

SIAPS Malaria End of Project Report

2011–2016



USAID
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SIAPS 
Systems for Improved Access
to Pharmaceuticals and Services

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About SIAPS

The goal of the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program is to ensure 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.

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Systems for Improved Access to Pharmaceuticals and Services
Pharmaceuticals and Health Technologies Group
Management Sciences for Health
4301 North Fairfax Drive, Suite 400
Arlington, VA 22203 USA
Telephone: 703.524.6575
Fax: 703.524.7898
E-mail: siaps@msh.org
Website: www.siapsprogram.org

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ACRONYMS

ACT	artemisinin-based combination therapy
CMS	central medical stores
CRMS	Continuous Result Monitoring System
DRC	Democratic Republic of the Congo
EUV	end use verification
IPTp	intermittent preventive treatment
MOH	Ministry of Health
NMCP	National Malaria Control Program
OSPSANTE	Outil de Suivi des Produits de la Santé
PMI	President's Malaria Initiative
PSM-TWG	Procurement and Supply Management Technical Working Group
RDT	rapid diagnostic test
SIAPS	Systems for Improved Access to Pharmaceuticals and Services
USAID	US Agency for International Development
WDI	William Davidson Institute

THE CHALLENGE

Since 2000, substantial progress has been made in fighting malaria. Between 2000 and 2015, malaria case incidences declined by 41% and malaria mortality rates by 62%.¹ Despite this remarkable progress, approximately 212 million cases of malaria occurred globally in 2015, resulting in 429,000 deaths, with most of those in children under the age of five in Sub-Saharan Africa. Sustained reductions in malaria-related mortality and morbidity will only be achieved through improved access to and the appropriate and safe use of quality-assured malaria medicines. The US President's Malaria Initiative (PMI) invests heavily in procuring malaria commodities, ensuring their safe and effective use, and strengthening local supply chains. Many countries supported by PMI continue to face challenges in ensuring an uninterrupted supply of high-quality malaria medicines and commodities as well as their appropriate use. Factors contributing to these challenges include poor planning and coordination among country partners; a lack of strategic information for decision making, which leads to frequent stock-outs of key health commodities at all levels; and weak human resource capacity to perform key pharmaceutical management functions, resulting in irrational medicine prescribing, dispensing, and use.

¹ World Health Organization. World Malaria Report 2016. Geneva: WHO; 2016. Available at: <http://www.who.int/malaria/publications/world-malaria-report-2016/report/en>

THE SIAPS APPROACH

Important components of the global malaria strategy include early diagnosis and prompt treatment, which require the continuous availability of quality pharmaceutical products and effective services. Improving the management of pharmaceutical products is crucial to ensuring that interventions reach the population. The US Agency for International Development (USAID)-funded Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program worked to strengthen malaria commodity management through a variety of global, regional, and country-based approaches. SIAPS's core principles include improving metrics, monitoring and evaluation, capacitating local governments and organizations, and increasing country ownership in support of scaling up the availability and utilization of malaria products, including artemisinin-based combination therapy (ACT) and rapid diagnostic tests (RDTs). At the country level, SIAPS collaborated with national malaria control programs and central medical stores (CMS) to develop and implement activities aimed at strengthening the pharmaceutical management of antimalarial products.

SIAPS/PMI-supported Countries

Angola
Benin
Burundi
Democratic Republic
of the Congo (DRC)
Ethiopia
Guinea
Kenya
Liberia
Mali
Niger
South Sudan
Latin America Regional

SIAPS ACHIEVEMENTS

At the global level, the portfolio worked to identify opportunities to use new and existing tools; coordinate technical work; and ensure that approaches, strategies, and tools are based on and informed by needs and priorities.

Global Technical Leadership

To document SIAPS's contributions toward reducing malaria morbidity and mortality through systems strengthening approaches and other interventions, key stakeholders, including Ministries of Health (MOHs), health workers, community leaders, and nongovernmental organizations, were interviewed. Corresponding qualitative and quantitative data, reports, and other materials were collected to support evidence of SIAPS's achievements. This information has been summarized into a malaria legacy document titled *Defeating Malaria through Pharmaceutical Systems Strengthening Approaches*.

SIAPS contributed significantly to the global malaria policy dialogue by participating in technical working and advisory groups, presenting at conferences, and producing publications.

Building Capacity to Manage Malaria Commodities

Determining accurate estimates for the quantity of antimalarial commodities to be procured requires close collaboration with partners, timely and quality data, and sufficient capacity at the central and peripheral levels. Recognizing the capacity gap in quantification in many countries, SIAPS worked with USAID/PMI, the Centers for Disease Control and Prevention, USAID/DELIVER, Roll Back Malaria, Clinton Health Access Initiative, William Davidson Institute (WDI), and Medicines for Malaria Venture to develop the *Multi-Partners Manual for Quantification of Malaria Commodities*, which provides step-by-step guidance for carrying out a national-level quantification of ACT and RDTs. This manual has been used across all SIAPS- and DELIVER-supported countries that also receive PMI support and has been adopted by Roll Back Malaria as its official quantification manual.

Estimating Country-level Distribution Costs for ACT and RDTs

Strengthening financial strategies and mechanisms and improving the efficiency of pharmaceutical management processes reduces financial barriers and releases much-needed funds for additional procurements. To better understand the cost of ensuring continuous availability of malaria commodities, SIAPS and WDI conducted a retrospective costing exercise in Kenya and Benin to estimate the cost of distribution of malaria commodities, including ACT and RDTs, from the CMS to health facilities. This experience led to the development of a costing extrapolative model that will be used by other countries to accurately estimate costs and inform funding decisions.

Improving Availability of Information for Decision Making

The portfolio supported PMI countries to implement a set of three PMI monitoring tools in close collaboration with USAID/DELIVER and PMI/Washington. Tools included information on supply plans for malaria commodities; the End Use Verification (EUV) tool; and the Procurement Planning and Monitoring Report for Malaria. Data collected with these tools have been used to monitor availability, detect impending stock-outs, prevent expiries, and disseminate information that supports greater availability and use of commodities.

With support from the malaria core portfolio, more than 70 EUV surveys have been implemented in eight PMI countries: Angola, Burundi, DRC, Ethiopia, Guinea, Kenya, Liberia, and Mali. At the end of each EUV survey, feedback meetings with MOH partners were held to share and disseminate results and highlight the issues influencing the availability and use of malaria commodities throughout the supply chain. As a result, corrective actions were taken to improve the availability and use of malaria commodities (table 1).

Table 1. Changes in National Malaria Programs as a Result of Findings from EUV Surveys

Country	Program Changes
Angola	Informed national distribution plans of ACT and RDTs to reflect actual needs in each province.
Burundi	The National Malaria Control Program (NMCP) streamlined the requisition process for malaria commodities, leading to a reduction in the requisition time from two weeks to two days.
DRC	The NMCP adopted the EUV survey as one of its monitoring and evaluation tools.
Ethiopia	A manual to guide redistribution of antimalarial medicines between public health facilities was developed to help facilities maintain acceptable stock levels and reduce expiries. As an example, 542 ampoules of artesunate injection and 3,870 doses of ACT were redistributed among health facilities in the Oromia region in April 2016.
Guinea	A new malaria reporting system was created following a baseline survey. A 90% reporting rate was achieved in 2015 with the new reporting system, up from 30% in 2012.
Kenya	Information on drug management indicators was incorporated in routine semi-annual national monitoring activities (Quality of Care Survey).
Liberia	NMCP and country health teams responded to findings showing a lack of formalized training in case management and commodity management by conducting trainings in counties.
Mali	The MOH decided to make free RDTs available for the entire population with no cost recovery.

Country-level Contributions

The malaria core portfolio provided support and guidance for SIAPS’s country-level activities to ensure that pharmaceutical system strengthening interventions in support of malaria control programs are of the highest technical quality and are consistent with PMI objectives and SIAPS’s mandate. Some key achievements are highlighted in table 2.

Table 2. Select Country-level Achievements

Country	Key Achievements
Angola	<p>SIAPS supported coordination in the pharmaceutical supply chain by facilitating pharmaceutical supply management working group meetings. SIAPS collaborated with in-country malaria partners to hold regular malaria coordination meetings and develop joint work, operational, and strategic plans. During these meetings, the NMCP and its main partners shared and analyzed data for malaria commodities.</p> <p>Health facilities did not have appropriate tools for malaria logistics data to report medicine consumption. SIAPS supported the NMCP to develop and distribute pharmaceutical management tools to all facilities. Of the 778 facilities, 672 are currently using appropriate tools for malaria logistics data.</p>
Burundi	<p>Malaria infection during pregnancy is a major public health concern that poses serious risks for the mother and her child, both before and after birth. Intermittent preventive treatment (IPTp) is a proven cost-effective intervention for preventing malaria in pregnancy. In Burundi, SIAPS worked with the MOH and partners to develop a policy document to introduce IPTp policy in Burundi. Support was also provided in the quantification and delivery of IPTp commodities in country and in rolling out the new policy through targeted trainings at the national, district, and community levels.</p>
DRC	<p>Quantification of antimalarials was difficult due to uncoordinated procurement and distribution by multiple partners. SIAPS helped the NMCP revitalize the national procurement and supply chain management working group that met quarterly to assess national antimalarial supplies. At the provincial level, where accessing quality data on consumption was a challenge, medicines coordination committees were established to collect and review consumption data for malaria commodities regularly. As a result, supply chain data from all partners are now shared and analyzed quarterly at both the national and provincial levels, and appropriate decisions are made. For example, redistribution schemes were developed to allow the exchange of commodities among health facilities. In addition, malaria partners participated in the first-ever nationwide quantification in June 2016, which was a big step toward a single procurement plan. These committees also helped to centralize and integrate storage of commodities from different donors and programs to improve efficiency.</p>
Ethiopia	<p>The Continuous Result Monitoring System (CRMS) is a comprehensive, indicator-based performance management system used by SIAPS and the PMI program in the Oromia region to track progress in malaria product management, strengthen systems, and improve health outcomes. The system was implemented at 44 health facilities and helped health managers at different levels monitor performance of the sites using key performance indicators. For example, when the CRMS showed a discrepancy between the number of laboratory-confirmed cases and the number of patients receiving malaria treatment, stakeholders took action to remedy this practice through pharmacist trainings, supportive supervision, and mentoring.</p> <p>The percentage of cases being treated without laboratory confirmation has decreased from 54% in 2011 to almost zero in 2016. As the CRMS continues to support improvements, SIAPS determined that scaling back routine support was essential to ensuring sustainability. With this objective, 28 health facilities in the Oromia region were graduated after taking steps to fully own their CRMS and demonstrating their capacity to monitor the availability, handling, and appropriate use of antimalarials.</p>

Country	Key Achievements
Guinea	<p>Limited use of available data for forecasting, a lack of consensus in establishing forecast assumptions, and inappropriate tools for quantification led to inaccurate forecasts of malaria commodities. Consequently, medicine shortages and costly emergency procurements, overstock, and an increased risk of product expiry were common. The NMCP, with support from SIAPS, made a significant first step toward establishing the Procurement and Supply Management Technical Working Group (PSM-TWG) to help maintain a focus on coordinated forecasting and supply planning of malaria commodities. With training, PSM-TWG members were equipped with the skills to quantify malaria commodities.</p> <p>Building on the training outcomes, SIAPS/Guinea supported the PNLG to carry out a five-year (2016–2021) forecast and a three-year (2016–2018) procurement plan for malaria commodities. The NMCP used these estimates as advocacy tools to secure more than 98% of the funding required for the procurement of malaria commodities between 2016 and 2018.</p>
Liberia	<p>The NMCP prioritized increasing the availability and use of malaria diagnostic tools and ACT as first-line treatment in all public health facilities, at the community level, and in the private sector to reach 80% of the population. However, improving access to malaria commodities through the private sector presented many challenges, including a lack of quality products, the absence of guidelines to manage malaria cases, irrational medicine, and inadequate supervisory support. Between September 2011 and September 2013, SIAPS was instrumental in establishing the Private Sector ACT Technical Working Group to guide the implementation. SIAPS also developed private-sector strategic documents, training manuals, and reporting tools. Feasibility studies were conducted to guide implementation, and a distribution system was established.</p>
Mali	<p>Accurate data that are managed with effective systems enable evidence-based decision making that, in addition to improving medicine availability, contributes to better patient care, stronger health systems, and better health outcomes. In May 2015, SIAPS provided support to Mali's MOH in the design and implementation of the Outil de Suivi des Produits de la Santé (OSPSANTE), a web-based dashboard that captures, aggregates, and tracks information and makes it available and accessible for malaria and family planning commodities. The tool facilitates timely data aggregation and helps the MOH and its stakeholders obtain information for better and faster decision making. This new tool made a significant improvement on the reporting rate, with the number of health facilities completing and submitting reports increasing from 67% in 2014 to 98% by the end of 2016.</p>
Niger	<p>SIAPS supported good governance and coordination in pharmaceutical supply chain by collaborating with the NMCP to launch a supply chain technical working group for malaria commodities. With SIAPS support, in-country malaria partners held regular malaria coordination meetings at which the NMCP and its main partners shared and analyzed data for malaria commodities.</p>
South Sudan	<p>SIAPS provided daily mentoring of NMCP staff at the central level. Support was provided to develop the National Malaria Control Policy, revise the national malaria strategic plan, and develop and distribute key malaria guidelines. SIAPS supported the NMCP and worked closely with World Health Organization to identify and set up three sentinel sites for monitoring therapeutic efficacy of antimalarial medicines and trained 171 staff at the sites. To ensure effective treatment of malaria, SIAPS supported the development of the second edition of the South Sudan Malaria Case Management and Training Guidelines and distributed 230 copies. SIAPS also supported World Malaria Day commemorations, malaria program reviews, and malaria indicator surveys. With SIAPS support, the malaria program was able to produce required documents that enabled it to win Global Fund grants of more than USD 97.6 million for malaria activities and commodities. This additional funding facilitated the scale up of malaria interventions the country</p>

Challenges

Competing priorities by funders and MOHs led to the suspension of some activities. The SIAPS malaria core portfolio leveraged country level resources; contributed to improved pharmaceutical governance; and build national-level capacity to manage malaria products, improve the availability of malaria commodities, monitor malaria commodities, improve the quality of information systems, strengthen in-country coordination mechanisms, and improve the quality of pharmaceutical services provided to malaria patients, all of which contributed to increasing access to malaria commodities and the coverage of malaria interventions.