-based regimens is almost complete (less than 0.02%), whereas approximately 24% of children are still taking regimens containing D4T. This figure was about 44% during the previous reporting period; the trend indicates an aggressive decline (by 20%) in just two months.

On-the-job training and mentoring was provided on real time dispensing to 27 dispensers; in addition, computer hardware and software maintenance support was provided for 13 ART electronic sites. In addition, two external backup drives were distributed to EDT sites to ensure continuous data backup, protect data loss, and produce quality data on patient uptake and regimen breakdown reports. As a result, continuous patient information recording is ensured at the health facilities and various reports generated at these sites are being used for decision making.

With the objective of strengthening the capacity of facilities to use information for decision making, four health facilities (two health centers and two hospitals) in Borana Zone have been supported through technical assistance and supply of PMIS tools to maintain the recording, collection, and use of malaria related information. As a result, quarterly malaria treatment and AMDM reports are collected from these health facilities to compile a continuous results monitoring system report. To fulfil the PMT's expectation from SIAPS on reporting, the data collected from 39 CRMS HFs in Oromia Region has been used to prepare the quarterly EUV report. The EUV report is finalized and submitted to SIAPS headquarters.

### *Constraints to progress*

- Report discrepancy (data quality)
- Frequent power interruption at health facilities
- Inappropriate handling and use of computers
- Shortage of trained ART pharmacists due to high staff turnover at some health facilities. As a result, manual PIS and electronic dispensing tools are not filled in properly.
- Since SIAPS is the only source of national aggregated information on patient uptake and regimen breakdown in the country, the system demands continuous follow-up, mentoring, and support to ensure quality of reporting.

To solve these problems, on-the-job training was provided to dispensers. In addition, discussion is made with staff and health facilities management on the advantages of recording and updating information to review patient medication history, prevent medication error, and to minimize report discrepancy.

### *Partner contributions*

- Health facilities CEOs and dispensary staffs have interest to implement EDT for real-time dispensing
- Health facilities continued recording and reporting malaria and AMDs related data.

#### ***Objective 4: Optimal use of financial resources ensured***

During the reporting quarter, two federal hospitals (St. Peters and ALERT) began implementing APTS. ALERT hospital managed to fulfill the required workforce (accountants, auditors, pharmacists, and cashiers) to fully implement APTS in all of its pharmacy units.

Jimma University Specialized Hospital, which started implementation of APTS during the previous quarter with support from SIAPS, produced its first financial and service report this quarter. Inventories were collected from all pharmacy outlets to compile and generate the monthly reports. Inventory of all expired drugs are taken from all pharmacy outlets to generate and monitor wastage rates.

As a part of strengthening APTS intervention, two health facilities in SNNPR region (Butajira and Hossana hospitals) were supported on medicines accounting management (cash, credit, and free sales). The hospitals were supported on compiling monthly financial and service reports. As a result, the two hospitals are managing their pharmaceutical transactions and generating monthly finance and service reports on a consistent basis. The hospitals are also practicing internal auditing and taking follow-up corrective measures. In addition, all 11 hospitals in East Amhara are sending APTS finance and service reports; the reports are continuously shared with all concerned authorities and partners including Amhara Regional Health Bureau (ARHB) and SIAPS. Generally, the reports show significant gain in revenue, reduced expiry/wastage (less than 2%), improved deployment of pharmacy workforce, decreasing tendency of polypharmacy, and improved availability and affordability of medicines.

During the quarter, Hossana and Butajira Hospitals conducted ABC value analysis and as a result they were able to identify medicines that are taking a significant proportion of the budget and yet are less relevant to their catchment areas and vice-versa.

#### ***Constraints to progress***

- Staff turnover, workload and lack of commitment because of different factors such as lack of indemnity for APTS implementation and incentive package (further education, short-term training, etc.) for pharmacy professionals as a whole.
- Minimal use of APTS reports generated for decision making

#### ***Partner contributions***

Renovation of pharmacies with APTS specification for its implementation, hospital management encouraging pharmacy professionals



## **Guinea**

**Goal: To ensure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes**

### ***Overall Quarter Progress***

SIAPS Guinea has intensified its advisory activities in the areas of pharmaceutical sector governance, capacity building of organizations and individuals on pharmaceutical management, and the collection and use of pharmaceutical information for decision making. SIAPS continued to work very closely with the Central Medical Store (PCG), the National Malaria Control Program (PNLP), the National Medicines Regulatory Authority (DNPL), and a series of international and local partners.

While the main focus of activities remains malaria, SIAPS has visibly broadened its scope of work to aid in managing the Ebola outbreak in Guinea and, more generally, to expand the logistics management information system to other key disease programs. Given the critical priority of stopping Ebola and the fluidity of public health sector funding at the moment, SIAPS has lent its support to many activities that were not envisioned in the new workplan.

In support of Ebola-related activities, SIAPS assisted PNLP in developing new guidelines for malaria case management in the context of Ebola, and in drafting the terms of reference for a survey measuring the impact of Ebola on how patients are being treated for malaria.

In terms of regular ongoing activities, a fifth end-user verification (EUV) survey was conducted during this quarter, along with a 5th malaria regional review meeting. Monthly reporting rates continue to be strong, following the electronic reporting system set in place by SIAPS and PNLP in mid-2013, with 99% of facilities in President's Malaria Initiative (PMI) zones reporting on average for the quarter ending in September 2014, and more than 80% of the reports coming on time. Consumption data emerging from these monthly reports will be used again during commodity distributions that will be organized by SIAPS with PNLP and PCG in 2015, while the epidemiological data is now included in a newsletter initiated by PNLP.

### ***Objective 1: Pharmaceutical sector governance strengthened***

Many of the activities implemented over the past quarter aimed to improve good governance, transparency and accountability as well as coordination among the various partners involved in malaria, Ebola and other activities.

With prior support from SIAPS, PCG in October 2014 launched an international tender for the procurement of essential medicines and for pre-qualification of products and suppliers. In December, SIAPS helped review the bids with the National Commission for Public Procurement of Guinea, and supported the commission during the pre-qualification process. The drugs purchased under this tender are to be sold to patients as part of the cost recovery program. The 50 commodities (medicines and medical devices) most commonly sold by the PCG in 2014 are covered by this tender; however, antimalarial products are not included as these are procured and

distributed for free by donors such as PMI/USAID and the Global Fund. This SIAPS support allowed PCG to noticeably improve its medicines procurement process in terms of transparency, equity and suppliers competition.

In December 2014, SIAPS attended a PNLP workshop organized by the Management Sciences for Health (MSH) Leadership, Management and Governance (LMG) program to roll out a new leadership process at PNLP. The workshop reunited all PNLP stakeholders and established a management committee for this initiative, with SIAPS being named a member of this committee.

SIAPS and its partners also made steps forward with regard to malaria-specific activities. At the request of PMI, SIAPS drafted a new concept note that defines the activities and budget for malaria commodity distributions that will be conducted by PCG with technical support from SIAPS starting in 2015. In October 2014, SIAPS attended an extraordinary meeting of the Roll Back Malaria (RBM) committee organized by PNLP. SIAPS is a member of the RBM committee in Guinea, which typically meets on a quarterly basis. The October meeting was called to address changes needed to malaria treatment guidelines given the Ebola outbreak. Two staff members of RBM Geneva—the operations director and the manager for community health—came to take part at this meeting.

SIAPS participated in the development of an emergency plan revising malaria case management protocols in the context of Ebola, according to WHO recommendations. This activity was conducted jointly by PNLP, Stop Palu and CRS. SIAPS attended the workshop held in Kindia on 2-3 December 2014, which resulted in the adoption of new case management protocols and tools.

From 24 November to 3 December, SIAPS conducted a joint mission with the Essential Medicines program of WHO Geneva and the UNICEF regional office in Dakar to assess the impact of Ebola on the operations of the PCG and determine urgent actions required to support the PCG, with particular emphasis on PCG's role in coordinating logistics for Ebola at the national level. SIAPS helped the PCG to adapt its five-year Strategic Plan in the Ebola context and aided in developing a budget for it. This activity was carried out in collaboration with WHO, UNICEF, UNFPA and others. The strategic plan was presented in December at a WHO meeting in Geneva that reunited technical and financial partners and Ministry of Health delegations from the three countries affected by Ebola (Guinea, Sierra Leone and Liberia).

### *Constraints to progress*

Ebola-related activities are now the top priority for all departments of the Ministry of Health and the PCG, and many international organizations have arrived to support this work. Therefore, all other activities, including those in the SIAPS workplan will be implemented gradually over time.

### *Partner contributions*

During the quarter, SIAPS worked with the wide range of local and international partners, including the Ministry of Health, the PNLP, the PCG, and the WHO. Coordination has been both a goal and a challenge, given that each organization needed to achieve its own agenda in the context of the Ebola outbreak.

## ***Objective 2: Increased and enhanced capacity for pharmaceutical supply management and services***

In the previous quarter, SIAPS helped PNLP finalize its terms of reference for a new working group focused on the supply management of malaria medicines, composed of the main PNLP partners. During this quarter, the group held its first meeting. This working group has been seen as a priority by SIAPS since the beginning of the program and is now in charge of all aspects of quantification, distribution and stock monitoring for the country.

SIAPS also acted as supervisor for a study on the malaria supply chain in Guinea, which was conducted by PNLP in connection with a new intervention focused on providing seasonal malaria chemoprevention to children under the age of five (the ACCESS-CPS Project). More generally, this study involves seven countries. Data analysis is ongoing and a workshop will be organized in the near future to disseminate the findings.

SIAPS, along with Stop Palu and the World Food Programme, participated in helping PNLP develop a process for the routine distribution of long-lasting insecticide-treated bed nets (LLINs) to pregnant women and children under the age of five through the health centers. This activity was already scheduled for 2015, but during his recent visits to Guinea, the director of the US Centers for Disease Control and Prevention (CDC) recommended that it be initiated as soon as possible to help prevent new cases of malaria, the symptoms of which can be easily confused with Ebola. Consequently, routine distributions of LLINs have been conducted countrywide by the PCG with funding from the CDC Foundation via the NGO eHealth.

SIAPS also helped to restructure the Quality Assurance department of PCG. In the previous quarter job descriptions and processes/procedures had been defined, in particular for self-inspections. In late October, SIAPS trained approximately 20 PCG staff on the new standard operating procedures.

As part of the Medicines for All program initiated by the Ministry of Health to provide comprehensive pharmaceutical management training to health workers, SIAPS lent its support to establish a committee responsible for revising the training modules and for developing a new module specific to Ebola commodities, in collaboration with the WHO. The revision process will last through late January 2015. SIAPS also helped the PCG with quantifying Ebola commodities needs and the distribution plans.

### ***Partner contributions***

The new PNLP working group on malaria commodities involves partners such as the PCG, DELIVER, Stop Palu, CRS, and USAID, PMI and CDC representatives in country.

### ***Constraints to progress***

The PNLP working group on the supply management of malaria commodities had been established during the previous fiscal year, but it was not yet functional. SIAPS will continue to provide support group, which is key for the coordination of the various partners.

**Objective 3: Making pharmaceutical management information available and used for decision making**

In October 2014, a common strategy was developed by PNLP with SIAPS and Stop Palu (both PMI/USAID-funded projects) to actively verify the data quality and validity of the monthly malaria reports compiled by health facilities in PMI zones and reported electronically via the health districts. This strategy involves supervision visits at the facility level that compare the data recorded in the patient registers and stock cards with the data reported to PNLP. A Microsoft Excel tool has been developed based on the initial supervisions conducted at health facilities in Kaloum and Dixinn (districts of Conakry) and Dubreka (a district in the region of Kindia). SIAPS participated in a supervision visit in the Labe region to test the new malaria supervision guidelines, developed jointly with PNLP, Stop Palu, and CRS during the previous quarter to help those supervising malaria case management and pharmaceutical management activities at the health center, hospital, district and regional levels.

In December, SIAPS organized a fifth EUV survey in the country (this survey had been delayed in the previous fiscal year due to the Ebola outbreak). This survey, like the previous one, covered the areas supported by both PMI and the Global Fund. A total of 31 health facilities and five pharmaceutical warehouses (including the new depot in the region of Boke) were surveyed, and findings will be available in late January 2015. SIAPS was responsible for training the data collectors from the Ministry of Health, leading field activities, debriefing, and data analysis in collaboration with PNLP.

In November 2014, SIAPS and PNLP organized a new series of malaria quarterly reviews in the regions of Boke, Labe (with participation from the Faranah region), and Kindia (with participation from the Conakry region). These reviews typically involve the directors, pharmacists, and data managers of all 19 health districts in the PMI-supported zone and their respective regional health authorities. In addition, other implementing partners (Stop Palu and DELIVER) supporting PNLP attended these review meetings. The two-day agenda focused on salient topics: the results of the latest EUV survey, key activities conducted or planned by PNLP and its partners, reporting rates for malaria, findings of the recent supervisions focused on data validity, data summaries by district, the new comprehensive guidelines for malaria supervisions at the facility level, and the presentation of a plan to mitigate the effects of Ebola on malaria case management in Guinea.

Several meetings were held between the DNPL, the PCG, the National Health Information System (SNIS), UNFPA, and SIAPS to define best ways to implement a national logistics management information system (LMIS) for all priority disease programs.

A three-day workshop was held in Kindia in mid-December to establish common reporting forms for collecting consumption data. This workshop received funding from UNFPA and technical assistance from SIAPS.

### *Constraints to progress*

Because of the Ebola outbreak, the EUV survey and the regional malaria review meeting conducted during this quarter had been postponed from the previous fiscal year. A challenge identified has been the need for government partners to take more ownership of the EUV survey, in particular data analysis and follow-up of recommendations.

### *Partner contributions*

SIAPS collaborated with many of the partners and government agencies mentioned above.

### ***Objective 4: Strengthened financing strategies and mechanisms to improve access to medicines***

SIAPS participated in negotiations that led to funding of the PCG through the eHealth Africa project for commodity distribution related to Ebola. As mentioned above, eHealth is funded by the CDC Foundation to support trainings related to sanitation and the protection of health workers against Ebola.

The cost recovery study described in the workplan for this fiscal year is anticipated to take place in early 2015.

## **Lesotho**

**Goal: To assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes**

### ***Overall Quarter Progress***

In this quarter, SIAPS worked with Ministry of Health (MOH) and the relevant stakeholders to conduct quantifications for ART, HIV rapid test kits (RTKs), and TB pharmaceutical commodities.

SIAPS provided technical assistance (TA) to the MOH laboratory department improve the Logistics Management Information Systems (LMIS) reporting from all the 18 laboratories and increase the availability of laboratory commodities including TB commodities.

SIAPS continued to work with the MOH, the National Drugs Services Organisation (NDSO), and the Clinton Health Access Initiative (CHAI) to conduct monthly stock status meetings of ARVs, HIV RTKs, and other ART-related commodities.

SIAPS also continued to provide support to the five District Health Management Teams of Berea, Botha Bothe, Mafeteng, Maseru and Mohale's Hoek districts to conduct supportive supervision and mentoring visits to health facilities. The supervision and monitoring program was conducted to strengthen the Lesotho health system and build the much needed human resources capacity for health. This, therefore, ensured a sustainable national response to the HIV/AIDS epidemic and contributes to achieving an AIDS Free Generation. This support led to an increase in the availability of tracer commodities (85%); an increase in the proportion of health facilities that keep complete patient information as per national standards (98%); and all (100%) the SIAPS supported sites stocked ARVs according to plan.

### ***Objective 1: Capacity for pharmaceutical supply management and services increased and enhanced***

SIAPS provided technical assistance to the MOH to conduct quantifications for ART and TB pharmaceutical commodities. The ART quantification meetings were conducted over a period of three weeks, led by the MOH Disease Control Directorate (DCD) pharmaceutical focal person responsible for ART. This quantification was done by the quantification committee of the Supply Chain Management Technical Working Group. The MOH departments of Monitoring and Evaluation (M&E) and Health Management Information Systems also actively participated in the exercise.

The National TB Program TB Logistics Coordinator led the quantification of the TB commodities using QuanTB that SIAPS introduced to the ministry in the previous fiscal year. This quantification was done in collaboration with CHAI. These quantifications were done in time to source funding for the procurement of both ART and TB pharmaceutical commodities for MOH financial year (April 2015 to March 2016) as required by the Government of Lesotho. Further, SIAPS and Global Fund Coordinating Unit conducted an MOH-led emergency

quantification exercise of Determine HIV RTKs to avert an anticipated stock-out during the course of the FY15. These activities will ensure an uninterrupted supply of commodities in the health facilities and assure availability of right supplies at right places that will support the scaling up core HIV and TB interventions in the country.

SIAPS conducted an orientation of the newly employed MOH District Logistics Officers (DLOs) who are funded by the Global Fund to Fight AIDS, Tuberculosis and Malaria grant. The DLOs will serve on the District Health Management Teams of Leribe, Mokhotlong, Qacha's Nek, Quthing, and Thaba-Tseka, which did not have the officers.

### *Constraints to progress*

There were delays in the quantification exercises as the data was not complete and readily available at the MOH DCD. SIAPS is working the MOH to strengthen the acquisition and repository of data of both patients and consumptions data so that it should be readily available at the DCD.

### *Partner contributions*

SIAPS collaborated with the NDSO and CHAI to provide technical assistance to the Ministry of Health DCD in conducting forecasting and quantification of HIV and TB pharmaceutical commodities. Moreover, SIAPS worked in collaboration with MOH Laboratory Directorate and Global Fund Coordinating Unit. SIAPS worked in coordination with government of Lesotho and implementing partners to support country priorities to achieve the set targets as stipulated in the national strategic plans documents.

### ***Objective 2: Utilization of information for pharmaceutical and laboratory decision making increased across all levels of the Lesotho health system***

In this quarter, SIAPS continued to pilot mobile health (mHealth) at 18 health centers in the district of Maseru. SIAPS worked with the Maseru DHMT to orient users on how to register patients and dispense medicines using mhealth. mHealth is used at these health centers to capture patient data during dispensing of ARVs, which is then transferred in "real time" over the internet to the District Health Management Teams where it is stored on the RxSolution database. This data is used to consolidate the monthly reports and to quantify monthly supplies of ARVs for each of the health centers. SIAPS will measure the impact of mhealth in improving the ART program logistics data during the this pilot phase after which the program will be rolled out countrywide. It is envisaged that consistent use of mHealth will improve data quality in terms of completeness, accuracy, and timeliness at the health centers where RxSolution is not available.

SIAPS provided onsite support of RxSolution at five of the 13 hospitals where RxSolution was operational. The rest of the sites received virtual support. SIAPS continued to provide technical assistance (TA) in the implementation of laboratory LMIS at all the 18 hospital laboratories. This TA resulted in 100% submission of the LMIS reports. Only 6% of the hospital laboratories experienced stockout of HIV Rapid Test Kits (RTKs) in this quarter. Additionally, SIAPS provided technical assistance to the MOH laboratory logistics coordinator to incorporate the

laboratory TB commodities into the routine laboratory LMIS reporting system. This was done to ensure proper management of laboratory TB commodities and prevent frequent stock outs of these commodities at the hospital laboratories. Since then there were no stock outs of laboratory TB commodities as reflected in the last two monthly stock status reports. Additionally, SIAPS mentored 26 TB laboratory technologists to compile laboratory LMIS reports and complete laboratory requisition forms.

### *Constraints to progress*

The laboratory procurement process at the MOH Laboratory Directorate has numerous constraints which led to most laboratory commodities being below minimum stock levels. SIAPS continues to liaise with laboratory directorate to make an emergency procurement through MOH funding for the short term. SIAPS is also working with MOH to find long term solutions to procurement challenges.

### *Partner contributions*

SIAPS collaborated with Foundation for Innovative New Diagnostics (FIND) to conduct mentorship for the TB laboratory technologists.

### ***Objective 3: Pharmaceutical services improved to achieve desired health outcomes***

SIAPS, in collaboration with NDSO and CHAI, continued to provide technical assistance to MOH in improving the national availability of ARVs, HIV RTKs, and other ART related commodities through conducting the monthly stock status meetings which are facilitated by the Ministry of Health. In these meetings, the monthly stock status reports are analyzed and informed strategic logistic decision making are executed so as to ensure continuous availability of the tracer commodities. The monthly stock status reports tracks availability of SIAPS tracer commodities (ARVs, HIV rapid test kits, and other ART-related commodities).

SIAPS conducted 67 supportive supervision and mentoring visits to the SIAPS-supported health facilities districts of Berea, Botha Bothe, Mafeteng, Maseru, and Mohale's Hoek. Additionally, SIAPS provided technical assistance to Berea and Mohale's Hoek to form clusters for peer to peer mentorings. Using both the cluster and health facility visit approaches, 133 health care workers (109 females and 24 males) were mentored in inventory management and pharmaceutical management information systems..

In the five districts, the availability of tracer commodities was 85%; the proportion of health facilities that keep complete patient information as per national standards increased to 98%; and all (100%) of the SIAPS supported sites stocked ARVs according to plan (that is, within two months minimum and three months maximum stock levels). However, 15% (9 out of 61 assessed health facilities) of all health facilities assessed in this quarter experienced stock-out of ARVs for more than three days.



### *Constraints to progress*

The aggressive implementation of new guidelines for initiating people on ART (CD4 500 cell/mm<sup>3</sup>, up from 350) has put a strain on the quantities of ARVs. During this time, SIAPS worked with MOH to monitor consumption patterns and to assist in ARVs distribution and provided feedback to MOH on the availability of the ARVs during the stock status meeting. It is planned that the new quantification will use targets as in the National Strategic Plan. SIAPS also provided technical assistance to the MOH in placing an accelerated procurement of ARVs (TDF-3TC-EFV 300/300/600 mg) to avert the anticipated national stock-out.

### *Partner contributions*

SIAPS collaborated with NDSO and CHAI to provide technical assistance to the Ministry of Health DCD in coordinating and conducting the monthly stock status meetings.

## **Mali**

**Goal: Assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes.**

### **Overall Quarter Progress**

During this quarter, SIAPS Mali supported the MOH and its stakeholders to strengthen pharmaceutical governance, build pharmaceutical management capacity in individuals and institutions, to make available logistics data for decision making, and to improve pharmaceutical services.

To improve pharmaceutical governance, SIAPS supported the Direction de la Pharmacie et du Medicament (DPM) and the regional directorates of Kayes, Segou, and Sikasso to organize quarterly supply chain coordination meetings to address issues related to health commodities management.

At the national level, these meetings focused on HIV commodities quantification and on updating the malaria supply plan. Participants from MOH, USAID implementing partners, UN agencies, and 12 civil society organizations attended these meetings. At the regional level, the coordination meetings focused on validation of medicine stock status and data on pharmaceutical management of key health commodities. Participants to regional meetings came from the Millennium Village Project, Strengthening Decentralized Health System Project, and the Community Health Regional Federation (FERASCOM). SIAPS also supported the Programme National de Lutte contre le Paludisme (PNLP), the Pharmacie Populaire du Mali (PPM), and DPM to continue dissemination of SOPs and LMIS tools for health facilities, elaborate two distribution plans for malaria products, and finalize the Central Medical Store strategic plan.

As part of capacity-building efforts, SIAPS supported MOH regional authorities in October 2014 to organize training workshops on pharmaceutical management and logistic reporting tools in Segou and Mopti regions and Tominian and Bandiagara health districts. Staffs from 48 health facilities were trained and pharmaceutical management tools provided to them. With 95 additional trained users, the total number of trained stock managers increased to 896 (220 female, 676 male), while the total number of health centers with management tools increased from 488 to 562.

SIAPS also supported post-training coaching sessions for stock managers in the Kayes, Sikasso, and Mopti regions where 182 users were coached. Records showed that 125 of these users successfully implemented their individual actions plan. Globally, the proportion of users who successfully implemented their individual action plans increased from 16% to 19%, although the annual target is 60%.

Furthermore, SIAPS supported Kayes, Sikasso, and Segou regions in organizing quarterly meetings to analyze and validate logistics data; 26 participants from health districts, PPM regional warehouses, civil society organizations (CSOs) members, and other stakeholders attended these meetings.

For more transparent and accountable pharmaceutical systems, SIAPS continued its support to PPM for developing a five-year strategic plan and review its SOPs.

From December 9 to 22, a SIAPS consultant conducted a review of PPM main operation procedures in Bamako, covering the procurement process, storage, management, information system, order preparation process, and shipping and distribution. The two remaining SOPs that relate to medicine receipt, storage, order entry, and distribution will be reviewed in the next quarter, and educational materials will be developed to train PPM staff on revised SOPs.

To avail data for decision making, SIAPS assisted the MOH in submitting one PPMRm and one PPMRc and made recommendations for a continuous availability of malaria and contraceptives commodities. Additionally, SIAPS supported the health regional directorates to organize seven workshops to share the latest EUV findings with MOH stakeholders at the national level and in the regions of Kayes, Koulikoro, Sikasso, Segou, and Mopti and in the district of Bamako. Participants from 50 health districts and other key stakeholders attended these workshops.

### ***Objective 1: Pharmaceutical sector governance strengthened***

During this quarter, SIAPS Mali provided assistance to the DPM to organize two meetings of the National Technical Committee for the coordination and monitoring of health commodities (malaria, MCH, HIV and AIDS, TB, and FP) through the HIV and Malaria Technical Working Groups (TWGs). The HIV TWG meetings took place December 1-19, 2014, in Bamako and focused on the HIV and AIDS commodities quantification. With the goal of improving quantification to ensure the constant availability of HIV and AIDS medicines in PPM and health centers, SIAPS assisted the National HIV Program (CSLS) to organize a quantification workshop. Attendees to this two-week workshop included executives (pharmacists and other staff) from DPM, CSLS, HCLS, PNUD (GF Principal Recipient), Project Plan Mali, and some physicians, all of whom are involved in the management of HIV and AIDS commodities.

Quantimed and Pipeline tools were used for the forecasting and supply planning of ARV commodities. The purpose of the Malaria TWG meeting that took place on October 29, 2014, was to update the malaria commodities supply plan. After the meeting, the MOH sent requisition letters to all partners (PSI/GF, USAID, and PPM) involved in the supply plan so that they could procure commodities for the malaria program for 2014 and 2015.

To maintain transparency of the distribution system of donor-funded malaria commodities, SIAPS provided technical assistance to the NMCP on October 2, 2014, to develop distribution plans for PMI-funded sulfadoxine-pyrimethamine on the basis of logistic data to ensure that the quantities allocated are adequate and follow transparent assumptions. Given that health districts are the final point of the PPM distribution process for malaria commodities, SIAPS regional technical advisors supported the regional pharmacists to coordinate efforts with PPM regional warehouses, DRS, and health districts to ensure that all Centre de Santé Communautaire (CSCOM) and other health facilities receive malaria commodities based on their needs and in line with developed distribution plans.

Finally, SIAPS provided pharmaceutical management tools (stock cards and LMIS reports and SOPs) to 21 health centers in the Tominian health district in Segou region and 27 health centers of the Bandiagara health district in Mopti. The production and provision of pharmaceutical management tools to health facilities will enable managers to better manage and report on commodity stock status and other logistics data for evidence-based decision making.

### *Partner contributions*

- Malaria TWG, HIV and AIDS TWG, DPM, PPM, PNLP, DSR, CSLC/MSHP, HCNLS
- Donors: USAID, PSI, UGP, PNUD
- OSC: Projet village du millénaire, FERASCOM, Projet de développement décentralisé, Marie Stop International, ESTHER AID

### *Constraints to progress*

How to keep the local CSOs involved in the process of decision making on supply and distribution of health commodities into the country.

### ***Objective 2: Capacity for pharmaceutical supply management and services increased and enhanced***

During this quarter, SIAPS contributed to building the capacity of individuals and organizations in medicines supply chain management.

SIAPS trained the community health center technical directors and the stock managers of the health districts of Tominian in the Segou region and Bandiagara in the Mopti region. Additionally, SIAPS organized post-training coaching sessions of stock managers in the health districts of Niono, Diema, and Kenieba in the Kayes region; in the health districts of Selingue and Kinyan in the Sikasso region; and Bankass in the Mopti region. A total of 95 users (42 in Tominian, 53 in Bandiagara) benefited from training on SOPs. As a result, a number of trained health workers in the country increased to 896 out of 946 planned for program year 4.

SIAPS also continued to assist the Direction Régionale de la Santé to organize quarterly supply chain coordination meetings in three regions (Kayes, Sikasso, and Segou) to validate medicines stock status (specifically for malaria, MNCH, and FP commodities and HIV tests) and address any pharmaceutical management issues that were identified during coaching visits at health facilities and CSCOM.

These meetings allowed stakeholders to discuss all pharmaceutical management issues including data quality, reporting rate, key findings, and other concerns identified during coaching visits. In collaboration with SIAPS and the PPM regional warehouses, DRS presented stock status and major medicine supply chain bottlenecks and problems so that all stakeholders could identify customized corrective actions based on the specific CSCOM context. Findings from aggregation, quality, and analysis of collected medicines data were validated during these meetings before their submission to DPM. From an expected total of 636 LMIS reports (CRGS) from these three regions, 239 reports were transmitted.

During project year 4, SIAPS Mali plans to support PPM to develop and update their SOPs and develop a supply chain operations training package for PPM staff members.

The first step to achieving this objective was a visit of an Imperial Health Sciences (IHS) consultant December 9-22, 2014, to work with the PPM to review its SOPs and subsequently acquire best practices on storage and distribution of malaria, HIV, MNCH, and FP commodities.

Almost all current PPM operational procedures were reviewed, a new organizational chart was suggested, and a potential schedule for training needs was drawn up. It is expected that a training of PPM staff will take place after completion of the SOP review process during the next quarter.

#### *Partner contributions*

- DRS of Kayes, Sikasso, and Segou regions
- Health districts of Tominian, Bandiagara, Nioro Diema Kenieba, Selingue, Kignan, and Bankass Central Medical Store (PPM)

#### ***Objective 3: Pharmaceutical management information available and used for decision making at different levels of the Malian health system***

During this quarter, SIAPS Mali submitted one PPMRm and one PPMRc to track and report to USAID Washington on the availability and use of key health commodities (antimalarial medicines and contraceptives). SIAPS also conducted regional and national workshops to disseminate findings and recommendations from the September EUV survey on the availability and use of antimalarial products (ACTs, RDTs).

The PPMRm showed that the country currently has the following level of stock at the Central Medical Store (PPM):

- 3 months stock of artemether-lumefantrine tablets  $6 \times 1$
- 4 months stock of artemether-lumefantrine tablets  $6 \times 2$
- 13 months stock of artemether-lumefantrine tablets  $6 \times 3$
- 2 months stock of artemether-lumefantrine tablets  $6 \times 4$
- 2 months stock of sulfadoxine-ppyrimethamine
- 8 months stock for malaria RDTs

To avoid stock-outs or overstock, recommendations were made and shared with donors involved in the malaria supply plan (USAID/PMI, PSI/Global Fund, PPM/MoH).

The PPMRC report recommended that:

- A supply plan (for both sectors, public and social marketing) should be respected in terms of delivery dates and quantities planned for ordering
- A delivery of the 7200 kits of DIU for PSI and planned by USAID to be delivered by 2015 should be anticipated to avoid stock-out in the social marketing (PSI) sector

- A transfer of Microlut from PSI to PPM before the product expiration date
- A transfer to PPM of Depo-Provera stock delivered by UNFPA and stored in the DPM warehouse

The findings of the EUV surveys (conducted in August and September 2014) regarding the supply chain and malaria case management were disseminated in six places (Kayes, Koulikoro, Sikasso, Segou, Mopti, and in the district of Bamako) and at the national level to the key actors, so that corrective actions could be taken and implemented.

*Partner contributions*

- PPM, PSI, DPM, DSR, USAID, for data collection and validation
- DRS and health districts of Kayes, Koulikoro, Sikasso, Segou, and Mopti regions and Bamako PPM Regional Warehouse in Kayes, Koulikoro, Sikasso, Segou, and Mopti regions

## **Mozambique**

**Goal: To assure access to safe, efficacious and quality pharmaceutical products and to effective pharmaceutical services to help achieve desired health outcomes.**

### ***Overall Quarter Progress***

In this quarter, SIAPS supported the Pharmacy Department (PD) in preparing for the National Essential Medicine Workshop to revise and update the current Essential Medicines List. The PD agreed on the indicators to be used to monitor improvement in the PD's performance. The PD also consented to begin installation of Pharmadex and SIAPS has initiated the translation of the software and has scheduled a time for installing the system.

### ***Objective 1: Governance in the pharmaceutical sector strengthened***

SIAPS developed the materials needed for the Essential Medicines List workshop—a draft of the EML, participants' list, objectives, agenda, presentations, and an outline of the workgroups—and supported PD with all administrative actions to make the workshop possible. The workshop had to be postponed twice because EML committee members were unavailable; all efforts are being made to hold the workshop January 26 to 30.

SIAPS also helped strengthen the PD M&E system by orienting the M&E focal staff members on how to collect data from each sector and insert it into the indicator tracking table. SIAPS has also worked with the PD to identify the main aspects to be highlighted in the annual PD M&E Report to be delivered by end of January 2015.

### ***Constraints to progress***

Because of other commitments in the PD, the National Essential Medicines Workshop was postponed twice.

### ***Objective 2: Utilization of strategic information for decision making increased***

During this quarter, SIAPS continued customizing Pharmadex and translating manuals into Portuguese using the information provided by the PD Registration Sector. The PD department proposed that the Pharmadex software should not be installed before March 2015 to ensure the availability of all Registration Sector Staff for the training on the software.

### ***Objective 3: Financing strategies and mechanisms strengthened to improve access to medicines***

In this quarter, SIAPS held three meetings with the PD Inspection Sector to discuss and evaluate the priority recommendations of the FY 2013 Price Report to control the price of medicines. From the meetings' conclusions and recommendations PD has finalized and sent to SIAPS the final document with the opinion on the proposal for the control of prices. SIAPS is reviewing the proposals and recommendations of the opinion document to be able to identify and propose the

next steps to be reflected in SIAPS Feedback to the PD.

*Constraints to progress*

Delayed feedback from the PD due to competing priorities affected the timely finalization of the report.



## **Namibia**

**Goal: Assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes**

### **Overall Quarter Progress**

SIAPS supported the Namibia Medicines Regulatory Council (NMRC) by mentoring technical staff and accelerating the evaluation of applications to register essential medicines so that safe, high-quality medicines are available for people living with HIV and AIDS; for managing TB; for maternal, newborn, and child health (MNCH), and for other public health diseases. Through SIAPS' technical assistance, 132 medicine registration dossiers—accounting for 19% of the three-year dossier backlog—were screened or evaluated. As a result of the screening, 79 dossiers passed and were evaluated, and, subsequently, 46 new products were approved for registration in November 2014. The products included the preferred first line, fixed-dose combination antiretroviral (ARV) medicines 3TC/TDF and atazanavir/ritonavir.

SIAPS provided technical support to NMRC to operationalize the medicines quality monitoring (MQM) guidelines and to conduct medicine quality surveillance in 24 public health facilities in 8 of Namibia's 14 regions. A total of 172 samples, of which 25% were ARVs, were collected and submitted to the NMRC Quality Surveillance Laboratory (QSL) for testing. Post-marketing surveillance (PMS) is one of the Ministry of Health and Social Services' (MOHSS) initiatives for assuring the quality of ARVs and medicines for treating opportunistic infections. Good quality medicines improve the chances of successful treatment and contribute to better outcomes.

SIAPS supported the MOHSS to update the handheld Electronic Dispensing Tool (EDT) mobile devices for 13 primary healthcare (PHC) facilities; they also trained 21 health workers on using the devices to collect data on ARV dispensing at the PHC sites. The intervention supports ART facilities to efficiently collect and report on ARV and ART patients and to ensure data completeness, accuracy, and reliability for decision making by the ART program. The support to PHC facilities, together with ongoing technical assistance enabled 98% of the 50 ART main sites to continue using EDT to document and report logistic and patient data and to ensure that Namibia's system for requesting and receiving pharmaceutical sector information remains functional.

To decentralize ART services, SIAPS collaborated with the Global Fund tuberculosis (TB) grant to train 22 regional pharmacists and PHC supervisors, who in turn will train nurses at PHC facilities, in medicines inventory control for the proper management of ARVs, TB, malaria, and other medicines and medical supplies in the public sector health system. Prior to the training, SIAPS provided technical assistance for updating the medicines supply chain management manual for PHC facilities.

SIAPS worked with the MOHSS-Therapeutics Information and Pharmacovigilance Centre (TIPC) and the University of Washington to compile a technical report on the sentinel-site active safety surveillance of first-line ARV medicines at Windhoek Central and Katutura Intermediate Hospitals. A total of 66 (16%) of 413 patients experienced at least 1 adverse event. The

incidence rate of experiencing at least 1 adverse event was 33/100 person-years. TIPC also received 22 spontaneous ADR reports in Q1 of FY15. SIAPS supported the development of *The Namibia Medicines Watch*, a TIPC publication for the period October-December 2014.

**Objective 1: Pharmaceutical regulatory system strengthened for better ART services**

To support the registration of medicines at the NMRC, 16 technical assessors, including 12 MOHSS pharmacists and 4 personnel from the private sector (8 of which were previously trained by SIAPS), participated in the five-day dossier-review session in October. The session enhanced the assessors' practical evaluation skills for reviewing applications to register new and optimized ARV formulations and other medicines for the treatment of HIV-associated opportunistic infections. A total of 132 dossiers were reviewed. The total number of applications reviewed in the July and October sessions accounts for over 37% of the dossier backlog reported in February 2014. The medicines register was also cleaned out by removing 29 products that were earlier registered, but do not qualify as medicines per the Medicines and Related Substances Act, 2003 (e.g., olive oil-based products).

With SIAPS' support, MQM guidelines were developed and adopted by NMRC. In support of the MQM guidelines and PMS, 172 samples were collected and submitted to the NMRC QSL for testing. The samples included 43 ARVs (25% of the samples) and 16 anti-TB and commonly used antibiotics in the ART program.

SIAPS supported NMRC to test the medicines registration tool Pharmadex and conducted on-the-job training for six NMRC staff, including new recruits, on how to enter medicine registration applications. Also, user profiles for NMRC staff were set up. The new version was installed on the MOHSS server to give the NMRC users local access.

SIAPS supported the MOHSS Directorate of Special Programs (DSP) to conduct support supervision visits to public health facilities to monitor implementation of ART services and evaluate the impact of the ART program in a feedback report. The MOHSS, with support from SIAPS and SCMS, has implemented strategies to strengthen ART pharmaceutical systems, including rolling out ART services to PHC facilities and implementing the Nurse Initiated Management of ART services (NIMART). SIAPS is supporting the implementation of NIMART by strengthening ARV stock and patients' data management using EDT and its mobile version at PHC facilities. The visits covered all of Namibia's 14 regions.

SIAPS supported the MOHSS to assess service quality at ART sites in selected regions, following recommendations of a report produced by the MOHSS, with support from SIAPS and Tufts University, on early warning indicators (EWIs) of HIV drug resistance (DR). The report identified retention in care and adherence as gaps in ART service delivery. The MOHSS assessed site processes that support quality of clinical care, adequacy of documentation of outcomes and processes, and compliance to national guidelines and identified areas for improvement.

### *Partner contributions*

- NMRC provided the medicines dossiers for the evaluation session held in October 2014, coordinated the dossier evaluation activity; participated in rolling out Pharmadex, and participated in the PMS of medicine quality
- MOHSS regional health directorates (for regions involved in the PMS activities)
- DSP on support supervision for ART service delivery improvement

### *Constraints to progress*

- NMRC is having difficulties in attracting personnel trained in dossier evaluation to participate in evaluation meetings. MOHSS/NMRC is working on a contract to engage trained dossier evaluation experts to support the activity.
- The collection of medicine samples for quality testing could not be accomplished in two weeks as planned; only one team was available to carry out the activity, which extended to three weeks.
- Financial resources are needed to cover the collection of medicine samples from the private sector.
- Delayed installation of Pharmadex on the MOHSS server affected the timeliness of activities in the implementation plan.

### ***Objective 2: Capacity of pharmaceutical HR and local institutions in managing the pharmaceutical system and supply chain in delivery of sustainable ART and other pharmaceutical services strengthened***

SIAPS supported the University of Namibia-School of Pharmacy (UNAM-SoP) to review progress of supported activities and to implement the four pharmaceutical management modules for the B.Pharm. curriculum developed with SIAPS' technical assistance. SIAPS collaborated with the University of Washington to train 16 healthcare workers and a UNAM-SoP lecturer to enable UNAM-SoP to conduct pharmacovigilance trainings. SIAPS supported UNAM-SoP in presenting a poster on the incorporation of the supply management module into the curriculum. The poster was presented at the People that Deliver conference in October and subsequently published in the *Pharmaceutical Policy Journal* in December 2014.

SIAPS continued supporting UNAM-SoP on medicine use-related indicator data management following data collection exercises conducted by students during their health facility attachments in June/July 2014. Lecturers identified two students to compile comprehensive reports with recommendations for action. SIAPS is working with the UNAM-SoP lecturers to develop manuscripts for publication in journals.

SIAPS facilitated the development of a pharmacy training strategic plan to guide the transition of the UNAM Department of Pharmacy to a fully-fledged SoP. SIAPS also provided technical assistance to UNAM-SoP to develop an outline of an educational workshop program for lecturers and a preceptor and intern continuing professional development training program.

SIAPS provided technical assistance to the Pharmacy Council and Health Professions Council of Namibia (HPCNa) through collaboration and by supporting the National Health Training Center (NHTC) for reaccreditation to train PAs. SIAPS worked with the HPCNa to finalize three guidelines (the quality management system manual, standards and qualifications for PAs, and a competency framework for pharmaceutical technicians that stipulate the PA career path) and collect data in the ongoing NHTC PA-tracer study. The interventions are for fulfilling requirements for accreditation by the Namibia Qualifications Authority (NQA). The three guidelines are under review by stakeholders and will be finalized and submitted to the Pharmacy Council of Namibia for approval in Q2 of FY15.

With this support, Namibia continued to have two health professional associations/councils receive technical assistance in pharmaceutical management education against the period target of one.

SIAPS discussed with Harvard Medical School (Department of Population Medicine) research themes aimed at using ART generated data for further analysis to inform programmatic and other management decisions.

With SIAPS ongoing support, one dossier review session was completed by local partners, bringing the cumulative number over the course of the program to five and meeting the quarter's target of three. Eight (19%) of the health professionals trained on evaluating dossiers participated in a session in October. Two of the eight technical evaluators were from the private sector. The dossier reviews are among the efforts to engage local partners.

SIAPS provided technical assistance to NHTC to orient 22 PA students on the EDT and the EDT mobile in preparation for their field attachments and eventual placement at public health facilities after their graduation.

### *Partner contributions*

- UNAM-SoP on implementation of pharmaceutical management modules that were developed with SIAPS technical assistance and compiling reports from the data collected on medicine use-related indicator assessment
- I-TECH on support to NHTC for developing a quality management system and manual and competency framework for PAs
- NQA on accreditation of the NHTC PA training program
- NHTC on finalizing a quality management system for the NQA reaccreditation and training of PAs, and ongoing data collection for the PA-tracer assessment

### *Constraints to progress*

A final strategic plan for UNAM-SoP could not be developed within the period under review mainly because of the lead consultant's unavoidable long absence.

Inadequate human resources, high staff turnover, and limited follow-up for on-the-job support and/or awareness at health facilities make it difficult to implement programs that MOHSS staffs

have been trained on and impacts pharmaceutical practices such as inventory management and medicine use evaluations which are among the activities conducted by the therapeutics committees.

Compilation of an aggregate report on medicine-use indicator data collected by UNAM-SoP students was delayed because UNAM opted to assign students to compile the report, which is a slower process, but is necessary for capacity enhancement of both the B.Pharm. students and UNAM-SoP. Unavailability of the aggregate report made it difficult to discuss the annual indicators whose data source is the report. SIAPS is working with UNAM-SoP lecturers to support students to compile the report.

***Objective 3: Pharmaceutical metrics developed, the availability and use of data for making strategic decisions on ART program improved***

SIAPS continued to support the DSP HIV Case Management and Division Pharmaceutical Services (Div: PhSs) in using HIV data for decision making. In November and December 2014, SIAPS supported Div: PhSs to compile the consolidated ART-PMIS report for the period April to September 2014 and also with onboarding and capacity building of the newly recruited ART logistics pharmacist. In the report, the total number of active patients was reported to be 113,010 as of the end of September 2014. The ART PMIS report also reported on the EWIs for HIV DR for patients on ART as of the end of September. Pill pick-up among patients remained relatively high (83%), and the proportion of patients achieving adherence of more than 75% is about 60%. Retention in care for ART patients in cohorts started a year ago remains high (95.4%) as of September 2014.

SIAPS supported the MOHSS to strengthen the efficiency and integration of the handheld mobile EDT device at PHC facilities, with the desk-top version of the EDT on computers at the main ART sites to ensure data completeness, accuracy, and reliability. The EDT mobile is a tool used to manage EDT data at remote sites where ART services are offered such as at outreach and Integrated Management of Adolescent and Adult Illness sites. SIAPS supported the MOHSS to update the software of the handheld EDT mobile devices for PHC facilities in the Kavango East and Zambezi regions. A total of 21 health workers from 13 health facilities were trained on dispensing ARVs using the EDT mobile device. These PHC health workers will be crucial in capturing correct data on patients served and medicines dispensed at decentralized ART sites, enabling the ART program to obtain reliable data at all times for analysis and decision making. Rundu district and the Zambezi region have 7,184 and 8,040 active patients, respectively, on ART (September 2014).

The support to PHC facilities together with ongoing technical assistance enabled 98% of 50 ART main sites to continue using the EDT to document and report logistic and patient data and to ensure that Namibia's system for requesting and receiving pharmaceutical sector information remains functional.

Following visits to the Zambezi and Kavango regions to pilot the implementation of EDT mobile, SIAPS compiled a success story on the impact and lessons learned.

SIAPS supported the Div: PhSs in compiling a technical report on the national pharmacists' forum that was held from September 29 to October 3, 2014, in Otjiwarongo, Namibia. The report indicates recommended interventions for improving pharmaceutical service delivery in the public sector.

#### *Partner contributions*

- MOHSS Div: PhSs, sub-division NMPC on ART and PMIS reporting
- MOHSS-DSP on support to PHC facilities that are using EDT mobiles for ART data capture
- Zambezi Regional Health Management Team
- Kavango Regional Health Management Team

#### *Constraints to progress*

The quarterly ART PMIS feedback reports for April to September 2014 could not be completed and disseminated within the target of 30 days after the end of the respective quarters because of changes in key senior pharmacist positions at the MOHSS/NMPC. SIAPS facilitated training of the new ART logistics pharmacist on consolidating reports from facilities and generating the aggregated feedback reports.

#### ***Objective 4: Financing strategies and mechanisms to improve access to medicines for HIV and AIDS***

SIAPS Namibia is a member of the Universal Health Coverage Advisory Committee of Namibia (UHCAN). SIAPS, in collaboration with SCMS, participated in the UHCAN quarterly meeting in December. SIAPS also participated in a public lecture on increasing access to medicines that was held at the Polytechnic of Namibia.

#### *Partner contributions*

- UHCAN, comprising various stakeholders and chaired by the deputy permanent secretary of the MOHSS

#### ***Objective 5: Pharmaceutical services delivery strengthened to improve adherence to HIV/TB treatment, enhance achievement of health outcomes, and contain AMR***

SIAPS participated in the MOHSS-DSP technical support visits to monitor implementation of HIV-related activities and also gaps identified in the EWIs of HIV DR. SIAPS visited clinics, hospitals, and health centers in the Ohangwena and Kunene regions and participated in a training to address service-related challenges identified in the 2014 EWI report. The technical assistance enabled Namibia to continue tracking EWIs for HIV DR.

As part of activities to support decentralization of ART services, SIAPS supported the MOHSS to conduct a medicines inventory management training-of-trainers workshop. SIAPS collaborated with the Global Fund TB grant to improve the inventory control and storage practices at the frontline health facilities to support the effective and efficient management of

life-saving ARVs, TB, malaria, and other related medicines and medical supplies within the public sector health system. Regional pharmacist and PHC supervisors from the regional directorates were trained to improve effectiveness and efficiency of inventory control and ordering practices at PHC facilities. Prior to the training, a team consisting of staff from SIAPS, SCMS, Global Fund, Central Medical Stores, and Div: PhSs reviewed and updated the medicine supply chain management manual for PHC facilities.

SIAPS worked with the TIPC and University of Washington to conclude the active surveillance study and data capture. A technical report on the sentinel surveillance carried out at the Katutura Intermediate and Windhoek Central Hospitals was completed in December 2014. The active surveillance activity prospectively determined the incidence and severity of and risk factors for adverse medicine events in persons receiving first line, highly active ART at two sentinel sites. In the report, 66 (16%) of the 413 patients experienced at least 1 adverse event. The incidence rate of experiencing at least 1 adverse event was 33/100 person-years. TIPC also received 22 spontaneous ADR reports in Q1 of FY15. SIAPS supported the development of the Quarterly publication of the TIPC (*The Namibia Medicines Watch*) for the period Oct-Dec 2014.

SIAPS supported Div: PhSs to provide the standard treatment guidelines (STGs) to private practitioners through a cost recovery mechanism. SIAPS provided technical assistance to the Pharmacy Council manager and the HPCNa to guide them on determining a cost recovery price for the STG based on the STG post-implementation assessment and also quotations from the printers. The HPCNa had obtained permission from MOHSS-NMPC to provide the STGs to practitioners through a registration mechanism. In December, the HPCNa agreed to provide the STGs at a cost of NAD 400 through each of the five professional councils when practitioners register. SIAPS provided a seed stock of 1300 copies of the STG to the HPCNa.

SIAPS held monthly meetings with Harvard University to develop a systematic process for review of EDT data elements and queries to assist in the strengthening of ART EWI data use for decision making. A checklist on data availability and completeness and scope of work were developed.

SIAPS supported MOHSS-Division Quality Assurance to review progress and define next steps for infection control and medical waste management as SIAPS intensive technical assistance ends in January 2015. The team agreed to focus on provision of consolidated support to Katutura and Windhoek Central Hospitals in developing plans of action, assessing and documenting the current problem, and implementing selected quality improvement plans.

### *Partner contributions*

- MOHSS TIPC on pharmacovigilance activities: active surveillance and community pharmacovigilance
- MOHSS-HIV Case Management Unit and DSP on ART adherence and retention initiatives
- Global Fund, Central Medical Stores, and Div: PhSs on updating the medicine supply chain management manual for PHC facilities and inventory management improvement activities
- University of Washington on pharmacovigilance activities

- Harvard University to develop a systematic process for review of EDT data elements and queries to assist in strengthening ART EWI data used for decision making
- SCMS on supply chain management manual for PHC facilities and supply chain aspects of pharmaceutical services
- UNAM-SoP on pharmacovigilance trainings and implementing the rational medicines use and pharmaceutical supply management modules for pre-service teaching
- MOHSS-Division Quality Assurance on infection control and medical waste management activities

### *Constraints to progress*

Challenges in holding HIV adherence TWG meeting delayed implementation of the ART short-message reminder system, one of the ART adherence and retention initiatives.

Spontaneous reporting of adverse medicines reactions remained below target in Q1 (22 spontaneous ADR reports received between October and December 2014 against a quarterly target of 75). Health facilities are not actively sending reports to TIPC, reportedly because of reporting fatigue and limited or delayed feedback from TIPC. SIAPS will continue supporting TIPC to create awareness on pharmacovigilance among healthcare workers and encourage reporting for monitoring patient safety.



## Philippines

**Goal: To strengthen key institutions in reducing the TB burden through increased access to high-quality, effective pharmaceutical and laboratory services.**

### ***Overall Quarter Progress***

SIAPS is working with the National TB Control Program (NTP) to strengthen health systems and to improve access to effective, sustainable, and high-quality TB pharmaceuticals and services. As part of the overall assistance to strengthen NTP laboratory leadership and management, SIAPS supported the National TB Reference Laboratory (NTRL) in the enhancement and monitoring of the implementation of NTRL work plans. SIAPS helped identify and address obstacles standing in the way of plan implementation. In addition, SIAPS trained 10 NTRL staff on laboratory information utilization for decision making.

SIAPS supported the implementation of key activities in the expansion of Barangay Health Management Councils (BHMCs) in Quezon City. In October, the Quezon City Council passed a city ordinance on establishing BHMCs in all barangays in the city. This initiative led by the local government leaders was inspired by the positive results of the BHMC pilot model in Barangay Payatas.

With SIAPS technical assistance, the NTP Drug Supply Management (DSM) sub-technical working group composed of NTP, NTRL, the World Health Organization (WHO), the Philippine Business for Social Progress (PBSP), which is the Global Fund Principal Recipient, and other partners developed and submitted the 2015 procurement plan for TB medicines to Global Fund. QuanTB is now being adopted as a tool for forecasting and quantification; its outputs were utilized for the quantification requirement of the procurement plan.

SIAPS helped the Department of Health (DOH) Region IV-A to organize a Regional DSM Working Group that tackles issues related to supply chain management in the region. Additionally, SIAPS worked with partners to train supply chain managers in monitoring TB medicines and supplies. As a result, DSM is now part of routine program monitoring activities.

SIAPS worked with NTRL, the DOH Knowledge Management Information Technology Services (KMITS-DOH) and the *Innovations and Multisectoral Partnerships to Achieve Control of Tuberculosis* (IMPACT) Project to discuss and review the latest version of the Integrated Tuberculosis Information System (ITIS) laboratory module. Next steps include supporting NTRL to pilot the approved enhanced ITIS laboratory module.

SIAPS is supporting the NTP and the Food and Drug Administration (FDA) of the Philippines to prepare for operational research studies on bedaquiline and a nine-month MDR-TB treatment regimen. SIAPS is helping by strengthening the pharmacovigilance system that will be used for the two studies.

The preliminary results of the national TB supply chain assessment commissioned by SIAPS were already presented to DOH-NTP and several partners. At the request of the DOH and NTP

SIAPS was asked to determine the costs of hiring a third-party logistics provider at the central and provincial levels. This add-on section of the assessment is underway.

***Objective 1: Capacity for Pharmaceutical and Laboratory Leadership, Governance and Management Improved***

SIAPS continues to support NTP and NTRL in strengthening its leadership and management capacity by monitoring the implementation of the NTRL Technical Unit work plans. Technical assistance is also being provided in the nationwide expansion of Xpert MTB- RIF services to identify *Mycobacterium TB* and resistance to rifampicin; in the adoption of LED fluorescence microscopy; and in strengthening TB microscopy services. SIAPS worked closely with NTRL to develop key presentation materials on the status of TB diagnostics to update NTP and partners during the recent Green Light Committee mission trip.

SIAPS briefed the new acting city health officer of Quezon City on the BHMC model. As a result, SIAPS was requested to expand the BHMC initiative to another urban poor barangay (Barangay Commonwealth). Additionally, SIAPS acted as resource persons in the BHMC performance review of Districts 2 and 3.

The Quezon City Council passed an ordinance on the citywide expansion of BHMCs in October—a major milestone for the BHMC initiative. This ordinance was inspired by the positive results of the BHMC model in Barangay Payatas.

SIAPS contributes to strengthen the overall management of the supply chain at the central level wherein SIAPS assisted the DSM sub-technical working group in the quantification of the national requirement of first-and second-line TB drugs for the year 2015. Of note, the working group utilized QuanTB outputs as one of the assumptions in the quantification requirement.

SIAPS is mentoring NTRL logistics officer in the management of laboratory supplies by providing technical support on how to align the current logistics system with the revised NTP Manual of Operations. NTRL has completed the annual procurement plan for programmatic management of drug-resistant tuberculosis (PMDT) laboratory supplies with the support of SIAPS.

During this quarter, SIAPS helped strengthen the governance capacity of regional and provincial health staff to manage TB supplies in Region IV-A through the organization of a Regional DSM Working Group. The recent meeting of the region wide governance group has identified discrepancies in the allocation and distribution of TB medicines. With drug requisition gradually being re-established in the provinces, the working group will also enhance coordination and communication mechanisms in the region.

During this quarter SIAPS worked with Region IV-A and Quezon City District 3 in building the monitoring capacities of peripheral supply chain managers. SIAPS participated in field monitoring visits to mentor staff on data collection and interpretation and providing recommendations on improvement of managing TB pharmaceuticals and supplies. Utilizing the

DSM monitoring tools developed by SIAPS in the previous quarters, DSM monitoring is now regularly integrated by program managers as one of their routine monitoring activities.

As part of the BHMC model in Payatas, 11 partners including supply officers in three health facilities, representatives from non-government organizations and local community leaders were trained on the use of the *Practical Guide for the Management of Pharmaceuticals and Health-related Commodities* and oriented on the inventory-tracking tool.

Several deliverables were completed this quarter, such as the 2015 Global Fund Procurement Plan and a briefer on BHMC Payatas Model submitted to USAID Philippines.

### *Partner contributions*

The IMPACT Project provided financial support to the year-end performance review of the BHMCs in Quezon City Districts 2 and 3. The coordination and mobilization of regional offices and provincial health offices in Region IV-A for the meeting of the DSM sub-technical working group and conduct of monitoring of supply chain management was facilitated by IMPACT.

### *Constraints to progress*

There were challenges in retaining a DSM officer in NTP. In 2014, two trained staff resigned and DSM tasks were transiently assigned to the M&E staff. A new DSM officer was hired on November 2014. Bad weather and a typhoon resulted in several postponements of the Regional DSM Working Group meeting in Region IV-A.

### ***Objective 2: Improved capacity for transparent and evidence-based decision making***

In this quarter, SIAPS trained 10 NTRL staff on laboratory information utilization (LIU) for decision making. A briefer on the training was developed. Individual post-training action plans were developed by the trainees to be implemented in the next 12 months.

Building on SIAPS support to the NTP and DOH's Knowledge Management Information Technology Services (KMITS), SIAPS participated in the discussion related to the development of the Integrated Tuberculosis Information System (ITIS) Laboratory Module. Additionally, SIAPS supported NTRL in the training on recording and reporting for laboratory supply management and provided technical assistance on the development of a reporting form for Xpert MTB/RIF supply management indicating information on deliveries, consumption, stock levels and requisition. This ensures that comprehensive and high-quality data are available to inform decisions on allocation.

SIAPS continues to facilitate supply chain coordination meetings with Quezon City Health District 3 staff to strengthen pharmaceutical information management for decision making. District partners had effectively used the information from the TB supply tracking tool through redistribution of stocks. This action helped address a stock-out of kits for TB in children at Ermin Garcia Health Center by pulling overstocks from Pansol Health Center.

With the inputs of Quezon City Health District 3 staff, SIAPS developed a dashboard for the district supervisors where they can consolidate monthly stock information and health facility performance. This will be piloted in the upcoming quarter.

### *Constraints to progress*

Pilot testing of NTRL standard operating procedures (SOPs) for information management is delayed due to partners' other work commitments.

### **Objective 3: Improved capacity of NTP to deliver pharmaceutical and laboratory services**

SIAPS continues working to set up and strengthen the pharmacovigilance surveillance system. In this quarter, SIAPS supported NTP and FDA of the Philippines in the preparations for two operational research studies: one on Bedaquiline and another on a nine-month MDR-TB treatment regimen. The nine-month MDR-TB treatment regimen study is targeted to be initiated in February 2015.

SIAPS provided assistance in the ongoing development of the cohort event monitoring pharmacovigilance Standard Operating Procedures (SOPs) for the two studies. SIAPS also helps in securing for medicine dossiers and other requirements for the approval of the study protocols.

The initial results of the national TB supply chain assessment commissioned by SIAPS were presented to DOH-NTP, regional NTP coordinators, WHO and other partners. The second phase of the assessment is presently being conducted to determine the costing of third party logistics.

SIAPS participated in the stakeholders' meeting of NTP with the DOH's Health Emergency Management Bureau, the National Disaster Risk Reduction and Management Council, and the Department of Interior and Local Government on the proposed policies and guidelines for TB management during disasters. Definitions of terms in the draft policy were clarified to align with the work of other national agencies. The writing group composed of NTP, WHO, TASC, IMPACT, and SIAPS will prepare the second draft based on the recommendations from this consultative meeting.

During the recent Green Light Committee mission visit, SIAPS joined WHO-WPRO, NTP, NTRL, the Lung Center of the Philippines, KMITS, TASC, IMPACT and the Philippine Business for Social Progress (PBSP) in assessing the supply chain management in PMDT implementation.

SIAPS participated in PMDT operational planning for 2015 and provided technical inputs in pharmaceutical management and pharmacovigilance activities and strategies. In addition, SIAPS contributed in the NTP year-end consultative and planning workshop. At NTP's request, SIAPS will develop a harmonized procurement and supply management plan for all TB supplies, including first-line drugs, second-line drugs, and laboratory supplies for 2016. This will be one of the major activities in 2015. SIAPS was also requested by NTP to provide technical assistance

in the assessment of NTP laboratory network in support of the conduct of the 2015 National TB Prevalence Survey.

SIAPS facilitated the attendance of three NTP program managers to the 45<sup>th</sup> World Conference on Lung Health in Barcelona, Spain in November 2014.

*Partner contributions*

TASC and the US Centers for Disease Control and Prevention (CDC) contributed to the development of the nine-month MDR-TB treatment regimen study protocol and adverse drug event reporting form.

*Constraints to progress*

Changes in the organizational structure of FDA affected the scheduling of pharmacovigilance activities.

## **South Africa**

**Goal: Strengthen the capacity of pharmaceutical systems at all levels to support the South African Government's priority health programs and initiatives to improve health outcomes**

### ***Overall Quarter Progress***

Extensive support provided by SIAPS to the pharmaceutical depot (warehouse) in North West (NW) culminated in the depot becoming one of the public sector depots in South Africa (SA) to be licensed by the Medicines Control Council to function as a wholesaler.

The M&E framework for the Centralized Chronic Medicines Dispensing and Distribution (CCMDD) Program being implemented by the National Department of Health (NDoH) was finalized. The framework will facilitate routine tracking of the program's progress, as well as serve as a mechanism to monitor the performance of service providers.

A total of 26 managers completed the Leadership Development Program (LDP) in the Klipfontein Mitchells Plain sub-structure of Metro District Health Services in the Western Cape (WC) province. Working in teams comprised of the pharmacy, clinical, and facility managers, the participants addressed a range of challenges in nine facilities. Four of the nine teams (44%) achieved their desired measurable results by the end of the program. All the teams will continue work on their projects. The sub-structure director requested the scale-up of the project to reduce waiting times at the pharmacy to less than two hours during peak periods at all facilities within the sub-structure.

The number of facilities currently using RxSolution increased to 359 by the end of the quarter. This brings SIAPS a step closer to achieving its target of implementing the system in 494 facilities by the end of September 2015. The version of the system being used for the NDoH direct delivery procurement was successfully interfaced with the Gauteng medical depot inventory system to facilitate exchange of documents for supplier payment. To date, 1,081 transactions have been completed through this interface.

The South African president announced the launch of Operation Phakisa to improve the quality of all primary healthcare clinics in the country. SIAPS was one of the stakeholders that, over a three-year period, contributed to the development of detailed plans for the expansion of the "Ideal Clinic" concept to all primary healthcare facilities. The project will be owned and have oversight by the NDoH and the Office of the Presidency.

In Limpopo province (LP), SOPs for pharmaceutical services in primary healthcare facilities and community health centers were finalized and signed for implementation by the head of the Department of Health. Printed copies were presented to the province for further dissemination to facilities.

SIAPS continued to provide support to the NDoH Pharmacovigilance Centre (NPC) in implementing the decentralized pharmacovigilance system in NW and Mpumalanga (MP) provinces. Over the quarter, a total of 256 ADR reports were reviewed by the NPC. Since

January 2014, 11,503 reports had been reviewed at the national level. In MP, all 266 feeder clinics in the 24 clusters are reporting and are meeting regularly. In NW, which is in the third phase of implementing this system, 16 clusters are actively reporting.

### ***Objective 1: Pharmaceutical sector governance strengthened***

Over the last two years, SIAPS has supported the NDoH Directorate: Affordable Medicines in the awarding and management of 26 tenders for pharmaceuticals and medical consumables. One of the criteria used to monitor the efficiency of the Directorate in managing tenders is the time taken to award tenders. Over the past two years, this time ranged from 8 to 26 weeks for tenders for pharmaceuticals. The target set by the Directorate is 16 weeks. To facilitate NDoH awarding tenders within the required time frame (and before the existing tender expires), SIAPS is working with the Directorate to streamline processes and procedures. During this quarter, an SOP for the extension of current contracts was drafted and submitted to NDoH. Feedback is awaited on an additional five SOPs related to tender management. During this quarter, tenders for ARVs and condoms were advertised and applications received. SIAPS provided technical input in the verification and preparation for the bid evaluation process. An SOP was also drafted for this verification process. SIAPS also supported the development of estimates and conditions of tender in preparation for the supplementary tender for tablets (HP09) which was subsequently advertised.

A draft tool to monitor the performance of contracted distributors of pharmaceuticals and medical supplies from the depot to hospitals was developed and submitted in response to a request received from NW Pharmaceutical Services.

SIAPS continued to support the NDoH in the implementation of the CCMDD Program. During the quarter, the M&E framework was finalized for implementation. This work was done in collaboration with NDoH and Health Systems Trust (HST). The framework was presented to provinces and CCMDD service providers. SIAPS continued to provide technical input in the development of service-level agreements between NDoH and pick-up points, both individual and corporate.

SIAPS supported the development of a new set of criteria for the awarding of pharmacy licenses. The new criteria, which are based on population per sub-district, had been published in the *Government Gazette* for public comment. SIAPS is working with the NDoH and key stakeholders to incorporate comments received in a revised version of the criteria. Once completed, these will be published in the *Gazette*.

SIAPS provided technical assistance in the review of the Good Pharmacy Practice rules for the South African Pharmacy Council. SIAPS provided comments on the final draft of the rules related to automated dispensing units (ADU) and the draft rules for remote ADU, collection and delivery of medicine, Internet sites, and mobile pharmaceutical services.

In December, SIAPS attended the Health System Strengthening Kopano (meeting) organized by the South African Global Non-Communicable Disease (NCD) Alliance. This workshop aimed at engaging stakeholders for interventions needed to address gaps identified in the implementation

of the National Strategy for NCDs 2013-2019. Earlier in 2014, 600 policy documents (national and provincial) were reviewed by the Alliance, providing a baseline on available policies and operational plans on NCDs. The absence of pharmaceuticals in the strategy was identified as one of the gaps. With support from the chief director responsible for NCDs at the NDoH, a meeting with the deputy minister of South Africa was secured by the Alliance to present the resolutions taken during the kopano. SIAPS provided assistance to the NCD Alliance in the development of their strategic approach and for meeting preparation. The meeting agreed to hold a workshop with NDoH, including the Directorate: Affordable Medicines, the provinces, and representatives from the NCD Alliance to review the department strategies, plans, and identified areas where NCD Alliance's support is needed.

The National Policy for the Establishment and Functioning of Pharmaceutical and Therapeutics Committees in South Africa has been submitted to the provinces for review. The policy was well received and will be tabled at the NDoH management meeting where it will be discussed among the deputy director general and chief directors before being presented to the National Health Council.

### *Partner contributions*

- CHAI: quantification for ARV contract and supplier monitoring tool
- SCMS: management of the Provincial Medicine Procurement Unit (PMPU) and review of master procurement catalogue MPC pricing and supplier correctness
- SA-NCD Alliance: convened the NCDs Health Systems Strengthening Kopano, drafted the resolutions, and requested a meeting with the deputy minister
- HST: work on the CCMDD M&E framework

### ***Objective 2: Capacity of personnel for the provision of pharmaceutical services enhanced***

Under objective 2, SIAPS focuses on developing the capacity of pharmacy personnel by using pre- and in-service training. SIAPS has also made considerable strides toward building leadership and management capacity through the Pharmaceutical Leadership Development Program (PLDP). Since the inception of the program, SIAPS has supported almost 160 healthcare personnel to develop and implement quality improvement plans across 210 sites. SIAPS is currently implementing three leadership development activities in LP, KwaZulu-Natal (KZN), and WC.

In LP, 26 pharmacists are in the advanced stages of completing the PLDP. During the quarter, participants completed the fourth of five workshops. The workshop goals were to introduce participants to the basic and essential principles of pharmaco-economics, create an understanding of the principles of human resource management in the workplace, monitor progress on the implementation of the leadership quality improvement initiatives, and assist teams with analysis and recording of their results.

In KZN, 44 pharmacists had previously completed the PLDP and addressed a total of 13 challenges. The province is being supported to scale-up and sustain the PLDP quality



improvement plans. This process will help ensure ownership of the program at provincial, district, and facility levels and further capacitate pharmacists to apply leading and managing practices. A team has been created in each district and the teams have selected a challenge to address. In November 2014, SIAPS conducted coaching visits to support the district teams. The visits were used to reinforce the approach used in the PLDP and to assist the teams in reflecting on how they are applying the leading and managing practices and tools as they plan and implement their quality improvement initiatives. A total of 12 districts and the pharmaceutical services provincial team are involved in this process; 92 personnel participated in the coaching visits which took the form of participatory, interactive workshops. Teams made presentations on their progress, detailing the desired measurable result identified, and shared results on their analysis of their current situation as it relates to the measurable result. Teams were coached on making the measurable results identified SMART; conducting a root cause analysis on their current situation; and developing an M&E plan.

In the WC, nine pharmacists, eight clinical managers, and nine facility managers across nine facilities completed the LDP in the Klipfontein Mitchells Plain sub-structure.

The team quality-improvement projects addressed the following challenges:

- Improving patient waiting times
- Improving the reporting of duplicate patient folders
- Reducing absenteeism rates
- Reducing Chronic Dispensing Unit (CDU) non-collection rates
- Reducing the percentage of clients with missed referrals and inappropriate referrals
- Reducing valid CDU prescription rejections
- Reducing the time taken to administer an analgesic at the emergency unit of a local district hospital

SIAPS also continued to support the Nelson Mandela Metropolitan University (NMMU) in developing curricula and training for B.Pharm., pharmacy technical assistant, and pharmacy technician (PT) students. During the quarter, SIAPS set and graded the pharmacy law and ethics assignment and final examination for the students and participated in the final oral examination. Students who had completed the SIAPS-supported electives on medicine supply management and pharmacovigilance presented their results at the final presentation evening held in October. SIAPS coordinated a visit to Dora Nginza Hospital for PT students from NMMU. This was part of the practical training to enable the PTs to understand how medicine supply management is implemented in the public sector.

### ***Objective 3: Use of information for decision making in pharmaceutical services improved***

Strengthening structures and systems that ensure the availability of pharmaceutical information for decision making is central to SIAPS' goal. To that effect, SIAPS continues to support the expansion of the use of RxSolution beyond the 359 public health facilities where it is currently in use. The system facilitates electronic management of pharmaceutical inventory while enabling users' easy access to trends on consumption and other information. SIAPS also provides

technical assistance in the implementation of Infomaker<sup>®</sup>, an off-the-shelf commercial report-building software, in provincial pharmaceutical depots across the country.

### **RxSolution system enhancements**

SIAPS continued to support the implementation of information systems to support the NDoH in the implementation of two key initiatives, namely the direct delivery procurement model and the management of tenders. RxPMPU, a customized version of RxSolution, has been implemented at the NDoH for management of orders and monitoring of supplier performance in the direct delivery model. As reported previously, an interface between RxPMPU and MEDSAS, the inventory management system used by the Gauteng Province (GP) depot, was finalized to facilitate supplier payments. Since its implementation, 1,081 transactions had been submitted for payment using the interface.

The master procurement catalogue developed in the previous quarter was reviewed and is now being managed on a database that can be downloaded on RxSolution. The catalogue is expected to facilitate easier distribution of contract information about products such as names, pack sizes, and prices to stakeholders. The catalogue has been loaded on the NDoH website and an officer from NDoH was trained to manage the process and maintain and update data. SOPs for data flow and data management are being developed. Draft SOPs for managing national stock numbers and contract price adjustments have been prepared in line with the revised process.

During the last reporting period, SIAPS developed the interface between RxSolution and the smartphone-based application currently being piloted for monitoring and reporting medicine availability in remote clinics that do not have the requisite infrastructure to use RxSolution. The interface is being piloted at 3 hospitals and 18 clinics in Amajuba district in KZN. Preliminary results from the pilot, although positive, highlighted some gaps that required a revision of the smartphone application to meet NDoH's needs. In response, SIAPS is revising the interface to accommodate changes to the smartphone application. The pilot is expected to be completed in the next quarter.

SIAPS continued to support the biometric system pilot at four clinics in the City of Tshwane (CoT). A report template was developed and loaded onto the CoT central database to identify patients who visit more than one clinic, which may have a negative effect on health outcomes. During the quarter, support was provided in creating new reports to identify data entry errors and update patient data.

### **RxSolution rollout**

During the quarter, SIAPS increased the number of sites where RxSolution is installed to 359 countrywide. In Gauteng (GP), the focus remains on optimizing RxSolution use in the 21 hospitals where it has been installed. A team of SIAPS staff were placed on call during the holiday season to address any emergencies relating to use of the system.

SIAPS is working with the LP Provincial Department of Health to install RxSolution in all 39 hospitals in the province. During the quarter, RxSolution was installed at Warmbaths, Witpoort,

Ellisras, Mokopane, and Mankweng Hospitals, and personnel were trained on the use of the system.

Mankweng Hospital is the first of two referral hospitals in LP that will use a version of RxSolution customized for direct delivery procurement. SIAPS will focus on optimizing usage of the system within these facilities before expanding to other facilities in the province.

SIAPS provided technical assistance aimed at optimizing use of the RxSolution stock module. This onsite assistance focused on training users; updating institutional formularies; verifying and creating bin locations on RxSolution, and capturing and verifying stock take information, among others. The hospitals targeted during this quarter were Charlotte Maxeke Academic, Kalafong, and Dr. George Mukhari Academic.

Responding to the NDoH's need for oversight on pharmaceutical inventory for facilities using RxSolution, SIAPS completed development of an RxSolution dashboard that remotely pools data from health facilities with Internet connectivity. This function will enable the NDoH to remotely access inventory data from facilities. The dashboard will initially be implemented for hospitals in GP, once a decision has been made on where the server will be located.

In the Free State (FS), a project charter has been developed and awaits final approval by NDoH management. The charter provides details on how RxSolution implementation within the province will be managed by all role players and stakeholders. Steering and technical committee meetings were held in eThekweni Metro in KZN to discuss the rollout of RxSolution. Committee meetings are expected to be held for Eastern Cape (EC), Northern Cape, FS, and MP provinces in the next quarter.

During the reporting period, 63 facility users were trained in Port Elizabeth in the EC PEPFAR-supported partners; ANOVA Health Institute and BroadReach Healthcare were also trained. Partners are assisting in RxSolution implementation.

### **Data management and analysis for decision making**

Over the years, SIAPS has developed a set of standard reports to facilitate effective decision making using data generated through the routine use of RxSolution. Customized reports are also developed upon request from users. During the quarter, support on the RxSolution reporting module was provided to system users in facilities in GP, LP, EC, and to the Provincial DoH in KZN. During the quarter, technical assistance was provided to the Limpopo Depot where Infomaker report templates were updated to facilitate extraction of data from PDSX, the software system in use at the depot.

SIAPS provided support for the supervision of a fourth-year pharmacy student at NMMU carrying out a research project using data from RxSolution. During the quarter, SIAPS provided further guidance to the student for preparation of a presentation for the annual Pharmacy Research Evening. Input was also provided for the finalization of the final project report submitted to the EC DoH.

As part of sharing new enhancements of the RxSolution system, two presentations entitled “Development and Implementation of an Electronic Inventory Management System for Direct Delivery Procurement at the National Department of Health” and “Patient’s Record Management in Tshwane Metro Clinics through Biometrics Registration: An Interface with RxSolution” were made at the 2014 ICT4 Health Conference held in Durban in November 2014.

In LP, SIAPS assisted in extracting data for the previous two financial years from the PDSX stock control system at the pharmaceutical depot. The data were analyzed and reformatted to enable it to be imported to RxSolution to reflect bin locations, stock usage levels, products per demander, and the hospital code list. The mapping of this data to RxSolution is expected to facilitate a more harmonized approach to implementing the system in the remaining facilities in the province.

#### ***Objective 4: Financing mechanisms strengthened to improve access to medicines***

The efficient use of existing resources is critical to ensuring optimal provision of pharmaceutical services. The classification of pharmaceuticals into VEN (vital, essential, and necessary) supports informed decision making on procurement priorities. With SIAPS assistance, the GP VEN analysis was finalized and approved by the provincial Pharmacy and Therapeutics Committee (PTC).

SIAPS also conducted a comparison of quantities of vaccines issued to facilities in GP in FY12-13 versus FY13-14. The analysis highlighted a sharp decrease in FY13-14 raising concerns on immunization coverage within the province. The overall number of live births in the province increased by less than 1% with large variations between districts in this period (District Health Information System [DHIS] data). An analysis of the variation in number of vaccines doses administered (DHIS)/issued by the Medical Supply Depot between FY12-13 and FY13-14 was performed and presented for discussion to the GP Provincial PTC. The DHIS data did not show a decrease in the number of doses administered as was the case for those issued. Facilities clearly held large stocks of vaccines doses from FY12-13, hence the decrease in orders placed the following year. Further investigation will be needed to understand reasons for overstocking and interventions developed to address the challenge.

#### **Global Fund**

During the quarter, SIAPS continued to provide technical assistance to the NDoH’s Global Fund Unit to review the quarterly Central Procurement Unit (CPU) report to improve its compliance with Global Fund requirements. SIAPS developed a draft checklist for the review of the CPU narrative report. It is expected that the checklist will assist in standardizing the review process and identifying gaps in the reports.

### ***Objective 5: Improved medical products availability***

The NW pharmaceutical depot was awarded a license by the Medicines Control Council during this quarter. This was the culmination of extensive work by the depot staff with assistance from SIAPS to comply with the requirements of the regulator.

During this quarter, SIAPS was invited by the NDoH to participate in a six-week national laboratory to develop detailed plans for the expansion over a three-year period of the “Ideal Clinic” concept to all primary healthcare facilities. This is a presidential project—Operation Phakisa—driven by the NDoH for execution across the whole country. The laboratory was divided into eight streams, focusing on service delivery, infrastructure, waiting times, human resources, financing, supply chain management, institutional arrangements and scale-up, and sustainability. Medicine supply management was included in supply chain management. During the laboratory, which used the Big Fast Results approach, “3 feet plans” were made for medicine distribution to clinics, creating visibility of available inventory (including medicines), and establishing hubs for stock management/ordering on behalf of the clinics. Other aspects relating to medicine use and staffing were addressed in the service delivery and human resources streams. More than 160 participants from NDoH, all provinces, donor-funded partners, and the private sector attended the workshops. The project is owned by the NDoH and the Office of the Presidency.

In LP, SIAPS assisted with the development and editing of the SOPs for pharmaceutical services in primary healthcare facilities and community health centers as reported in the previous quarter. In this quarter, the head of the Department of Health signed the SOPs and 480 copies were printed and submitted to the province. Districts will have meetings and workshops to officially introduce the SOPs. SIAPS continued to provide input in the review of the first drafts of the hospital-level SOPs, which were completed during this quarter.

In LP, the 2014 community service pharmacists who were involved in the Adopt a Clinic Project completed their quality improvement projects at primary healthcare facilities. The aim included improved availability of medicines and overall scores for pharmaceutical services on the national core standards. Three abstracts on these projects were accepted for podium presentation at the 2015 South African Association of Hospital and Institutional Pharmacists conference, which will take place in March 2015. Presentations are being finalized and will be submitted to SIAPS for input. All the projects will be presented to the provincial senior management in February 2015.

The final report on the post-intervention assessment conducted by SIAPS as part of the technical assistance provided to the Mangaung health facility quality improvement project is currently under review. The report is expected to be completed in the next quarter.

A meeting was held with the deputy director for Pharmaceutical Services in the Department of Correctional Services (DCS) to discuss the proposed areas of support by SIAPS. Subsequent to the meeting, a draft MOU with an annexure of activities was compiled and submitted to the DCS.

SIAPS attended the SADC pooled procurement workshops and meetings during this quarter. SIAPS has been requested to support SADC pooled procurement on technical activities, such as quantification of needs, STG, medicine supply management, and the SADC medicine database. This is contingent upon member states contributing the necessary funds for implementation of pooled procurement.

### ***Objective 6: Improved rational use of medicine and patient safety***

The National Essential Drug Program (NEDP) is in the process of reviewing the Adult Essential Medicines List (EML). SIAPS provided technical assistance in the review of the chapter dealing with conditions of the eye. The latest version of this chapter was compared against decisions taken during the expert review meetings. SIAPS developed and proposed a mechanism to keep track of changes requested during expert review meetings, with a summary of the rationale for changes proposed.

SIAPS assisted NDoH in conducting the following cost analyses to inform decisions of the expert review groups of the national EML committee:

- Imatinib versus nilotinib for chronic myeloid leukemia as first- and second-line treatments, respectively
- Lanthanum versus sevelamer for treatment of hyperphosphatemia, using the defined daily dose
- IV ganciclovir versus oral Valganciclovir

Because of their participation in the process, newly appointed NEDP staff built their capacity to do cost analyses.

SIAPS assisted with the review of academic detailing slides for the dental and oral conditions, STIs, and endocrine chapters.

### **Review/development of medicine formulary**

Due to the recent award of seven new contracts (HP04-2014, HP06-2014, HP07-2014, HP08-2014, HP09-2014, HP10-2014, and HP12-2014), provincial formularies require updating. SIAPS provided assistance to LP to start developing their provincial formulary and also updated the GP formulary to accommodate new contracts. Uncertainty about contracting status of some items has contributed to delays in updating formularies. This process is on-going.

SIAPS is assisting the GP PTC formulary sub-committee with the motivation to the PTC for Imiglucerase (Cerezyme®), which is used to treat Gaucher's Disease. On the basis of an analysis of the non-EML items that have been prioritized by the formulary sub-committee, items were listed for submission to the clinical interns at the University of Limpopo (Medunsa campus) to start preparing motivations for the PTC.

In the previous quarter, SIAPS had assisted the NEDP with the preparation of a circular to explain selection of medicines from therapeutic classes in the recent contracts and with a review

of the evidence available on the treatment of spasticity. Both documents were circulated by NDoH during this quarter.

In October, SIAPS provided a two-day pharmacoeconomics training to 82 bachelor of pharmacy students at the University of KwaZulu-Natal (UKZN). A section on health technology assessments was added to the pharmacoeconomics material. Upon request from students, additional incremental cost effectiveness ratio calculations and solutions were provided for practice. SIAPS set the final examination and supplementary papers for UKZN.

### **Medicine utilization reviews**

In 2013, SIAPS assisted the GP with the publishing of *Guidelines for Implementation of Pharmaceutical and Therapeutics Committees in Gauteng Province*. Using the guidelines the West Rand District PTC embarked on improving rational medicines use at the primary healthcare facilities in the district. The district team identified abacavir tablets (single dose and combination) as needing further investigation. SIAPS provided support to adapt the medicine use evaluation (MUE) data collection tool provided in the guidelines in accordance with the latest national STGs for HIV and AIDS. Convenience sampling was used to select nine clinics in the district based on the quantities of abacavir tablets ordered over the past financial year. The MUE found that only 62.5% of the treatment reflected in the files was compliant with the STGs. These findings will be discussed further within the district. The template of the data collection tool for MUE was shared with the NEDP as they are encouraging provinces to conduct MUEs.

### **Support to PTCs**

In GP, the use of misoprostol needs to be closely monitored to avoid illicit use and ensure maternal and child health. Letters regarding the safe use of misoprostol were previously sent to nine hospital and two districts PTCs. Only three hospitals and one community health center sent copies of their misoprostol registers as requested. An analysis was conducted to compare the quantities of misoprostol procured from the Medical Supplies Depot with the quantities issued according to the misoprostol register and the number of terminations of pregnancies recorded. The findings, showing that more misoprostol tablets were ordered than issued to patients, were presented to the GPPTC. On-site visits to facilities will be needed to investigate potential overstocking or mismanagement of the stock.

Upon request, SIAPS presented an analysis highlighting the high use of antibiotics and the percentage of expenditure on non-EML items at the Dr. George Mukhari Academic Hospital at the institutions' November PTC meeting.

Some medicines on the national contract for solid dosage forms (HP09-2014) were awarded per therapeutic class. In the treatment of type 2 diabetes, glimepiride was awarded on contract as a representative of the sulfonylurea class. To ensure a smooth implementation of the therapeutic class interchange, SIAPS assisted West Rand PTC in the development of a memo to guide prescribers on therapeutic interchange between gliclazide and glimepiride in the treatment of type 2 diabetes.

## **MDR-TB**

To strengthen quality of health services, the NDoH has implemented a support visit strategy to each of the nine provinces in South Africa. SIAPS assisted the team allocated to the support visit to Bongani Hospital, a MDR-TB hospital in Ehlanzeni district, MP. SIAPS assisted NDoH with the training of TB coordinators and facility managers in KZN, WC, and NC provinces on the DR TB paper-based tools, i.e., the patient card, the ADR form, and the patient discharge card (the DOT chart).

## **Pharmacovigilance**

SIAPS continued to provide support to the NPC in implementing the decentralized pharmacovigilance system. The NPC is also finalizing the set-up of an audio-visual support system that will operate from NPC to support clusters in all provinces. During the quarter, the ADR report form was reviewed and disseminated to relevant healthcare professionals. Over the quarter, a total of 256 ADR reports were reviewed by the NPC. Since January 2014, 11,503 reports had been reviewed at the national level. The majority of reports reviewed were from the Dr. Kenneth Kaunda district in NW, followed by Ehlanzeni and Gert Sibande districts in MP.

In MP, all 266 feeder clinics in the 24 clusters are reporting and are meeting regularly. Piet Retief Hospital Cluster had some challenges on the approach to treatment failure and renal dosing in HIV. A support visit was conducted during which SIAPS assisted with the review of several ADRs with treatment failure. An SOP on how to approach treatment failure was developed and customized for Piet Retief Hospital Cluster. SIAPS is currently supporting the NPC on developing a new concept of the “pharmacovigilance district support team” for monitoring and support of the clusters. These teams will be comprised of nurses, doctors, and pharmacists from different clusters and will also act as a link to the district PTC.

During the quarter, SIAPS continued to support phase 3 of the rollout to NW which involves cluster support visits on management of ADRs; 16 clusters are actively reporting and 4 have regular meetings. SIAPS provided technical assistance with the completion of the technical report on decentralized HIV, AIDS, and TB pharmacovigilance in the NW. The report highlights the three-phase approach taken for the rollout of the decentralized pharmacovigilance program and the gaps identified in the training health care professionals on pharmacovigilance.

During the previous quarter, the Antimicrobial Resistance National Strategy Framework 2014-2024 was presented to the National Health Council and approved for dissemination. The strategy and the AMR background document were shared broadly in preparation for the AMR Summit held in October. SIAPS provided assistance to the NDoH in preparation for and during the summit, including drafting the speech for the minister of health. The meeting was chaired by the director general of health and attended by the minister of health and a wide range of stakeholders to ensure an intersectoral approach. To fast track implementation of the strategy, a working group with representatives from the NDoH, academia, SIAPS, and the private sector later met to develop a draft implementation plan for antimicrobial stewardship in South Africa. SIAPS continued providing support to the NDoH to review and finalize the implementation plan for Antimicrobial Stewardship in South Africa-Post Summit commitments.



Infection prevention and control (IPC) is a ministerial priority for service delivery improvement. During this quarter, 176 healthcare professionals (161 females and 15 males) were trained on IPC and the infection control assessment tool (ICAT) in LP (50), MP (100), and NW (26) provinces.

*Partner contributions*

I-TECH: sponsor training, audio-visual material

Right to Care: employed a pharmacovigilance coordinator in MP

## **South Sudan**

**Goal: Assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes**

### **Overall Quarter Progress**

During the last quarter, SIAPS focused on critical functions and supported services to improve availability and accessibility of essential medicines. SIAPS worked with various states, including Central Equatoria (CES) and Western Equatoria (WES), and MOH to deliver the Emergency Medicines Fund (EMF) essential medicines, including maternal and child health products. For this quarter, SIAPS facilitated five EMF meetings, documented minutes, communicated to partners, and followed up on action points to ensure effective management of the EMF distribution.

SIAPS provided technical leadership in quantification and forecasting of HIV commodities for 2015. SIAPS and partners developed assumptions based on all available HIV data. SIAPS finalized the activity, compiled the quantification document, and shared it.

USAID through DELIVER procured 350,000 long-lasting insecticide nets (LLINs) for distribution through antenatal clinics (ANC) and the Expanded Program on Immunization (EPI) clinics in CES and WES, together with information, education, and communication (IEC) flip charts. SIAPS participated in planning meetings to ensure availability of storage space, identified partners to manage the distribution, outlined distribution guidelines, and finalized a distribution schedule.

SIAPS hosted the country portfolio manager and the deputy director for country programs during a regular country visit to undertake management and technical review of activities and to touch base with key stakeholders. During the visit, human resources challenges, staff welfare, and operational concerns and work plan implementation were addressed. Installation of an electronic the software system DASH board and the Electronic Dispensing Tool (EDT) were initiated.

The PMI Malaria Senior Technical Advisor, Angus Spiers, visited South Sudan October 15–24 to develop the 2015 South Sudan Malaria Operational Plan and held a series of consultations with USAID, MOH/National Malaria Control Program (NMCP), SIAPS, and other partners.

The portfolio manager, SIAPS country director, and USAID South Sudan held discussions toward development of the FY15 work plan and budget to capture USAID areas of focus and ensure MOH gaps in pharmaceutical management and malaria are addressed.

SIAPS country and HQ teams reviewed Continuous Results Monitoring System (CRMS) data collection tools and processes and came up with a sound data collection methodology, refined CRMS data collection checklist, site selection procedures, detailed plan, clear budget, and timeline.

To strengthen pharmaceutical management, SIAPS organized, coordinated, and facilitated the

first roll-out training November 10-12, 2014, for Kajokeji County in collaboration with integrated service delivery program (ISDP) partner Action Against Hunger (AAH) ; 24 participants (14 males and 10 females) attended, including facility supervisors, program managers, and facility staff. These trainers are expected to roll out the training at county and health facilities.

SIAPS participated and supported the review of MOH Central Medical Stores (CMS) SOPs for storage and distribution of pharmaceuticals. The review covered receipt and distribution of drugs to health facilities. In all, 23 SOPs were reviewed, and comments and additional information provided by SIAPS were incorporated. The document will be finalized and submitted to MOH for adoption to improve warehouse management and commodity availability.

The malaria concept note for the Global Fund's New Funding Mechanism (NFM) was highly rated and recommended to the Grant Approval Committee for funding. SIAPS facilitated a Global Fund grant retreat November 3–7, 2014, and through the Malaria Technical Working Group (MTWG), embarked on preparation of responses to address issues raised by the Global Fund Technical Review Panel (TRP). In addition, they worked on grant negotiation documents. SIAPS participated in the sub-recipient evaluation and selection processes and actively contributed to finalization of the M&E plan.

SIAPS supported the NMCP to organize and conduct a workshop December 12–18, 2014, to finalize the development of the National Malaria Strategic Plan (MSP) 2014/15-2020/21 and the M&E plan. The seven-year MSP will be operationalized through three-year and annual plans. Present were state director generals of the MOH, malaria coordinators, M&E officers, and MOH, NMCP, partner, and RBM Secretariat representatives.

### ***Objective 1: Pharmaceutical services improved to achieve desired health outcomes***

To ensure availability of pharmaceutical services, USAID procured 350,000 LLINs through the USAID | DELIVER project to be distributed through ANCs and EPI clinics in the two focus states of WES and CES. SIAPS participated in meetings with USAID, USAID | DELIVER, and Jhpiego to plan the distribution of these LLINs. The meeting focused on ensuring the availability of adequate storage space for the LLINs in all the 16 counties of the 2 states, identifying responsible ISDP implementing partners to manage the distribution at county level, and outlining the guidelines for giving out the nets to beneficiaries on the basis of MOH's insecticide treated net (ITN) guidelines. Participants at the meeting agreed to distribute the malaria prevention IEC flip charts to counties, together with the nets. The meeting finalized a distribution schedule that was shared in advance with all county implementing partners in the two states. It is expected that these distributions will go a long way to reduce malaria cases and prevent deaths.

SIAPS provided technical leadership in the quantification/forecast of HIV commodities for South Sudan's HIV program for 2015. During the quantification, SIAPS developed sound assumptions based on the recent HIV treatment and prevention guidelines, current morbidity, data for the different regimens, current prescribing practices, and available national stock and pipeline information. SIAPS led the HIV commodities quantification process through facilitation

and technical guidance in meetings with participants from the MOH HIV team, UNDP/Global Fund, PEPFAR, USAID, and the International Center for AIDS Care and Treatment Program (ICAP.) As a result, SIAPS finalized the activity with quantification of HIV commodities including adult ARV and pediatric first- and second-line drugs and PMTCT, post-exposure prophylaxis (PEP) drugs, and opportunistic infection drugs. SIAPS has compiled the final quantification document and shared it with the quantification team to ensure that there is minimal stock-out of ARVs and contribute to the AIDS-free generation objective.

SIAPS, through USAID-funding, procured PMIS tools to be used in WES and CES. These PMIS tools were printed on the basis of a critical gap identified in the pharmaceutical system. The availability of these tools will ensure that data on commodities issued to health facility at the central level and consumption at the health facility level for EMF commodities are reported accurately. This will guide the MOH and partners to make proper decisions for future quantification and address any supply management challenges. SIAPS has currently distributed these tools to all the 16 counties in WES and CES.

### *Constraints to progress*

The current unstable security situation in some parts of the country, especially in the Unity, Upper Nile, and Jonglei, has impeded the supply of essential medical supplies to those states. This has been a big challenge to the EMF working group. However, distribution has improved, due to the coordination activities through the EMF meetings.

The rains and bad roads have also made transport and distribution of medical supplies difficult in some parts of the states. In WES and CES, the roads are relatively better, but still a challenge in some parts of the counties.

Storage capacity at the county and health-facility levels remains a big challenge as these facilities receive tons of medical supplies quarterly. The de-junking activity has relieved most counties but does not solve the long-term problem of storage; storage capacity needs to be improved in most of the counties with proper store-handling equipment and human resources.

### *Partner contributions*

SIAPS worked with our ISPD partners and USAID | DELIVER to ensure the distribution of EMF in WES and CES. ISDP, Health Pooled Fund (HPF), and Interchurch Medical Aid (IMA) also provided information on functional facilities when the distribution plan was updated and alerted SIAPS to any challenges during the distribution of EMF. Other partners, such as the HPF, also engaged SIAPS for technical assistance in pharmaceutical management trainings and de-junking activities.

### ***Objective 2: Capacity for pharmaceutical supply management and services increased and enhanced***

SIAPS, in collaboration with Juba County, planned and conducted a one-day LMIS tools use training for Ganji and Gungu Payams. The training targeted staff that work in health facilities

(Bele, Bungu, Langi, Kulipapa, Kagwada PHCUs and Ganji primary healthcare centers [PHCCs]). It was conducted on December 5, 2014. Eight participants (six males, two females) were trained. The knowledge gained will help improve information management and minimize stock-outs.

SIAPS conducted on-the-job training in eight facilities (four in Terekeka and four in Kajo Keji County); 15 staff were trained (5 females, 10 males). The training was intended to improve inventory management and the accuracy and consistency of reports.

SIAPS, in collaboration with ADRA and the Terekeka County team, rearranged the medical store in Muni PHCC. In Kajo Keji, SIAPS collaborated with ARC staff and the county storekeeper to rearrange Jalimo PHCC. The Lainya County medical store was also rearranged. These activities created storage space and improved store management, storage, and effective distribution of EMF commodities.

SIAPS carried out supportive supervision in Lainya and Yei counties. In Lainya, the team worked closely with implementing partners and the Lainya County Medical Officer, Mr. Elias Kaiga; the M&E Officer, Mrs. Christine Amude; and the SSUHA/ISDP Project Manager, Mrs. Bella Amondi. During the visit, improvement in the management of EMF commodities was noted and was the result of full involvement and participation of the county medical officer in the regular management of supplies. The county is implementing a pull system, but uses a push system for facilities that are not easy to reach or unable to send their requests. The team briefed Lainya County on the August LMU report, which showed that Lainya was second to Yei, with the highest percentage of stock-outs in CES. The team discussed the possible root cause of the stock-outs and how to mitigate them in the future. Some of the challenges were due to capacity of the in-charges to make requests on time.

In Yei County, a similar activity was carried out with the County Administrator, Mr. Cons, and M&E Staff, Mr. Lasuba Michael. The county implements a pull system in some facilities, but not in others. Most of the facilities not implementing the pull system were having stock-outs. SIAPS discussed a plan for the rollout, and the county administrator indicated his interest and plans to confirm dates with AAH.

SIAPS rearranged county stores as a way to support improvement of store management. The previous assessment done as part of CRMS showed the Yei County store to be the last in the state. In our last visit in August, the county acting store keeper and administrator made it a priority to rearrange their store. The only task left undone was putting labels on the shelves. We worked with the county staff to place the labels, put the items in their designated areas on the shelves and pallets, and rearrange the pallets. The balance of the first quarter's EMF was to be sent to the health facilities the week after, to empty space for the coming consignment.

### *Constraints to progress*

The availability and capacity of human resources throughout the supply chain and at the facilities is low. This results in delays in rolling out interventions. Most of the county and health facilities do not have pharmacists and trained store managers. Continuous supportive supervision at the

county and health-facility levels is also lacking, resulting in delaying interventions to resolve challenges. The departure of the SIAPS technical advisor for WES has also stalled implementation of pharmaceutical activities.

***Objective 3: Pharmaceutical management information made available for decision making at different levels of the health system***

SIAPS coordinated and facilitated six EMF TWG meetings through setting the agenda, chairing the meetings, documentation and sharing of minutes with action points, and follow-up and technical support in implementing the action points by working closely with EMF team members.

As part of technical support to the EMF team, SIAPS has developed an assessment format and shared it with partners to compile the storage gaps for all counties. This will provide information on availability of storage space; storage conditions; capacity in volume; locations of nearby available store rooms for counties with no store rooms; availability of storage improvement equipment, shelves, and pallets; available personnel for each store; the availability of functional cold chain. Partners (IMA and HPF) were able to compile and share storage gap assessments for the counties in the states where they are working. SIAPS compiled this data for CES and WES.

SIAPS developed and shared with partners a list of EMF medicines and medical supplies by facility. It has detailed information on the different lots, product contents, and quarter/annual quantities for the different health-facility kits. This information was helpful to increase awareness about existing EMF kits and quantities-by-facility that are being used by county implementing partners, CHDS, and health facilities.

In addition collaborating with USAID | DELIVER, SIAPS supported compilation of detailed logistic data on total volume, total weight, and number of cartoons for EMF kits, which could be used by CIPs and CHDs for monitoring and for making arrangements for storage space and transportation.

SIAPS facilitated the monthly pharmaceutical meeting at the state MOH warehouse on October 3, 2014, in which the project updated the state pharmaceutical staff on the stock status of tracer medicines for the various counties. In summary, the percentage of stock-out is high in Yei County health facilities, with 25% of facilities reporting stock-outs on average, followed by Lainya County at 23%, and Morobo County at 17%. Kajo Keji County and Terekeka had the smallest stock-outs at 14% and 7%, respectively.

The country team and the visiting HQ team reviewed the CRMS data to incorporate new indicators and also to make it user friendly and easy to analyze. These new indicators will enable the tool to collect most of the indicators needed in the South Sudan M&E tracking sheet. In addition, the timelines for data collection were developed and estimates for data collection activities were also developed.

SIAPS compiled the PPMRm quarterly update report for October to December 2014. This report captures stock status information for basic antimalarial products AS + AQ and RDTs; it

combines stock status, pipeline information, forecasting, changes in selection and guidelines, quality assurance, storage, LMIS, and distribution. This report is used as a global early warning system for ensuring commodity security of antimalarials. This information enables managers to make decisions on improving stock availability to ensure commodity security of malaria commodities.

### *Constraints to progress*

The human resources at the facilities is limited and the capacity to manage inventory is minimal. This leads to delays in receiving prompt and accurate reports for analysis. Most facilities also do not have PMIS tools for recording logistics data, making record keeping virtually impossible. The program has only one data officer to cover both WES and CES; this has made it impossible to get information from WES. The technical advisor for WES has resigned, which has stalled implementation of activities.

### **Objective 4: Financing strategies and mechanisms strengthened to improve access to medicines**

SIAPS supported the NMCP in the preparation of the presentation of the malaria indicator survey (MIS) 2013 report to the MOH Senior Board on November 14, 2014, in a meeting chaired by the director general for international health and coordination on behalf of the undersecretary. Participants noted with concern the increasing malaria transmission, despite a number of interventions being implemented. SIAPS was able, however, to explain this trend, mainly in terms of current interventions being too low to reverse the rate of malaria transmission in the country.

The meeting concluded that, at an appropriate date, the report will have to be presented again to the board in the presence of both the undersecretary and the minister of health; the next MIS should be based on states and not regions as the level of analysis; and a high-level launch of the report should be organized as a means of advocacy, raising awareness, and resource mobilization.

SIAPS reviewed and updated the malaria supervision checklists which are tools to be used at all levels of the healthcare delivery system. SIAPS supports malaria program implementation, mainly targeting WES and CES.

SIAPS undertook a supportive supervision visit to WES on September 15-26, 2014. The visit covered the counties of Yambio, Tambura, and Maridi.

SIAPS participated in the three-day training workshop for District Health Information System (DHIS) team members in South Sudan. The Health Management Information System (HMIS) has transitioned to the electronic system for reporting, analysis, and interpretation of health data collected routinely from health facilities.

To ensure maximum utility of the DHIS, all users of health information must be trained. SIAPS engaged WHO in discussions on the need for training state malaria coordinators and M&E

officers as well as members of the MTWG on the DHIS. WHO decided to provide funding for the basic training, which was conducted September 30 to October 2, 2014. The training was facilitated by experts from the HPF and the M&E Department of the MOH. The training was successfully concluded, and the key action points were to update the malaria indicators in case management, update the DHIS system, send USBs to states, and ensure that all 2013/14 datasets are loaded into the system. At the end of the training, the facilitators expressed their willingness to provide intermediate-level training for a core team of NMCP staff and MTWG members, once funding is secured.

### *Constraints to progress*

The past political crisis has stalled major activities to be implemented; realignment of the work plan saw some activities removed.

Transport arrangements were difficult due to bad roads and heavy rains.

### *Partner contributions*

SIAPS worked with our ISPD partners and USAID | DELIVER to ensure distribution of ITNs in WES and CES and further coordinate distribution to facilities. ISDP also provided information through periodic updates on the county to facility-level distribution and alerted us on any challenges during the distribution of ITNs.



## Swaziland

**Goal:** The goal of the SIAPS program in Swaziland is to assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes.

### ***Overall Quarter Progress***

SIAPS has been working closely with the Chief Pharmacist, Assistant Director at the Central Medical Stores, and the Chief Technologist at the Swaziland Health Laboratory Services (SHLS) warehouse to strengthen health product management and HIV service delivery initiatives. The technical support is provided to high volume health facilities in Swaziland's four regions to improve HIV and TB quality of care. There are over 105,000 patients on ARV treatment in the country with 144 facilities providing treatment services. Of the 144 health facilities, direct technical support is provided to 52 as they provide treatment services to 75% of the ART patient population.

During this quarter, SIAPS actively monitored stock levels at central and facility level to ensure that treatment services are not interrupted. The country has faced serious threats to product availability which have led to facilities rationing the quantities of medicines supplied to patients from the regular three months' supply to one month. There was a national shortage of lopinavir/ritonavir tablets (LPV/r) that led to facilities being advised to instead use the short-dated LPV/r liquid while working with the Ministry of Health Procurement Unit to accelerate the procurement and shipment of ordered stock. SIAPS has worked with ICAP and the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) to explore possible stop-gap measures to assist with purchasing additional LPV/r tablets. The stock levels of TB medicines and condoms have been adequate for the peak season. SIAPS has also provided advice to the National Tuberculosis Control Program (NTCP) and Central Medical Stores (CMS) to ensure that adequate stock is available at facilities in anticipation of migrant workers who may be visiting Swaziland during the December holidays.

In preparation for the annual tender cycle for 2015-16, SIAPS supported the MOH in developing the annual quantification and supply planning for TB medicines, ARVs, and laboratory commodities. The total forecast budget required for ARVs is 53,000,000 US dollars (USD) for two years while TB medicines is estimated at USD 5,000,000 (USD 1 = SZL 11.00). The TB budget will be funded by MOH and Global Fund will fund the procurement of second-line TB medicines for a specific cohort of patients. SIAPS has also assisted the SHLS with planning the procurement of chemistry equipment as part of the national equipment standardization project. SIAPS continues to work with the Global Fund Principal Recipient in country to ensure that procurement and supply management resources are effectively used, particularly to complement the government resources.

Use of information in supply management has improved in this quarter with the forecasting data being obtained from the SIAPS-supported LMIS tools, i.e., Rx Solution. The laboratory forecasting used data generated from the web-based commodity tracking system. The ARV forecasting used information from the manual LMIS system while TB quantification was based

on morbidity data. The reporting rate for the laboratory LMIS has consistently been above 90% while ARV facilities have been below 90%. SIAPS is in the process of finalizing the update of the Commodity Tracking System (CTS) to include more products such as condoms and anti-TB medicines. Support is also continuing for the CMS to use RxSolution effectively to improve inventory management. SIAPS has also worked with Imperial Health Sciences (IHS) to assist in developing key performance indicators (KPIs) for the national warehouse. The CMS team has been trained on warehouse management and the development of KPIs which will be monitored over the next calendar year.

Our work in improving the pharmaceutical capacity and supply management at treatment sites is continuing. During this quarter, SIAPS has provided technical support and mentorship to 46 health facilities providing HIV treatment and care services. The support visits focused on proper stock management, adherence monitoring, managing adverse drug events, and information management. Sixteen laboratories were also visited to monitor the stock level of tracer items and also ensure proper stock management procedures are maintained.

### ***Objective 1: Strengthen governance in the pharmaceutical sector***

SIAPS supported the Chief Pharmacist's office in its efforts to advocate for the approval of the Medicines and Related Substances Control Bill no. 7 of 2014 and the Pharmacy Bill no. 8 of 2014. Four meetings were held with the parliamentary Health Portfolio Committee; reviewing submissions following the invitation for comments on the Bills published in print media and further finalizing the committee report.

SIAPS was invited to the Southern African Development Community (SADC) member states consultation on African Union Model Law on Harmonization of Medicines Regulation in Africa. The consultation was also an opportunity for SIAPS to align the technical assistance provided on the two bills with Africa's emerging and future regulatory trends.

SIAPS was also invited to participate in the SADC medicines regulation harmonization initiative workshop held in South Africa. The workshop was aimed at ensuring that the SADC countries including Swaziland have the adequate guidance and standards in establishing their Medicines Regulatory Authority.

SIAPS collaborated with National TB Control Program (NTCP) to conduct a survey of 35 retail pharmacies across the four regions for private sector involvement in TB case detection and treatment. Next quarter, SIAPS will finalize the survey report and use the findings to inform and conduct trainings.

Following the successful facilitation of two National Essential Medicines Committee meetings in the last two quarters, SIAPS continued its support of this committee through facilitating discussions on the consolidated vital, essential, and non-essential (VEN) medicine analyses. This effort is aimed at assisting facilities to identify their VEN medicines which should be in stock at all times. This is a SIAPS initiative to improve availability of essential medicines throughout the country. A meeting with public sector pharmacists was held to gain consensus on the VEN for the different levels of the health sector. During this meeting, the group explored options to help

establish a system to minimize vital medicine stock-outs through monitoring their stock levels across all levels of the supply chain including CMS and supplier performance management by the Procurement Unit. A plan is being developed and will be discussed further in follow-up meetings.

SIAPS facilitated the supply chain technical working group (SCTWG) meeting attended by representatives from civil society, MOH, and nongovernmental organizations, i.e., CHAI, MSF, EGPAF, UNFPA, and UNAIDS. Medicine availability in the country and issues contributing to inefficiency and ineffectiveness of the supply chain system were discussed at the meeting, followed by resolutions which were documented for action. This included a proposed meeting where challenges and bottlenecks experience by CMS leading to stock-outs would be mapped out and recommendations put forward.

SIAPS provided TA in drawing up the bidding document for standardized equipment for chemistry platforms. SIAPS also finalized the laboratory warehouse SOPs to be used towards improving warehouse operations management.

### *Constraints to progress*

The Ministry of Finance staff did not attend the SCTWG meeting so most issues relating to medicines finance were not adequately addressed. There were delays in the parliamentary process for enactment of the pharmacy legislation.

### ***Objective 2: Increase capacity for pharmaceutical supply management and services***

SIAPS continues to increase capacity for pharmaceutical supply management and services through pre-service and in-service training and mentoring of health care workers.

During this quarter, 46 health facilities (13 in Manzini, 12 in Shiselweni, 10 in Hhohho, and 11 in Lubombo) were visited and 70 health care workers (HCWs) were mentored on supply chain and pharmaceutical management of HIV, TB, and family planning products, particularly storage management, stock card update, reporting, dispensing, adverse drug events, and adherence monitoring. There was a notable improvement in stock card update rates at facilities such as Zombodze clinic improving from 53% in February 2014 to 100% in October 2014. Phocweni Military Health Clinic, which did not previously use stock cards, began using them and has kept its update rate at 100%.

Clinics also received TA to perform a thorough reorganization of their medicines storeroom and general storage set up. SIAPS, in collaboration with regional health management team (RHMT), coordinated acquisition and delivery of shelving from the Central Medical Store.

SIAPS continues to support the SHLS to improve availability of diagnostic products. SIAPS and MOH counterparts visited 15 main laboratories and provided mentorship on storage, reporting and ordering, stock cards and inventory management. In collaboration with ICAP and EGPAF, SIAPS conducted onsite training for 30 health care workers at 3 facilities for rollout of Life Long

Antiretroviral Therapy for Pregnant and Lactating Women program (Option B+). The training emphasized treatment adherence, monitoring adverse drug reactions, and rational medicine use for HIV and TB patients.

SIAPS trained 41 health care workers (9 females, 32 males) on warehousing and distribution of medicines. SIAPS, through Imperial Health Science (IHS), conducted a warehouse operation capacity gap assessment to identify performance gaps towards strengthening the capacity of central warehouse managers and supervisors. A Human Resource Capacity Development and Performance Improvement plan was designed and subsequently 16 (6 female, 10 males) warehouse personnel received training on the plan.

Fifteen (9 females, 6 males) HCWs from the SHLS warehouse, the Strategic Information Department, and CMS attended a workshop on the redesigned commodity tracking system including. The participants were trained on the system's new features, which includes the ability to create new program data records independently.

The SIAPS-supported SANU pharmacy program has to date enrolled 55 students (Year 1 = 20; Year 2 = 22; Year 3 = 11) for the Diploma in Pharmacy. Fifteen students earned a Certificate in Pharmacy which was presented at a graduation ceremony attended by the Chief Pharmacist.

SIAPS has also provided advice to Good Shepard College of Nursing on the development of a Diploma in Pharmacy Program.

### *Partner contributions*

SIAPS reached out to Imperial Health Sciences to train MOH warehouse team on warehouse operations.

### *Constraints to progress*

- There is a lack of adequate storage space at facilities and central stores, particularly at SHLS warehouse. To optimize the available storage space, CMS has made space available to the laboratory warehouse for the storage of bulk products
- Laboratory services were covered in the capacity gap assessment conducted by IHS but because of conflicting priorities, none of the warehouse staff was able to attend the training. In its routine support to the laboratory, SIAPS will use the training material provided to improve warehouse performance.
- The Diploma in Pharmacy program at SANU lost one full-time staff member at the end of December 2014. The position, funded by MSH together with SIAPS, has been absorbed by SANU.

***Objective 3: Address information for decision-making challenges in the pharmaceutical sector***

SIAPS continued to redesign the Commodity Tracking System (CTS) based on the request from MOH. SIAPS facilitated a visit by the system developer to finalize outstanding requirements and also to analyze the existing tools, e.g., RxSolution and the Access Data Management Unit database. Currently, ART, laboratory, TB, and Sexual Reproductive Health (SRH) commodities have been included, and new program commodities can be added when required without redesigning the system. Three months of ART and SRH stock and patient data has been successfully migrated to the CTS and available for analysis. In the next quarter, SIAPS will support the migration of all ART data to CTS, finalize offline functionality, and host the system in Swaziland.

SIAPS also continued to provide support to 35 facilities currently implementing RxSolution based on the gaps identified during a previous quarter assessment. Collaborating with the MOH, support was provided for troubleshooting system-related bugs, which include network connectivity, automation of back-up procedures, database schema, and application upgrade. SIAPS also mentored staff at seven implementing sites on the use of the system modules.

SIAPS also held discussions with the Client Management Information System/RxPMIS developing firm to assess the status of outstanding deliverables. A project close-out discussion is underway and a few outstanding issues are being addressed.

All ART facilities used the standard LMIS tools to report to and order from the Data Management Unit at CMS. Eighty-seven percent (37/39) of health facilities submitted their LMIS reports and 67% (26/39) have been consistently reporting on time. This is an improvement from the 60% reported in the previous quarter for timely reporting. Currently, 15 laboratory facilities have shown tremendous improvement in reporting of logistic data with facility reporting rate increasing from 90% in the previous quarter to 96%.

SIAPS and CMS-Data Management Unit conducted data quality spot checks aimed at improving the quality of logistic data. Health facilities were selected based on criteria of inconsistent reporting and ordering in the six months ending September 2014. Five facilities met the criteria and were visited to determine what challenges facilities face in meeting the reporting requirements and establish areas of partnership with facilities to find sustainable solutions to improving data quality, i.e., timeliness, accuracy, completeness). Plans are underway to finalize and ensure implementation of a comprehensive follow-up for these data quality spot checks.

This quarter, SIAPS continued to support the use of logistics data in the annual SHLS forecasting for FY 2015/16 laboratory commodities. SIAPS provided technical assistance and data from RxSolution on stock on hand, issues consumption, a report on receipts and another on issues and adjustments. SIAPS also used CTS to provide information on consumption of key products at facility level for forecasting.

### *Constraints to progress*

- Organizational challenges with the vendor engaged for the RxPMIS project resulted in the contract not being extended.
- The redesign of the CTS has exceeded its original boundaries as the Ministry has added new requirements that were not included in the current contract with the system developer.

### **Objective 4: Financing strategies and mechanisms strengthened to improve access to medicines**

Adequate funding is a key component of an efficient supply chain system. SIAPS therefore continues to ensure financing strategies and mechanisms are strengthened to improve access to medicines through supporting efforts for more efficient use of existing resources.

SIAPS in collaboration with local partners supported MOH in facilitating the 2015-16 annual forecasting and demand planning exercises for priority health program commodities, i.e., ARV, TB, SRH, and laboratory HIV commodities. Forecast and quantification was completed for two years producing requirement for ARV stock worth 284,242,549 Swazi Lilangeni (SZL) for the first year and SZL 290,585,222 for the second year. The TB commodity quantification was for one year ending in 2016, producing a requirement of SZL 5,201,812 for susceptible TB medicines and SZL 50,660,205 for drug-resistant TB medicines. These reports informed the quantities and budget requirements for the procurement of HIV, TB, SRH and laboratory commodities. It was also used to inform budgeting and tendering through the government, Global Fund (for second-line TB), and UNFPA (for SRH).

SIAPS also supported the quarterly supply planning meeting for the remaining two quarters of the 2014/15 procurement cycle. The supply plan was conducted for HIV, TB, laboratory and SRH commodities including male and female condoms. This was done considering the stock situation in the country, any outstanding shipments, and available budget.

SIAPS successfully assisted the SHLS in advocating for the timely release of two quarter-year government budget allocations (Q3 and Q4). The Ministry of Finance disbursed the budget for the remaining two quarters of FY2014/15. The supply planning results were used to generate purchase orders for the supply of reagents and supplies.

### *Partner contributions*

Imperial Health Sciences (IHS) conducted a human resource capacity development and performance improvement plan.

### *Constraints to progress*

- Funding for health commodities was inadequate. CMS and SHLS are advocating for more funding.
- Suppliers are unable to deliver shipments on time.

***Objective 5: Improve pharmaceutical services to achieve desired health outcomes***

SIAPS continues to strengthen pharmacy services and product availability to support TB and HIV treatment services at health facilities. Condoms stock status improved from 3.4 to 5.8 months of stock at central stores, which is within the required stock level of four to seven months of stock. Through SIAPS support, laboratories have been able to improve product availability, the use of stock cards, and reporting. The average availability of laboratory commodities improved from average of 1.9 months to 2.9 months. At laboratory facilities, rapid test kits average product availability was 2.4 months (Determine HIV test kit and Unigold HIV test kit at 2.4 and 2 months, respectively); TB reagents GeneXpert Cartridges average product availability is 1.8 months, and CD4 reagents average product availability is 1.2 months.

The CMS has been out of stock of LPV/r 125 mg tablets and zidovudine/lamivudine/nevirapine 300/150/200 mg tablets for HIV; and rifampicin, isoniazid, and ethambutol 150/75/400 mg tablets for TB for more than two weeks. Thirteen percent (5/39) of health facilities reported stock-outs of tracer commodities, mainly LPV/r 125 mg tablets.

At CMS, 54% (12/22) of the listed tracer commodities were below required four to seven months of stock during this reporting period. Nine percent (2/22) commodities were overstocked and 36% (8/22) were within required four to seven months.

SIAPS visited six sites implementing the TB and HIV active surveillance project. A draft work plan was developed to improve responsiveness to issues at the sites—timely and accurate data entry into the Sentinel Site-based Active Surveillance System for Anti-retroviral and Anti-TB system and consistent monitoring and reporting of adverse drug events. SIAPS supported the dissemination of the preliminary findings from the active surveillance project at a forum attended by all implementing facilities. This was an opportunity to reflect on the successes and challenges encountered in implementation of the project and share best-practices from the facilities.

SIAPS, in collaboration with SANU, conducted a Standard Treatment Guidelines/ Essential Medicines List (STG/EML) a cross-sectional post-implementation survey, undertaken at 33 health facilities across the country. Assessment results show an average of 3.2 medicines was prescribed per encounter; injections were prescribed in 16% of the encounters which was within recommendations from WHO. Compliance with the EML in prescribing medicines was also acceptable with 84% of medicines prescribed on the EML. However, only 34% of medicines were prescribed using generic names, far less than the WHO recommendation of 100%. Also of concern was antibiotics being prescribed in the 54% of encounters.

SIAPS continued to support Quality Improvement (QI) projects implementation at health facilities. During the quarter, all target facilities were visited for follow up and it is expected that all the health facilities should have comprehensive results from their projects in the next quarter. SIAPS also continued to support the functioning of Pharmacy and Therapeutic Committees at seven health facilities to implement antimicrobial resistance (AMR) advocacy and document evidence-based improvement in medicine use.

## Tajikistan

**Goal: To strengthen the TB control system to address the increased threat of MDR-TB**

### ***Overall Quarter Progress***

SIAPS continued providing technical assistance to the National TB Program (NTP) of Tajikistan in the different aspects TB pharmaceutical management. An early warning system has been established to alert the NTP to supply problems related to anti-TB pharmaceuticals. SIAPS supports the NTP in collecting data from the oblasts, and entering and analyzing it in QuanTB.

The system has already helped to prevent several stock-outs or loss of medicines in TB facilities in the country. The system also helps to plan for redistribution of medicines between facilities when needed. SIAPS also supported the NTP to conducting visits to the Kulab Oblast, which has had problems with ensuring the quality and regularity of data provided for QuanTB analyses.

### ***Objective 1: Increase and enhance capacity for NTP pharmaceutical management***

SIAPS works very closely with the NTP of Tajikistan to provide NTP staff with on-the-job trainings and technical assistance to manage different aspects of TB pharmaceutical management. During the last quarter, SIAPS supported the NTP of Tajikistan in negotiations with the Global Drug Facility (GDF), which included steps to accelerate an order of pediatric TB medicines and supporting the registration of TB medicines.

SIAPS is working with local counterparts to institute curriculum reform for the post-diploma education of TB practitioners, with the aim of incorporating more TB pharmaceutical management topics. Draft TB pharmaceutical management manual and training materials, such as PowerPoint presentations, were developed. They include both generic information about TB Pharmaceutical Management and also specific topics related to TB Pharmaceutical Management in Tajikistan. The manual and training materials are being translated into Russian. After translation, they will be sent to the NTP and the Institute of Post-Diploma Health Education of the Ministry of Health of Tajikistan, as well as to the international partners for their inputs and feedback. In February and March 2015, the materials will be finalized and SIAPS will work with in-country partners to obtain official approval and institute the desired curriculum changes.

### ***Objective 2: Increase use of information for decision-making in TB pharmaceutical management***

Based on the gap analysis and respective needs assessment for the development of a TB pharmaceutical management information system, which was conducted by SIAPS last year, SIAPS suggested two solutions for optimizing the use of a logistics management and information system (LMIS) in decision-making. The suggested solutions included:

- Using mHealth solutions, a mobile logistics management system focusing on stock tracking, requisition planning, and delivery acknowledgement via SMS (i.e. CommTrack, which is an open-source turnkey product designed to strengthen logistics management through the use of mobile technology).



- Instituting the use of e-forms for stock tracking, requisition planning, and delivery acknowledgement, which will be based on two components: Adobe™ PDF forms sent by email (LMIS quarterly reports from all levels) and a Microsoft Excel™ tool allows for multiple users and generates reports based on data in PDF format.

Both options were discussed with the NTP staff and partner organizations. All parties agreed that the system that is available SMS is not suitable for Tajikistan due to several reasons including: potential government crackdowns on SMS usage; previous negative experience of partners on use of SMS based systems: for example, in the framework of the TBREACH Wave 2 grant, implemented by project HOPE, where the users of the system did not send messages of adequate quality or supplying enough data to sufficiently generate reports. It was unanimously agreed that implementation of a PDF-file-based system would be the most efficient and realistic solution for Tajikistan. SIAPS will work toward implementing this system in the next quarter.

*Partner contributions:*

Project Hope and the Royal Netherlands Chemical Society (KNCV) Tajikistan Branch contributed to the discussions and shared their experiences with regard to the proposed options for optimizing the performance of LMIS and its use in decision-making.

***Objective 3: Strengthen the supply system for anti-TB medicines***

SIAPS is helping to establish and implement a system for the use of QuanTB as an early warning and quantification tool in Tajikistan. Since June 2014, monthly patient and stock-related data is submitted by the oblast (regional) TB pharmaceutical management coordinators to the national TB pharmaceutical management coordinator, who then creates and analyzes QuanTB files for each oblast. These files and analyses are shared with SIAPS for feedback and recommendations.

SIAPS supported the NTP of Tajikistan in analyzing the collected information for the June-September 2014 period. Quality of reporting from the national coordinator has improved since starting using of the system: i.e. in the very first reports, data in the QuanTB files and narrative report were not matching, while in October reporting data was more consistent.

The quality of data provided by the different oblasts varies. SIAPS provides feedback for each monthly oblast report, which is considered by the national TB pharmaceutical management coordinator. Corrections are made to submitted data through follow-up communication with oblast coordinators. One of the regions (Kulob Oblast) provided very low-quality data for the July-October period. In light of this poor quality, SIAPS provided support for the National TB pharmaceutical coordinator's visits to 12 TB facilities in Kulob Oblast in December 2014. The reasons for the low-quality reporting were explored and the National TB pharmaceutical coordinator coached the local staff in data collection and obtained missing data.

In October 2014, with the assistance of SIAPS, a new version (2.0.0) of QuanTB was introduced to the NTP of Tajikistan. It was used to analyze collected data to enable early detection of the problems in the supply of first-line pediatric and second-line TB medicines and corresponding quantification.

Several problems were detected and remedial actions were planned. For example, analyses of collected data with QuanTB revealed a risk of stock-out of pediatric anti-TB formulations rifampin-isoniazid (RH, 30 mg/60 mg) and rifampin-isoniazid-pyrazinamide (RHZ, 30mg/60mg/150mg) at the Central Children's Hospital in Dushanbe and the Rudaki District TB dispensary. The necessary amounts of medicines for these facilities were calculated with QuanTB. It was recommended that medicines be redistributed from the Sogd Oblast TB dispensary, where there was overstock of these medicines, to the above-mentioned facilities. QuanTB analyses also revealed that the Kurgan-Tube Oblast dispensary was facing potential expiry of levofloxacin (250 mg) in January 2015. It was recommended that these medicines be redistributed to the Macheton District TB dispensary, which was able to utilize them before expiry.

### *Constraints to progress*

There are inconsistencies in the quality and regularity of provision of data for the QuanTB early warning system (QuanTB) in some regions.

### *Partner contributions*

Project HOPE expressed willingness to support the implementation of QuanTB in Sogd oblast and requested that SIAPS support and train staff in the use of QuanTB in early 2015. As a starting point, the project staff will facilitate quality data provision regarding patient-centered parameters (date of start of treatment and the medicines/regimens used per patient) to the national pharmaceutical management coordinator via the Sogd Oblast coordinator. SIAPS will continue to collaborate with Project Hope, as they will be implementing USAID funding for a new TB project in Tajikistan. As one of the objectives of the program is strengthening the TB supply system in the country with the use of QuanTB, there now exists a good opportunity for coordination, collaboration and ensuring the sustainability of SIAPS intervention.

## **Turkmenistan**

**Goal: To strengthen the TB control system of Turkmenistan to address the increased threat of MDR-TB.**

***Objective 1: To strengthen the Turkmenistan National TB Program (NTP) by improving the TB management information system***

### *Overall Quarter Progress*

In the last quarter a WHO EpiReview mission was conducted in Turkmenistan and a SIAPS consultant was part of the team. During that visit the mission recommended that the Ministry of Health (MOH) and NTP should start data entry in e-TB Manager. It was recommended that this be set up and customized for Turkmenistan for piloting purposes as soon as possible, and that the data should be entered retroactively for the whole of 2014. The NTP and MOH officials agreed that the pilot regions should start entering the data on October 1, 2014.

Due to concerns about maintaining the security of patient information, patients' names were not entered, and only patient registration numbers were used to generate the aggregated TB reports. It was also recommended that the Ministry of Health provide its support to ensure that the internet connection would be strong enough to install e-TB Manager (customized for use in Turkmenistan) on the server at the NTP. None of these recommendations were carried out.

SIAPS will continue to work with the WHO to persuade the NTP and MOH to start piloting e-TB Manager in Turkmenistan. If there is no possibility of piloting e-TB Manager in Turkmenistan, it will work to identify other areas of TB pharmaceutical management where technical assistance would be effective and efficient with the remaining funds. Those suggestions will be presented and discussed with the USAID Mission in Central Asia.

### *Constraints to progress*

The reasons for the delay in starting the e-TB Manager pilot have not been clearly explained. The NTP has promised to begin entering the data soon, but no timeline has been established. While it has not been communicated directly, it is possible that the MOH does not want to pilot an internet-based electronic information system developed by international organizations.

### *Partner contributions*

WHO Europe and the WHO Turkmenistan Country Office are participating in the pilot of e-TB Manager, providing logistical and financial support.

## **Ukraine**

**Goal: To assure availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes.**

### ***Overall Quarter Progress***

In the first quarter of its fourth project year, SIAPS Ukraine has both made advancements in activities carried over from the previous project year and successfully begun the implementation of new activities, planned under USAID's Complex Crisis Fund (CCF) funding.

Efforts were directed toward maintaining the functionality of eTB Manager, along with implementing new features and functions. Namely, new National TB Treatment Guidelines were implemented and a data analysis tool was introduced, providing decision-makers with the opportunity to conduct multi-dimensional analyses. At the same time, significant progress has been achieved in transferring the ownership of eTB Manager to government entities and building their capacity to operate the system, with the National TB Institute having begun to access the system. The State Penitentiary Service (SPS), as another major national eTB Manager administrator, received technical assistance from the project to facilitate the implementation of eTB Manager in its facilities. Finally, the draft Transition Plan was prepared, outlining the process of transferring the ownership and maintenance of the system from SIAPS to the Ukrainian Center for Disease Control (UCDC).

The challenge of redesigning the drug utilization reviews (DUR) was productively addressed in the reporting quarter through the establishment of new protocol and the development and piloting of new data collection tools. Thus, the organizational phase of the DUR successfully came to an end. Data collection will begin following the approval of the protocol by an ethics committee (which will be established with technical support from the project).

Progress has also been made in the implementation of the Pharmacovigilance Automatic Information System (PAIS). A final version of the software was released, and the piloting has started according to the plan. Data security issues have held back the implementation process, but an agreement was reached with USAID to secure additional funding that will enable the development of a data security system.

To improve pharmaceutical management governance, an assessment of various existing medicines lists and regulatory frameworks was performed and the ways in which they are currently being used by various procurement entities were analyzed. As a result, the project has prepared a comprehensive comparison of four different medicines lists used for public procurement. These comparison lists will be used as a main reference for the development of a harmonized national essential medicines list (EML).

Additionally, progress was made toward building the capacity of civil society organizations (CSOs) to perform price referencing. As a result of series of meetings, the CSOs' needs were determined, and an agreement was reached on the technical requirements for establishing a Price Referencing Observatory.

Activities aimed at implementing a framework contracts procurement practice in Ukraine were successfully launched during this quarter. The training curriculum for framework contracting was designed and successfully used during two three-day trainings held in Poltava and Kremenchuk. The project was challenged by an underestimation of demand for such training. While there was room for 25 participants, twice as many potential trainees requested to participate. The potential implementers of the framework contracts showed great interest in the topic, and the project's activity resonated with implementers and suppliers. The project has received several requests from the medicine suppliers' side to build their capacity to handle framework contracting in preparation for the opportunity of expected framework contracts tender announcements. The project will continue its work in this direction to ensure the practice of framework contracts will be successfully launched for public procurement of health products in Ukraine.

This reporting period presented a number of challenges, but the project was able to address those challenges and will continue to build on this success in the coming quarters.

***Objective 1: Strengthen pharmaceutical management information systems (PMIS) to support the HIV and AIDS and TB Programs***

The major targets in this reporting period were to: (1) advance in transitioning the ownership of eTB Manager to the government of Ukraine, while (2) continuing the provision of technical support in countrywide roll out of the e-TB Manager.

A major advancement has been made with the drafting of a transition plan, which has been developed and is ready for discussion and alignment with UCDC. A stronger work connection was established with National TB Institute and State Penitentiary System, which will ease the further deployment of eTB Manager in these facilities. Previously the SIAPS Ukraine office did not have direct permanent contact with these facilities. Now, however, due to the number of strategic meetings initiated and followed up by SIAPS, connections have been established with direct executors of administrative functions within these facilities.

Notably, a meeting with Oleksandr Etnis, the new head of the SPS health care department, was held on December 16. There it was determined that SPS will: 1) assign the personnel responsible for acting as national administrator of the system; 2) receive the keys from UCDC; and 3) send a letter to penitentiary facilities in regions requesting to receive missing user keys and improve/start entering cases to eTB Manager. It was also planned that in the stakeholders meeting would be conducted in Q1 2015 to discuss the status of eTB Manager implementation in SPS.

Furthermore, two meetings with National TB Institute employees were conducted. These included: Volodymyr Yuhymets, the head of the IT department; Deputy Director Vasyl Melnyk; and Chief External TB Specialist Svitlana Cherenko. During the first meeting, the problem of simultaneous access was discussed and solutions were considered. During the second meeting UCDC representatives participated in and presented the best practices of the system usage based

on their experience and held a Q&A session. It was agreed that the Institute would take steps to achieve a 95% correspondence rate between paper-based and electronic forms.

Toward the aim of strengthening PMIS in Ukraine, SIAPS continued to provide technical support to national-level users of eTB Manager. Developments from the quarter include:

- Specifications for the adaptation of eTB manager based on the new National TB Treatment Guidelines were developed and formalized with UCDC. Then the adaptations were developed and tested and are now being implemented in eTB Manager. The drugs management module of eTB Manager (QuanTB) is currently being adapted to the new treatment guidelines. As of December 2014, 67 facilities are entering data on TB medicines into eTB Manager.
- A tool for data analysis was localized, implemented and tested in the Ukrainian version of eTB Manager. The training on use of the data analysis tool was conducted for seven members of the UCDC staff. It was agreed that UCDC will start using the tool for data analysis to support the decision making process. It was also agreed that SIAPS and UCDC will work on preparation and conducting of the training on the use of the data analysis tool for representatives of oblasts starting in March 2015.
- Data quality control procedures are simplified through the implementation of a non-linked cases report. Previously, multiple cases could have been entered to the system for a single patient as if those cases were associated with different patients. As a way of control, a report was developed and implemented in eTB Manager to search and display such cases, enabling them to be merged in a single case by user, thus improving data quality.

### *Partner contributions*

The major contributing partner for this objective is UCDC, which in the reporting period continued to provide SIAPS with specifications of technical requirements for updates, bugs fixes and new features needed for eTB Manager.

### *Constraints to progress*

The state service for HIV/AIDS and other dangerous infectious diseases has been eliminated, and another government body responsible for HIV, AIDS and TB has not been established to date. Thus, the process for identifying the TB registry as the official tool for the quantification of TB drugs continues to be hindered.

The major problem with the function of eTB Manager at the National TB Institute—the inability of multiple eTB Manager users in the National TB Institute to have the simultaneous access to the main server—was addressed and steps were taken toward its eradication. A trial designed to solve the problem showed that the internal information system of the National TB Institute needs reconfiguration to meet the current demand. SIAPS is now negotiating to discuss the ways of such reconfiguration.

Another challenge in the reporting period was the advancement of the roll-out of the e-TB Manager in the SPS. The major problems the SPS currently has with eTB Manager are:

- The SPS is still in the process of setting up an internet connection for eTB Manager clients, utilizing money provided through a grant from the Global Fund to Fight AIDS, Tuberculosis and Malaria.
- The SPS didn't have assigned staff and relevant job descriptions for eTB Manager National Administrator-level users.

### ***Objective 2: Improve pharmaceutical services for the TB and HIV and AIDS Programs***

As was discovered in the previous period, the sample of patients chosen to participate in DUR consisted of patients with four resistance types, rather than with one, as had been expected. In the Kyiv Oblast TB Dispensary, 15 treatment regimens were used instead of 5-8 as the facility's management had claimed. Thus, the main task for the reporting period was changing the DUR design to reflect this mismatch.

To complete this task, several stakeholder meetings were held with representatives of SIAPS, UCDC, SEC and the Kyiv Oblast TB Dispensary. As a result, criteria for additional medicines were developed, and data collection forms were changed accordingly. Electronic data collection forms were created to replace the paper-based ones, which will improve data collection processes and data quality. The final versions of the DUR criteria and data collection forms were translated into Ukrainian and approved during the working group meeting. The protocol was reviewed based on the new criteria and the data collection pilot was performed to verify the new criteria and test data collection tools. The new protocol is ready to be submitted for ethics committee approval. The ethics committee is to be established within Kyiv Oblast TB Dispensary, and SIAPS provides technical assistance to facilitate this process and enable the data collection.

In the reporting period the PAIS software was finalized, and the piloting of the final released version has begun as planned. PAIS functions were presented to data analysis specialists from UCDC and State Expert Center (SEC) during a training, and these organizations have approved its further implementation.

As a result of tight cooperation with SEC, the digital identifier for PAIS was received from the WHO. Now PAIS is recognized by VigiFlow (the complete individual case safety report management system, operated by the WHO).

It was planned that in the reporting period PAIS will be available for usage on an SEC-owned web address. Unfortunately, this target was not met due to a fire in the SEC office, which destroyed their server.

### *Partner contributions*

UCDC contributed by participating in the working group meetings, and cooperating on development of the new protocol for DUR. SEC is the major contributor with regard to criteria and forms development, protocol review, and assistance in the development of legislation/regulation on the establishment of an ethics committee in the Kyiv Oblast TB Dispensary. The Kyiv Oblast TB Dispensary also contributed to the development of forms.

The SEC was the lead contributor to work on PAIS, as they led the communications with WHO and received the identifier for PAIS to be recognized by VigiFlow.

### *Constraints to progress*

A major constraint to the advancement of the DUR was UCDC's rigid condition requiring the development of the full-scale protocol for the DUR. This caused a significant delay in DUR implementation, as the design had to be changed due to a discovered discrepancy between the expected and actual number of resistance types and treatment regimens. Now, as the new protocol is finalized and successfully tested, it will be approved by the ethics committee (creation pending), and the data collection will start.

Another unexpected factor behind the delayed deployment of PAIS is linked to data security issue. Initially SEC lawyers allowed the usage of PAIS without a data security system. Later, the Ministry of Infrastructure requested a data security system to be put in place for PAIS to function legally. Extensive efforts of SIAPS resulted in approval from USAID to use current funding for the creation of a scope of work for data security system development. In the reporting period the scope of work was created, and SEC is ready to announce the tender for the developer's selection.

### ***Objective 3: Improve pharmaceutical management governance***

In this quarter, SIAPS conducted a situation analysis to review various existing medicines lists and regulatory frameworks, and to identify the ways in which they are currently being used by various procurement entities.

National and oblast level meetings were held with representatives of the MOH, state services, the State Expert Center, the Oblast Health Administration, the Central Formulary Committee, the WHO and chief physicians. SIAPS facilitated interviews with these officials, and information was acquired on the actual usage of existing medicines lists for procurement and on procedures of selection of medicines for these lists. The preliminary results of the analysis are available.

A desk review of public procurement data has started to identify the number (and potentially the value) of medicines procured by the MOH, which are listed in different medicines lists, including the WHO-approved EML and the Ukrainian National EML.

In the reporting period, the workshop was conducted for Civil Society Organizations, CSO's representatives, All Ukrainian Network of People Living with HIV (Network), the



Anticorruption Action Center (AntAC), UNDP, International Renaissance Foundation, All-Ukrainian Council for patients' rights and safety, Reanimation Package of Reforms) to introduce them into the best practices of price-setting and referencing, and to outline conversion points with EML and Framework contracting.

In the follow-up meetings, SIAPS HQ experts took stock of the current issues CSOs are facing in the area of price referencing and discussed the suggestions for the basket of benchmark pharmaceuticals for procurement price tracking, including product attributes and pricing options.

CSOs asked for technical assistance (TA) in verifying the currently registered prices and in finding suitable alternatives for price referencing. This TA request will be taken into account by MSH HQ experts as they consider further steps of development. SIAPS was also asked to consider providing training on pricing for government employees in a meeting with officials from the Ministry of Economic Development and Trade.

A series of meetings was held with associations of manufacturers and individual companies to discuss the possibilities of them submitting price data for benchmarking to SIAPS, and a similar request was sent to the oblast pharmaceutical retail network. After receiving their feedback, SIAPS is looking into other ways of getting information about wholesale and retail prices.

The list of benchmarks CSOs will use in their advocacy activities, as well as preliminary requirements for data collection, were discussed in detail to find an optimal format for their incorporation into the Price Referencing Observatory, the online price reference tool that SIAPS will develop.

### *Partner contributions*

Deputy Minister Yuri Savko of the MOH and the WHO/Europe office showed support to SIAPS in EML review, thus helping to facilitate meetings with officials—a necessary step in conducting the situation analysis. The Network and AntAC contributed to the formulation of the requirements for the price referencing tool, and the IRF was instrumental in broadening the price referencing agenda in Ukraine.

### *Constraints to progress*

The proposal to make significant changes to the scope and format of the EML—creating one list instead of multiple—is very politically sensitive. The current situation creates an environment that supports corruption in public procurement, while the introduction of one EML has the potential to reduce vulnerability to corruption practices, which are covered up by high-level officials.

Changes in the Ukrainian government caused a delay in advancement in this area. The new government was officially established in November. Before that happened, SEC and other stakeholders were not in a position to move forward with the EML.

Since the situation analysis was planned to be facilitated by MSH HQ experts, whose visit to Ukraine was shifted from November to December, all further work has also been shifted, and the final results will be available in January 2015. Then the workshop with the stakeholders will be held to present and discuss the findings and reach a consensus on further steps.

With regard to price referencing, there is no clear commitment from the suppliers to provide data on wholesale and retail prices. Given the low accessibility and poor transparency of information about prices placed on the official public procurement website it might be a challenge to track down some prices.

Given that no CSOs with regional presence have so far confirmed their ability to collect data in the regions, data collection might also turn out to be challenging.

#### ***Objective 4: Improve Management of Supply Chain Services***

Following an intensive outreach to USAID priority oblasts in September 2014, a memorandum of understanding and cooperation was signed with the Health Administration of Poltavaska Oblast. This allowed the program to move ahead with new training curriculum development focusing on the practical aspects of framework contracting. This curriculum encompasses a substantial interactive component, accounting for at least 40% of training time. Six hands-on tasks were assigned to the trainees to guide them through the major steps of framework contracting. Didactic materials included questions and discussion points to engage audience in proactive discussions, and to encourage the cross-pollination of ideas and exchange of opinions and practical solutions. A special emphasis was placed on the issues related to transparency, good governance, and anticorruption. Participants had the opportunity to attend sessions on the best international practices in public pharmaceutical procurement, outlining WHO and World Bank requirements for medicines procurement and providing an outlook on the implications of Ukraine's accession to the EU for public procurement.

A total of 84 members of tendering committees took part in two three-day trainings held in Poltaskva and Kremenchuk. In the wake of the first training a stakeholders' meeting was facilitated by SIAPS to allow for a free discussion of framework contracting perspectives in Poltaskva Oblast. The event was co-chaired by the USAID activity manager, SIAPS CPD, the Poltavaska Oblast deputy governor, and the head of health administration. Participants included 13 chief physicians, financial inspectors, and representatives from the oblast council, the Ministry of the Interior, the Anti-Monopoly Committee, and the Treasury, all of whom took an active part in the discussion, providing their views on the prospects for framework contracting in public pharmaceutical procurement.

#### ***Partner contributions***

Poltavska Oblast Health Administration had an active role in and substantially contributed to the conduct of both trainings. The head of health administration led the opening session and, together with the USAID activity manager and SIAPS CPD, crowned the first training by handing out participation certificates to the trainees. The deputy head of health administration

attended all three days of the training, led discussions, offered practical solutions, and volunteered advice.

The stakeholders' meeting was co-chaired by the deputy governor of Poltavaska Oblast and the head of health administration. Both of them showed profound interest and stated their support of the framework contracting activities. They see great potential for framework contracting in the field of anticorruption and view it as an efficient tool for streamlining procurement practices in the oblast of Poltavaska. Hence, they expressed their gratitude for technical assistance offered by USAID and SIAPS.

### *Constraints to progress*

Oblast authorities have no experience in appointing a procurer-in-chief. Given the long timeframe mandated by the legislation, their lack of experience might turn out to be an additional setback in piloting pooled procurement through framework contracts.

Public sector procurement accounts for just 8-13% of expenses for pharmaceuticals. Combined with opaque and cumbersome public tendering procedures, this discourages manufacturers and wholesalers from participating in public tenders for pharmaceuticals. Considering that a successful framework contract requires at least three eligible suppliers, tendering committees might be hard-put to find sufficient number of bidders willing to participate in framework contracts.

A substantial number of site-level members of tender committees lack tendering proficiency. This accounts for low transparency of regional procurement and constitutes a major drawback in the mastering of cutting-edge procurement techniques, such as framework contracting.

## **Uzbekistan**

**Goal: To address the threat of increased levels of MDR-TB by strengthening the TB control system.**

### ***Overall Quarter Progress***

SIAPS finalized a comprehensive, indicator-based assessment of the TB pharmaceutical management system in Uzbekistan. The findings of the assessment were presented at the National TB Conference, organized with the support of the WHO in Tashkent, Uzbekistan on December 5-6, 2014.

The national TB pharmaceutical management working group decided that the recommendations and corresponding activities will be included in the National Strategic Plan for the National TB Program (NTP) of the Republic of Uzbekistan (2016-20), which is currently being drafted. Based on this plan, the concept note for the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) will be developed.

### ***Objective 1: Strengthen pharmaceutical sector governance***

During the last quarter SIAPS conducted an assessment of the TB pharmaceutical management system in Uzbekistan. The collected data was analyzed and an assessment report was developed in close collaboration with the national TB pharmaceutical management working group. The results of the assessment were presented and discussed at the National TB Conference, which was held in Tashkent on December 5-6, 2014 and organized by the WHO Uzbekistan Country Office. Participants included staff from the Ministry of Health of Uzbekistan, representatives of the staff from all levels of the National TB program, and international partners.

This is the first comprehensive indicator-based assessment of the TB pharmaceutical system in Uzbekistan, and it provides an excellent snapshot of the achievements and needs of the country's TB pharmaceutical management system. The assessment's findings serve as a guide for the development of the recommendations for strengthening management of TB pharmaceuticals. These recommendations have been included in the National TB Strategic Plan (2016-20), which is being currently developed by the NTP with the support of the WHO. Based on the National TB Strategic Plan, the Concept Note for GFATM funding will be developed.

SIAPS participated in the group discussions at the conference and provided technical input and guidance.

### ***Partner contributions***

The WHO Uzbekistan Country Office organized the National TB Conference, where the findings of the assessment were presented. The WHO cooperated with SIAPS to integrate the recommendations for strengthening the TB pharmaceutical system into the National TB Strategic Plan (2016-20).

### *Constraints to progress*

Generally complicated bureaucratic processes in the country delay approval for any activity, but SIAPS has established good working relationship with national counterparts and international partners to help obtain approval for different activities.

### ***Objective 2: Strengthen pharmaceutical services for the NTP of Uzbekistan***

SIAPS is in the process of identifying consultants to provide technical assistance to the head Department of the MoH of medicines and medical equipment quality control and the NTP to strengthen the TB pharmacovigilance system. The current plan is to engage employees of the State Expert Center (SEC) of the Ministry of Health of Ukraine, who can share their experiences and expertise in pharmacovigilance with their colleagues in Uzbekistan. SIAPS has a long history of collaborating with and supporting the SEC in Ukraine.

### ***Objective 3: Strengthen supply system of anti-TB medicines***

In December, SIAPS held a meeting with the national TB pharmaceutical management working group. The working group identified the regions where the QuanTB software would be piloted: in Tashkent City, and in the Samarkand, Khorezm and Fergana oblasts. It was decided that the workshop to train the representatives of these oblasts and to discuss the establishment of an early warning system would be held in January 2015 in Tashkent and that the pilot will start in February 2015. The corresponding documents were submitted to the MoH and the Ministry of Foreign Affairs.

### *Partner contributions*

SIAPS is working in close collaboration with the WHO Uzbekistan Country Office.

### *Constraints to progress*

The workshop for starting the pilot for the early warning system was approved by the MOH and took place in mid-January 2015.