

August 2016





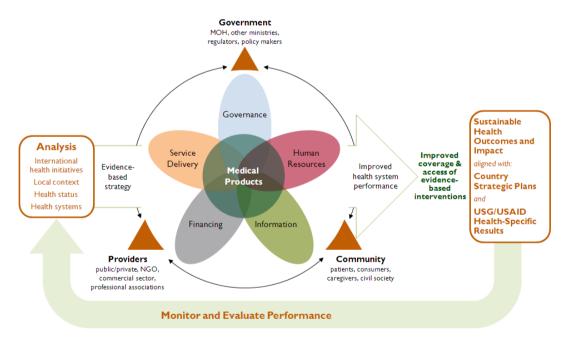
## **Background**

USAID and the US Centers for Disease Control (CDC) are implementing the US President's Emergency Plan for AIDS Relief (PEPFAR) program in Cameroon since 2009.

In 2012, USAID invited the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program to Cameroon to assist the National AIDS Control Committee (NACC) in managing and preventing the frequent and severe stock-outs of Antiretroviral (ARV) medicines that the country was facing. Shortages of HIV commodities compromised the impact of PEPFAR investments, and limited access to treatment nationwide.

SIAPS Cameroon objective of improving access to HIV and related pharmaceutical services, evolved over the four-year project from emergency response to a systems strengthening approach, and from investments prioritizing centrally-based activities, to interventions aiming at enhancing management capacity at the regional and health facility levels.

# **SIAPS Approach**



The SIAPS project in Cameroon was implemented through a comprehensive approach starting with thoughtful assessments of the different components of the pharmaceutical supply system.

Despite the lack of initial baseline data that could inform on the gravity of the situation, stock-outs of ARVs were a chronic problem, and the symptom of numerous systemic dysfunctions from the central level to the periphery.

The dysfunctions stem related to both governance and technical capacity, including lack of coordination among institutions, inefficient procurement processes, unpredictability of budget availability, inefficiencies of the storage and distribution systems, lack of qualified staff, and inadequate information system.

# Level of intervention and geographic coverage



SIAPS started the implementation of technical activities to avoid nation-wide stock outs of ARVs in May 2012, working closely with NACC, the Directorate of Pharmacy (DPML), and the Central Medical Stores (CENAME).

During 2013, SIAPS extend technical support to the Regional Funds for Health Promotion of Adamawa, Est, Center, Littoral, North West and South West.

Since 2014 SIAPS expanded the scope of technical assistance to Antiretroviral Treatment (ART) centers and PMTCT sites in the 6 regions.

PEPFAR priority regions are Center, Littoral, North West and South West.

## Number of ART and PMTCT facilities covered by SIAPS in Cameroon

	January – September 2014	October 2014 – September 2015	October 2015 – June 2016
Adamawa	3	3	0
East	3	3	0
Centre	7	39	60
Littoral	7	26	39
North West	7	18	18
South West	5	15	15
Total number of SIAPS- supported sites by Year	34	104	132
% of national patients on treatment	55%	76%	71%

# SIAPS Cameroon - Key Interventions 2012 - 2016

# Intervention 1: Institutional governance and compliance with the Global Fund and other donors' requirements

In 2012, stock-outs of ARVs at the national level were closely linked with governance issues, including lack of coordination to solve short- and long-term questions on access to HIV commodities and in fulfilling Global Fund grant conditions, which caused significant delays in the disbursement of funds and affected the capacity to procure HIV health commodities.

### SIAPS assisted with the following actions:

- Respond to urgent issues related to quantification and fulfilment of Global Fund conditions, in collaboration with key partners, such as ESTHER and CHAI.
- Prepare Global Fund documents related to the Round 10 extensions, submission of the HIV
  concept note, and grant making documents ensuring complementarity and coherence in
  pharmaceutical-related issues between the PEPFAR and the Global Fund agendas
- Facilitated the establishment of a multi-partner quantification and stock monitoring committee of HIV commodities, and capacitated its members to conduct quantification.
- Participated in multiple work groups and task forces with other national and international partners (PMTCT Task Force, Regional Funds Platform, LMIS Committee).
- Advocate with other Technical and Financial Partners for pharmaceutical reforms and influence the inclusion of pharmaceutical strengthening interventions in other donors' agendas such as the Global Financing Facility (GFF).
- Participate as a member of the Country Coordinating Mechanism (CCM) of the Global Fund, representing the International Non-Government Organizations

## Intervention 2: Data availability and use of pharmaceutical information

In 2012, the HIV program in Cameroon had not yet put in place a recording and reporting system to capture patient and pharmaceutical data and information. Tools had been developed but not yet printed and disseminated. As such, although the general perception was that ARVs stock-outs were widespread and critical, there was no data to analyze the magnitude of the problems at the different levels and geographic areas.

### SIAPS assisted with the following actions:

- Printing and disseminating the approved tools including ART dispensing registers, reporting tools, and stock cards.
- Training and supervision to ensure adequate use of registers and reports in 34 health facilities in PY3, and 104 in PY4 and 132 in PY5.
- Implementation of the dashboard OSPSIDA to oversight ARVs stock levels at regional and national level, and capacitation of its members.
- Participated in the multi-partner initiative for the implementation of a Logistics Management Information System (LMIS) of essential medicines and medical supplies at central and regional levels.

## Intervention 3: Storage and distribution of HIV health products

Limited storage capacity, inadequate storage conditions, and improper use of available spaces at all levels of the supply systems were identified in the SIAPS assessment report as key factors that affect the capacity of Cameroon to rapidly scale up ART.

#### SIAPS actions in this area included:

- Procurement of some essential equipment for the Regional Funds of the six focused regions, optimization of available spaces, and rehabilitation and equipment of some rented CENAME stores.
- Trainings to improve storage management at ART sites, Regional Funds and CENAME.
- Rational distribution of ARVs in times of shortages to minimize treatment disruptions.
- In collaboration with Expertise France development of standard operating procedures (SOPs) for pharmaceutical supplies management.
- Assessment of options for adequate supply chain of PMTCT Option B+ commodities.
- Deployment of a vehicle (pick-up) to each of the four Regional Funds of Center, Littoral, NW and SW to support technical and distribution activities in each of the regions.
- Inclusion of interventions aiming at increasing storage capacity at CENAME and the Regional Fund of the Center as part of the New Funding Model Grant signed by the Ministry of Health with the Global Fund.
- Re-assessment of the storage capacity nation-wide, and feasible logistics solutions to accommodate increased HIV-commodities for 2016-2018.

# Intervention 4: Human capacity building Management, leadership and governance at regional and ART site levels

In 2012, the assessment of the pharmaceutical management systems in Cameroon analyzed the scarcity of skilled human resources in the pharmaceutical system, affecting particularly to the HIV program. During 2012 and 2013, SIAPS conducted intensive trainings with the objective of introducing the most basic notions on pharmaceutical management to the ARV dispensers and stock keepers followed by quarterly supervisions to ensure application of knowledge to routine activities.

However, data captured during centrally-organized quarterly supervisions showed limited reductions of stock-outs at these levels, despite the availability of products at the central level and the supervisions and trainings conducted. For this reason, since 2015, SIAPS expanded the scope of technical support to enhance management and governance at regional and local levels, through different actions, including:

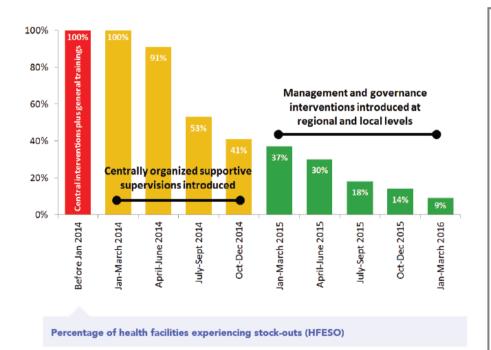
- The use of the regional technical advisors to four regional medical stores to strengthen coordination among the regional HIV program managers and the medical stores and to improve the regional distribution plans of HIV commodities.
- Transfer of leadership to organize and conduct supervision of HIV commodity management from the national HIV program to the regional HIV coordinators.
- Use of a continuous quality improvement process to empower health facility managers to lead the HIV clinic teams, interpret key pharmaceutical indicators, and use adapted internal supervision tools to address constraints.
- Provide a forum for peer exchange and sharing of good practices and lessons learned between regional medical stores, regional HIV coordinators, and health facilities managers during regional quarterly meetings.

# SIAPS Cameroon - Key Results 2012 - 2016

## Key Results 1: Significant reductions of stock-outs of ARVs at central and health facility level

Since March 2014, the availability of ARVs at the central level improved significantly thanks to the efforts to restore the financial flow for ARV procurement with the fulfilment of the Global Fund conditions, and to the improvements achieved in forecasting and quantification, leading to eradication of stock-outs of the most-widely used ARVs at the central level. The availability of ARVs at central level, in combination with training and centrally-organized supervision activities, was reflected in a decrease of health facilities experiencing stock-outs (HFESO) from 100% in January to 53% in July. By December, the percentage of HFESO fell to 41%, but facility stock-outs actually increased for four tracer ARVs.

From March 2015 onwards, with the introduction of management and governance improvement interventions at regional and health facilities plus the deployment of SIAPS technical advisers to the regions, stock-outs at ART of all 6-tracer ARVs decreased steadily every quarter. Percentage of HFESO reached 14% in December 2015, and this trend was maintained in 2016, with only 9% in 98 HFESO by March 2016.



"Through SIAPS support in pharmaceutical management, we have gone from the days where we used to divide a packet of drugs among 3 patients due to stock outs to dispensing up to 3 months' worth of drugs for 1 patient." (ARV dispenser – North West)

## **Key Results 2: Improved storage conditions**

In May 2014 CENAME organized an official ceremony for the reception of a high volume ARV procurement funded by the government. The stores equipped by SIAPS were critical to allow reception of the HIV commodities allowing for additional 1000m2.

At the peripheral level, SIAPS monitored storage conditions over the course of the project against some minimum and attainable requirements set for Regional Funds, and ART sites.

- At the Regional Funds, in 2013 none of the stores supported by SIAPS complied with minimum storage requirements. By September 2015, all six Regional Funds compiled with the agreed minimum storage requirements..
- At the ART sites, in January 2015, only 15% of the 104 health facilities supported by SIAPS complied with basic storage requirement, while in September 2015 this percentage increased to 78.8% and by May 2016, 96% had achieved the minimum standards.

Improvements achieved were sometimes possible through provision of additional equipment, but in most instances were due to the mobilization of health facility internal resources, as a result of the awareness raised by SIAPS during supervision and feedback meetings.



Picture a: Moldy cartoons of medicines in the South west Regional Medical Stores before SIAPS intervention.



Picture b: Cartons in the South west Regional Medical Stores equipped with dehumidifiers. After a few days of use, mold disappeared.

## Key Results 3: Improved availability, quality and use of data at 132 ART and PMTCT sites

As such, in 2012, health facilities were not recording and reporting any information on pharmaceutical information, such as patients per regimen or stock on hand.

- As of September 2015, more than 80% of the 104 SIAPS-supported health facilities were updating the ART registers, dispensing registers, and stock cards daily.
- In addition, more than 85% of the 104 health facilities were reporting monthly logistics information, and more than 50% complied monthly with deadlines requirement.
- By March 2016, at least 50% of the health facilities were able to monitor and maintain adequate stock levels of all ARVs, defined as stock level within maximum and minimum agreed values.
- By June 2016 ART site coordinators of 69% of the health facilities were conducting regularly internal supervision of pharmaceutical services, verifying stock levels, and ensuring consistency of data reported across registers and reports
- By June 2016, OSPSIDA had complete information (98%) of ART sites in the four PEPFAR regions.
- By June 2016, the multi-partners initiative for the implementation of a LMIS successfully concluded
  the phases of implementing a unique national codification of health products and the harmonizing the
  IT equipment and software.

## Key Result 4: Increased human capacity to manage and oversight HIV pharmacy services

Most improvements in human capacity to manage HIV commodities and oversight pharmacy services were achieved at regional and health facility level, and were attributed to a continuous improvement methodology. Qualitative interviews and spontaneous feedback provided by administrators of the regional warehouses, ART site coordinators, dispensers, and store keepers, show a high degree of satisfaction of the skills acquired. At the central level, main achievement is related to the capacity of the Quantification Committee and particularly NACC to conduct quantification exercises, using the tools Quantimed and ForLab.

In relation to trainings, by September 2015 SIAPS conducted a total of 33 trainings addressing nine different topics on pharmaceutical management. The total number of participants was 741, out of which 56% were female. As per level of training, 81% of the participants worked at health facilities, 4% at the regional level, and 15% at the central level.

There were no trainings conducted in 2016, although supervision and regional feedback meetings were maintained. By June 2016, 69% of the ART sites coordinators were conducting routinely internal supervisions of the HIV pharmaceutical services.

"They tell us our sites are not performing well, we need to supervise them; but no one asks if we even know what to supervise. SIAPS interval supervision tool and feedback meeting has helped me understand what is supposed to be going on in my treatment center and how to supervise it to make sure it is performing at its optimal level."



### **Key Result 5: Progress towards better governance**

Different initiatives supported by SIAPS and other partners are contributing to improved governance in the pharmaceutical sector. The availability of some HIV and pharmaceutical management normative documents provide reference standards for pharmaceutical operations including the SOPs for pharmaceutical supply management at the health facility level, the terms of reference of the Quantification and Stock Monitoring Committee, and SOPs for quantification at national level. Also, the established quantification and stock monitoring committee has restored trust and transparency in forecasting HIV commodities, although stock monitoring remains problematic. These actions were key in order to satisfactory fulfil some Global Fund grant conditions which allowed to resume the procurements with Global Fund resources.

During 2015 and 2016 SIAPS worked closely with the Civil Society Organization Positive Generation to jointly analyze barriers to access to HIV services, and contrast indicators. SIAPS also assisted PG in developing a web-based version of the Treatment Access Watch magazine which will be soon released.

In 2015 SIAPS also began a partners' committee, the Medicines Cluster, which aims to increase collaboration among technical and financial partners working in the pharmaceutical system. During 2016 the cluster proposed the introduction of pharmaceutical governance interventions in the Global Fund Facility proposal which will be submitted to the World Bank by the end of the year.



# Conclusions and lessons learned by SIAPS Cameroon 2012 – 2016

Conclusion from SIAPS interventions in reducing stock-outs at health facility level

- It is possible to decrease and even eliminate stock-outs of ARVs from central to health facility level.
- Availability of health products at central level does not guarantee alone availability of health products at the health facility.
- Around 40-50 % of stock-outs are due to management problems at the health facility level
- Capacity building interventions focused on training and external supervision are not effective to significantly reduce stock-outs.
- Enhancing leadership capacity of staff with coordination and management responsibilities to oversight pharmaceutical services and interpret data is associated with stock-out reductions.

Risks and challenges for the supply chain in Cameroun

Procurement remains a major bottleneck to ensure availability of health products at national level, especially in a context where the government will need to cover gaps in future donors' contributions. An efficient procurement of health products requires procedures that allow for prequalification of suppliers, signature of long-termagreements with suppliers, and that anticipates markets opportunities and constraints.

The supply system and logistics capacity cannot respond to current demand and increasing needs for health products. There is need to rethink the supply strategy at all levels of the system with innovative approaches, including rethinking roles and responsibilities of the different institutions involved .

Risks and challenges to improve pharmaceutical services of the HIV program

There are important opportunities to improve pharmaceutical services: new simplified WHO guidelines test and treat, multiple-month supplies, innovations in ARV formulations, promising laboratory point-of-care technologies.

However, increased access of ART in Cameroon is not just about a quantitative jump on number of people in treatment but a need for qualitative improvement, requiring consideration of:

- Humanization of patients' care and palliative services.
- Logistics capacity and efficiency in supply
- Financial barriers
- Patient retention
- Access to children and key populations











