USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM
Procurement and Supply Management

FISCAL YEAR 2019

QUARTERLY REPORT – QUARTER 3

April 1 to June 30, 2019

HIV and family planning products are delivered to the last mile by boat in Haiti. *Photo credit: Rodny Darenard/GHSC-PSM*

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE CDC

U.S. President's Malaria Initiative

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Contract No. AID-OAA-I-15-00004

The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project is funded under USAID Contract No. AID-OAA-I-15-00004. GHSC-PSM connects technical solutions and proven commercial processes to promote efficient and cost-effective health supply chains worldwide. Our goal is to ensure uninterrupted supplies of health commodities to save lives and create a healthier future for all. The project purchases and delivers health commodities, offers comprehensive technical assistance to strengthen national supply chain systems, and provides global supply chain leadership.

GHSC-PSM is implemented by Chemonics International, in collaboration with Arbola Inc., Axios International Inc., IDA Foundation, IBM, IntraHealth International, Kuehne + Nagel Inc., McKinsey & Company, Panagora Group, Population Services International, SGS Nederland B.V., and University Research Co., LLC. To learn more, visit ghsupplychain.org

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Acronyms

3HP	isoniazid and rifapentine combination treatment for tuberculosis
3PL	third-party logistics
ADVISER	AIDS Data Visibility, Evaluation and Reporting
ALu	artemether-lumefantrine
API	active pharmaceutical ingredient
APTS	auditable pharmaceutical transaction and services
ART	Anti-retroviral therapy
ARV	Anti-retroviral
ASAQ	artesunate and amodiaquine
BVBD	Bureau of Vector Borne Diseases (Thailand)
CARhs	Coordinated Assistance for Reproductive Health Supplies
CDC	U.S. Centers for Disease Control and Prevention
CECOMA	Central Procurement Agency for Medicines and Medical Supplies (Angola)
CMS	central medical store
COP	Country Operational Plan
CPhI	Convention of Pharmaceutical Ingredients
CSP	Coordinated Supply Planning group
DCP	decentralized procurement
DMPA	depot-medroxyprogesterone acetate
DRC	Democratic Republic of the Congo
DRF	drug revolving fund
EID	early infant diagnosis
eLMIS	electronic logistics management information system
ePOD	electronic proof of delivery
FASP	forecasting and supply planning
FLARE	First-Line ARV Reporting and Evaluation
FP/RH	family planning/reproductive health
FY	fiscal year
GDSN	Global Data Synchronization Network
GHSC-PSM	Global Health Supply Chain Program-Procurement and Supply Management project
GHSC-QA	Global Health Supply Chain Program-Quality Assurance project
GHSC-RTK	Global Health Supply Chain Program-Rapid Test Kit project
GHSC-TA	Global Health Supply Chain Program-Technical Assistance project
GLN	Global Location Number
Global FP VAN	Global Family Planning Visibility and Analytics Network
GTIN	Global Trade Item Number
INH	isoniazid
JMS	Joint Medical Stores (Uganda)
LLIN	long-lasting insecticide-treated net
LMIS	logistics management information system
LZN	lamivudine/zidovudine/nevirapine
MCH	maternal and child health
MMD	multi-month dispensing

MNCH	maternal, newborn, and child health
MOH	Ministry of Health
MOHCC	Ministry of Health and Child Care (Zimbabwe)
NMCP	National Malaria Control Program
OPT	order promising tool
OTD	on-time delivery
OTIF	on-time, in-full delivery
PCG	Central Pharmacy of Guinea
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PLHIV	people living with HIV
PMI	U.S. President's Malaria Initiative
PPMR	Procurement Planning and Monitoring Report
PPMRm	Procurement Planning and Monitoring Report-malaria
PrEP	pre-exposure prophylaxis
Q	quarter
QA	quality assurance
QC	quality control
RDT	rapid diagnostic test
RHSC	Reproductive Health Supplies Coalition
RTK	rapid test kit
SMC	seasonal malaria chemoprevention
SPAQ	sulphadoxine-pyrimethamine + amodiaquine
SSWG	Systems Strengthening Working Group
TAF-ED	tenofovir alafenamide fumarate, emtricitabine, dolutegravir
TB	tuberculosis
TLD	tenofovir, lamivudine, dolutegravir
TO	task order
TPT	TB preventive therapy
TransIT	transportation information tool
UAV	unmanned aerial vehicle
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VMMC	voluntary medical male circumcision
WAHO	West African Health Organization
WHO	World Health Organization

Executive Summary

The Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project funded by the U.S. Agency for International Development (USAID) is pleased to present this report to summarize our work and performance for Quarter 3 (Q3) of Fiscal Year 2019 (FY 2019). We describe here our work in providing life-saving medicines and other health commodities and building efficient, reliable, and cost-effective supply chains for delivering these drugs and health supplies for the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), the U.S. President's Malaria Initiative (PMI), USAID's programs in voluntary family planning and reproductive health (FP/RH), and the Agency's program in maternal and child health (MCH), which equitably share the cost of the project.

Global Supply-Chain Performance

Section C1 describes GHSC-PSM's global supply-chain procurement and logistics activities and achievements. Highlights of our global supply-chain performance in Q3 appear below.

Procured more than $142.3 million in medicines and commodities.

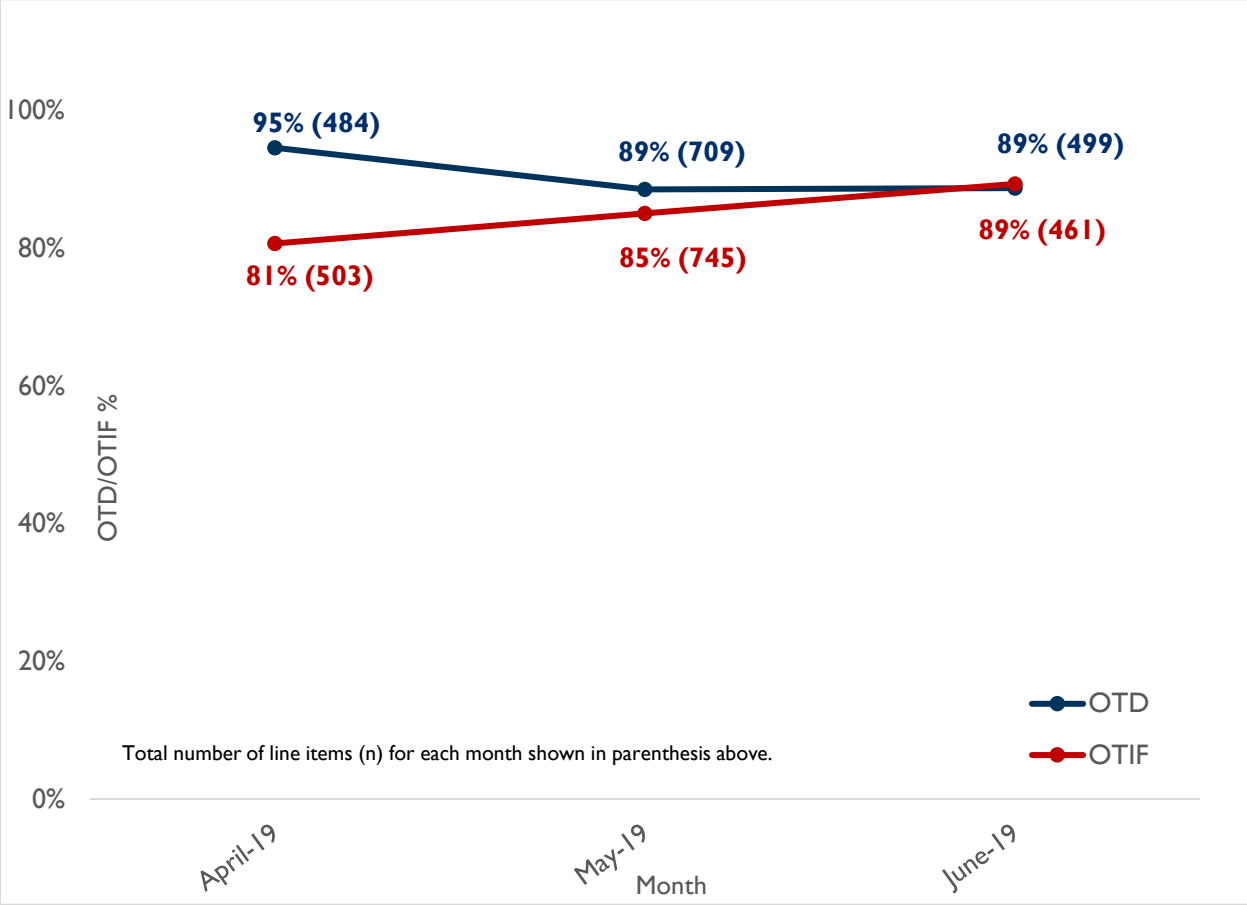
Delivered more than $193 million in medicines and commodities.

Achieved **on-time delivery**[1] **(OTD) of 92 percent** and **on-time, in-full delivery (OTIF) of 85 percent**, and the backlog of late orders dropped to 1.4 percent (see Exhibit 1).

OTD and OTIF rates were strong for all health areas during Q3. OTD was 92 percent for HIV; 97 percent for malaria; 100 percent for FP/RH; and 85 percent for maternal, newborn, and child health (MNCH) medicines and commodities, each of which exceeded the contract's 80 percent quarterly target. GHSC-PSM continues to conduct root-cause analysis of late deliveries and to refine procurement and supply-chain processes to improve performance continuously.

[1] The project's delivery window is –14/+7 days. With this delivery window, deliveries are considered on time if they are made within the period 14 days before or seven days after the agreed delivery date.

Exhibit 1. OTD and OTIF Over the Quarter



Health Areas

GHSC-PSM provides procurement, assistance to strengthen supply-chains, and global collaboration to the U.S. Government's programs for HIV/AIDS, malaria, FP/RH, MCH, and other emerging health threats. We provide highlights of the project's achievements below.

HIV

GHSC-PSM continues to contribute to PEPFAR's life-saving agenda.

The transition to preferred first-line treatment tenofovir/ lamivudine/ dolutegravir (TLD). GHSC-PSM delivered TLD to nine countries this quarter, including our first deliveries of TLD to the Republics of Panamá and Perú for Venezuelan refugees. The project has delivered 91 percent of TLD orders on time. The project also started documenting and disseminating insights from countries such as the Republics of Botswana and Haïti, that are already using TLD as their first line treatment and have high availability of the product at care-delivery points.

Multi-month dispensing. In accordance with PEPFAR guidelines, GHSC-PSM now procures larger pack-sizes of TLD (either 90-count bottles and/or 180-count bottles). The project provided technical guidance to our field offices on how to support host-country governments, U.S. Government Departments and Agencies engaged in PEPFAR, and implementing partners to incorporate multi-month dispensing into the supply chain.

Pediatric anti-retrovirals (ARVs). GHSC-PSM is monitoring country transitions to the pediatric formulary recommended by the World Health Organization (WHO). The project also is analyzing how the market is responding to large increases in demand for four recommended products that are available from a limited number of suppliers.

GHSC-PSM has delivered enough anti-retroviral therapy to provide nearly **6.3 million patient-years of HIV treatment to date.**

This includes **1.7 million patient-years of TLD treatment delivered to date.**

Preventive therapy for Tuberculosis (TB). While global donors negotiate prices for rifapentine, part of the newly recommended prophylaxis, GHSC-PSM is working to ensure the availability of the current treatment, isoniazid (INH). We secured supply by procuring enough INH to cover orders funded by PEPFAR Country Operational Plans (COP) for 2018, and prepositioned stock in our regional distribution centers so it would be readily available for PEPFAR countries.

Condoms. With the loss of one of the project's major suppliers of male condoms, GHSC-PSM negotiated increased production capacity and allocated orders for more than 210 million male condoms to other contracted suppliers. The project also released a solicitation to bring on more suppliers and coordinated closely with the United Nations Population Fund (UNFPA) to help it diversify its suppliers of condoms.

Viral load. The project procured the equivalent of 1.2 million viral-load tests for 10 countries this quarter. Also, the project trained staff in four field offices to procure viral-load reagents locally, using the project's new long-term reagent-rental agreements. These agreements support improved testing performance, increase the availability of test results, and should reduce cycle time for viral-load equipment and commodities.

Visibility of data. GHSC-PSM continued to collect and review inventory data for more than 20 HIV medicines, reagents, test kits, and commodities at central and regional warehouses in 18 PEPFAR countries to identify stock imbalances, and added data from the Kingdom of Swaziland (eSwatini) and the Federal Democratic Republic of Ethiopia this quarter. The project developed a new Warehouse ADVISER dashboard to share these data with expanded capacity for their visualization. The project also continues to collect and analyze data from almost 17,500 service delivery points in 12 countries so program managers can determine whether the availability of drugs and supplies matches patient load.

Malaria

GHSC-PSM works to help PMI reduce deaths from malaria deaths and decrease morbidity from the disease. (See box.)

On-time delivery. GHSC-PSM achieved consistently high on-time delivery performance for malaria drugs and commodities this quarter—97 percent for the quarter, including 100 percent in May.

Artemisinin-based pharmaceuticals. GHSC-PSM executed new long-term agreements for artemisinin-based pharmaceuticals that added four new suppliers and two new products. These agreements will reduce market risk and better meet the evolving needs for these important malaria treatments.

Project staff visited finished-pharmaceutical manufacturing facilities to understand better their production economics, operations and constraints. This included a visit to a manufacturer of artemisinin-based pharmaceuticals — the first pharmaceutical manufacturer on the African continent from which GHSC-PSM will directly procure.

Seasonal malaria chemoprevention (SMC) drugs. The project's 2018 sourcing strategy for amodiaquine + sulfadoxine/pyrimethamine (SPAQ), used for SMC, came to fruition this quarter. GHSC-PSM procured SPAQ directly from the manufacturer (rather than through wholesalers), negotiated more favorable pricing, and coordinated production slots to ensure the availability of the products. The project placed large orders and stockpiled inventory in a regional distribution center to ensure the supply of the medicine and flexibility for time-sensitive campaigns. We delivered SPAQ to nine countries in Q3, all of which received their product in time to implement their planned campaigns. In one country alone—the Republic of Cameroon—the project delivered enough SPAQ to prevent malaria in 1.5 million children under five years of age.

Distribution of long-lasting insecticide-treated nets (LLIN). This quarter, GHSC-PSM supported the distribution of enough LLINs to protect nearly 12.3 million people in the Republics of Ghana, Malawi, Nigeria, South Sudan and Zimbabwe.

Global standards. In Q3, GHSC-PSM hosted the first meetings of the TraceNet Working Group, co-chaired by USAID and the Global Fund to Fight AIDS, Tuberculosis, and Malaria. The working group is developing GS1-based identification, labeling, and data-exchange procurement requirements for LLINs, which will help ensure the traceability of this critical and widely used malaria-prevention product.

Family Planning and Reproductive Health

GHSC-PSM's support for USAID's programs in voluntary family planning/reproductive health achieved several major milestones in Q3.

Global Collaboration Strategic Framework. In close collaboration with USAID, the project updated our FP/RH Global Collaboration Strategic Framework, first developed in 2016, to reflect current thinking around engaging with global and country stakeholders to advance USAID's FP/RH objectives. The updated framework includes a strategy to strengthen communications with FP/RH focal points in host-country governments, improve their technical knowledge and awareness, and align the project's technical support for FP/RH objectives.

GHSC-PSM has delivered enough contraceptives to **provide 50.5 million couple-years of protection to date.**

This includes **5.1 million couple-years of protection in Q3.**

Registration of FP products. GHSC-PSM is coordinating with UNFPA to capture and manage data for the registration of FP commodities. The project developed and shared a registration tool for use by procurement and planning teams at GHSC-PSM and the UNFPA Procurement Services Branch. Harmonization will improve the quality of data for registration and reduce an unnecessary burden on suppliers, which otherwise would have to provide the same data to multiple procurers.

Visibility of data. GHSC-PSM participated in planning the second phase of the Global Family Planning Visibility and Analytics Network (Global FP VAN), in which five more governments will start exchanging data with the Global FP VAN.

Increase in deliveries of contraceptives. As reported in the latest *Overview of Contraceptive and Condom Shipments*, the total value of contraceptives and condoms delivered by GHSC-PSM for USAID's FP/RH programs increased 21 percent in FY 2018, driven largely by increased demand in Africa and increases in the values and quantities of contraceptive implants and injectables delivered.

On-time delivery. GHSC-PSM delivered 100 percent of FP/RH commodities on time each month in Q3, our best record for any commodity group since the project started.

MNCH

GHSC-PSM works to prevent child and maternal deaths by increasing access to quality-assured MNCH medicines and commodities, and by providing global technical leadership on MNCH commodities.

GHSC-PSM continued raising the importance of considering supply-chain issues in MNCH programs, creating a newborn and child health commodity working group on behalf of USAID and UNICEF.

Quality of oxytocin. GHSC-PSM worked in Ghana and the Republic of Mozambique to improve the management of oxytocin throughout the supply chain to ensure its quality at the point of use. In Q3, the project reported findings from an assessment of oxytocin in the supply chain in Ghana and made recommendations that the government and implementing partners are now considering. Also, the project prepared an assessment that will inform a strategy to improve the management of oxytocin in Mozambique.

Global coordination. The project's leadership or active participation in global MNCH fora continued in Q3. The project's staff spearheaded the development of a new working group on drugs and commodities for newborn and child health (see box), participated in a panel on the quality of medicines and investing in quality and equality for women's and girls' health at the Women Deliver 2019 conference, and participated in the Annual Meeting of the Post-Partum Health Implementation Community of Practice.

Country support. The project continued work on the design of drug-purchase revolving funds that would provide sustainable financing for essential MNCH commodities in three pilot States in Nigeria, GHSC-PSM also helped the Adama Hospital Medical College of Ethiopia design and execute a study of poor prescribing practices of antibiotics in children, organized meetings to disseminate the findings, and designed interventions to address the root causes of the misuse of antibiotics.

Deliveries. In Q3, GHSC-PSM delivered $939,380 in MNCH drugs and commodities, including by delivering all but two out of a large 236-line item order of essential medicines for the Democratic Republic of Congo (DRC).

Other Emerging Health Threats

In Q3, GHSC-PSM held workshops on emergency supply-chain preparedness in the Dominican Republic and the Republics of Guatemala, Honduras and Paraguay, and a regional workshop for the Caribbean. The project also continued making deliveries of male condoms and mosquito repellent to prevent Zika infection and assessing use of repellent and instructional materials at distribution centers and antenatal care facilities in four countries.

Global Supply Chain

During Q3 of FY 2019, GHSC-PSM achieved its best quarterly OTD performance, especially notable since in May the project delivered 745 line items, the most in one month to date. In addition to strong delivery performance, the project's cross-cutting achievements over the quarter include the following:

- GHSC-PSM's strategic sourcing of health commodities continued to promote market health, reduce prices, and shorten lead times for a variety of products, such as pediatric ARVs, artemisinin-based pharmaceuticals, condoms, and essential medicines.
- As required by their agreements with GHSC-PSM, six suppliers, which cover 24 trade items across all health areas, including ARVs, essential medicines, laboratory reagents, kits for voluntary medical male circumcision (VMMC), malaria pharmaceuticals, and intrauterine devices, started submitting master data via the Global Data Synchronization Network™ (GDSN®). Adoption of global standards (namely GS1) for the identification of products and location, and product master data is becoming a reality for the USAID-funded health supply chain.
- GHSC-PSM competed contracts for long-term agreements to procure health commodities from local vendors in Mozambique and the Republic of Zambia.
- GHSC-PSM expanded the use of a new operations team co-located with the project's regional distribution center in Dubai, which increases the number of orders handled by this team by seven percent this quarter and will reduce costs and cycle time in the future.

Strengthening Health Institutions

GHSC-PSM continues to manage 34 country or regional field offices. Supplemented by headquarters-based experts, these offices provide wide-ranging technical assistance to strengthen national health supply-chains. Several years of investment in strengthening supply-chain systems is yielding important innovations and positive results on many fronts. This quarter, GHSC-PSM:

- Received approval in Malawi to operate unmanned aerial vehicles (UAVs) beyond visual line-of-sight. The project conducted community sensitization and 77-kilometer test flights across Lake Malawi in preparation for carrying medicines and laboratory samples (including, but not limited to, dried blood spots, viral-load tests, early infant diagnostic tests [EID], and TB samples);
- Shared preliminary results from one year of temperature-monitoring throughout the health supply chain in Mozambique with the Ministry of Health (MOH);
- Expanded use of the Transportation Information Tool (TransIT), including the electronic proof of delivery (ePOD) app, in the Republics of Angola and Mozambique, which is providing end-to-end data to help managers track the performance, location, and costs of the distribution of drugs and health commodities;
- Released the third *Supply Chain Management Resource Digest* through the International Association of Public Health Logisticians;
- Helped the University of Lahore expand its training curriculum on supply-chain management to meet the needs of the private and humanitarian sectors in the Islamic Republic of Pakistan; additional income from this training will allow the university to continue offering this curriculum without USAID's financial support, to further progress on the Journey to Self-Reliance in Pakistan;

- Expanded the use of the new electronic logistics management information system (eLMIS) in the Federal Democratic Republic of Nepal, which has cut the delay in receiving site-level stock data from seven months to between two and four months;
- Launched an early-warning system in Zimbabwe that aggregates supply-chain data into a single dataset with graphs and heatmaps to highlight stock risks by product, which already has identified a risk from future unfunded ARV shipments and allowed for the mobilization of $7 million to help cover that gap;
- Supported the National Directorate of Pharmacy and Medicines of the Republic of Guinea in mapping and capturing geo-coordinates for all private pharmaceutical establishments, which will help the Guinean MOH engage the private sector better in addressing public-health priorities (such as the more-rational use of medicines) and will facilitate regulatory compliance;
- Revised the contents of the basic FP kit and developed a supplementary kit to better meet clients' needs in South Sudan, a need that surfaced during our call center's monthly calls to health facilities in the country;
- Reviewed findings from a pilot early-warning system we supported technically and financially in Burkina Faso; between the launch of the pilot in July 2018 and May 2019, stock-out rates of the selected malaria drugs and commodities dropped from 16 percent to five percent;
- Received 117 supply plans for core products, almost double the number submitted two years ago, which reflects the institutionalization of this best practice for commodity-planning;
- Completed a supply-chain costing study as preparation for the shift by the Rwandan MOH to a commercial supply-chain; and
- Helped the governments of three countries—Nigeria, Rwanda and Zambia—develop strategies to implement GS1.

The pages that follow provide additional detail on strides taken by GHSC-PSM this quarter to ensure the continuous availability of life-saving drugs, medical supplies, and health commodities to the people who need them around the world.

SECTION A

INTRODUCTION

A1. Background

The USAID GHSC-PSM project works to ensure uninterrupted supplies of quality medicines and commodities to save lives and to create a healthier future for all. The project directly supports the following global health areas of importance to the U.S. Government:

- The U.S. President's Emergency Plan for AIDS Relief (PEPFAR) to help reach the Joint United Nations Programme on HIV/AIDS global 90-90-90 HIV/AIDS testing, treatment and viral-load suppression targets.
- The U.S. President's Malaria Initiative (PMI) to reduce malaria deaths and substantially decrease malaria morbidity, toward the long-term goal of elimination.
- USAID's Family Planning and Reproductive Health program to ensure that key reproductive-health commodities are available for safe and reliable voluntary family planning.
- USAID's maternal and child health program to prevent child and maternal deaths.
- Other public health threats as they emerge, with support for Zika at this time.

The project procures and delivers medicines and commodities, offers comprehensive technical assistance (TA) to strengthen national supply-chain systems, and provides global supply-chain leadership to ensure that life-saving health supplies reach those most in need. In Q3, the project procured commodities or provided TA to 61 countries (see Exhibit 2 on the following page).

A2. About This Report

We are pleased to present our performance report for fiscal year 2019 quarter 3 (April 1 through June 30, 2019). GHSC-PSM is a matrixed project that integrates work across two axes: health areas and technical objectives. Accordingly, the report is organized as follows:

- Section B summarizes major activities in each of the **five health areas**, including HIV/AIDS, malaria, FP/RH, maternal, newborn, and child health, and other public health threats.
- Section C describes activities under each of the **three main technical objectives** (global commodity procurement and logistics, systems strengthening, and global collaboration), including key indicator results for those objectives.
- Annex A provides **performance and context indicators** for April 1 through June 30, 2019 (quarterly indicators).

Given the size and complexity of GHSC-PSM, this report summarizes our primary efforts and achievements this quarter and reflects only a fraction of the project's efforts each day to help people around the world live healthier lives.

Exhibit 2. Countries for Which GHSC-PSM Procured Commodities or Provided TA in Q3

	Proc.	TA
AFRICA:		
Republic of Angola	●	●
Republic of Benin	●	
Republic of Botswana	●	●
Burkina Faso	●	●
Republic of Burundi	●	●
Republic of Cameroon	●	●
Republic of Côte d'Ivoire	●	
Democratic Republic of the Congo (DRC)	●	
Federal Democratic Republic of Ethiopia	●	●
Republic of Ghana	●	●
Republic of Guinea	●	●
Republic of Kenya	●	●
Kingdom of Lesotho		●
Republic of Liberia	●	●
Republic of Madagascar	●	
Republic of Malawi	●	●
Republic of Mali	●	●
Islamic Republic of Mauritania	●	
Republic of Mozambique	●	●
Republic of Namibia	●	●
Republic of the Niger	●	●
Federal Republic of Nigeria	●	●
Republic of Rwanda	●	●
Republic of Senegal	●	●
Republic of Sierra Leone	●	●
Republic of South Africa	●	
Republic of South Sudan	●	●
Kingdom of Swaziland (eSwatini)	●	●
United Republic of Tanzania	●	
Republic of Togo	●	
Republic of Uganda	●	●
Republic of Zambia	●	●
Republic of Zimbabwe	●	●

	Proc.	TA
ASIA:		
Islamic Republic of Afghanistan	●	
People's Democratic Republic of Bangladesh	●	
Kingdom of Cambodia	●	●
Republic of Indonesia		●
Republic of Kazakhstan	●	
Kyrgyz Republic	●	
Lao People's Democratic Republic	●	
Republic of the Union of Myanmar	●	●
Federal Democratic Republic of Nepal	●	●
Islamic Republic of Pakistan		●
Independent State of Papua New Guinea	●	
Republic of Tajikistan	●	
Kingdom of Thailand	●	●
Socialist Republic of Viet Nam	●	●
LATIN AMERICA & CARIBBEAN:		
Barbados		●
Dominican Republic	●	●
Republic of Ecuador	●	
Republic of El Salvador	●	●
Republic of Guatemala		●
Republic of Haiti	●	●
Republic of Honduras	●	●
Jamaica	●	●
Republic of Panama	●	●
Republic of Paraguay	●	
Republic of Peru	●	
Republic of Suriname	●	●
OTHER:		
Ukraine	●	
Republic of Yemen	●	

SECTION B

PROGRESS BY HEALTH AREA

In this section, we summarize GHSC-PSM's support over the last quarter for HIV/AIDS, malaria, FP/RH, MNCH, and other public health threats.

B1. HIV/AIDS

GHSC-PSM has delivered enough ARVs to provide **6.3 million patient-years of HIV treatment over the life of the project,** including **797 thousand patient-years of treatment this quarter**.

To date, GHSC-PSM has delivered more than **20.7 million bottles of TLD** to countries, which would provide more than 1.7 million patient-years of treatment.

39 countries procured HIV/AIDS medicines and commodities, and **32 countries received health supply-chain systems strengthening** with HIV/AIDS funding.

GHSC-PSM brought **improved product visibility** into HIV commodities in **54 warehouses and 17,500 health facilities** in 18 PEPFAR countries.

This quarter, 10 countries procured **1.2 million viral-load tests** to support scale-up of patient viral-load testing.

GHSC-PSM supports PEPFAR's goal of controlling the HIV/AIDS epidemic by procuring and delivering medicines and commodities[2] to prevent infection and treat people living with HIV (PLHIV), including those used to support scale-up of viral-load testing to monitor treatment efficacy for PLHIV. GHSC-PSM is also implementing data visibility initiatives that support appropriate procurement and distribution of ARVs to link patients with the necessary commodities.

[2] GHSC-PSM procured health commodities for the following countries: AFRICA: Angola, Botswana, Burkina Faso, Burundi, Cameroon, Côte d'Ivoire, DRC, Ethiopia, Ghana, Malawi, Mali, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, South Africa, South Sudan, Eswatini, Tanzania, Togo, Uganda, Zambia, Zimbabwe; LATIN AMERICA AND THE CARIBBEAN (LAC): Dominican Republic, Haiti, Jamaica, Panama, Peru, Suriname; ASIA: Burma, Nepal, Papua New Guinea, Vietnam; EUROPE AND EURASIA (EE): Kazakhstan, Kyrgyzstan, Tajikistan, Ukraine.

Supporting PEPFAR's HIV Prevention Agenda

Pre-exposure prophylaxis

Multiple clinical trials have shown that daily, oral pre-exposure prophylaxis (PrEP) using the anti-retroviral medicines tenofovir and emtricitabine dramatically reduces the risk of HIV infection for people who take it as directed. GHSC-PSM supports scale-up of prevention initiatives like PrEP under special initiatives such as PEPFAR's Determined, Resilient, Empowered, AIDS-free, Mentored and Safe Partnership for adolescent girls and young women (referred to as DREAMS) as well as for other key populations. One innovation is the "V" kit. The V for PrEP pilot will be conducted in Zimbabwe for which GHSC-PSM recently issued a request for information. The solicitation sought to identify potential suppliers for the kit, as well as estimates for the production lead time and unit price. GHSC-PSM will finalize the order quantity and begin formal sourcing activity in July 2019.

Condoms

GHSC-PSM continued our collaboration with USAID, the UNFPA, the Bill and Melinda Gates Foundation and others to provide timely and accurate condom procurement information to meet our partners' respective needs. This includes the release of a new condoms catalog that should streamline orders for social marketing campaigns and reduce lead times.

In early 2019, one of GHSC-PSM's strategic male condom suppliers became ineligible to supply product to the project, resulting in constrained supply of this important prevention method. To ensure supply to USAID programs globally, GHSC-PSM proactively negotiated increased capacity and allocated orders for more than 210 million male condoms to other suppliers, working closely with those suppliers to evenly distribute demand and avoid capacity constraints.

Commodities Procured for HIV/AIDS Programs

- ARVs
- Diagnostics
- Essential medicines
- Injectable anesthetics
- Laboratory reagents
- Male and female condoms
- Personal lubricants
- Voluntary medical male circumcision (VMMC) kits

To mitigate supply risk in the near term and maintain a healthy market, GHSC-PSM issued a limited competition request for quotation for the supply of male condoms with the goal of onboarding additional suppliers. This will help maintain a healthy and competitive market and reduce the risks of shocks that might disrupt condom programs.

VMMC kits

In Q3, GHSC-PSM, in collaboration with the U.S. Centers for Disease Control and Prevention (CDC), USAID and implementing partners, developed the contents of the first early-infant male-circumcision kit. This kit will be used by USAID, CDC and the Global Fund. Each of these donors previously procured its own unique kits, adding unnecessary costs to VMMC programs. GHSC-PSM also worked with VMMC kit vendors to promote vendor-managed inventory, whereby vendors maintain inventory of product procured by GHSC-PSM until that product is needed. Vendor-managed inventory helps address market fluctuations and reduces the project's warehousing and transportation costs. Finally, GHSC-PSM revised the VMMC kit specifications for 2019–2020 and issued a request for proposals to eligible suppliers in June 2019. Evaluations and awards of the new VMMC contracts will take place in Q4.

HIV/Tuberculosis Prevention and Treatment

Worldwide, TB is a leading cause of death among PLHIV, and more than 30 percent of PLHIV who have latent TB eventually develop active TB. To reduce the risk of active TB, the WHO recommends TB preventive therapy (TPT) for PLHIV. Options include either six to 12 months of isoniazid prevention therapy or three months of weekly INH and rifapentine in a co-formulated treatment (3HP) with a recommended supplementation of pyridoxine (vitamin B6).

A March 2019 study concluded that 3HP therapy, unlike INH alone, can be safely used with dolutegravir-based anti-retroviral therapy (ART) without adjusting dolutegravir doses. Based on the study results, the Treatment Action Group and the Increasing Market and Public Health Outcomes through Scaling Up Affordable Access Models of Short Course Preventive Therapy for TB, or IMPAACT4TB, project recommended that national governments introduce 3HP into HIV programs and that donors, including PEPFAR and the Global Fund, support countries in procuring 3HP for TPT as an essential part of the HIV clinical care package.

However, the high cost of rifapentine and the limited availability of INH in the market remain major constraints to broad scale-up of 3HP. While Unitaid, the Clinton Health Access Initiative, and the Aurum Institute solicit lower prices for 3HP, GHSC-PSM worked with the USAID Office of HIV/AIDS, the USAID TB program and the GHSC-Quality Assurance (GHSC-QA) project (implemented by FHI 360) in finalizing a short-term plan to increase knowledge around the availability of INH for TPT. We also are securing supply by procuring INH directly from manufacturers for COP18–funded orders and prepositioning stocks in our regional distribution centers based on COP19 projections.

GHSC-PSM supported the TLD transition in Botswana in Q3. By the end of the quarter, more than 95% of sites had TLD on hand. *Photo credit: GHSC-PSM*

Supporting the First 90: Testing

In support of rapid test kit (RTK) availability to reach the first 90 (HIV diagnosis), GHSC-PSM provides forecasting and supply planning as well as in-country logistics support for RTKS while the GHSC-RTK program (implemented by Remote Medical International) supports global procurement and transport to PEPFAR countries. The project also better management of RTK orders and deliveries through the regional- and central-level stock data we collect through the Warehouse AIDS Data Visibility, Evaluation and Reporting (ADVISER) initiative. We share these data with GHSC-RTK monthly to guide future RTK orders.

Supporting the Second 90: Treatment

TLD transition

To help achieve HIV treatment goals, GHSC-PSM continued to support PEPFAR countries' planned transition to TLD, the preferred first-line ARV. The project delivered TLD for 9 countries this quarter, including first-time deliveries to Panama and Peru, both in support of refugees from Venezuela. GHSC-PSM communicated regularly with country counterparts and suppliers to balance country demand with manufacturing capacity and ensured timely delivery, achieving 91 percent on-time delivery of TLD

through the regional distribution centers this quarter. GHSC-PSM continued procuring 90-count bottles and began procuring 180-count bottles of TLD to facilitate multi-month dispensing this quarter.

Also this quarter, GHSC-PSM met for the first time with global care and treatment partners to provide a supply-chain update on the TLD transition. GHSC-PSM also shares with USAID regular progress updates and data for each country transitioning to TLD through meetings and the First-Line ARV Reporting and Evaluation (FLARE) reports. FLARE reports provide monthly inventory data from more than 59 warehouses in 16 countries for all first-line ARVs, including legacy ARVs that are being drawn down as countries shift to TLD use.

Scaling Up Supply of TLD

To date, the project has delivered 20.1 million units of TLD to 16 countries. This is enough to provide more than **1.7 million patient-years of TLD treatment.**

GHSC-PSM has begun documenting and disseminating insights and lessons learned from countries with high availability of TLD at the site level, including Botswana and Haiti, so that the global community can learn from our efforts.

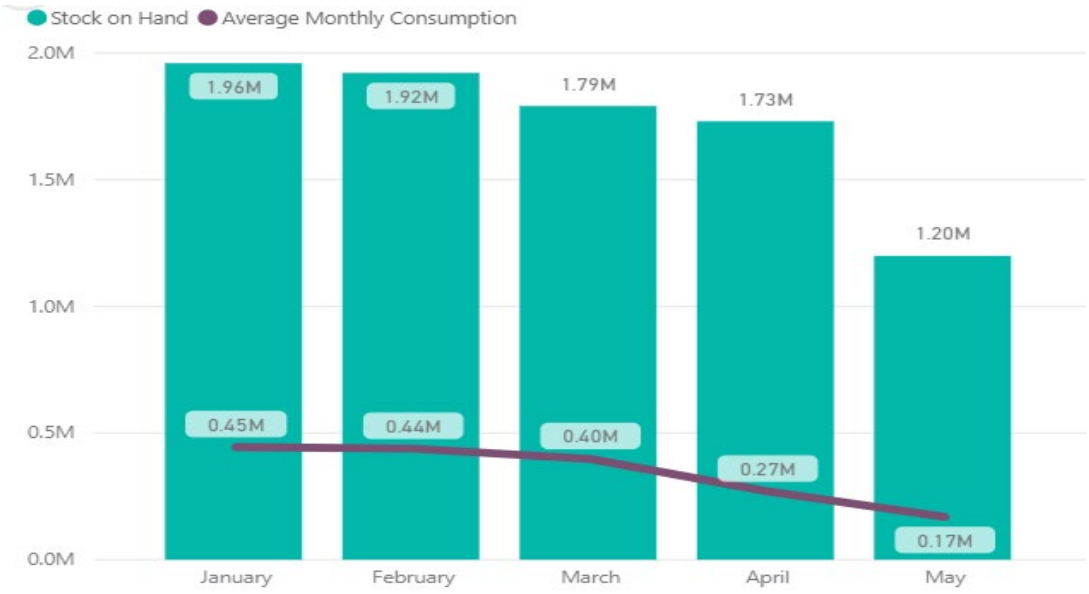
Legacy ARV drawdown

To support efficient transition to newer regimens such as TLD and minimize vestiges of older first-line ARV regimens (legacy ARVs), GHSC-PSM collects, reviews and compiles monthly ARV inventory data from warehouses in 16 countries through the FLARE report.

Per the 2019 COP Guidance, with the help of USAID technical assistance, GHSC-PSM has stopped procuring and has supported transitioning patients away from legacy ARVs containing nevirapine, such as lamivudine/zidovudine/nevirapine (LZN). Since January 2019, global LZN stocks on hand have declined by 40 percent, and average monthly consumption of LZN has declined by 62 percent (see Exhibit 3 on the next page).

GHSC-PSM is using the FLARE initiative to closely monitor LZN stock on hand in PEPFAR countries at the central medical stores-level to ensure alignment with the COP19 guidance.

Exhibit 3. Drawdown of Stock on Hand and Reduced Consumption of LZN[3]



Multi-month dispensing

The 2019 COP Guidance asks all countries to increase multi-month dispensing (MMD) availability of ARVs, recommending that countries procure larger pack sizes of ARVs, chiefly the 90- and 180- tablets bottles of TLD. To support this guidance, in Q3, GHSC-PSM started stocking 90-count bottles in our regional distribution centers. Countries that are transitioning to MMD will receive larger-count bottles moving forward, unless USAID approves the delivery of 30-count bottles. GHSC-PSM also released an MMD technical brief that provides guidance to GHSC-PSM field offices on how to support host governments, U.S. Government agencies, such as USAID, CDC, Department of Defense, implementing partners, and other stakeholders with regards to incorporating MMD into the supply chain.

Pediatric ARVs

After release of the *WHO 2018 Optimal Formulary and Limited Use List for Pediatric ARVs*, USAID and GHSC-PSM worked closely with countries to align pediatric ARV demand with this guidance. GHSC-PSM organized a recurring forum of USAID and GHSC-PSM staff to monitor country transitions to a more optimal pediatric formulary. We are working to develop a total market analysis for four pediatric products[4] that are seeing large increases in demand with a limited set of suppliers. GHSC-PSM produced and distributed guidance to USAID and field offices about the current market as well as proposed actions.

Urgent deliveries

This quarter, GHSC-PSM successfully managed two time-sensitive deliveries to meet urgent needs:

[3] This represents central medical stores in Cameroon, Haiti, Lesotho, Malawi, Mozambique, Namibia, Nigeria, Uganda, Zambia and Zimbabwe.
[4] Lopinavir/ritonavir 40/10 mg pellets, lopinavir/ritonavir 40/10 mg granules, lopinavir/ritonavir 100/25 mg, and abacavir/lamivudine 120/60 mg.

- The project processed and delivered an urgent ARV order for Tanzania in record time to help avert a stock-out. Immediately after approval from the Office of the U.S. Global AIDS Coordinator, 230 pallets of ARVs with an estimated value of $3.3 million were picked and packed from a project regional distribution center over a two-day period immediately before the Eid holiday. The project had the shipment picked up on June 15, obtained the duty waiver, got the shipment through customs, and delivered the product on time by June 26—an exceptionally short turnaround time for a difficult shipping destination.
- The project planned intensively to meet urgent Venezuelan refugees' needs for ARVs and delivered two pallets of TLD for refugees living in Panama. This was an exciting first step in assisting the Venezuelan refugees and is an approach that can be replicated in the future for similar deliveries.

Supporting Third 90: Viral-Load Testing

In Q3, GHSC-PSM continued to support PEPFAR countries by building their capacity for procuring viral-load testing reagents, specimen collection consumables, and testing equipment to reach their viral-load and EID targets. The project also worked with in-country partners to strengthen laboratory forecasting and supply planning. In Malawi, the project provided remote training for the country's national quantification team on laboratory forecasting for viral-load scale-up using the ForLab software. The project conducted an updated molecular and viral-load instrument survey in 15 countries to inform procurement decisions and network optimization efforts and integrated these data into the project's global viral-load data dashboard.

Finally, GHSC-PSM worked with USAID and CDC to develop the PEPFAR strategy and overall curriculum for inventory management of laboratory commodities at national and site levels. This curriculum will strengthen inventory management and stock-level reporting to improve laboratory testing and decrease stock-outs of viral-load commodities.

Stock Tracking, Oversight and Planning for HIV/AIDS

This quarter, GHSC-PSM carried out multiple efforts to support USAID's vision for improved visibility into HIV commodity inventories at all levels of the supply chain.

Site-level data visibility in 12 countries at 17,500 health facilities

The project continued to collect, review and report site-level inventory data from 17,500 facilities in 12 countries.[5] Important outputs from this extensive data collection effort (involving 400+ Excel files with over 800,000 data lines) include the following. Results from this analysis have been shared with GHSC-PSM field offices to identify opportunities for improving in-country supply-chain activities.

HIV commodity data visibility at 54 central and regional warehouses

Each month, GHSC-PSM reviews inventory data for more than 20 HIV medicines and commodities at central and regional warehouse levels in 16 PEPFAR countries to identify stock imbalances. We support the use of this information to mitigate imbalances and avoid rationing and waste, where possible, by raising awareness, identifying opportunities to shift GHSC-PSM shipments, and supporting redistribution

[5] GHSC-PSM is collecting site-level data from Angola, Botswana, Cameroon, Haiti, Lesotho, Malawi, Mozambique, Namibia, Nigeria, Uganda, Zambia and Zimbabwe.

within a country. Each month, GHSC-PSM reports data generated at this level on the status of first-line ARV drawdown, the transition to TLD, and HIV commodity stock-out risk to USAID and PEPFAR. This quarter, GHSC-PSM began collecting and reporting these data for two new countries—Ethiopia and Eswatini.

When the platform previously used to collect central and regional warehouse inventory data was no longer available, GHSC-PSM took the initiative to ensure access to and use of these data, as well as to improve capacity for data visualizations through the new Warehouse ADVISER dashboard. This dashboard is updated each week to provide full visibility into country HIV commodity inventory at the central and regional levels.

Country Support

The HIV task order funds supply-chain systems strengthening in 32 countries[6]. As an example of our work, in April, GHSC-PSM organized a workshop in **Botswana** to review the national ARV quantifications and transition plans. At the workshop, stakeholders and members of the National ARV Costing and Forecasting Technical Working Group validated the outputs of the ARV quantifications. The central medical store (CMS) is now placing timely ARV orders in the right quantity to minimize stock-outs and expiries based on the information in the quantifications. At the workshop, stakeholders also agreed on next actions to optimize ARV treatment for children, in line with recent WHO recommendations. When the country starts implementing the optimized pediatric ARV plan in July, children will receive more effective and suitable ARV treatments with fewer toxicities and better treatment outcomes.

Also in **Botswana**, GHSC-PSM has been working with the Ministry of Health and Wellness in developing strategies to implement MMD of ARVs. The project learned through field visits that health facilities are already providing 2–3 months' worth of medicines to most stable patients to reduce patient wait time and congestion at clinics. While in the field, project staff also assessed storage conditions and constraints. The project held a highly participatory stakeholder meeting to share evidence and openly discuss key concerns, including about how the current and future transitions to TLD and tenofovir alafenamide fumarate (TAF) will interact with the transition to MMD.

[6] The countries for which GHSC-PSM provides technical assistance with HIV funding are: AFRICA: Angola, Botswana, Burundi, Cameroon, Eswatini, Ethiopia, Ghana, Kenya (TO5), Lesotho, Malawi, Mali, Mozambique, Namibia, Nigeria, Rwanda, South Sudan, Uganda, Zambia, Zimbabwe; LAC: Barbados, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Panama, Suriname; ASIA: Burma, Cambodia, Indonesia, Vietnam

B2. Malaria

The project has delivered enough anti-malarials to treat over **187.3 million infections**, including **24.7 million** in Q3.

30 countries procured malaria medicines and commodities and **22 countries received health supply-chain systems strengthening** with malaria funding under the contract.

The project supported distribution of LLINs to provide **protection from malaria for nearly 12.3 million people** in Ghana, Malawi, Nigeria, South Sudan, and Zimbabwe.

The project continued to provide technical leadership in **promoting malaria commodity market health** for commodity security and quality.

Under the PMI-funded malaria task order, GHSC-PSM supplies life-saving prevention and treatment medicines, rapid diagnostic tests (RDTs) and LLINs. We offer partner countries new approaches to strategic planning, logistics, data visibility, analytics and capacity building. We also provide technical guidance to strengthen global supply, demand, financing and the introduction of new malaria medicines and commodities.

Commodity Sourcing, Procurement and Delivery

GHSC-PSM's provision of malaria commodities this quarter entailed strategic sourcing, procurement, QA, deliveries and support for transferring/redistributing stocks, as summarized below.

Strategic sourcing

Artemisia annua, the herb from which artemisinin is extracted, grown by a GHSC-PSM supplier. *Photo credit: GHSC-PSM*

In Q3, GHSC-PSM executed long-term agreements with selected awardees from a recent request for proposals for artemisinin-based finished pharmaceutical products. (Contracts with remaining awardees should be finalized by the end of the fiscal year.) By way of this tender, GHSC-PSM added four new suppliers and two new products to reduce market risk and better meet countries' evolving needs. Execution of the new long-term agreements reflects a significant milestone in an ongoing collaborative effort between GHSC-PSM and the Global Fund to increase the stability of the market for the key raw material, artemisinin. Historically, the market has seen substantial price volatility because of multiple factors, including the uncertain annual crop yields of artemisinin, a vegetal product. Also, concerns have been expressed about the quality of the product and the environmental, health and safety conditions of a broad pool of suppliers. To address these issues, GHSC-PSM and the Global Fund are requiring that all finished pharmaceutical manufacturers under long-term agreements provide products derived from artemisinin exclusively procured from preapproved suppliers and incrementally provide incentives for finished

pharmaceutical product manufacturers to incorporate the use of semisynthetic artemisinin into their production processes.

GHSC-PSM will use a new mechanism to allocate orders for artemisinin-based finished pharmaceutical products. This will reduce procurement lead time, provide increased visibility to suppliers, and yield overall better value by systematically applying a holistic evaluation approach that is inclusive of such considerations as total landed cost, supplier performance, and market health.

Also in Q3, the project completed the first round of evaluations of offers for provision of LLINs.

Procurement and deliveries

Since the start of the project, GHSC-PSM has procured malaria commodities[7] for 30 countries (all PMI countries, including two USAID-designated malaria countries). Over the life of the project, GHSC-PSM has procured $488.5 million in malaria medicines and commodities, including $45 million this quarter.

OTD and OTIF. GHSC-PSM produced consistently high on-time delivery performance for malaria commodities during Q3, returning 90 percent in April, 100 percent in May, 99 percent in June and 97 percent for the quarter. This is the highest quarterly on-time delivery performance for malaria commodities since the beginning of the project.

Seasonal malaria chemoprevention

From the start, GHSC-PSM has procured SPAQ for countries that stage seasonal malaria chemoprevention (SMC) campaigns for the prevention of malaria in children. Countries typically conduct four-month-long campaigns during which children take one treatment per month between June and October, during the malaria season. Timely delivery of the product is therefore critical. However, all global procurers were sourcing product from a single manufacturer. As the number of countries conducting SMC campaigns and the scope of the campaigns increased, demand for production in the months before the SMC season exceeded global capacity, creating bottlenecks and delays, and necessitating complicated product swaps among procurers. Moreover, given that the product was not yet WHO-prequalified, GHSC-PSM procured SPAQ through wholesalers (according to approved standard operating procedures), which further complicated the management of an already challenging commodity.

In 2018, GHSC-PSM developed and executed a new SMC sourcing strategy to alleviate the supply-chain and market-related challenges associated with this critical and life-saving commodity. GHSC-PSM:

- Contracted directly with the manufacturer (rather than procuring through a wholesaler) to
    - Negotiate more favorable commodity pricing, generating significant cost-savings
    - Directly coordinate production slots to ensure availability of the product when needed
- Generated forecasts and placed large inventory orders for 80 percent of the projected 2019 SPAQ demand directly with the supplier during the less-coveted production slots just after the SMC campaigns. This avoided competition with other global procurers and minimized the risk of

[7]GHSC-PSM procured malaria commodities for the following countries: AFRICA: Angola, Benin, Burkina Faso, Burundi, Cameroon, Côte d'Ivoire, DRC, Ethiopia, Ghana, Guinea, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Sudan, Tanzania, Uganda, Zambia, Zimbabwe; ASIA: Burma, Cambodia, Laos, Thailand

delays and slippages. The project planned to place a top-up order for the remaining 20 percent once countries have a firmer idea of required quantities, to hedge against overstock. This strategy was successful in that significant changes in demand meant that a top-up order was ultimately unnecessary, and the project maintained an appropriate level of stock to meet the year's needs and maintain a buffer to meet any unanticipated demand.

- Staged the product in the regional distribution center in Belgium, where stockpiled inventory was managed carefully to optimize remaining shelf life relative to requested delivery dates. Managing fulfillment from a stockpile has provided flexibility to accommodate the substantial fluctuation between order placement and ultimate fulfillment from the regional distribution center.

In Q3, GHSC-PSM completed delivering SPAQ to recipient countries. GHSC-PSM serviced nine countries, with all product delivered on time and in advance of the planned SMC campaigns so that all countries could start their campaigns on time. The scale and potential impact of this work are illustrated for one country (Cameroon) in the text box below. The project has already begun to build on this year's success, refining the approach to include close collaboration with the Global Fund, close monitoring and collaboration with new suppliers, and assessment of strategies for staging the product.

Providing Product to Save Children's Lives in Cameroon

To make product available for Cameroon's seasonal malaria chemoprevention campaign, GHSC-PSM managed 12 separate air shipments (with a total volume of 224 pallets weighing more than 38 tons) of more than 6 million doses of SPAQ dispersible tablets. Close management of these shipments meant all pallets were delivered on time to meet the campaign start date.

The 38 tons of SPAQ are enough to **prevent malaria in 1.5 million children under 5 in Cameroon**.

Implementation of ocean strategy

Historically, with few exceptions approved by PMI, GHSC-PSM has shipped RDTs and pharmaceutical products used for PMI programs by air. In April, GHSC-PSM reported findings from a pilot study of shipping RDT and malaria medicines by ocean to reduce freight costs. With PMI support, GHSC-PSM now plans to use ocean transit with a concurrent quality control (QC) testing model as the default mode of shipment for PMI orders. The project will follow this new strategy when it meets the recipient country's programmatic and regulatory requirements and it is deemed the best value. This is expected to yield substantial cost-savings on freight.

Artemisinin-based pharmaceutical product manufacturer visits

In Q3, GHSC-PSM met with new and existing suppliers in Uganda, China and India to orient them to the new contracting vehicle (referenced above), align goals and expectations, and better understand supplier production economics, operations and constraints, especially as these are impacted by the new strategy and fixed-price procurement mechanism. The trip yielded a wealth of information and informed ongoing dialogue around the artemisinin market and contractual requirements.

The trip included visits to finished pharmaceutical manufacturing facilities (including a visit to the first manufacturer on the African continent from which GHSC-PSM will directly procure malaria pharmaceutical products), active pharmaceutical ingredient (API) manufacturing facilities, and an

artemisinin extractor. Project staff also participated in the Convention of Pharmaceutical Ingredients (CPhI) conference in Shanghai, the largest pharmaceutical trade show in Asia.

The trip allowed GHSC-PSM to troubleshoot persistent operational issues, discuss a new supplier performance scorecard with vendors, and understand our suppliers' logistical operations, which is particularly important as we shift to ocean shipments for pharmaceutical consignments. GHSC-PSM also worked with suppliers on the operational and strategic details of new vendor-managed inventory and rapid supply arrangements and explored the upstream key starting material and API markets to better understand market and supply risks.

Quality Assurance

GHSC-PSM addresses challenges due to an LLIN manufacturer's quality issues

In Q2, GHSC-PSM received notification of critical management and structural failures at the production facility of one of the project's primary LLIN manufacturers. In Q3, the project continued to investigate the quality of LLINs produced by this manufacturer by performing QC testing on the LLINs when they arrived in country. Data collected from QC testing will help the project understand how these failures may affect the long-term quality of nets that were manufactured between January 2017 and April 2018.

In Q3, GHSC-PSM also evaluated the quality management systems of LLIN manufacturers that responded to a GHSC-PSM request for proposals to ensure they meet PMI's and the project's minimum quality requirements. The project continues to monitor the health of the market for adequate supply of appropriate and high-quality products.

QA system in use

In Q3, GHSC-PSM's new quality-assurance management system, which captures and creates visibility into QA-related information for malaria commodity orders that require QA support, was in full use. The project continues to refine the system to improve functionality and user-friendliness.

Reduced testing cost-savings

In Q3, the project continued to follow the risk-based testing strategy for artemisinin-based combination therapy that was first implemented in Q2. The revised testing strategy yielded cost-savings of more than $84,000, and total cost-savings of almost $222,000 since its implementation.

Global Standards and Advocacy

In Q3, GHSC-PSM hosted the first three meetings of the TraceNet Working Group to develop GS1-based identification, labeling and data exchange procurement requirements for LLINs. GHSC-PSM coordinates the group, which is co-chaired by USAID and the Global Fund, with participation from several project country offices, more than 10 LLIN manufacturers, and GS1. The group focused on providing advocacy and raising awareness of global standards in the context of the LLIN supply chain and on finalizing the group's terms of reference. Ultimately, the group will work to achieve a harmonized procurement requirement by the end of 2019.

Support for Prioritizing Orders and Transferring Stock

In Q3, 27 countries submitted data to the Procurement Planning and Monitoring Report–malaria (PPMRm). The PPMRm collects and reports information on stock status and on host governments' and

other donors' shipments. The visibility of stock status and shipment information enables PMI, the project and countries to make decisions on prioritizing, expediting, transferring or delaying procurements or shipments, and facilitates review of forecasts and supply plans to optimize procurements.

Based on PPMRm data, actions were taken at the global or national level, including:

- Because of overstock of artesunate and amodiaquine (ASAQ) in Nigeria, the PMI shipments of ASAQ 100/270mg 3 tablets and 6 tablets for Nigeria were transferred to Liberia.
- Several PMI artemether-lumefantrine (ALu) consignments are on hold for Uganda because of current overstocks and pending further insight into future consumption.

In **Zambia**, where stocks of several malaria commodities were low, the project generated and shared the supply plan with the MOH, partners and stakeholders to raise awareness of the shortage and to mobilize resources to meet the need.

LLIN Distribution Support

In Q3, many countries launched or continued large-scale LLIN campaigns and routine distribution as a key malaria prevention strategy. These massive initiatives ensure beneficiaries, particularly in high-impact areas, receive the nets they need in advance of the rainy season. While the actual distributions can last just a few weeks, logistics, supply planning, procurement, and prepositioning the nets can take months.

School-based LLIN distribution in Ghana, May 2019. *Photo credit: 5fifty Production/GHSC-PSM*

GHSC-PSM supported PMI in procuring and donating 500,000 LLINs to **South Sudan** in FY 2019**,** with the nets arriving in Juba between January and June 2019. GHSC-PSM supported distribution of these nets and others—1.5 million in total—in Q2 and Q3, providing protection to 3 million people. GHSC-PSM implemented an innovative approach to minimize distribution costs by eliminating storage time in Juba and its associated costs. Instead, GHSC-PSM coordinated a complex international procurement and arranged transportation with a local third-party logistics (3PL) provider to distribute the nets immediately upon their arrival in Juba.

In **Ghana**, GHSC-PSM supported the National Malaria Control Program (NMCP) to implement a school-based distribution of LLINs in May. The project procured 1.35 million LLINs—enough to protect 2.7 million people—and used 3PL transport services to distribute the LLINs to targeted schools. This distribution reached 22,739 out of 22,749 schools, achieving 99.96 percent coverage. The project will convene all stakeholders and 3PL providers for post-distribution review sessions to discuss key issues and lessons learned.

Also, GHSC-PSM supported:

- The mass distribution of more than 685,000 LLINs in two provinces in Zimbabwe.
- Routine distribution of LLINs to health facilities in Malawi (340,840 LLINs), Nigeria (138,350 LLINs), and South Sudan (1,510,250 LLINs—see above).

Country Support

GHSC-PSM provided supply-chain systems strengthening for malaria medicines and commodities in 22 countries in Q3.[8] Examples of our work in Q3 follow.

In **Burkina Faso,** in January 2019, the project successfully trained 50 National Public Health School teachers to administer the logistics management information system (LMIS) standard operating procedures course to students, including pharmacist assistants, logisticians, nurses, midwives and nurse aids. This training was integrated into the pharmacist assistant and logistician course modules this academic year. This quarter, GHSC-PSM, with financial support from PMI, provided five desktop computers to the National Public Health School in Ouagadougou to be used in conjunction with the training. Also, the project printed and provided 700 copies of the integrated LMIS standard operating procedures to 68 health schools to support teaching of the LMIS modules in these schools.

USAID hands over 700 copies of the integrated LMIS standard operating procedures and five desktop computers to the Director of the National Public Health School in Ouagadougou. *Photo credit: GHSC-PSM*

In **Mali**, because of overstock of Alu6x1 and 6x2, GHSC-PSM helped the malaria technical working group project the usable and at-risk-of-expiry ALu 6x1 and 6x2, normally used in children, for each facility from the central to the service delivery point level based on stock-on-hand, shelf-life and projected consumption. The NMCP then issued a circular to regions and districts advising them to use the projected at-risk-of-expiry quantity of ALu 6x1 and 6x2 to treat adolescents and adults to avoid expiries. This action will save approximately 292,972 blister packs of ALu 6x1 and 204,148 blister packs of ALu 6x2 worth more than $179,000.

Following the forecasting and supply planning training provided to the Bureau of Vector Borne Diseases (BVBD) in **Thailand** in FY 2019 Q1, this quarter the project provided technical assistance in forecasting and supply planning to the BVBD to formalize its quantification methodology and develop a 2019–2020

[8] The countries for which GHSC-PSM provides technical assistance with malaria funding are: Angola, Burkina Faso, Burma, Burundi, Cambodia, Cameroon, Ethiopia, Ghana, Guinea, Liberia, Malawi, Mali, Mozambique, Niger, Nigeria, Rwanda, Sierra Leone, South Sudan, Thailand, Uganda, Zambia and Zimbabwe

supply plan for malaria commodities. This is the first time that Thailand's BVBD is using a formal quantification method and developing a supply plan for malaria medicines and commodities.

In **Guinea,** in support of the National Directorate of Pharmacy and Medicines, the project mapped and captured geocoordinates for all private pharmaceutical establishments, including private drug wholesalers, manufacturers, pharmacies and drug promotion agencies. In total, 811 pharmaceutical establishments were inventoried, including 518 pharmacies, 53 drug wholesalers, 24 drug promotional agencies, one pharmaceutical industry and 215 drug outlets. The directorate will use this information to harness these facilities' potential to support public health outcomes, facilitate regulatory compliance, and involve the facilities in promoting the rational use of medicines. The results will also allow the directorate to adjust the distribution of existing pharmacies based on the recommended ratio and appropriate distance around other pharmacies and guide decisions around deploying new pharmacies to ensure equitable geographic coverage.

GHSC-PSM aided the Central Pharmacy of **Guinea** (PCG) to strengthen the temperature and humidity monitoring system in its warehouses. Specifically, the project is helping PCG replace its manual temperature measurement system, which is at risk of human error, with an automated system. The automated system consists of temperature and humidity sensors that send readings to a web application. The web application includes a warning system that alerts staff to excursions outside the recommended temperatures. GHSC-PSM installed 38 sensors in three regional depots and two trucks and trained eight PCG staff members to analyze temperature and humidity data. This new system enables PCG to comply with good storage and distribution practices in its warehouses in Conakry, Boké and Labé as well as in two trucks that transport pharmaceutical products to hospitals and health centers. PCG staff can use the automatically generated temperature and humidity data to inform mitigation strategies and best practices for storage and distribution of medicines, helping ensure that they are safe and effective for patients.

In **Liberia**, based on findings from the December 2018 end-use verification survey, the project partnered with the MOH to conduct an orientation for health workers in clinics. The orientation is intended to improve health worker capacity to complete logistics forms and submit requisitions to the county health teams to inform product resupplies.

The NMCP in **Burkina Faso**, with technical and financial support from GHSC-PSM, is piloting an Early Warning System on malaria commodity stocks at health facilities in 10 health districts. Through the system, the health facility communicates stock levels of selected malaria medicines and commodities (ALu 6x2, sulphadoxine-pyrimethamine, LLINs, RDTs, artesunate injectable) to the district pharmacist, who analyzes the data and provides immediate feedback to the health facility on its stock situation. Together, they can take timely action to avoid stock-outs or overstocks. In May 2019, GHSC-PSM, together with NMCP, conducted a supervision visit to the pilot districts and analyzed stock information. The analysis found that stock-out rates decreased from 16 percent in July 2018 at the beginning of the pilot to 5 percent in May 2019. The pilot will be jointly evaluated by NMCP and the project in July 2019 and, based on findings, the system may be extended to all districts in FY 2020.

B3. Family Planning and Reproductive Health

GHSC-PSM delivered enough contraceptives to provide **50.5 million couple-years of protection over the life of the project, including 5.1 million in FY 2019 Q3**.

25 countries procured FP/RH commodities,[9] and **health supply-chain systems-strengthening** support was provided to **19 countries** with FP/RH funding.

GHSC-PSM strengthened its global leadership role through the **new FP/RH Global Collaboration Strategic Framework** and associated work plan.

USAID and other donors approved a **second phase for the Global FP VAN** to expand to more countries and study how it can support country-led procurement.

The total value of contraceptives and condoms delivered by GHSC-PSM on behalf of USAID **increased in FY 2018 by 21 percent to $51.5 million**, according to the latest *Overview of Contraceptive and Condom Shipments* report.

GHSC-PSM continued to successfully fulfill USAID-supported countries' orders in a timely manner, achieving **100 percent OTD in April, May and June 2019**, and hence 100 percent OTD for the quarter overall.

The FP/RH task order serves as the primary vehicle through which USAID procures and provides FP/RH commodities for USAID's voluntary family-planning programs; offers technical assistance to improve supply systems and contraceptive security in partner countries; and provides technical leadership to strengthen global supply, increase financing and introduce new FP/RH commodities.

Addressing FP/RH Priorities

GHSC-PSM addressed USAID's FP/RH priorities by managing and continuously improving its global supply operations; partnering with countries to build self-reliant supply chains; and leading with knowledge and evidence. Below, GHSC-PSM provides examples of its work in these areas.

Collaboration with Global Stakeholders

In Q3, the project continued to build global partners' awareness of and support for the U.S. Government's FP/RH priorities and programs, and to support USAID's leadership in FP/RH commodity availability through the following activities.

[9] Per USAID guidance, all condom procurements are counted under the HIV/AIDS task order.

Revised FP/RH Global Collaboration Strategic Framework

In June 2019, GHSC-PSM finalized our task order 3 (TO3) Global Collaboration Strategic Framework and work plan, replacing the global collaboration strategy developed in 2016 during the project start-up. The new strategic framework, which was developed via multiple consultations over six months, reflects the extensive collaboration that is already underway. The revised mission statement reads: "… promote contraceptive security, especially reliable and sustainable supply chains through strategic engagement with global and country stakeholders to advance USAID's FP/RH objectives." Accompanying the strategic framework is a country engagement strategy to support an active and robust exchange between FP/RH focal points in-country and the FP/RH headquarters team to strengthen communications, improve technical knowledge and awareness, and align technical support for FP/RH objectives between headquarters and country offices. GHSC-PSM developed a work plan that outlines key activities around building partnerships, engaging country offices and developing a publishing agenda to supplement ongoing work and began implementing that work plan.

Contraceptive security tracking

From April to June 2019, GHSC-PSM finalized updates to the 2019 Contraceptive Security Indicators survey based on lessons learned from the 2017 survey. In particular, GHSC-PSM revisited sections on quality and the private sector that were added in 2017. The project added new or updated questions about product registration, the robustness of the local and international manufacturer base, availability of WHO-prequalified and stringent regulatory authority-approved products, and private-sector engagement plans, among others. To better understand equity concerns among different segments of the population, we added questions concerning policies that could enable or hinder access to contraceptives for a larger group of sub-populations. Survey managers also added questions that further delve into the details of FP2020 commitments and Global Financing Facility for Women, Children and Adolescents partnerships. GHSC-PSM disseminated the 2019 survey in June and expects to start receiving data in August.

Pathways to increasing access to hormonal intrauterine system (hormonal IUS)

In April, GHSCS-PSM was among a small group of organizations that participated in the levonorgestrel-releasing intrauterine system coordination meeting in Washington, DC, focused on providing program updates on efforts to increase access to the hormonal IUS and better understand market potential. As part of ongoing coordination efforts, GHSC-PSM is working closely with key stakeholders to better understand current and potential future market demand.

Contraceptive landscape market analysis

In Q3, IQVIA, a health sciences information company subcontracted by GHSC-PSM, presented findings from a 2018 contraceptive procurements analysis to USAID and the Health Policy Plus project in Kenya. The analysis reviewed the availability of contraceptives in 2017 in Kenya and highlighted how this impacts contraceptive security and family-planning programming. Key findings included: increasing CYP because of increasing use of long-acting reversible contraceptives and condoms and the dominance of free contraceptives (with free contraceptives providing 84 percent of CYP). This analysis will be presented at the Total Market Approach Working Group meeting in early 2020.

Launching a new work plan for the Reproductive Health Supplies Coalition's Systems Strengthening Working Group

In Q3, GHSC-PSM continued developing and implementing a new strategy for the Reproductive Health Supplies Coalition (RHSC's) Systems Strengthening Working Group (SSWG), which it chairs. After presenting a revised SSWG strategy at the RHSC General Membership Meeting in March, in Q3, the working group reviewed the strategy based on member feedback and developed an accompanying work plan. GHSC-PSM presented the work plan to the group in June. New workstreams include the visibility and analytics workstream as well as humanitarian settings, along with a learning agenda covering workforce development, health financing and last-mile distribution. Work is underway to identify leads for the priority activities and to move forward on implementation.

Publishing the contraceptives and condoms report

GHSC-PSM submitted the *FY 2018 Overview of Contraceptive and Condom Shipments* report (C&C Report) to USAID in April. The total value of contraceptives and condoms delivered by GHSC-PSM on behalf of USAID for FP/RH programs, increased in FY 2018 by 21 percent to $51.5 million because of strong demand in African nations.

Harmonization between GHSC-PSM and UNFPA creates efficiencies for suppliers

By harmonizing supplier communication, data structure and tools for FP commodities, GHSC-PSM and UNFPA are improving the quality of registration data and reducing the unnecessary burden for suppliers of providing the same data to multiple parties.

Registering FP commodities

Pharmaceuticals and medical devices must be registered with the appropriate regulatory body to be marketed and sold in most countries. The same requirement exists for donated health commodities, including those that GHSC-PSM procures on behalf of USAID for public-sector and social-marketing distribution. Tracking which products are registered in which countries is a complex problem, with continually changing country requirements, regulatory submissions, and registrations. For the first time ever, GHSC-PSM is coordinating with UNFPA to capture and manage registration data for family-planning commodities. This quarter, GHSC-PSM developed and made a registration tool available to procurement and planning teams at GHSC-PSM and the UNFPA Procurement Services Branch. The tool combines registration data from more than 20 suppliers for hundreds of items across both organizations. To increase the value of the information, the tool includes the latest intelligence on registration requirements and waiver acceptability by country to support decision making for the organizations' sourcing teams. By harmonizing supplier communication, data structure and tools, GHSC-PSM and UNFPA are improving the quality of registration data and reducing the unnecessary burden for suppliers of providing the same data to multiple parties. Small steps such as this can make a big difference in keeping orders moving quickly, ensuring the right product gets shipped, and ultimately offering better medicines and commodities and care to those who need them most.

Enhancing visibility of data on family-planning supplies

GHSC-PSM continued to support the launch of the Global FP VAN, the reproductive-health community's pioneering undertaking to increase supply-chain visibility and improve collaboration across stakeholders. The Global FP VAN platform provides access to upstream order/shipment data and supply planning information. GHSC-PSM facilitated the introduction of the Global FP VAN data visibility platform in Malawi and Nigeria. The ministries of health and other stakeholders in both countries now

can access data for their countries through the Global FP VAN. During Q3, Global FP VAN donors, including USAID, approved a second year-long learning phase that will increase by five the number of countries exchanging data with the platform, increase the number of upstream supply-chain data providers, and enhance the platform so it can better facilitate country-led procurement processes. In June, GHSC-PSM participated in the second phase planning meeting at UNFPA's Procurement Services Branch.

Analyzing Order Promising Tool Performance for FP/RH Commodities

As part of an ongoing effort to continuously improve our commodity order processing, GHSC-PSM analyzed the performance of our order promising tool (OPT) for FP/RH products. The OPT uses estimated lead times from the major steps in the ordering process, including order processing, manufacturing, import waiver and shipping, to calculate a total estimated lead time to fill an order. This is used by GHSC-PSM to determine a reliable delivery date. The analysis showed that the tool's current estimates for FP/RH commodities match the current cycle times for those products and thus generate reliable lead times and estimated delivery dates.

Collaborating Globally to Avert Stock-outs and Expiries

In Q3, GHSC-PSM's Procurement Planning and Monitoring Report (PPMR) team received and processed reports from 54 country programs. Based on data on stock imbalances in the PPMR, the project worked with the Coordinated Assistance for Reproductive Health Supplies (CARhs) group to:

- Create three new shipments for Côte d'Ivoire, DRC and Senegal
- Postpone five shipments to Benin, Burkina Faso, Côte d'Ivoire and Ethiopia to avoid overstock and prevent commodity expiries
- Expedite three shipments to Benin and Senegal to prevent or mitigate stock-outs
- Achieve six transfers for programs in Cameroon, Côte d'Ivoire, Madagascar, Senegal and Tanzania

Also, donors responded to 36 information requests and 10 issues highlighted by programs through PPMR submissions, providing in-country counterparts with valuable information on upcoming shipments and requests for assistance.

In May, GHSC-PSM facilitated the West Africa Health Organization's (WAHO) Early Warning System Workshop in Lagos, Nigeria, along with the GHSC-Technical Assistance (GHSC-TA) contractor in West Africa (Chemonics). The early warning system aims to prevent stock-outs of contraceptives and ensure uninterrupted access to users. The meeting convened 31 individuals, primarily health ministry representatives, from 15 Economic Community of West African States countries, to discuss best practices in data reporting, analysis and use for regional and donor collaboration through the CARhs and Coordinated Supply Planning (CSP) groups. Participants also discussed developing a standard operating procedure for transferring commodities between programs within the region and the next generation of the early warning system, which is currently being piloted under the Global FP VAN project.

Commodity Sourcing and Procurement

Participating in the annual quality of RH medicines and devices meeting

In June, GHSC-PSM participated in the Quality Reproductive Health Medicines and Contraceptive Devices procurers meeting in Copenhagen. The annual event allows RH donors and procurers to discuss topics related to FP/RH product quality to achieve convergence on quality standards. Key sessions focused on quality versus price, quality guiding principles, prequalification of FP/RH products, and regulatory constraints and opportunities. GHSC-PSM attendees, in conjunction with USAID and GHSC-QA colleagues, highlighted progress on the USAID-UNFPA joint registration tool, efforts to trademark the Blue Lady Logo to support appropriate use and as an indicator of quality, and the increase in USAID's supply of quality-assured generic FP/RH products as a result of GHSC-PSM's TO3 Sourcing Strategy.

Commodities Procured for FP/RH Programs

- Consumable kits for implants
- Contraceptive implants
- Cyclebeads®
- Injectables
- Intrauterine devices
- Oral contraceptive pills

Addressing the constrained global supply of FP/RH products

As the global supply shortages of injectables, oral contraceptives, and one-rod implants continued during Q3, GHSC-PSM effectively allocated the limited supply of products available across recipient countries to avert stock-outs. The project achieved this by strategically leveraging the existing supplier base, introducing generic products, and using inventories of these products at the regional distribution centers in Belgium and Dubai. GHSC-PSM participated in the global prioritization of country orders for the above-mentioned commodities by collaborating closely with the global FP/RH community through the CSP group.

Participating in the CSP group's annual meeting

GHSC-PSM is part of the RHSC's CSP group, which works collaboratively to prevent stock imbalances across donor-supported countries. At the annual CSP meeting in June in Copenhagen, GHSC-PSM helped review 2019–2020 global demand for implants and injectables and develop strategies for product allocations across countries. The CSP group agreed on a methodology for developing and communicating global forecasts for key health commodities with suppliers and other key stakeholders and designed a monthly process to improve collaborative decision making on order allocation across countries.

Releasing the DMPA tender

In June, GHSC-PSM issued a solicitation to procure the long-acting injectables depot-medroxyprogesterone acetate (DMPA) intra-muscular and DMPA subcutaneous. Through this tender, the project will maintain a strong supplier base to ensure a continuous and best-value supply of quality-assured injectable contraceptives.

Achieving on-time delivery

GHSC-PSM continued to successfully fulfill USAID-supported countries' orders in a timely manner, achieving 100 percent monthly OTD in April, May and June 2019, and hence 100 percent OTD for the quarter. This was achieved thanks to the strong integration among supply-chain activities and functions such as: close monitoring of country-level supply plans, inventory levels, and other demand signals; a

strong sourcing strategy fed by market intelligence; effective vendor management of the supplier base; close monitoring of the project's supply, central stock, and allocation of country orders (procurement and fulfillment functions), all while engaging and coordinating with the FP/RH community to ensure the project's performance was meeting countries' needs.

Country Support

Below, we illustrate the technical assistance that GHSC-PSM provided to strengthen in-country[10] supply chains for FP/RH commodities this reporting period.

Workers pack family-planning commodities into kits for distribution to health facilities in South Sudan. *Photo credit: GHSC-PSM*

Contraceptives kits updated to meet the demand in South Sudan.

GHSC-PSM supports South Sudan's health ministry's delivery of contraceptives to hospitals and county health departments and, since early 2017, has helped the ministry design, pack and deliver contraceptive kits. A trends analysis during Q3 prompted GHSC-PSM and the ministry to revise the contents of the family-planning kits.

A "basic" kit includes three oral contraceptives, condoms, and two injectable methods, while supplementary kits contain three long-acting methods. GHSC-PSM's monthly calls to counties and hospitals suggested changes in usage and demand for basic kit items, including more DMPA-IM and a greater need for combined oral contraceptives over the progestin-only pill than originally anticipated. This informed revisions in the ratios of the individual items and quantities (see box).

Phone calls lead to revision of contraceptive kits in South Sudan

GHSC-PSM monthly calls to counties and hospitals in South Sudan suggested changes in usage and demand for items in contraceptive kits. The revised kits better reflect the contraceptive needs of users and will increase the availability of required commodities at service delivery points.

Stakeholder collaboration enhances contraceptive access in Uganda.

Following reported facility-level stock-outs of combined oral contraceptives, GHSC-PSM and the Uganda MOH worked

[10]GHSC-PSM procured FP/RH commodities for the following countries: AFRICA: Benin, Burkina Faso, Burundi, DRC, Ethiopia, Ghana, Guinea, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Senegal, Tanzania, Uganda, Zambia; LAC: Haiti; ASIA/NEAR EAST: Afghanistan, Bangladesh, Nepal, Yemen. The countries for which GHSC-PSM provides technical assistance with FP/RH funding are: AFRICA: Angola, Burundi, Ethiopia, Ghana, Guinea, Kenya (TO5), Liberia, Malawi, Mali, Mozambique, Nigeria, Rwanda, South Sudan, Uganda, Zambia; LAC: Guatemala, Haiti; ASIA/NEAR EAST: Nepal, Pakistan

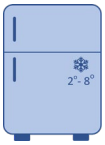
together to better manage distributions from two-central medical stores in Uganda. Specifically, we partnered with Joint Medical Stores (JMS) to distribute oral contraceptives. In Q3, JMS delivered nearly 1.3 million cycles of combined oral pills to more than 1,200 public health facilities across 122 districts. Also, during this quarter, JMS transferred 648,400 vials of DMPA-IM procured by the project to National Medical Stores to be distributed to public facilities. The collaboration with MOH and the medical stores improved access to care and improved family-planning choices for women in Uganda. The total quantity of the FP commodities distributed and transferred to the public will provide more than 300,000 couple-years of protection.

B4. Maternal, Newborn, and Child Health

Nine countries procured MNCH medicines and commodities and **15 countries received health supply-chain systems strengthening** with MNCH support this quarter**.**

By the end of Q3, the project had procured **$6.5 million in MNCH commodities over the life of the project**.

GHSC-PSM participated in several global collaboration and **technical events, including the Postpartum Hemorrhage Community of Practice membership meeting and Women Deliver.**



The project continued to lead efforts to **improve the availability of quality oxytocin** in Ghana and Mozambique.

Under the MNCH task order, GHSC-PSM supports efforts to end preventable child and maternal deaths by increasing access to quality-assured medicines and supplies for MNCH. In collaboration with USAID, the project provides global technical leadership on MNCH commodities and ensures that supply-chain management considerations are included in global dialogue and initiatives. GHSC-PSM focused on three key areas during this reporting period: improving the availability of quality oxytocin, ensuring the availability of MNCH medicines and commodities, and providing global technical leadership.

Improving the Availability of Quality Oxytocin

Oxytocin, the recommended product for preventing and treating postpartum hemorrhage, is a heat-sensitive uterotonic that requires transport and storage in a temperature-controlled supply chain, or cold chain. Storing oxytocin at room temperature or higher can result in product degradation. Keeping oxytocin within a proper temperature range is a common challenge in many countries where cold chain infrastructure is limited.

In **Ghana**, the MOH's Ghana Health Service's Family Health Division has taken steps to improve oxytocin quality, including exploring possible cold chain integration efforts. To support this effort, GHSC-PSM assessed: 1) the viability of integrating oxytocin into the WHO's Expanded Programme on Immunization cold chain; and 2) current procurement and regulatory practices to determine whether they ensure that only quality oxytocin is procured and managed throughout the supply chain. In Q3, GHSC-PSM collected and analyzed qualitative and quantitative data and developed recommendations for Ghana Health Service, other government counterparts and implementing partners. GHSC-PSM presented these findings and recommendations at Ghana's Second National Maternal Child Health and Nutrition Conference in June and will work with stakeholders to determine next steps.

In **Mozambique**, oxytocin is currently the first-line drug for prevention and treatment of postpartum hemorrhage in health facilities; however, it is not kept in the cold chain. In Q3, GHSC-PSM developed a scope of work for a desk review on the current oxytocin landscape in Mozambique and an in-country

engagement session to align stakeholders on key guidelines for quality-assured uterotonics. This activity will initiate a dialogue on the potential development of a postpartum hemorrhage uterotonics strategy in Mozambique and discuss a path forward. These activities should start in October 2019.

Ensuring the Availability of Quality-assured MNCH Commodities Within the Public and Private Sectors

Improving availability of information on MNCH commodities

In Q3, GHSC-PSM made progress in researching and developing tools to assess the factors that affect the availability of newborn and child health medicines and commodities, including oral rehydration salts, zinc, amoxicillin dispersible tablets, and newborn equipment and supplies. The tools will be used in assessments in Malawi, Mali and Rwanda.

Assessing barriers among private-sector wholesalers in Mozambique and Zambia

GHSC-PSM developed a rapid assessment to identify challenges and barriers that private-sector wholesalers and distributors face in providing quality-assured MNCH products throughout the health supply chain. This is important because many individuals and families seek care from the private sector, whether for health services in clinics or hospitals, or for health commodities in pharmacies or drug shops. In Q3, GHSC-PSM collected data on these barriers in Mozambique and Zambia. Across the two countries, GHSC-PSM interviewed more than 50 stakeholders. While the commercial sectors in each country are unique, a common recommendation from the two assessments is to strengthen the role of the pharmaceutical wholesaler associations and to improve guidelines on various product registration mechanisms. GHSC-PSM is conducting a full analysis of the data and will complete reports in Q4.

Providing Global Technical Leadership and Coordination in MNCH

GHSC-PSM actively participated in several coordination and leadership events throughout the quarter. In June, GHSC-PSM's MNCH director participated on a panel organized by the United States Pharmacopeia and Devex at the Women Deliver 2019 conference on gender equality and women's health in Vancouver. The four-day conference brought together people to share knowledge, connect with other partners to foster collaboration and learn about latest developments. The panel discussion focused on ensuring the quality of medicines and investing in equality for women's and girls' health.

New working group connects USAID and UNICEF

In Q3, GHSC-PSM worked with technical advisors in USAID's Office of Maternal and Child Health and Nutrition to develop a newborn and child health commodity working group on behalf of USAID and UNICEF.

In late May, GHSC-PSM participated in the Post-Partum Health Implementation Community of Practice Annual Meeting. Lastly, GHSC-PSM worked with various technical advisors within USAID's Office of Maternal and Child Health and Nutrition to develop a newborn and child health commodity working group on behalf of USAID and United Nations Children's Fund (UNICEF). The working group plans to hold its first call in early July with a range of partners involved in newborn and child health commodities.

GHSC-PSM also continued to provide significant technical input to a guidance document on medicines for preventing postpartum hemorrhage that the Boston Consulting Group is developing.

Country Support

GHSC-PSM provided supply-chain systems strengthening for MNCH commodities in 15 countries[11] in Q3.

GHSC-PSM continued to work with three states in **Nigeria** to develop our drug revolving funds (DRFs). The establishment of DRFs will provide a sustainable mechanism through which the states can ensure a steady supply of essential MNCH commodities. During Q3, the project assessed DRF systems in three pilot states (Bauchi, Sokoto and Kebbi). The purpose was to understand how existing governance and operations compare to what is required for a successful DRF. Evaluators visited 60 health facilities across the three states and interviewed more than 50 stakeholders. Also, the project organized two advisory panel workshops, developed six case studies from other Nigerian states and sought out expertise from international DRF experts.

GHSC-PSM held two-day alignment workshops in each of the three states to share results of the diagnostic evaluations with stakeholders. More than 120 participants approved the findings and developed mitigation strategies and a workplan. In Q4, GHSC-PSM will continue to work with the states to create the necessary guidelines and standard operating procedures to support the DRFs.

Assessment findings lead to improved use of amoxicillin for young children in Ethiopia

Through a series of meetings presenting findings about misperceptions of the efficacy of certain medicines in children, stakeholders agreed to interventions to address the issue. Adama Hospital Medical College conducted drug use evaluation and root-cause analysis on the rational prescribing practice of amoxicillin dispersible tablet and amoxicillin suspension for pneumonia management in children under five. In Q3, GHSC-PSM supported the hospital in designing and executing the study, organizing dissemination meetings and designing interventions.

Study findings indicated that only 13 percent of children under five were appropriately treated per the recommendations of standard treatment guidelines.[12] None of the children were given amoxicillin, even though the hospital has stocked it for more than five years. Findings also indicated that prescribers resorted to more expensive second-line medicines.[13]

Separately, the root cause analysis indicated that the following all contributed to poor prescription of antibiotics: misperceptions about the lack of efficacy of amoxicillin suspension, unsatisfactory experience of prescribers, weak regulation, lack of adequate knowledge, lack of updated guidelines, and absence of clinical pharmacy practices. The results were presented to the drug and therapeutic committee, the pediatric department of the hospital and at a national review meeting. In the meetings, held in June, stakeholders agreed to design and implement interventions to avoid irrational drug use, ensure adherence to the prescription guidelines, and design a user-friendly order sheet to standardize the prescribing practice. The evaluation will be repeated in six months to determine the effectiveness of the interventions.

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[11] The countries for which GHSC-PSM provides technical assistance with MNCH funding are: AFRICA: Ethiopia, Ghana, Guinea, Kenya (TO5), Liberia, Malawi, Mali, Mozambique, Nigeria, Rwanda, Zambia; LAC: Guatemala, Haiti; ASIA: Nepal, Pakistan

[12] (STG 2014)/WHO 2014—using amoxicillin suspension (23.90 Birr/bottle).

[13] Examples include amoxicillin-clavulanic-acid (78 Birr/bottle) and cephalexin suspensions (50.70 Birr/bottle).

Procurement and Deliveries

In Q3, GHSC-PSM procured MNCH commodities for nine countries in Q3[14].

Also, in Q3, GHSC-PSM continued with deliveries of a large order of essential medicines to DRC. Of 236 line items, only 2 lines remained to be delivered at the end of Q3. GHSC-PSM also delivered two shipments of magnesium sulfate to Mali, and 128 baby scales and 145 infant warmers to Rwanda.

In Q3, GHSC-PSM delivered to Rwanda pallets containing 128 baby scales and 145 infant warmers. *Photo credit: GHSC-PSM*

[14] Countries that received procurement support for MNCH: DRC, Ghana, Haiti, Liberia, Madagascar, Mali, Mozambique, Rwanda, Zambia.

B5. Other Emerging Health Threats

GHSC-PSM also **delivered 3.6 million male condoms** to Ecuador for pregnant women to give to their partners to prevent sexual transmission of the Zika virus and avert microcephaly cases.

The project **distributed repellent to antenatal care facilities** to ensure that pregnant women have access to Zika prevention commodities.

GHSC-PSM conducted technical assistance activities in four countries and held a regional workshop to build the capacity of health ministry supply-chain teams to **prepare for future outbreaks of infectious disease**.

GHSC-PSM is working with Ministries of Health across Latin American and the Caribbean to provide critical Zika diagnostic and prevention supplies. Also, GHSC-PSM is building resilient supply chains that are equipped to face the challenge of emerging public health threats when they arise.

Supporting the Zika Response

GHSC-PSM provides commodities used by health programs to help pregnant women throughout Latin America and the Caribbean avoid contracting Zika, an arbovirus and sexually transmitted infection that can cause severe birth defects when it infects women during pregnancy. GHSC-PSM is equipping health ministries with male condoms and mosquito repellent and providing technical assistance to resist Zika's spread. Deliveries of commodities this quarter to prevent infection are summarized in the box.

Deliveries to Prevent Zika Infections

In Q3, GHSC-PSM:

- **Delivered 3.6 million male condoms** to Ecuador.
- **Procured more than 400,000 bottles of mosquito repellent** to be delivered to Paraguay.

Repellent

In Q3, GHSC-PSM continued to oversee the orders of repellent shipments to **Paraguay** and **Peru.** A final order of repellent to **Ecuador** is pending final authorization by that government. GHSC-PSM also continues to monitor ongoing distribution of repellent and guidance materials to antenatal care facilities in the **Dominican Republic, El Salvador, Haiti, Honduras and Jamaica**. Ministries of health dispense this repellent to pregnant women for Zika prevention.

Condoms

The project delivered 3.6 million condoms to **Ecuado**r in April and processed a new order of condoms for **Peru**. The ministries of health in the recipient countries dispense these condoms to pregnant women to give to their partners to prevent sexual transmission of the virus and avert microcephaly cases.

Assessment of Use of Repellent and Instructional Materials

To verify whether mosquito repellent and guidance materials are being distributed and used as intended, GHSC-PSM developed an assessment tool to be used at distribution centers and antenatal care facilities across the region. The tool is used to collect data on availability of repellent and the conditions in which it is stored, the knowledge of the health workers distributing repellent and the women using it for Zika prevention, and the extent to which pregnant women have received the donated product.

In Q3, GHSC-PSM analyzed data from the first assessment, which had been conducted in **Jamaica**, and developed a draft report that includes follow-up recommendations to further strengthen Jamaica's operating procedures for responding to future emergency outbreaks of infectious disease.

GHSC-PSM also is conducting assessments in the **Dominican Republic, El Salvador, Haiti and Honduras**, with work to be completed in Q4.

Emergency Supply-Chain Preparedness

In Q3, GHSC-PSM held emergency supply-chain preparedness workshops in the Dominican Republic, Guatemala, Honduras and Paraguay. In May, GHSC-PSM organized a regional workshop with participation from health ministries and other stakeholders from Antigua and Barbuda, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, the Organization of Eastern Caribbean States, and the Pan-American Health Organization.

At these workshops, health supply-chain professionals reviewed, discussed and applied the *Emergency Supply Chain Playbook* that was developed under the Global Health Security Agenda. GHSC-PSM has adapted the playbook to address Zika and other infectious disease outbreaks in Latin America and the Caribbean. Participants worked in subgroups to develop or strengthen protocols and plans for handling supply-chain operations for emergencies, such as the ongoing dengue outbreak. Lastly, participants completed a simulation workshop covering a variety of infectious disease scenarios to enable participants to practice decision making during an unfolding emergency.

GHSC-PSM is planning a second regional meeting for September in Lima, **Peru**. The workshop will be attended by representatives from **Colombia, Ecuador and Peru**—the countries in South America that participated in USAID's Zika response.

SECTION C

PROGRESS BY OBJECTIVE

C1. Global Commodity Procurement and Logistics

Procured $142.3 million in health commodities. Procurement values have reached nearly **$2 billion for the life of the project**.

Delivered 1,721 line-item orders this quarter, with a value of **$194 million**. In May, the project delivered 745 line items, the most line items delivered in one month to date.

Delivered 92 percent of line items on time, based on the defined on-time window (within the period 14 days before or seven days after the agreed delivery date). **Delivered 85 percent on time and in full.** GHSC-PSM has now achieved **four consecutive quarters of OTD above 80 percent (including 13 consecutive months above 80 percent) and three consecutive quarters of OTIF above 80 percent.**

C1a. Global Supply Chain: Focused on Safe, Reliable, Continuous Supply

GHSC-PSM's procurement strategy seeks to continuously identify opportunities to pursue three main objectives:

- Reduce response/cycle times, lead times, and transaction costs
- Increase on-time deliveries
- Balance price, delivery and quality (i.e., achieve best value)

In Q3, we maintained strong OTD and OTIF while lowering overall commodity and supply-chain costs. We did so by focusing on the following initiatives.

The Global Supply Chain at a Glance

- **72 countries** served
- **3,665 products** in the catalog provided by **304 suppliers**
- **Five international freight forwarders** responsible for **4,380 shipping lanes**

Driving Performance with Analytic Tools

As part of the project's continual improvement processes, GHSC-PSM continues to strengthen existing tools to meet emerging needs and to design new tools to support innovations in operations. Recent updates that help the project better meet USAID's needs include the following:

- ***Requisition Order Pipeline Dashboard.*** Since the introduction of the Requisition Order Pipeline Dashboard in September 2017, the dashboard has become a key tool used by project procurement specialists in their daily work. The dashboard now includes and visualizes

information on projected on-time delivery and on-time delivery-in full performance to help teams track and manage orders to both these standards.

- ***Freight Estimator Tool.*** The freight estimator tool was updated with rates from the 2019 freight awards, to allow specification of the inco-term, and to improve the user interface.
- ***Order Promising Tool.*** The project continues to provide a monthly release of the OPT so that it reflects current data and supports responsible setting of delivery commitments.
- Improved Management of Deliveries

This quarter, the project undertook two major initiatives to improve delivery performance, as summarized below.

Expanding use of an operations team in Dubai

The project expanded use of an operations team that was established last quarter at the regional distribution center in Dubai. This team manages shipments out of that regional distribution center and all shipments to three high-volume countries: Angola, eSwatini and Mozambique. Location of the team in a more proximate time zone allow closer collaboration with logistics partners. The number of orders handled by the Dubai-based operations team increased 7 percent this quarter.

Improving processes for deliveries to DRC

The DRC is the most challenging destination country for GHSC-PSM. This is because DRC has a complex process for obtaining duty waivers for donated health commodities; GHSC-PSM does not have staff in country so we rely on and collaborate closely with the GHSC-TA project for waiver support; the time it takes to obtain a duty waiver varies; and GHSC-PSM delivers to multiple warehouses within the country rather than just to the central medical stores. In an effort to address these multiple delivery challenges, in Q3, GHSC-PSM staff visited DRC to meet with the various waiver stakeholders including the GHSC-TA office, U.S. Embassy and the USAID Mission. We worked together to identify ways to reduce waiver lead times, and the project is now trialing these revised approaches on test shipments. GHSC-PSM also met with local 3PL agents, shipping lines and other in-country stakeholders to shorten the time taken to quickly move life-saving medicines and commodities into country while reducing freight costs and ensuring quality. Project staff also trained GHSC-TA team members on GHSC-PSM tools, such as Automated Requisition Tracking Management System and the OPT, to facilitate their use of these tools.

Expanding Decentralized Procurement

GHSC-PSM's strategy is to expand decentralized procurement (DCP, or order management by local field offices) where appropriate. With local management of orders, the procurement specialist is closer to the recipient and to the authorized distributor in country. As a result, DCP allows for more efficient coordination and processing of any changes in specifications, quantities or delivery terms, and can reduce cycle time and bolster on-time delivery.

In June, GHSC-PSM trained DCP procurement specialists from six field offices at a regional workshop in Mozambique. DCP procurement specialists were trained on how to procure essential medicines using the project's long-term agreements with fixed prices; project procurement standard operating procedures, work instructions, tools, and business rules; and a refresher on procedures, systems and procurement ethics for sourcing and procuring lab commodities under long-term agreements. This training will help ensure the DCP staff execute procurements following the same procedures as do

headquarters staff. These staff will take solid procurement experience and detailed knowledge of how to use long-term agreements to their next positions, including possibly for host country procurement offices.

In the past quarter, GHSC-PSM decentralized responsibility for procuring viral-load/early-infant-diagnosis tests under the reagent rental concept. Head office staff trained the field office staff from Haiti, Mozambique, Nigeria and Zambia to issue purchase orders under the centrally managed long-term agreements.

Also, the project is continuing to enhance best value by procuring medicines and commodities from local (in-country) rather than international vendors. GHSC-PSM is collaborating with the GHSC-QA contractor to review the eligibility of current and potential local vendors. We also are working to establish long-term agreements with vendors who meet the required quality, performance and competitiveness standards. The field offices in Mozambique and Zambia are in the process of completing such contracts, with other countries to follow soon.

Strategic Sourcing

Essential medicines

GHSC-PSM, in coordination with USAID and the GHSC-QA contract, organized a three-day essential medicines supplier summit from April 30 to May 2. Procurement and quality representatives from eight essential medicines wholesalers from Europe, Africa and Haiti participated. Suppliers learned about the opportunities and challenges faced by the project in procuring and delivering essential medicines and provided input into the project's 2019–2020 Essential Medicines Strategy. GHSC-PSM and GHSC-QA also had one-on-one meetings with suppliers to discuss on-time performance, quality and the upcoming solicitation for essential medicines.

Shortly after the summit, GHSC-PSM issued a request for quotations for the procurement of 212 essential medicines products that are used across USAID-funded health areas. The evaluation of offers and awards should be finalized in Q4.

Pediatric ARVs

GHSC-PSM, in coordination with USAID, is successfully responding to increasing demand for certain pediatric products and developing strategies to respond to demand signals while accommodating supply constraints. Interventions have included conducting strategic procurements to meet demand well into the future, stocking new pediatric ARV products in the regional distribution centers, and closely monitoring suppliers' increase in production.

C1b. Project Performance

In this section, we summarize findings on key indicators of global supply-chain performance. Additional detail on these and other indicators is provided in Annex A.

Timeliness of Delivery

GHSC-PSM measures on-time delivery in two ways:

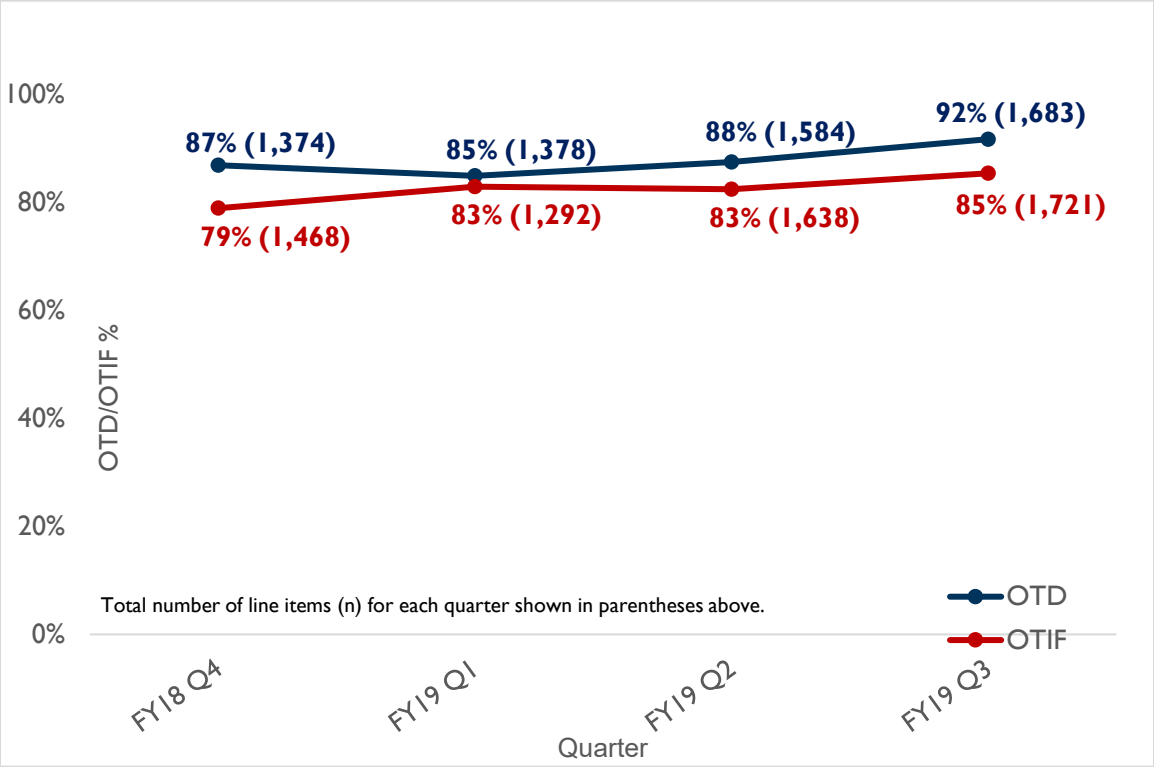
- OTD is the number of on-time deliveries as a percentage of *expected* deliveries in the period.

- The OTIF rate reflects the number of on-time deliveries as a percentage of all *actual* deliveries in the period.

OTD is a more accurate reflection of recent performance, while OTIF is a lagging indicator as late orders due in prior periods get delivered.

In Q3, GHSC-PSM continued to drive efficiencies in global supply-chain processes, while sustaining the timeliness of our deliveries. We averaged 92 percent OTD, and 85 percent OTIF, reducing the backlog to 1.4 percent of annual volume.

Exhibit 4. OTD and OTIF Over the Last Four Quarters



C2. Systems-Strengthening Technical Assistance

GHSC-PSM **assisted 41 countries** with health supply-chain systems strengthening and **supported 34 country or regional offices**.

GHSC-PSM provided **technical feedback on 55 supply plans** to strengthen national supply planning capabilities.

In **Malawi, the project became the first entity to receive approval to operate UAVs** beyond visual line-of-sight for a multi-month cargo activity. Full-length flights between the Nkhata Bay District Hospital and the Likoma Island Hospital will carry medicines nearly 77 kilometers across Lake Malawi and collect samples.

GHSC-PSM's strategic goal is for every country to have a locally led health supply chain that is integrated, optimized, accountable, agile, lean and able to sustainably supply quality products to all citizens. To support this, headquarters-based health supply-chain systems-strengthening technical specialists work with field teams to define systems-strengthening strategies that are appropriate to the local context and that can be realistically achieved. Emphasis is placed on automated data capture and real-time end-to-end data visibility, pharmaceutical-grade infrastructure, and efficient distribution across countries. Each supply chain should be managed by supply-chain professionals dedicated to quality improvement, and, where possible, develop strategies to outsource functions to accountable private-sector providers.

Different health areas fund supply-chain systems-strengthening assistance in each country. The costs of technical assistance and supply-chain systems-strengthening activities are proportionally shared across health task orders (HIV, malaria, FP/RH and MNCH). Cost-sharing formulas are reviewed annually to verify that each health area's share of the total cost for technical assistance remains equitable. Systems-strengthening efforts associated with health area–specific activities (e.g., LLIN distribution for malaria or viral-load scale-up for HIV) are supported entirely by the relevant health area.

C2a. Activities and Achievements

The project strengthens health supply-chain systems by bringing tailored assistance to yield important achievements and results. Following are highlights of where and how GHSC-PSM applied health supply-chain systems-strengthening approaches in specific countries this quarter.

Warehousing and Distribution

GHSC-PSM continues to improve country warehousing and distribution systems through 33 field offices. Our approaches seek to improve data-driven decision making across the supply chain, optimize in-country warehouse networks, and increase efficiencies in warehousing and distribution operations.

In Q3, GHSC-PSM continued exploring the use of UAVs, to complement existing distribution methods for last-mile delivery of medicines and collection of laboratory samples including but not limited to dried blood spots, viral-load, EID, and TB samples. In **Malawi**, the project became the first entity to receive approval to operate UAVs beyond visual line-of-sight for a multi-month cargo activity. After a series of successful demonstrations for the Department of Civil Aviation, the UAV deployment team is conducting community sensitization and test flights around Nkhata Bay and Likoma Island Districts. By mid-July, full-length flights between the Nkhata Bay District Hospital and the Likoma Island Hospital will carry medicines nearly 77 kilometers across Lake Malawi and collect samples for the return trip. The potential benefit is characterized with a quotation from a nurse/midwife, shown in the box.

> "This is very important work. When we move lab samples and results faster, we can put people on [ARV] treatment. They don't have to wait a whole month."
>
> *Nurse and midwife from Mzuzu University in Malawi*

GHSC-PSM staff operate test flights for drones in Malawi. *Photo credit: GHSC-PSM*

GHSC-PSM expanded temperature and humidity monitoring efforts by installing additional sensors throughout **Burkina Faso's** supply chain and launching ambient monitoring in **Guinea**. This complements work done previously with funding from the Bill & Melinda Gates Foundation and the Global Fund and will result in a more robust dataset for all donors. GHSC-PSM shared preliminary results from the first year of temperature monitoring in **Mozambique,** to be followed by a more extensive analysis in a paper to be published later this year.

The Government of **Rwanda** is preparing to shift to a commercial public health supply chain. GHSC-PSM was able to assist by conducting a costing exercise to ascertain the true costs of the supply chain for donor-funded commodities and essential medicines through all five tiers of the supply (from the central medical stores to community health centers). The study gave supply-chain operators the information they need to establish appropriate markups/margins for both categories of products.

GHSC-PSM continued to receive positive feedback on the transformative potential of the TransIT tool developed by Chemonics (see box). In Q3, the project successfully trained more than 30 drivers in **Mozambique** on the use of the electronic proof of delivery (ePOD) tool that feeds data into TransIT. During this training, Mozambique recorded and mapped 74 shipments. Since then, GHSC-PSM staff have

facilitated training for 15 additional drivers. Four local 3PL companies were trained in using ePOD and are now tracking their shipments using the desktop version of TransIT and the ePOD app.

In **Angola,** GHSC-PSM implemented TransIT at the Central Procurement Agency for Medicines and Medical Supplies (CECOMA) to improve shipment tracking and to enable staff to conduct real-time analysis of key indicators such as utilization, cost, performance and proof of delivery (POD). After the use of TransIT for one full quarter, performance improved for two key indicators at CECOMA: on-time delivery and the percent of PODs outstanding (see Exhibits 5 and 6 below). CECOMA is still in the early phase of TransIT implementation and is eager to implement additional features and improvements to further improve supply-chain performance. For example, the initial phase of rollout was for desktop computers only. The next phase will introduce the TransIT mobile app to track on-time deliveries in real time. Also, CECOMA will begin transport cost analysis to identify the cost per kilometer of shipments and make necessary strategic decisions using the analysis. CECOMA will also implement TransIT at the next level of the supply chain within the 18 provincial warehouses in Angola that presently face challenges with POD tracking and archiving.

TransIT: A Transportation Management Tool Suited to the Environments Served by GHSC-PSM

TransIT uses a cloud-based system that enables access to transportation information anytime and anywhere while minimizing infrastructure, set-up and maintenance costs. The tool aggregates end-to-end data—from distribution planning through delivery to the recipient—to track performance, location and costs as commodities move through the in-country distribution network. TransIT creates an "instant report card" that enables managers to better track shipments, make data-driven decisions, optimize distribution resources and assets, and use historical data to identify trends.

TransIT pairs with the ePOD Android app that truck drivers use to upload information about shipment delivery status. They can upload photos of the POD, the recipient and the shipment at the delivery location, with a time and location stamp. The system uploads information automatically as soon as Internet access is available.

Exhibit 5: Monthly improvement of on-time delivery before and after implementation

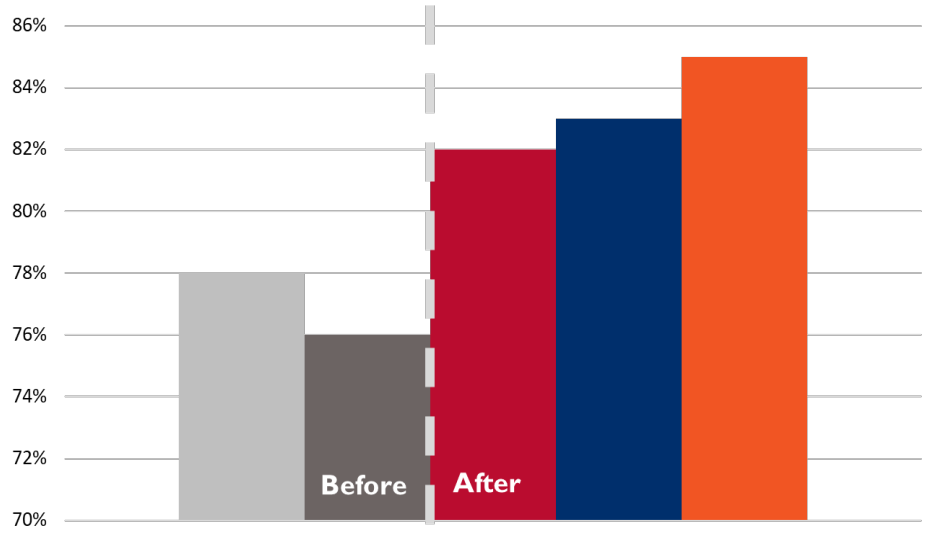
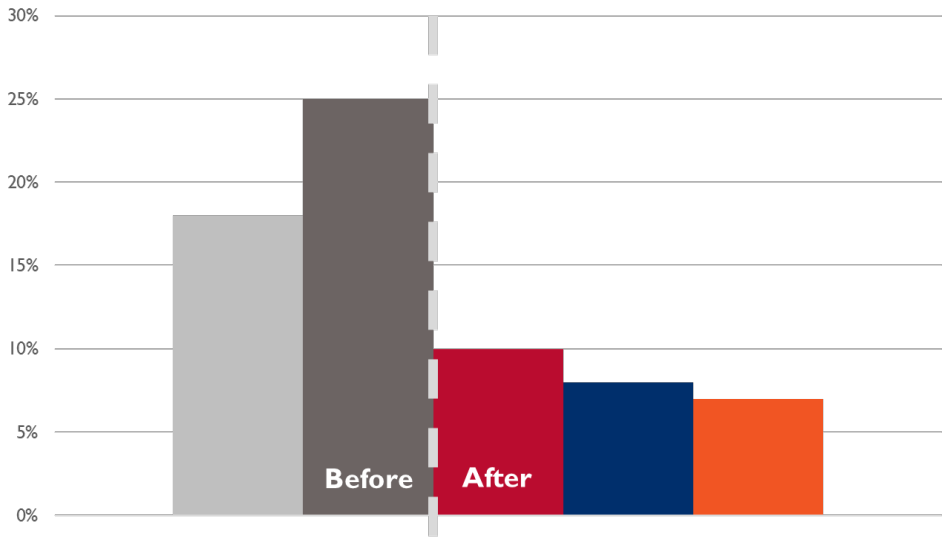


Exhibit 6: Monthly improvement in percentage of outstanding PODs before and after implementation



Workforce Development

GHSC-PSM strengthens public health supply-chain workforces through 22 field offices. These interventions build sustainable workforces through professionalization and systematic approaches to workforce development, putting countries on a path to self-reliance.

This quarter, GHSC-PSM delivered the Introduction to Supply Chain Management course in Pretoria, South Africa. Participants including 15 USAID staff members from 12 countries, are now equipped with the skills needed to better engage in supply-chain management activities in their respective countries.

The project also released the third *Supply Chain Management Resource Digest* through the International Association of Public Health Logisticians. The digest provides a range of resources that support the journey to self-reliance, including tools, web resources, reports, journal articles, open editorials, case studies and videos on improving supply chains and insights from the private sector.

In **Pakistan**, the project, with engagement from district MOH offices, reviewed human resource systems within the FP/RH supply chain in the districts of Swat and Charsaddar. Results are being used to develop a three- to five-year human resources strategy to improve supply-chain management workforce performance in these districts.

Also in **Pakistan**, GHSC-PSM facilitated a meeting between three universities where the project is advocating to sustain supply-chain management pre-service education. After GHSC-PSM's initial curriculum investments, the University of Health Sciences in Lahore has modified the three-credit supply-chain management course to meet training needs identified in the private pharmaceutical sector and humanitarian supply-chain management sector, with important results (see box).

A Long-Term, Self-Sustaining Solution to Building Supply-Chain Capacity

By expanding the supply-chain management training curriculum to meet the needs of the private and humanitarian sectors, the University of Health Sciences in Lahore is generating additional income for the university. This allows the university to sustain its engagement in supply-chain management education, reducing the need for further USAID support.

Management Information Systems

GHSC-PSM strengthened country supply-chain information systems through 32 field offices. Although at different levels of supply-chain maturity, these countries are on a path to developing end-to-end data visibility, with data-driven mechanisms to support evidence-based decision making.

In **Zimbabwe**, managing risks to the health commodity supply chains across multiple programs has been a daunting task requiring significant time from the Ministry of Health and Child Care (MOHCC) and its partners. In Q3, GHSC-PSM launched an early warning system that aggregates data from multiple databases into a single dataset to show commodity supply pipelines. The tool produces graphs and heatmaps that highlight stock risks by health area and product type, with deeper analysis available at the click of a button. MOHCC staff and partners used the tool to present supply-chain risks to partners during the annual quantification and forecasting exercise. For example, the system highlighted a risk arising from future unfunded National Aids Council ARV shipments, which increased awareness of the urgency of the situation. With this early warning, USAID expedited approval for GHSC-PSM to procure an additional 368,235 90-tablet bottles of TLD and 86,765 30-tablet bottles of dolutegravir using $7.1 million in core funds from USAID in Washington to help cover the gap.

Nepal's eLMIS was launched in 2018 and now serves as the platform where district-level staff enter and compile quarterly paper-based reports to provide an overview of stock status in the country. Before switching to eLMIS, there was a seven-month lag in getting logistics information, causing challenges for decision making, planning and forecasting. Now, with entry of the reports possible as soon as they reach the district level, the eLMIS has reduced the lag time by half (now 2–4 months) in less than a year. Encouraged by this rapid transformation, the Ministry of Health and Population has conducted trainings at the subdistrict level on how to enter paper-based health facility reports in eLMIS, making local governments self-reliant in operating the eLMIS. The ministry aims to move from quarterly to monthly eLMIS inputs to provide better, more timely visibility into all of Nepal's facilities.

Governance, Financing and Leadership

With GHSC-PSM support, countries achieve a responsive health supply-chain system led by a strong team with managerial capacity, institutionalized checks and balances, robust governance oversight, open civil society involvement, and cost-effective and transparent financing mechanisms. GHSC-PSM strengthens governance, financing and leadership through 18 field offices.

The **Guatemala** MOH Logistics Management Unit requested GHSC-PSM's assistance in developing a standard operating procedure manual for the central medical store to guide best practices. GHSC-PSM collaborated with key Logistics Management Unit staff, the MOH Administrative Department, and the central medical store to prepare the manual. The manual, now approved by the MOH, outlines specific points of contact and procedures for warehouse management, streamlines operations, emphasizes best practices within the central medical store, serves as a learning platform and template to train new staff, and, in general, supports the MOH's journey to self-reliance. The standardization of practices builds an operational foundation that is vital to ensuring cost-effective management of the central medical store and to safeguarding the quality of the medicines that pass through it en route to health facilities. Setting an operational standard and an expectation of operational excellence will catalyze local planning, financing and the country's ability to address its own development challenges.

In **Ethiopia**, GHSC-PSM supported the Dire Dawa City Administration Regional Health Bureau to develop, enact, advocate and disseminate an indemnity directive calling for implementation of auditable pharmaceutical transaction and services (APTS) at health facilities. The indemnity directive helps mitigate

risks associated with discrepancies, unintended losses and errors that occur during pharmaceutical transactions at dispensaries and stores, protecting professionals from having to pay for any losses out of their own pockets. The directive allows dispensers and storekeepers to pay and accumulate a monthly indemnity allowance that could compensate for any unintended losses that are identified during annual audits. Based on the directive, the city government allocated budget and deployed auditors to check financial and pharmaceutical transactions and to supervise the proper implementation of APTS, such as inventory, wastage and transaction management. Implementation of the indemnity policy created an enabling environment for APTS and is motivating staff; building confidence, transparency, accountability and improved productivity; and enhancing availability of pharmaceuticals and customer satisfaction.

GHSC-PSM provided technical assistance to the Ministry of Health and Social Services in **Namibia** to allocate the national pharmaceutical budget to the country's 14 regions based on need, with the aim of improving equity and accountability at the district level. For the first time, districts will now be required to control their pharmaceutical spending within the allocated budget and provide justification for additional money should they exhaust the budget allocation. The budget allocations were made using a needs-based approach, developed through consensus during a workshop in April. The 45 participants included regional health directors, chief and senior medical officers, regional accountants, regional pharmacists and senior managers from the central medical stores and the national-level Division of Pharmaceutical Services. Workshop participants used six parameters to construct a needs-based budget allocation formula: population, number of PLHIV, outpatient department attendance statistics, the poverty index, number of health facilities, and prevalence of noncommunicable diseases. Significant weight was given to the number of PLHIV because HIV and associated illnesses remain the greatest causes of morbidity and mortality in Namibia and the procurement of ARVs consumed approximately 40 percent of the pharmaceutical budget in FY 2018/19.

GHSC-PSM, in collaboration with key stakeholders, continues to provide technical assistance to the MOH/**Ghana** Health Service-established coordination committees to facilitate supply-chain coordination and oversee recommendations affecting commodity availability at the regional level. In May and June, GHSC-PSM supported the Regional Level Supply Chain Technical Working Group meetings in the Central, Greater Accra and Upper East regions. Participants discussed the development of last-mile distribution sustainability plans and implementation challenges, staff behavior underlying data availability challenges, and the need for continuous collaboration between regional leadership and program coordinators to ensure commodity availability. GHSC-PSM continues to provide relevant region-specific supply-chain analytics and identify issues to guide decision-making at the regional level and is helping regions review last-mile distribution implementation challenges and develop sustainability plans.

In **Sierra Leone,** GHSC-PSM helped develop an emergency supply-chain playbook that will serve as a roadmap to quickly assess and distribute resources, essential medicines and other health commodities during a public health outbreak. The project also helped form an emergency supply-chain committee to maintain the playbook and activate it during an emergency. In Q3, the project held successful desktop simulation meetings to strengthen stakeholder engagement and coordination, and overall strengthen the capacity for health system readiness to send and receive medical and non-medical supplies during a public health emergency.

Forecasting and Supply Planning

GHSC-PSM continues to provide forecasting and supply planning (FASP) support through 34 field offices to help institutionalize processes so countries move from relying on external technical support to developing their own fully integrated FASP capabilities as part of the journey to self-reliance.

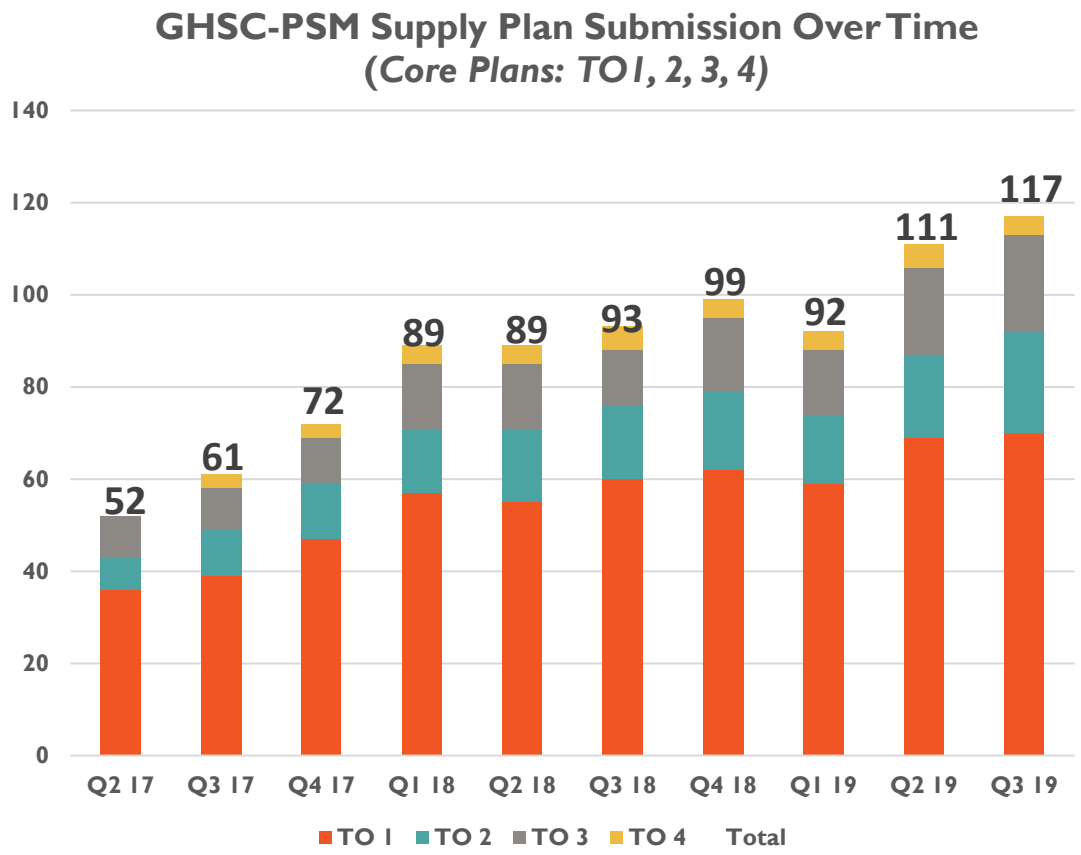
Supply plans

Countries continued to increase the number of supply plans that they update and submit to GHSC-PSM. This quarter, GHSC-PSM received 117 supply plans, including for new product categories like medicines for opportunistic infections and TB. Supply planning, as promoted by the project, has clearly taken hold (see box).

Supply Planning: Now a Well-entrenched Best Practice

Within the core plan categories, countries submitted 117 supply plans. This is **nearly double the number submitted two years ago** in Q3 2017. This increase reflects increased utilization by countries and programs of this endorsed practice for commodity planning, positioning countries to move closer to uninterrupted access to health commodities. Additionally, PMI required supply plans from all of its countries, resulting in a 130 percent increase in supply plan submissions between Q3 2017 (10 countries) and Q3 2019 (23 countries). The plans provide valuable visibility to the GHSC-PSM global supply chain and insight into global market demand for commodities.

Exhibit 7: GHSC-PSM Supply Plan Submissions Over Time



GHSC-PSM has finalized a supply plan review automation tool that flags data quality issues and provides tactical feedback based on country planning and global supply-chain considerations. As a result, for the second quarter in a row, GHSC-PSM could conduct and share technical reviews of 100 percent of the plans submitted in the PipeLine tool format.

FASP request for proposal

GHSC-PSM is managing a solicitation to develop a modernized, cloud-based supply planning solution. In Q3, the request for proposal closed and the project initiated technical review of the bids.

Procurement

Procurement of pharmaceuticals and medical supplies accounts for as much as 40–60 percent of health system expenditures in low- and middle-income countries. GHSC-PSM helps countries analyze the enabling environment for procurement at the policy and institutional levels, improve procurement efficiencies and reduce procurement delays. The project provides procurement systems strengthening through 32 field offices.

GHSC-PSM delivered a Contract Management course for 20 staff of the central medical stores in Botswana in cooperation with the International Law Institute, affiliated with Georgetown University. This five-day course addressed: (a) understanding contract management, (b) scope of contract management, (c) types of contracts, (d) implementation of contracts, and (e) evaluating performance and supplier relationship management. The course theme was to evaluate risks and to learn to assess, manage and solve complex problems in all phases of the procurement cycle. The course received positive feedback from Botswana's central medical stores manager (see box).

> "I would like to extend my appreciation for your kind support to CMS and me. I appreciate you, your leadership and organization for the continual support your render to us, especially in the recent training on Contract Management you provided to our CMS Team. Indeed, this is a great achievement for us. Thank you for your support now and in the future, on behalf of myself, the Ministry and the Government. We applaud you, GHSC-PSM and USAID, for your generous assistance. Thank you."
>
> *Keletso Israel*
> *Manager of Botswana Central Medical Stores*

Global Standards and Traceability

In May 2019, GHSC-PSM worked in **Zambia** to raise awareness and advocate for GS1 standards in the public and private sectors and to establish a national coordinating committee to govern implementation of standards across the health sector. The project developed terms of reference for a Global Standards and Traceability Subcommittee to the Procurement and Supply Management Technical Working Group. This subcommittee will coordinate a National Traceability Vision and Strategy Workshop, to be hosted by the MOH and the Zambia Medicines Regulatory Authority, with support from GHSC-PSM in July 2019.

In June 2019, the Minister of Health in **Rwanda** endorsed the Rwanda National Vision and Strategy for Pharmaceutical Traceability Leveraging GS1 Global Standards, which was developed with support from GHSC-PSM. Building off this momentum, GHSC-PSM supported the Rwanda Food and Drug Authority in designing Rwanda's traceability model to enable better supply-chain data visibility and reduce the presence of substandard and falsified medicines in that country. With preliminary consensus to implement a full track-and-trace model in a centralized system, GHSC-PSM will continue to support the MOH and Food and Drug Authority in Rwanda to develop a five-year costed implementation plan.

In June 2019, GHSC-PSM supported the National Agency for Food and Drug Administration and Control and the Federal Ministry of Health in **Nigeria** in developing a vision, strategy, and roadmap for implementing GS1 standards in support of pharmaceutical traceability. More than 100 participants from the public and private sectors, including USAID, the Global Fund, the Nigeria Customs Service, pharmacists, manufacturers, wholesalers, distributors, and solution providers from the Mobile Authentication Service program worked together to develop a strategy document. The event successfully brought together stakeholders from across the health sector to establish an achievable future vision and co-create the path to get there.

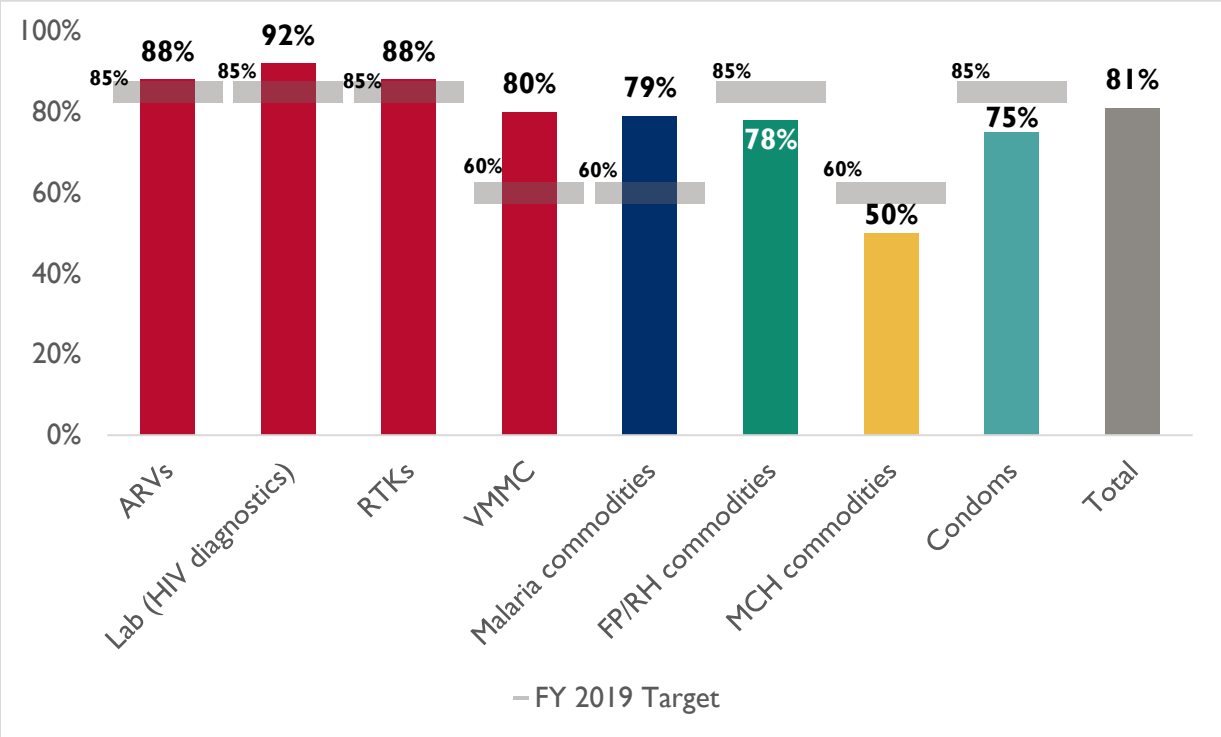
C2b. Project Performance

GHSC-PSM collects and analyzes data on a variety of indicators of national supply-chain system health to understand the environments in which we operate and to help us calibrate our work. These indicators also help establish priorities for our health supply-chain systems-strengthening support and, over time, will allow us to assess the outcomes of our technical assistance. Values for these indicators are provided in Annex A. To facilitate understanding of progress in each country, health supply-chain systems-strengthening indicators are presented country by country and include important contextual information for each country. Dashboards with these country-specific indicators are made available for GHSC-PSM field offices to explore with in-country stakeholders.

Quarterly Supply Plan Updates

In Exhibit 8, we present results for one indicator—percentage of countries conducting quarterly supply plan updates—that is critical to ensuring procurements are planned well ahead so that adequate stock levels can be maintained in the supply chains that we support.

Exhibit 8. Percentage of Required Supply Plans Submitted During Q3 by Commodity Group



Under the quantification paradigm supported by GHSC-PSM, supply plans take a regularly updated, forward-looking view of demand for 18 months. This **comprehensive, systematic and long-term approach to supply planning** provides visibility into monthly demand even if a single quarterly update is not submitted.

Countries develop and submit to GHSC-PSM supply plans for up to eight commodity groups. Supply plans are the source of country-level procurements, based on projections of consumption and inventory. For Q3, GHSC-PSM received 117 supply plans from 28 countries, including 76 required plans.[15] The team has reviewed and provided technical feedback on 55 supply plans (including every plan submitted in the PipeLine tool format), with additional reviews ongoing for late submissions.

GHSC-PSM monitors supply plans quarterly to identify common errors and omissions across countries or commodity categories, to assess results from earlier improvement efforts, and to identify areas for additional guidance and mentoring. The quality of the plans is assessed against 14 criteria, with the reviews generating actionable recommendations for improvement. The supply plan reviews identify issues with future orders, allowing the field offices to take pre-emptive actions to minimize the impact.

Capacity Building

The number of people trained provides a basic illustration of where the project is focusing its capacity-building resources and where it might expect related supply-chain outcomes to improve. A high number of individuals were trained in Q3, with a total of 5,263 trainees (2,562 women and 2,701 men).

Most trainings were cross-cutting, meaning they addressed topics relevant to multiple health areas. By funding source, 43 percent were trained with HIV/AIDS funding; 21 percent with malaria funding; 21 percent with FP/RH funding; and 15 percent with MNCH funding. Trainings focused on warehousing and inventory management, LMIS, governance and finance, transportation and distribution, and human resources capacity development.

[15] Some supply plans that GHSC-PSM receives are not required because GHSC-PSM does not have a presence in the country or because GHSC-PSM does not procure the items covered by those plans. These additional plans nonetheless provide the project with insight on the market size and scope for various commodities and can be shared with global stakeholders.

C3. Global Collaboration

GHSC-PSM **hosted the first three meetings of the TraceNet Working Group** to develop a GS1-based identification, labeling and data exchange procurement requirement for LLINs.

GHSC-PSM continued to **participate actively in global fora**, sharing data and promoting new approaches.

The project **shared packaging rationalization research findings with USAID and UNFPA** and discussed potential areas for alignment.

GHSC-PSM's global collaboration in Q3 focused on strategic engagement, market dynamics and other research, awareness and advocacy efforts. The scale, scope and complexity of managing a global supply chain require us to collaborate with many global and local partners to ensure the availability of medicines and health commodities. By integrating our work across health sectors and sharing information, resources, activities and capabilities, we can achieve together what we could never achieve alone.

Strategic Engagement

As described throughout this report, GHSC-PSM engages actively with other global players to promote the availability of medicines and commodities. We do so by providing supply-chain expertise to important global fora, working with global partners to allocate scarce supply, promoting harmonization of standards and practices, and working to manage commodity stock information as a global good. Our contributions are recapped below.

Global Standards and Traceability

In January 2018, GHSC-PSM implemented a new procurement requirement for suppliers of pharmaceuticals, medical devices, laboratory reagents, and sterile kits to identify and label their commodities in accordance with GS1 global standards for health care. The requirement also includes exchange of product master data through the GS1 Global Data Synchronization Network™ (GDSN®). To give suppliers the time needed to make necessary investments for compliance, the requirement has a phased implementation approach, with the first phase being mandated by December 30, 2018.

In Phase 1, suppliers need to submit the Global Location Numbers (GLNs) that identify their business entities and Global Trade Item Numbers (GTINs) that identify their items and various levels of packaging. They also need to label the tertiary pack trade item with a barcode that encodes the GTIN, batch/lot and expiration date. At the end of Q3, GHSC-PSM has received GLNs for 52 percent of in-

scope suppliers and GTINs for 54 percent of in-scope items and confirmed that 43 percent of in-scope items comply with the tertiary pack labeling requirement.

In Phase 2, suppliers need to submit master data for their products through the GDSN. At the end of Q3, GHSC-PSM synchronized data through the GDSN with six suppliers, covering a total of 24 trade items across all task orders, including ARVs, essential medicines, laboratory reagents, VMMC kits, malaria pharmaceuticals, and intrauterine devices.

GHSC-PSM is partnering with GS1 to develop a formal training and certification program on GS1 for project staff. The free, online, interactive program offers basic and intermediate certifications covering GS1's system of global standards for product identification, data capture, and data exchange tailored with a specific focus on its applications in the health-care context. In April and May, the program began a pilot phase with a 10-person group made up of individuals from various project teams. Feedback from the pilot launch was used to finetune the program before moving forward with plans to offer the training to all relevant project staff in August 2019.

Basic Certification

- Intro to GS1
- ID Keys (GTIN, GLN, SSCC)
- Barcodes
- GS1 EDI
- GDSN
- Data Quality
- Electronic Product Code Information Services
- Transport & Logistics

Intermediate Certification

- Intro to GS1 Application Identifiers
- GS1 Data Matrix
- GS1 128
- Traceability
- GS1 Global Traceability Competency Framework
- GS1 Value Proposition

Supply-Chain Expertise Provided to Important Global Fora

GHSC-PSM represents the supply-chain point of view in key global meetings to ensure donors and governments consider the supply chain in program planning. This helps them get timely access to the commodities their programs need. Participating in these meetings also helps GHSC-PSM to stay current with emerging trends and requirements so we are ready to respond to global health commodity needs. Specifically, this quarter, as described in Sections B1 through C1, GHSC-PSM:

- Hosted the first three meetings of the TraceNet Working Group to develop a GS1-based identification, labeling and data exchange procurement requirement for LLINs. GHSC-PSM coordinates the group, which is co-chaired by USAID and the Global Fund, with participation from several project country offices, more than 10 LLIN manufacturers, and GS1.
- Continued to collaborate with the Global Fund to require that all suppliers with long-term agreements to provide finished products containing artemisinin use pre-approved suppliers of the ingredient.
- With UNFPA
    - Shared findings from a packaging rationalization study and discussed points of alignment between USAID and UNFPA.
    - Coordinated closely to help UNFPA diversify its condom supplier base
    - Coordinated to capture and manage data on registration of FP commodities
- Worked with the CARhs Group on almost 20 actions to manage imbalances of FP stocks.
- Continued developing and implementing a new strategy for the RHSC's Systems Strengthening Working Group, which we chair.

- Continued to support the Global FP VAN and participated in the second-phase planning meeting for the initiative.
- Participated in the Quality Reproductive Health Medicines and Contraceptive Devices procurers meeting in Copenhagen.
- Reviewed the 2019–2020 global demand for implants and injectables and developed strategies for product allocations across countries at the CSP annual meeting.
- Participated in the levonorgestrel-releasing intrauterine system coordination meeting to share market insights.
- Spearheaded development of a new newborn and child health commodities working group on behalf of USAID and UNICEF.
- Participated on a panel on the quality of medicines and investing in women's and girl's health organized by the United States Pharmacopeia and Devex at the Women Deliver 2019 conference in Vancouver.

Research and Innovation

GHSC-PSM is engaged in leading-edge research that helps shape global markets to meet countries' needs for medicines and commodities and that explores better ways to get these products to the people who need them.

The project continued a robust program of research into the health commodity marketplace, with significant progress this quarter.

GHSC-PSM attends CPhI China convention

In June, GHSC-PSM attended CPhI in Shanghai, the leading pharmaceutical ingredients trade show in the Asia-Pacific region. The event offered an opportunity to meet with suppliers of key starting materials, intermediates and APIs for medicines the project procures, and to gain a deep understanding of the underlying dynamics in our sector of the pharmaceutical market. Also, the team met with representatives from partners such as Medicines for All and Clinton Health Access Initiative to confer on strategic market information.

The key takeaway from CPhI is that China will continue stringent oversight of environmental and safety policies related to the chemical and pharmaceutical manufacturing industries. Going forward, supply disruptions are possible; however, final formulation manufacturers are doing what they can to mitigate the associated unpredictability of supply. Meanwhile, GHSC-PSM will continue to work with suppliers along the supply chain to understand, and, where possible, manage product-specific opportunities and issues. Also, the project will verify all claims of the impact of China's regulations on the ability of final formulation manufacturers to secure supply.

Collaboration with Other USAID GHSC Projects

GHSC-PSM is a member of the GHSC program family and interacts regularly with the other GHSC projects. Below we summarize examples of collaboration with other GHSC projects in Q3.

- In May, GHSC-PSM led the facilitation of WAHO's Early Warning System Workshop in Lagos, Nigeria, in coordination with WAHO and GHSC-TA.

- With GHSC-QA, the project highlighted progress in the USAID-UNFPA joint registration tool at the Quality Reproductive Health Medicines and Contraceptive Devices procurers meeting.
- The project worked with GHSC-TA and other stakeholders in DRC to seek ways to reduce waiver lead time. Project staff also trained GHSC-TA team members on GHSC-PSM information systems to facilitate their use of these tools.
- GHSC-PSM has been working with USAID's Bureau for Global Health Tuberculosis Division and GHSC-QA to finalize a short-term plan to increase knowledge around the availability of isoniazid for TPT.
- The project is collaborating with GHSC-QA to review the eligibility of local vendors and to establish long-term agreements with vendors who meet the required quality, performance and competitiveness standards.
- GHSC-PSM coordinated with GHSC-QA on a three-day essential medicines supplier summit at which the two projects had one-on-one meetings with suppliers to discuss on-time performance, quality and the upcoming solicitation for essential medicines.
- The project continued to collect and share central- and regional-level data on stocks of RTKs with the GHSC-RTK project.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

Current Reporting Period

2019-Q3

Delivery Impact to Date

Number of ACT treatments delivered

187,301,905

Number of Couple Years Protection delivered

50,541,563

Person-years of ARV treatment delivered

6,258,787

Global Supply Chain M&E Indicator Performance

FY2019 Quarter 3, April - June 2019

Delivery (OTIF, OTD and Backlog)	Cycle Time	Quality Assurance (TO2 only)	Procurement	Registration
Supply Plan Error	Forecast Error	Supply Plan Submissions	Warehousing	Vendor Performance

HIV Complete Quarterly Results (TO1)	Malaria Complete Quarterly Results (TO2)	FP/RH Complete Quarterly Results (TO3)	MNCH & Zika Complete Quarterly Results (TO4)

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE CDC

U.S. President's Malaria Initiative

Fiscal Year 2019 Key Performance Overview - IDIQ

		FY 2019 Q1	FY 2019 Q2	FY 2019 Q3	FY 2019 Q4	FY 2019
Reporting Period (Quarter) Start Date		10/01/18	01/01/19	04/01/19	07/01/19	10/01/18
Reporting Period (Quarter) End Date		12/31/18	03/31/19	06/30/19	09/30/19	09/30/19
Global Supply Chain						
A1a.	Percentage of line items delivered on time and in full, within the minimum delivery window	84%	83%	85%		
A1b.	Percentage of line items delivered on time, within the minimum delivery window	85%	88%	92%		
A3.	Cycle time (average) – # days per shipment	258	261	273		
A4.	Inventory turns (average number of times inventory cycles through GHSC-PSM-controlled global facilities) – ratio	*Annual Indicator*				
A5.	Total landed cost (logistics costs)	16.9%		*Semiannual Indicator*		
A13.	Percentage of batches of product showing nonconformity (out of specification percentage)	0.0%	0.0%	0.0%		

Important: Key performance metrics on this page are intended to provide an overall snapshot of the project's performance. They may conceal nuances of TO and/or country performance and must be interpreted in light of individual TO and/or country performance of more granular data.

Fiscal Year 2019 Key Performance Overview - IDIQ

			FY 2019 Q1	FY 2019 Q2	FY 2019 Q3	FY 2019 Q4	FY 2019
Reporting Period (Quarter) Start Date			10/01/18	01/01/19	04/01/19	07/01/19	10/01/18
Reporting Period (Quarter) End Date			12/31/18	03/31/19	06/30/19	09/30/19	09/30/19
In Country							
B1.	Stockout rate at SDPs		13%	12%	14%		
B2.	Percentage of stock status observations in storage sites where commodities are stocked according to plan, by level in supply system		25%	24%	26%		
B3.	SDP reporting rate to the logistics management information system (LMIS)		76%	77%	78%		
C1.	Number of people trained – #	TO-Specific Trainings Combined	1,143	2,281	2,190		
		Cross-TO Trainings	456	948	3,073		
		All Trainings (TO-Specific & Cross-TO)	1,599	3,229	5,263		

Important: Key performance metrics on this page are intended to provide an overall snapshot of the project's performance. They may conceal nuances of TO and/or country performance and must be interpreted in light of individual TO and/or country performance of more granular data.

Fiscal Year 2019 Key Performance Overview By Task Order

Indicator		IDIQ FY19 Target	Task Order 1 HIV/AIDS					Task Order 2 Malaria					Task Order 3 PRH					Task Order 4 – MNCH				
			FY19 Target	2018 Q4	2019 Q1	2019 Q2	2019 Q3	FY19 Target	2018 Q4	2019 Q1	2019 Q2	2019 Q3	FY19 Target	2018 Q4	2019 Q1	2019 Q2	2019 Q3	FY19 Target	2018 Q4	2019 Q1	2019 Q2	2019 Q3
Global Supply Chain																						
A1a	Percentage of line items delivered on time and in full, within the minimum delivery window (*Total number of line items delivered*)	80%	80%	82% 1187	82% 912	81% 1062	85% 1114	80%	65% 195	89% 188	92% 202	88% 270	80%	83% 54	83% 46	91% 44	93% 92	80%	63% 32	87% 146	81% 330	83% 245
A1b	Percentage of line items delivered on time within the minimum delivery window (*Total number of ADDs in the quarter*)	80%	80%	87% 1144	82% 1007	89% 1003	92% 1085	80%	88% 156	94% 189	93% 203	97% 264	80%	95% 43	92% 48	85% 46	100% 93	80%	68% 31	97% 133	81% 332	85% 241
A3	Cycle time (average) – days per line item delivered	NA	227	228	233	204	219	311	309	328	341	324	RDC: 232 DD: 272	RDC: 221 DD: 262	RDC 272 DD: 353	RDC 254 DD: 293	RDC 314 DD: 238	216	225	308	397	454
A4	Inventory turns – ratio	NA	4	6.2	Annual			3	4.6	Annual			3	3.3	Annual			NA	*No inventory held*			

A2: See Task Order 2 QA-specific indicators below. This indicator is not reported for TO1, TO3, and TO4 because QA processes for these task orders are managed by the GHSC-QA project.
Fiscal Year targets represent desired indicator result aggregated over the full fiscal year.

Indicator		IDIQ FY19 Target	Task Order 1 HIV/AIDS					Task Order 2 Malaria					Task Order 3 PRH					Task Order 4 – MNCH				
			FY19 Target	2018 Q4	2019 Q1	2019 Q2	2019 Q3	FY19 Target	2018 Q4	2019 Q1	2019 Q2	2019 Q3	FY19 Target	2018 Q4	2019 Q1	2019 Q2	2019 Q3	FY19 Target	2018 Q4	2019 Q1	2019 Q2	2019 Q3
A5	Total landed cost (logistics costs)	11%	8%	9.1%	9.4%		Semi annual	18%	21.2 %	35.7%		Semi annual	21%	12.5 %	15.9%		Semi annual	21%	20.6 %	15.6%		Semi annual
A6a A6b	Absolute percent supply plan error, with variants annual absolute percent error and supply plan bias *And* Absolute percent forecast error, with variants annual absolute percent error and forecast bias	*See Forecast and Supply Plan Performance pages for detailed indicator results*																				
A7	Temporary waiver percentage	NA	NA	*Not required for TO1 per M&E Plan*				NA	NA	NA	5%	10%	NA	NA	NA	7%	3%	NA	*Not required for TO4 per M&E Plan*			
A8	Average percentage of shelf life remaining for warehoused commodities, weighted by the value of each commodity's stock	NA	78%	84%	81%	82%	80%	70%	70%	68%	66%	69%	78%	86%	85%	86%	83%	NA	*No inventory held*			
A10	Percentage of product procured using a framework contract (framework contract percentage)	NA	77%	85%	72%	71%	81%	39%	40%	60%	68%	19%	95%	100%	100%	100 %	100 %	90%	100%	98%	61%	88%
A16	Percentage of backlogged line	<5%	<5%	2%	4%	2%	2%	<5%	1%	1%	0.3%	1%	<5%	0.2%	0%	2%	0%	<5%	0%	1%	0.6%	2%

A9, A11, A12: These indicators have been removed from the GHSC-PSM M&E Plan with approval from USAID.
A13, A14, A15: See Task Order 2-specific indicator results below. These indicators are not reported for TO1, TO3, and TO4 because QA processes for these task orders are managed by the GHSC-QA project.
Fiscal Year targets represent desired indicator result aggregated over the full fiscal year.

Indicator		Task Order 2 Malaria				
		FY19 Target	2018 Q4	2019 Q1	2019 Q2	2019 Q3
A2	Percentage of QA processes completed within the total estimated QA lead times	80%	83%	84%	80%	74%
A13	Percentage of batches of product for which the final result is showing nonconformity (out of specification percentage)	<1%	0.0%	0.0%	0.0%	0.0%
A14b	Average vendor rating score – QA labs	NA	76%	79%	74%	80%
A15	Percentage of QA investigation reports submitted within 30 calendar days of outcome determination (QA investigation report submission)	90%	100%	100%		Semiannual
Indicator		Crosscutting				
A14a	Average vendor rating score – Suppliers	NA	NA	75%	76%	74%
A14c	Average vendor rating score – Freight Forwarders	NA	79%	82%	86%	84%
C4	Percentage of required files submitted to BI&A in the reporting period	NA	84%	84%	84%	NA
C5	Percentage of required files timely submitted to BI&A in the reporting period	NA	84%	84%	81%	NA
Indicator		Task Order 1 HIV/AIDS				
C6	Average percent variance between GHSC-PSM ARTMIS and GHSC-BI&A calculations of key supply chain indicators for Task Order 1	NA	NA	0.2%	0.3%	NA

Fiscal Year targets represent desired indicator result aggregated over the full fiscal year. For certain performance indicators GHSC-PSM and USAID have agreed that targets are not appropriate, either because performance is not fully within project control, to avoid unwanted incentives, or because there is insufficient data to set targets at this time. For more detail, please see Annex C of the GHSC-PSM Monitoring and Evaluation Plan (11 Feb 2019).

Indicator		Task Order 1 HIV/AIDS				Task Order 2 Malaria				Task Order 3 PRH				Task Order 4 – MNCH				Crosscutting			
		2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3
In country Context, Performance, and Sustainability																					
B1	Stockout rate at SDPs	8%	8%	10%	11%	18%	13%	12%	13%	18%	15%	13%	15%	NA				NA			
B2	Percentage of stock status observations in storage sites where commodities are stocked according to plan, by level in supply system	35%	35%	36%	37%	25%	25%	22%	26%	16%	19%	16%	18%	NA				NA			
B3	SDP reporting rate to the logistics management information system (LMIS)	89%	96%	88%	84%	91%	90%	87%	76%	69%	68%	71%	78%	NA	52%	63%	71%	NA			
B4	Average rating of in-country data confidence at the central, subnational, and SDP levels – (0-9 scale)	6.2	Annual			6.5	Annual			6.7	Annual			6.7	Annual			NA			
B5	Percentage of required annual forecasts conducted	*See country-specific indicator pages for detailed data for this indicator (reported annually).*																			
B6	Percentage of required supply plans submitted to GHSC-PSM during the quarter	*See Supply Plan Submission and country-specific indicator pages for detailed data for this indicator.*																			

Targets for in-country performance indicators are set at the country level. Targets are not required for context indicators.

Indicator		Task Order 1 HIV/AIDS				Task Order 2 Malaria				Task Order 3 PRH				Task Order 4 – MNCH				Crosscutting			
		2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3
In country Context, Performance, and Sustainability																					
B7	Percentage of total spent or budgeted on procurement of commodities for public sector services by funding source	*See country-specific indicator pages for detailed data for this indicator (reported annually).*																			
B8	Percentage of initially GHSC-PSM-supported supply chain functions carried out by national authorities without external technical assistance	*This indicator is being redefined in consultation with USAID during FY2019, with the intent of reporting results in the FY2019 fourth quarter/annual report.*																			
B9	Supply chain technical staff turnover rate	*See country-specific indicator pages for detailed data for this indicator (reported annually).*																			
B10	Percentage of countries that have a functional logistics coordination mechanism in place	85%	Annual			82%	Annual			63%	Annual			63%	Annual			NA			
B11	Percentage of leadership positions in supply chain management that are held by women	60%	Annual			42%	Annual			18%	Annual			7%	Annual			26%	Annual		

Targets for in-country performance indicators are set at the country level. Targets are not required for context indicators.

Indicator		Task Order 1 HIV/AIDS				Task Order 2 Malaria				Task Order 3 PRH				Task Order 4 – MNCH				Crosscutting			
		2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3
In country Context, Performance, and Sustainability																					
B12	Absolute percent consumption forecast error, with forecast bias variant	*See country-specific indicator pages for detailed data for this indicator (reported annually).*																			
C1	Number of innovations (including operations research studies) that were developed, implemented, or introduced and are related to the health commodity market or supply chain best practices	6	4	8	0	2	1	2	0	3	2	4	1	0	0	0	2	9	2	11	5
C2	Number of people trained	875	594	993	942	1,067	492	198	667	0	19	85	192	30	38	1,005	389	7,840	456	948	3,073
C7a	Percentage of product lost due to expiry while under GHSC-PSM control	*See Warehouse Performance and country-specific indicator pages for detailed data for this indicator.*																			
C7b	Percentage of product lost due to theft, damage, or other causes while under GHSC-PSM control	*See 3PL and Commodity Vendor Performance and country-specific indicators pages for detailed data for this indicator.*																			

Targets for in-country performance indicators are set at the country level. Targets are not required for context indicators.
C3: This indicator has been removed from the GHSC-PSM M&E Plan with approval from USAID. C4, C5, and C6, are reported in the Global Supply Chain section above.

Indicator		Task Order 1 HIV/AIDS				Task Order 2 Malaria				Task Order 3 PRH				Task Order 4 MNCH				Crosscutting			
		2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3
In country Context, Performance, and Sustainability																					
C8	Number of global advocacy engagements in support of improved availability of essential health commodities	4	2		Semi annual	1	4		Semi annual	4	9		Semi annual	0	0		Semi annual	4	6		Semi annual
C10	Percentage of GHSC-PSM-procured or supported molecular instruments that remained functional during the reporting period	74%	63%	69%	71%	NA				NA				NA				NA			
C11	Supply chain policies, regulations, strategies, or SOPs developed or updated with GHSC-PSM assistance	*See country-specific indicator pages for detailed narratives for this indicator.*																			

Targets for in-country performance indicators are set at the country level. Targets are not required for context indicators.
C9: This indicator has been removed from the GHSC-PSM M&E Plan with USAID approval.

Delivery Performance

Current Reporting Period

2019-Q3

A1a. On-time, In-Full Delivery

Task Order	Total # of Line Items Delivered	OTIF	OTIF Target
TO1	1,114	85%	80%
TO2	270	88%	80%
TO3	92	93%	80%
TO4	245	83%	80%
Total	**1,721**	**85%**	**80%**

A1b. On-time Delivery

Task Order	Total # of Line Items with ADDs in the quarter	OTD	OTD Target
TO1	1,085	92%	80%
TO2	264	97%	80%
TO3	93	100%	80%
TO4	241	85%	80%
Total	**1,683**	**92%**	**80%**

A16. Backlog Percentage

Task Order	Total # of line items with ADDs in the last 12 months	Backlog	Backlog target
TO1	4,279	1.5%	5%
TO2	813	1.1%	5%
TO3	236	0.0%	5%
TO4	742	1.5%	5%
Total	**6,070**	**1.4%**	**5%**

Analysis

Task Order 3 reached a milestone of 100% on time delivery this quarter, with 0 backlog remaining to be delivered. OTIF reached 93%, consistent with the previous quarter. Delivery volume was 92 line items, which was TO3's highest quarter of family planning-only deliveries. (The previous peak of 300+ line items in FY2018 Q2 included sizeable deliveries of Ebola commodities).

Task Order 2 saw its highest delivery volume this quarter, at 270 line items delivered. It also reached its highest OTD performance, at 97%. OTIF decreased slightly to 88%, still above the 80% target. Backlog increased to 1.1%, representing nine line items that were undelivered and late at the time of reporting. Of those, five have since arrived at port or have been delivered to the recipient.

Task Order 1 had strong delivery performance this quarter, with all indicators falling within or above targets. OTIF increased from the previous quarter to reach 85%. OTD also ticked slight up and reached 92% this quarter. The backlog percentage fell to its lowest level since we began measuring it in FY2018, falling to only 1.5%.

Deliveries under Task Order 4 fell in terms of line item volume from the previous quarter, although the project continues to deliver much greater volumes in FY2019 compared to the previous fiscal year, numbering hundreds rather than dozens of lines. OTIF and OTD both increased slightly from the previous quarter, reaching 83% and 85%, respectively. Backlog rose to 1.5%, or 11 line items that remined undelivered at the time of reporting. Shipments for these items are in process.

Data notes

See "Indicator Details" pages in this report for more information.

Quarterly indicator targets are effective beginning FY2018 Q4.

Line items are considered on time if they are delivered between 14 calendar days before and up to 7 calendar days after the agreed delivery date.

All male and female condom and lubricant deliveries are reported under TO1.

See next page for break down by product category

Delivery Performance

Current Reporting Period

2019-Q3

Task Order	A1a. OTIF rate		A1b. OTD rate		A16. Backlog percentage	
	OTIF	Total # of Line Items Delivered	OTD	Total # of Line Items with ADDs in the quarter	Backlog	Total # of line items with ADDs in the last 12 months
TO1	**85%**	**1,114**	**92%**	**1,085**	**1.5%**	**4,279**
Adult ARV	82%	114	94%	108	0.9%	437
Condoms	81%	81	81%	88	0.5%	207
Food and WASH					0.0%	1
HIV RTK					0.0%	3
Laboratory	86%	556	94%	540	1.6%	2,526
Other Non-Pharma	86%	140	86%	148	2.4%	422
Other Pharma	97%	62	98%	62	1.1%	270
Other RTK	50%	2	100%	1	0.0%	7
Pediatric ARV	89%	84	95%	84	1.3%	239
TB HIV	86%	7	100%	6	0.0%	15
Vehicles and other equipment	100%	1	50%	2	10.0%	10
VMMC	64%	67	87%	46	0.7%	142
TO2	**88%**	**270**	**97%**	**264**	**1.1%**	**813**
ACTs	97%	118	100%	118	1.1%	366
Laboratory	50%	4	100%	2	0.0%	16
LLINs	100%	25	100%	25	0.0%	143
mRDTs	65%	52	86%	51	2.0%	102
Other Non-Pharma	40%	5	67%	3	0.0%	10
Other Pharma	100%	4	100%	4	0.0%	11
Severe Malaria Meds	79%	19	94%	18	3.0%	99
SMC	95%	19	100%	19	0.0%	30
SP	96%	24	100%	24	0.0%	36

Task Order	A1a. OTIF rate		A1b. OTD rate		A16. Backlog percentage	
	OTIF	Total # of Line Items Delivered	OTD	Total # of Line Items with ADDs in the quarter	Backlog	Total # of line items with ADDs in the last 12 months
TO3	**93%**	**92**	**100%**	**93**	**0.0%**	**236**
All Other TO3 Products					0.0%	1
Combined Oral Contraceptives	100%	4	100%	7	0.0%	37
Copper-Bearing Intrauterine Devices	100%	13	100%	13	0.0%	25
Emergency Oral Contraceptives	100%	9	100%	9	0.0%	16
Implantable Contraceptives	100%	25	100%	25	0.0%	46
Injectable Contraceptives	89%	18	100%	19	0.0%	58
Other Non-Pharma	60%	10	100%	7	0.0%	24
Other Pharma					0.0%	1
Progestin Only Pills	100%	13	100%	13	0.0%	24
Standard Days Method					0.0%	4
TO4	**83%**	**245**	**85%**	**241**	**1.5%**	**742**
Food and WASH					0.0%	8
Laboratory	100%	8	100%	8	16.1%	62
Other Non-Pharma	82%	206	82%	206	0.4%	226
Other Pharma	81%	26	100%	22	0.0%	436
Other RTK	100%	2	100%	2	0.0%	5
TB HIV	100%	3	100%	3	0.0%	5

Data notes

See "Indicator Details" pages in this report for more information.

Quarterly indicator targets are effective beginning FY2018 Q4.

Line items are considered on time if they are delivered between 14 calendar days before and up to 7 calendar days after the agreed delivery date.

All male and female condom and lubricant deliveries are reported under TO1.

Cycle Time Performance

Current Reporting Period

2019-Q3

A3. Average overall cycle time

Task Order	# of line items delivered	Average Cycle Time	Cycle time target
TO1	1114	219	230
TO2	270	324	315
TO3	92	293	
TO4	245	454	220
Total	**1721**	**273**	**240**

A3. Average overall cycle time (with TO3 Targets)

Task Order	# of line items delivered	Average Cycle Time	Cycle time target
TO3	**92**	**293**	
Direct drop fulfillment	25	238	275
Warehouse fulfillment	67	314	235

See next page for break downs by process segment, product category, fulfillment channel, and transportation mode

Analysis

TO4 cycle times continue to be impacted by large orders shipping to DRC. Overall cycle time this quarter was 454 days. Much of this increase was due to the USAID approval process time, which rose from 15 days in Q2 to 94 days in Q3. This represents the time from Recipient Approval to USAID Approval. This long approval time applied to 181 line items under 9 ROs. Extra time was required for approval due to funding delays.

Overall TO3 cycle time increased to 293 days. Looking only at RDC shipments, the end-to-end cycle time averaged 314 days. This was driven almost entirely by long cycle times for deliveries to DRC. Two-thirds of TO3 distribution order line items went to DRC this quarter, lengthening the Delivery cycle time in particular. This is the first time TO3 has delivered to DRC, which is known to have longer cycle times, and all items of which were shipped by sea. On the direct drop side, cycle time decreased to 238 days, falling below the target of 275 days for the first time. This was achieved mainly though reductions in clarifications and sourcing time.

Overall cycle time increased slightly for TO1 this quarter, to 219 days. It is still within the target of 230 days or less. For direct drop line items, overall performance was 209 days. Sourcing, approval and PO processing times for these direct drop orders has remained consistent. For orders under FCA and EXW Incoterms, we saw improvements in logistics segments this quarter, with Pick Up times dropping from 34 to 27 days, and Delivery times shaving off a week, from 37 to 30 days. For warehouse fulfillments, cycle time increased to 256 days. RDC cycle times are generally longer than direct drop, due to lengthier periods between USAID approval and PO release. This may be due to long hold periods, while orders are finalized but inactive while they approach their ADD/RDD and final inventory allocation. Cycle time for logistics processes (Pick Up and Delivery) from the RDC also increased from the previous period, but this is likely due to an increase in ocean shipments (108 RDC line items shipped by sea in Q3, compared with only 33 in Q2).

Overall cycle time for TO2 fell slightly this quarter, from 341 to 324 days. Within process segments, average PO and DO processing time fell, while the time to manufacture and/or prepare orders and pick them up increased. Cycle time for direct drops, which represents the majority (66%) of TO2 orders, was 300 days, marking the third quarter that these direct drop deliveries have performed within the target of 315 days or less. These orders had earlier PO releases this quarter and slightly shorter delivery segments. Pick up times, which include QA process time in most cases, remain consistent around 74 days.

Overall cycle time for RDC shipments (including line items transiting through the RDCs) remained consistent as well, at 374 days. These orders tend to have longer DO processing times, as finalized orders are inactive while they await final stock allocation closer to their RDDs/ADDs. Delivery times are shorter for these items, as the majority are shipped by air.

Cycle times for the Pick Up and Deliver segments exclude any deliveries shipped under C and D Incoterms. These deliveries are handled by suppliers, meaning that Pick Up dates are not relevant or available. Due to the large line item volume of these types of orders for TO1, the Pick Up and Deliver segment data reported for TO1 direct drops represents only about 50% of all TO1 direct drops.

Cycle time for TO2 QA processes averaged 57 days from Actual GAD to QA complete date, an increase from the previous quarters.

Data notes

Quarterly indicator targets are effective beginning FY2018 Q4.

Overall cycle time is defined as the number of days between when a customer order is submitted to when the shipment is actually delivered to the customer, inclusive of the start/end days and all holds or other dwell times. The project is implementing new dwell tracking procedures, with the intent of reporting dwell-adjusted cycle time by FY2020.

Data on overall cycle start and end dates are complete for all line items delivered this quarter. However, internal milestone data may not be complete for some line items. In these cases, line items with incomplete data are excluded from the segment averages. For this reason, the sum of all segments may not be equal to the overall average per task order and fulfillment channel, especially in earlier reporting periods.

Cycle Time Performance

Current Reporting Period

2019-Q3

A3. Average overall cycle time by product group, fulfillment channel, and transportation mode (TO1, TO2, and TO3)

Fulfillment Channel	Direct Drop Fulfillment			Warehouse Fulfillment			**Total**
Task Order	Air	Land	Sea	Air	Land	Sea	
TO1	**203**	**200**	**294**	**214**	**252**	**284**	**219**
Adult ARV	272		284	201	221	361	**279**
Condoms	238	506	360	149		227	**288**
Laboratory	179	202	295				**191**
Other Non-Pharma	290	186	454				**216**
Other Pharma	220	230	239		279		**245**
Other RTK	276						**276**
Pediatric ARV	233		406	229	240	320	**247**
TB HIV	207		495	163			**242**
Vehicles and other equipment		139					**139**
VMMC	125	180	190	200		252	**206**
TO2	**308**	**230**	**282**	**375**	**287**		**324**
ACTs	331			305			**321**
Laboratory	365	204					**285**
LLINs		268	277				**277**
mRDTs	231		294	654			**297**
Other Non-Pharma	329	221	233				**245**
Other Pharma	326						**326**
Severe Malaria Meds	341				287		**338**
SMC				331			**331**
SP	303			487			**457**
TO3	**296**		**200**	**287**		**323**	**293**
Combined Oral Contraceptives				575		57	**446**
Copper-Bearing Intrauterine Devices				364		349	**354**
Emergency Oral Contraceptives	299						**299**
Implantable Contraceptives	269		357	118		292	**259**
Injectable Contraceptives			198	252		370	**315**
Other Non-Pharma			183			146	**179**
Progestin Only Pills				212		349	**307**

A3. Average overall cycle time by product group, fulfillment channel, and transportation mode (TO4)

Fulfillment Channel	Direct Drop Fulfillment			**Total**
Product Category	Air	Land	Sea	
Laboratory	410		420	**417**
Other Non-Pharma	122	114	465	**460**
Other Pharma	387		446	**428**
Other RTK	326			**326**
TB HIV			455	**455**
Total	**344**	**114**	**462**	**454**

Data notes

Data on overall cycle start and end dates are complete for all line items delivered this quarter. However, internal milestone data may not be complete for some line items. In these cases, line items with incomplete data are excluded from the segment averages. For this reason, the sum of all segments may not be equal to the overall average per task order and fulfillment channel, especially in earlier reporting periods.

Overall cycle time is defined as the number of days between when a customer order is submitted to when the shipment is actually delivered to the customer, inclusive of the start/end days and all holds or other dwell times. The project is implementing new dwell tracking procedures, with the intent of reporting dwell-adjusted cycle time by FY2020.

Quarterly indicator targets are effective beginning FY2018 Q4.

Average cycle times by process segment

Fulfillment channel	Clarify and Source	USAID Approval	Process PO/DO	Manufacture/Prepare and Pick Up Order	Manufacture	Pick Up	Deliver
Direct drop fulfillment	**54**	**21**	**41**		**82**	**58**	**45**
TO1	52	4	40		84	27	30
TO2	90	5	22		76	74	35
TO3	74	7	49		34	26	55
TO4	32	94	62		86	105	78
Warehouse fulfillment	**77**	**5**	**104**	**57**			**51**
TO1	53	5	103	45			48
TO2	109	2	157	70			34
TO3	112	6	36	77			82
Total	**59**	**17**	**55**	**105**			**47**

Quality Assurance Performance (TO2 only)

Current Reporting Period

2019-Q3

A2. QA processes completed within required lead times

Task Order	Total # of QA processes completed	% QA Processes On Time	A2 Target
TO2	**85**	**74%**	**80%**
ACTs	27	81%	80%
LLINs	14	100%	80%
mRDTs	15	100%	80%
Other Pharma	5	40%	80%
Severe Malaria Meds	18	56%	80%
SP	6	0%	80%

A13. Out-of-specification percentage

Task Order	Total # of batches tested	Out-of-specification percentage	A13 Target
TO2	**303**	**0.0%**	**1%**
ACTs	106	0.0%	1%
LLINs	26	0.0%	1%
mRDTs	22	0.0%	1%
Other Non-Pharma	0		1%
Other Pharma	31	0.0%	1%
Severe Malaria Meds	96	0.0%	1%
SP	22	0.0%	1%

Data notes

All QA activities for TO2 are conducted by GHSC-PSM. All QA activities for TO1, TO3, and TO4 are managed by the USAID GHSC-QA contract. GHSC-QA may be contacted for data related to these TOs.

Exceptional procedures outside of routine QA testing and clearance are excluded from indicator A2. This includes consignments requiring QA investigations, method transfers, non-PMI procurements, post-shipment quality control, and LLIN shipments requiring witnessing of loading and/or sealing of goods.

Quarterly indicator targets are effective beginning FY2018 Q4.

A15. QA investigation report submission

Task Order	# of reports due	Report submissions	A15 Target
TO2			
ACTs			
LLINs			
mRDTs			
Other Non-Pharma			
Other Pharma			
Severe Malaria Meds			
SMC			
SP			

Ref	Analysis
A02	This quarter, the percentage of QA processes completed within the total estimated QA lead times dipped to 74%, which is below the target of 80%. The largest driver for this is delays in testing at one of the subcontracted testing labs. Due to a large volume of test requests with overlapping due dates and staffing issues, the lab was unable to meet all deadlines. The TO2 QA team has been in contact with the lab in regards to improving their lead time.
A13	Out of the 303 batches that were tested, none were out of specification.
A14b	The overall score for quality assurance lab vendors increased from 74% to 80% this quarter. Testing was performed by a total of five labs this quarter. Reliability (on-time provision of completed test reports) increased from 67% to 71%. Due to weekly check-ins with the labs and sharing of scorecard performance, customer service by the labs improved considerably, with all labs achieving the maximum 10 points for this indicator.

Warehouse Performance and Product Losses

Current Reporting Period

2019-Q3

A8. Shelf life remaining

Task Order	Inventory Balance	% Shelf Life Remaining	Shelf life target
TO1	$104,788,078	82%	78%
TO2	$21,697,296	69%	70%
TO3	$58,668,600	84%	77%
Total	**$185,153,973**	**78%**	

Ref	Analysis
A08	Beginning this quarter (FY2019 Q3) and with USAID's agreement, GHSC-PSM's remaining shelf life indicators focuses on all items that are in the RDC as part of the ACT emergency stockpile. At the close of Q3, the project had a little more than $283,000 in emergency ACTs in stock, with a remaining shelf life of 69 percent, very close to the target of 70 percent. All of this stock was allocated to country orders at the time of reporting.
A08	Overall shelf life remaining for family planning items was 83% this quarter, continuing to be above the target and performing consistently with the past several quarters.
A08	Shelf life remaining for HIV items remained consistent from previous quarters, continuing to be above the target, at 80% (target: 78%).
C07a	A quantity of SP/AQ commodities expired in the RDC this quarter. This product was originally a direct drop order that was rerouted to the RDC due to registration issues. It could not be reallocated to any other country before its expiry.
C07a	A small quantity of laboratory items expired at the RDC this quarter. The items were part of a canceled country order that was rerouted to the RDC. The product was not one that is usually stocked at the RDC, and it did not represent a significant value of TO1 inventory.
C07a	There were no expiries of Task Order 3 commodities this quarter.
C07b	The most common forms of product loss continue to be damage or discrepancies that occur during transit through the global supply chain, and which impact relatively small proportions of GHSC-PSM's order volume. These types of losses are typical for large supply chain operations. In one larger incident, a shipment of laboratory reagents to Burundi was lost due to improper cold storage. The items required frozen storage, which is not available at the Bujumbura airport. The incident resolution team determined that frozen items in the future must secure an import waiver to be delivered as soon as the shipments arrive in country. The team also agreed on additional procedures with the 3PL regarding dry ice packing while in transit.

C7a and C7b. Product loss due to expiry, theft, damage and other causes while in GHSC-PSM control

Task Order	Country	Type of Loss	Product Group	Loss Value	Loss Denominator	% Loss
TO1	Burundi	Damage	Laboratory	$84,507	$588,961	14.35%
TO2	Angola	Damage	mRDTs	$20	$478,676	0.00%
TO1	Malawi	Damage	VMMC	$17,108	$1,955,958	0.87%
TO1	RDC	Expiry	Laboratory	$106,620	$28,686,581	0.37%
TO3	RDC	Expiry	NA	$0	$25,548,990	0.00%
TO2	RDC	Expiry	SMC	$84,634	$4,818,968	1.76%
TO2	Ghana	Missing product	mRDTs	$9,108	$5,957,490	0.15%
TO3	Ghana	Missing product	Progestin Only Pills	$2,862	$923,408	0.31%
TO3	Zambia	Other	Combined oral contraceptive	$494	$643,147	0.08%

Data notes

- Average inventory balance (A4 and C7a denominator) is calculated using the ending balance at the close of each month.
- Expired inventory is excluded from shelf life calculations (A8). It is reported under product loss.
- Quarterly indicator targets are effective beginning FY2018 Q4. Per the project M&E plan, no targets are required for product loss indicators (C7a and C7b).
- Task Order 1 inventory includes all condoms. GHSC-PSM does not hold any inventory for Task Order 4.

Procurement Performance

Current Reporting Period

2019-Q3

A10. Framework contract percentage

Task Order	Procurement total	Framework contract percentage	Framework contract target
TO1	$87,330,124	81%	80%
TO2	$45,276,343	19%	40%
TO3	$7,372,300	100%	95%
TO4	$2,329,824	88%	90%
Total	**$142,308,591**	**62%**	**NA**

A10. Product-level detail

Task Order	Framework contract percentage	Procurement total
TO1	**81%**	**$87,330,124**
Adult ARV	100%	$44,776,415
Condoms	100%	$4,237,433
Laboratory	40%	$26,053,229
Other Non-Pharma	21%	$893,900
Other Pharma	100%	$748,383
Other RTK	0%	$133,176
Pediatric ARV	100%	$9,920,113
TB HIV	100%	$261,161
Vehicles and other equipment	0%	$17,164
VMMC	100%	$289,150
TO2	**19%**	**$45,276,343**
ACTs	100%	$3,609,049
Laboratory	0%	$612,773
LLINs	0%	$35,835,060
mRDTs	100%	$3,667,478
Other Non-Pharma	0%	$184,773
Other Pharma	100%	$166,574
Severe Malaria Meds	100%	$314,471
SP	100%	$886,166

A10. Product-level detail

Task Order	Framework contract percentage	Procurement total
TO3	**100%**	**$7,372,300**
Combined Oral Contraceptives	100%	$1,134,275
Copper-Bearing Intrauterine Devices	100%	$29,100
Implantable Contraceptives	100%	$5,334,532
Injectable Contraceptives	100%	$763,846
Other Non-Pharma	100%	$61,083
Progestin Only Pills	100%	$49,464
TO4	**88%**	**$2,329,824**
Other Non-Pharma	100%	$1,742,358
Other Pharma	100%	$319,176
Other RTK	0%	$268,290

Analysis

Framework contract procurements for Task Order 1 rose to 81%, meeting the increased target of 80% that went into effect this quarter. While key product categories such as ARVs, condoms, other pharma and VMMC have been procured under framework contracts almost exclusively for a year or more, the project has made strong progress on bringing laboratory procurements under these agreements as well. At this point last year, framework contracts represented only 6% of laboratory procurements in terms of value; now, performance on this indicator has reached 40% for TO1 lab products.

Task Order 2 framework contract procurements fell sharply this quarter, driven entirely by the larger procurement percent of LLINs than in previous quarters. Of the $45 million in malaria commodities procured this quarter, $35.8 million (80%) was LLINs. These items are still procured under fixed unit price subcontracts. However, RFPs for LLIN framework contracts are currently in process. GHSC-PSM has received and evaluated bids and has presented an awards approach for PMI's review. It is expected that these awards will be in place by the end of FY2019 and orders will begin to flow under these contracts more significantly in FY2020 Q1 and Q2. All other pharmaceutical and rapid diagnostic test procurements for this quarter were completed under framework contracts.

Task Order 3 continues to procure all items under framework contracts, per the sourcing strategy for these commodities.

Task Order 4 framework contracting recovered after a dip last quarter, reaching 88%. Due to its relatively small purchase volume on TO4, indicator performance can be heavily impacted by one or two line items. This was the case both last quarter and currently in FY2019 Q3. In this quarter, only one line item was procured under a non-framework contract (syphilis rapid diagnostic tests). All essential medicines, insect repellent, and other items were procured under BOAs and IDIQs.

Task Order 4 procurement totals include both MNCH and Zika procurements.

Data notes

Procurement totals are equal to the total value of all line items procured from vendors each period. This includes Purchase Orders and warehouse Replenishment Orders. Distribution Orders released from the RDCs to countries are not counted, as these quantities are already included when the items are first purchased as Replenishment Orders.

Framework contracts include indefinite delivery, indefinite quantity contracts (IDIQs), blanket purchase agreements (BPAs), and basic ordering agreements (BOAs). Non-framework contracts include firm fixed price and fixed unit price subcontracts, simplified purchase agreements, and other types of one-off purchase orders.

Commodities are considered "purchased" if the "PO Released for Fulfillment Date" in ARTMIS falls within the reporting period.

Registration Waivers

A7. Temporary registration waiver percentage

Task Order	Temporary registration waiver percentage	Total # of line items delivered
TO2	**10.0%**	**270**
ACTs	7.6%	118
mRDTs	0.0%	52
LLINs	0.0%	25
SP	12.5%	24
Severe Malaria Meds	57.9%	19
SMC	10.5%	19
Other Non-Pharma	0.0%	5
Laboratory	0.0%	4
Other Pharma	50.0%	4
TO3	**3.3%**	**92**
Implantable Contraceptives	0.0%	25
Injectable Contraceptives	5.6%	18
Copper-Bearing Intrauterine Devices	7.7%	13
Progestin Only Pills	7.7%	13
Other Non-Pharma	0.0%	10
Emergency Oral Contraceptives	0.0%	9
Combined Oral Contraceptives	0.0%	4
Total	**8.3%**	**362**

Analysis

Use of registration waivers to import family planning items was minimal this quarter, at 3.3 percent of line items delivered. This includes one line where a waiver was used to import injectables to Haiti, where registration submission is pending but not yet completed. Two additional line items requiring temporary waivers included copper IUDs for Bangladesh and progestin-only pills for Mozambique. All other items were either already registered or did not require registration.

Use of waivers fell this quarter compared to the previous quarter, in which 7% percent of line items were imported using a registration waiver. This represents three items delivered to Bangladesh, Mauritania, and Liberia. All other items were either already registered, did not require registration, or, in the case of a shipment to Yemen, were imported under exceptional emergency circumstances.

Use of registration waivers rose to 10% this quarter. Waivers were used for 27 line items with 12 different country destinations. Severe malaria medicines were most likely to require a registration waiver for importation, with more than half of these line items unregistered or pending registration in the destination country. The need for a registration waiver did not appear to have negative cycle time effects. Cycle times for line items requiring a waiver where slight shorter, averaging 315 days compared to 324 days for TO2 items overall.

Supply Plan Submissions

Current Reporting Period

2019-Q3

B6. Quarterly supply plan submission rate to GHSC-PSM HQ

Product Group	# of supply plans required	Supply plan submission rate	Submission target
ARVs	16	88%	85%
Condoms	16	75%	85%
FP commodities	18	78%	85%
Lab (HIV diagnostics)	13	92%	85%
Malaria commodities	28	79%	60%
MCH commodities	6	50%	60%
RTKs	16	88%	85%
VMMC	5	80%	60%
Total	**118**		

Analysis

Malaria supply plan expectations expanded significantly this quarter, increasing from 13 to 28 countries required to submit. While the overall rate of malaria supply plan submission declined to 79%, this still exceeded the target of 60%. GHSC-PSM headquarters received more malaria supply plans in Q3 than in any previous quarter.

Supply plan submissions for HIV product categories dipped slightly for most categories this quarter. VMMC remained constant, with four out of five required plans submitted. In all other product categories, submissions were brought down by Rwanda, which was unable to submit any of its required plans this quarter. Other non-submissions included Nepal, Cote d'Ivoire, and Senegal (condoms), and South Sudan (ARVs).

The submission rate for family planning supply plans was 78% this quarter, while the rate for condoms was 75%. Rwanda and Nepal were unable to submit for either category. Rwanda submitted too late to be counted in Q3, due to other supply chain activities and MOH priorities. Supply planning was delayed in Nepal due to low LMIS reporting. Once reporting rates reach 70% for Q3 data, supply plans will be developed. Other non-submitting countries for FP included Madagascar, which no longer has a GHSC-PSM field office, and South Sudan, which does not have an FP commodity budget this year. For condoms, supply plans were not received from Cote d'Ivoire and Senegal, which are GHSC-PSM-non-field office countries.

The submission rate for maternal, newborn and child health commodity supply plans returned to 50% this quarter. Plans were missing from Madagascar, which does not have a GHSC-PSM field office, Rwanda, which was unable to submit any supply plans this quarter, and Haiti. Haiti is in the process of recruiting an MNCH position that will oversee the supply planning process for TO4.

Supply Plan and Forecast Performance

Current Reporting Period

2019-Q3

A6a. Supply plan error - HIV Products

Product Category	Supply plan/ forecast error	Supply plan/ forecast bias	4-quarter error	Annual APE Target	4-quarter bias
Pediatric ARV	43%	8%	6%	26%	-6%
Laboratory	16%	16%	24%	30%	24%
Condoms	45%	16%	25%	35%	25%
Adult ARV	15%	0%	5%	26%	4%

A6a. Supply plan error - Malaria products

Product Category	Supply plan/ forecast error	Supply plan/ forecast bias	4-quarter error	Annual APE Target	4-quarter bias
ACTs	38%	38%	7%	35%	7%
mRDTs	33%	-33%	27%	35%	-27%

A6b. Forecast error - Family Planning products

Product Category	Supply plan/ forecast error	Supply plan/ forecast bias	4-quarter error	Annual APE Target	4-quarter bias
Combined Oral Contraceptives	13%	-13%	19%	35%	19%
Copper-bearing Intrauterine Devices	30%	-30%	2%	35%	2%
Implantable Contraceptives	38%	38%	22%	35%	22%
Injectable Contraceptives	38%	38%	25%	35%	25%
Progestin Only Pills	16%	16%	6%	35%	6%

Analysis

To improve supply plan performance for HIV commodities, the Plan and FASP teams have been working to strengthen the supply plan validation process, specifically through the communication channel between Commodity Procurement Managers and countries. The teams have also developed automated supply plan aggregation tools to create a fast, repeatable stream of data that can be used for visualizations, helping to improve visibility into a country's historical and planned orders.

This quarter's forecast error rates fell for combined oral contraceptives and copper-bearing IUDs, but rose for implants, injectables, and progestin-only pills. Overall forecast error for the last four quarters also rose for most products, with the exception of IUDs. Error for injectables was caused by an order for Zambia, whose RDD was pushed to Q4, and an order placed for Madagascar with a short lead time. The delay in order entry was due to a delay in funding confirmation as well as acceptance of the generic product. The Plan team is being proactive in approaching countries planning to order generics, due to longer clarifications lead times now associated with first-time orders. Variance for implants was due to orders placed with short lead times, while error for combined oral contraceptives was due to counties delaying orders and reducing quantities.

Supply plan performance for lab items has improved this quarter, with error for the quarter falling to 8%. This variance was due to a new order for lab equipment for Nigeria, which had not been included in the supply plan. The rolling four-quarter error measure has also continued to decline, reaching 17% and remaining within the target for the third quarter in a row.

Supply plan error for malaria commodities rose this quarter, to 38% for ACTs and 33% for rapid diagnostic tests. When compiled across Q2 and Q3, overall error for ACTs falls to 7%, with a lower order quantity in Q3 counteracting the overforecast in Q2. RDTs have been overforecast for two quarters now, yielding a two-quarters overall error rate of 27%. Task Order 2 continues to reformat and refine processes as its supply planning activities have ramped up over the course of this year. The Plan team is working to develop tools to improve visibility and pull in additional datasets, such as the Malaria Operational Plans, for comparison and analysis.

Supply plan error for condoms fell this quarter, impacted by a single order of male condoms for Afghanistan that was converted from No Logo to specialty foil in less than the minimum lead time of three months. The project has reemphasized this lead time for new orders and changes with non-field office countries.

Supply plan error for adult ARVs remained consistent this quarter compared to Q2, with 5% more units requested to be delivered compared to supply plans. Variance this quarter was due to a change in clinical guidance this quarter, resulting in a planned TLE order for Tanzania splitting into orders for both TLE and TLD, spread over multiple shipments, some of which fall outside the forecast period. Over the course of the four previous quarters, however, total units requested has come almost exactly in line with total units forecasted, with an error rate of 0.48%.

Supply plan error for pediatric ARVs fell significantly from the previous quarter, from 70 to 12%. Overall error for the last four quarters has also fallen, to just 4%.

Vendor Performance

Current Reporting Period

2019-Q3

A14a-c. Average vendor rating score

Vendor Type	Average vendor rating
Commodity Supplier	74%
Freight Forwarder	84%
QA Lab	80%

Analysis

Average 3PL vendor performance dipped slightly this quarter, from a score of 86% to 84%. Scorecard elements that contributed to the decrease included: on time performance (delivery and RFQ transit time—from 91% to 87%), booking timeliness (from 94% to 89%), invoicing accuracy (84% to 80%), and on-time spot quote turnaround (from 82% to 77%). The reduction in delivery timeliness can be partly attributed to the decrease in the overall number of shipments in April and May, so that each shipment was weighted more heavily. Additionally, a number of in-country circumstances were out of the control of 3PLs, with one lane in particular affected by carrier capacity constraints. For booking timeliness, 3PLs faced system issues with EDI mapping and container synching. GHSC-PSM has requested action plans from the 3PLs to improve this performance. Invoice accuracy was affected by the recent shift from manual to CSV submission, which should be smoother next quarter. Finally, spot quote turnaround time was affected by the receipt of requests from countries with challenging political environments, such as Venezuela.

Supplier on-time performance stayed largely steady from last quarter, dipping slightly from 76% to 74% for on-time in-full goods availability. While 74% of line items were supplied within the tolerance window, 11% were supplied with a delay of 1-2 weeks, while 15% were supplied more than two weeks late.

The overall score for quality assurance lab vendors increased from 74% to 80% this quarter. Testing was performed by a total of five labs this quarter. Reliability (on-time provision of completed test reports) increased from 67% to 71%. Due to weekly check-ins with the labs and sharing of scorecard performance, customer service by the labs improved considerably, with all labs achieving the maximum 10 points for this indicator.

14b. QA Lab Vendor Scorecard Components, Weighting, and Scores

Component Name	Indicator Name	Indicator Score	Indicator Weight (Overall)	Overall Weighted Score
1 -Reliability (Timeliness of Service)	Does the lab provide on-time provision of completed test reports?	71%	43%	30%
2 - Responsiveness	Does the lab provide prompt response after receipt of GHSC-PSM request for testing	66%	15%	10%
3 - Completeness of Documentation	Frequency of modification to Certificates of Analysis (CoA)	92%	18%	16%
4 - Invoice Accuracy	Submitted invoices for routing testing adhere to set IDIQ pricing	97%	15%	15%
5 - Service	Adherence to other terms and conditions, not related to reliability, responsiveness, completeness, and cost (Qualitative)	100%	10%	10%
Total			**100%**	**80%**

Data notes

Per the GHSC-PSM M&E plan, targets are not required for vendor performance indicators.

14c. Freight Forwarder Vendor Scorecard Components, Weighting, and Scores

Component Name	Indicator Name	Indicator Score	Indicator Weight (Overall)	Overall Weighted Score
5 - On-time performance	RFQ Transit Time	84%	20%	17%
5 - On-time performance	Delivery	91%	20%	18%
6 - On-time spot quote turnaround	Spot/Non-emergency Timeliness	77%	10%	8%
7 - Rate of deliveries without NCRs	Percent of shipments delivered without NCRs during the reporting period	98%	10%	10%
2 - ETA Delivery Accuracy/ Reliability	Percentage of shipments arriving within 2 days of the ETA	68%	5%	3%
4 - Invoicing Accuracy	Accuracy	91%	5%	5%
8 - Booking timeliness	Timeliness	89%	5%	4%
3 - Customer Service	3- Quarterly Perception Survey score	70%	4%	3%
3 - Customer Service	1- Quarterly Perception Survey score	75%	4%	3%
3 - Customer Service	2- Quarterly Perception Survey score	76%	4%	3%
2 - ETA Delivery Accuracy/ Reliability	Percentage of shipments arriving within 5 days of the ETA	81%	3%	2%
4 - Invoicing Accuracy	Completeness	72%	3%	2%
1 - EDI Status Performance	Timeliness	83%	3%	2%
1 - EDI Status Performance	Completeness	99%	3%	2%
4 - Invoicing Accuracy	Timeliness	63%	2%	1%
6 - On-time spot quote turnaround	Spot/Emergency Timeliness		0%	0%
Total			**100%**	**84%**

Complete Quarterly Results (TO1)

Reporting Period

2019-Q3

Task Order	A1a. OTIF rate: OTIF	A1a. OTIF rate: Total # of Line Items Delivered	A1b. OTD rate: OTD	A1b. OTD rate: Total # of Line Items with ADDs in the quarter	A16. Backlog percentage: Backlog	A16. Backlog percentage: Total # of line items with ADDs in the last 12 months	A10. Framework contracting: Framework contract percentage	A10. Framework contracting: Procurement total
TO1	**85%**	**1,114**	**92%**	**1,085**	**1.5%**	**4,279**	**81%**	**$87,330,124**
Adult ARV	82%	114	94%	108	0.9%	437	100%	$44,776,415
Condoms	81%	81	81%	88	0.5%	207	100%	$4,237,433
Food and WASH					0.0%	1		
HIV RTK					0.0%	3		
Laboratory	86%	556	94%	540	1.6%	2,526	40%	$26,053,229
Other Non-Pharma	86%	140	86%	148	2.4%	422	21%	$893,900
Other Pharma	97%	62	98%	62	1.1%	270	100%	$748,383
Other RTK	50%	2	100%	1	0.0%	7	0%	$133,176
Pediatric ARV	89%	84	95%	84	1.3%	239	100%	$9,920,113
TB HIV	86%	7	100%	6	0.0%	15	100%	$261,161
Vehicles and other equipment	100%	1	50%	2	10.0%	10	0%	$17,164
VMMC	64%	67	87%	46	0.7%	142	100%	$289,150
Total	**85%**	**1,114**	**92%**	**1,085**	**1.5%**	**4,279**	**81%**	**$87,330,124**

A6a and A6b. Absolute percent supply plan or forecast error

A6 Indicator	Supply plan/ forecast error	Supply plan/ forecast bias	4-quarter error	4-quarter bias
A6a - Supply plan error				
Adult ARV	5%	5%	0%	0%
Laboratory	8%	8%	17%	17%
Pediatric ARV	12%	12%	4%	-4%
A6b - Forecast Error				
Condoms	20%	-20%	17%	17%

B6. Quarterly supply plan submissions

Product Group	Supply plan submission rate	# of supply plans required
ARVs	88%	16
Condoms	75%	16
Lab (HIV diagnostics)	92%	13
RTKs	88%	16
VMMC	80%	5

A3. Cycle time (average)

Fulfillment Channel	Direct Drop Fulfillment			Warehouse Fulfillment			**Total**
Task Order	Air	Land	Sea	Air	Land	Sea	
TO1	**203**	**200**	**294**	**214**	**252**	**284**	**219**
Adult ARV	272		284	201	221	361	**279**
Condoms	238	506	360	149		227	**288**
Laboratory	179	202	295				**191**
Other Non-Pharma	290	186	454				**216**
Other Pharma	220	230	239		279		**245**
Other RTK	276						**276**
Pediatric ARV	233		406	229	240	320	**247**
TB HIV	207		495	163			**242**
Vehicles and other equipment		139					**139**
VMMC	125	180	190	200		252	**206**
Total	**203**	**200**	**294**	**214**	**252**	**284**	**219**

C7a and C7b. Product loss due to expiry, theft, damage, and other causes

Country	Type of Loss	Product Group	Loss Value	Loss Denominator	% Loss
Burundi	Damage	Laboratory	$84,507	$588,961	14.35%
Malawi	Damage	VMMC	$17,108	$1,955,958	0.87%
RDC	Expiry	Laboratory	$106,620	$28,686,581	0.37%

A8. Shelf life remaining

% Shelf Life Remaining	Inventory Balance
80%	$10,629,548

Crosscutting indicators

A14. Average vendor ratings

Vendor Type	Average vendor rating
Commodity Supplier	74%
Freight Forwarder	84%

Complete Quarterly Results (TO2)

Reporting Period

2019-Q3

Task Order	A1a. OTIF rate		A1b. OTD rate		A16. Backlog		A7. Waiver percentage		A10. Framework contracting		A2. QA processes on time		A13 Out-of-spec		A15. QA reports	
	OTIF	Total # of Line Items Delivered	OTD	Total # of Line Items with ADDs in the quarter	Backlog	Total # of line items with ADDs in the last 12 months	Temporary registration waiver percentage	Total # of line items delivered	Framework contract percentage	Procurement total	% QA Processes On Time	Total # of QA processes completed	Out-of-specification percentage	Total # of batches tested	Report submissions	# of reports due
TO2	**88%**	**270**	**97%**	**264**	**1.1%**	**813**	**10.0%**	**270**	**19%**	**$45,276,343**	**74%**	**85**	**0.0%**	**303**		
ACTs	97%	118	100%	118	1.1%	366	7.6%	118	100%	$3,609,049	81%	27	0.0%	106		
Laboratory	50%	4	100%	2	0.0%	16	0.0%	4	0%	$612,773						
LLINs	100%	25	100%	25	0.0%	143	0.0%	25	0%	$35,835,060	100%	14	0.0%	26		
mRDTs	65%	52	86%	51	2.0%	102	0.0%	52	100%	$3,667,478	100%	15	0.0%	22		
Other Non-Pharma	40%	5	67%	3	0.0%	10	0.0%	5	0%	$184,773				0		
Other Pharma	100%	4	100%	4	0.0%	11	50.0%	4	100%	$166,574	40%	5	0.0%	31		
Severe Malaria Meds	79%	19	94%	18	3.0%	99	57.9%	19	100%	$314,471	56%	18	0.0%	96		
SMC	95%	19	100%	19	0.0%	30	10.5%	19								
SP	96%	24	100%	24	0.0%	36	12.5%	24	100%	$886,166	0%	6	0.0%	22		
Total	**88%**	**270**	**97%**	**264**	**1.1%**	**813**	**10.0%**	**270**	**19%**	**$45,276,343**	**74%**	**85**	**0.0%**	**303**		

A3. Cycle time (average)

Fulfillment Channel	Direct Drop Fulfillment			Warehouse Fulfillment		**Total**
Task Order	Air	Land	Sea	Air	Land	
TO2	**308**	**230**	**282**	**375**	**287**	**324**
ACTs	331			305		**321**
Laboratory	365	204				**285**
LLINs		268	277			**277**
mRDTs	231		294	654		**297**
Other Non-Pharma	329	221	233			**245**
Other Pharma	326					**326**
Severe Malaria Meds	341				287	**338**
SMC				331		**331**
SP	303			487		**457**
Total	**308**	**230**	**282**	**375**	**287**	**324**

C7a and C7b. Product loss due to expiry, theft, damage, and other causes

Country	Type of Loss	Product Group	Loss Value	Loss Denominator	% Loss
Angola	Damage	mRDTs	$20	$478,676	0.00%
RDC	Expiry	SMC	$84,634	$4,818,968	1.76%
Ghana	Missing product	mRDTs	$9,108	$5,957,490	0.15%

B6. Quarterly supply plan submissions

Product Group	Supply plan submission rate	# of supply plans required
Malaria commodities	79%	28

A8. Shelf life remaining

% Shelf Life Remaining	Inventory Balance
69%	$283,283

A6a. Absolute percent supply plan error

A6 Indicator	Supply plan/ forecast error	Supply plan/ forecast bias	4-quarter error	4-quarter bias
A6a - Supply plan error				
ACTs	38%	38%	7%	7%
mRDTs	33%	-33%	27%	-27%

A14. Average vendor rating - QA labs

Average vendor rating
238%

Crosscutting indicators

A14. Average vendor ratings

Vendor Type	Average vendor rating
Commodity Supplier	74%
Freight Forwarder	84%

Complete Quarterly Results (TO3)

Reporting Period

2019-Q3

Task Order	A1a. OTIF rate: OTIF	A1a. OTIF rate: Total # of Line Items Delivered	A1b. OTD rate: OTD	A1b. OTD rate: Total # of Line Items with ADDs in the quarter	A16. Backlog percentage: Backlog	A16. Backlog percentage: Total # of line items with ADDs in the last 12 months	A10. Framework contracting: Framework contract percentage	A10. Framework contracting: Procurement total
TO3	**93%**	**92**	**100%**	**93**	**0.0%**	**236**	**100%**	**$7,372,300**
All Other TO3 Products					0.0%	1		
Combined Oral Contraceptives	100%	4	100%	7	0.0%	37	100%	$1,134,275
Copper-Bearing Intrauterine Devices	100%	13	100%	13	0.0%	25	100%	$29,100
Emergency Oral Contraceptives	100%	9	100%	9	0.0%	16		
Implantable Contraceptives	100%	25	100%	25	0.0%	46	100%	$5,334,532
Injectable Contraceptives	89%	18	100%	19	0.0%	58	100%	$763,846
Other Non-Pharma	60%	10	100%	7	0.0%	24	100%	$61,083
Other Pharma					0.0%	1		
Progestin Only Pills	100%	13	100%	13	0.0%	24	100%	$49,464
Standard Days Method					0.0%	4		
Total	**93%**	**92**	**100%**	**93**	**0.0%**	**236**	**100%**	**$7,372,300**

A6b. Absolute percent forecast error

A6 Indicator	Supply plan/ forecast error	Supply plan/ forecast bias	4-quarter error	4-quarter bias
A6b - Forecast Error				
Combined Oral Contraceptives	13%	-13%	19%	19%
Condoms	20%	-20%	17%	17%
Copper-bearing Intrauterine Devices	30%	-30%	2%	2%
Implantable Contraceptives	38%	38%	22%	22%
Injectable Contraceptives	38%	38%	25%	25%
Progestin Only Pills	16%	16%	6%	6%

A7. Temporary Waiver Percentage

Task Order	Temporary registration waiver percentage	Total # of line items delivered
TO3	**3.3%**	**92**
Combined Oral Contraceptives	0.0%	4
Copper-Bearing Intrauterine Devices	7.7%	13
Emergency Oral Contraceptives	0.0%	9
Implantable Contraceptives	0.0%	25
Injectable Contraceptives	5.6%	18
Other Non-Pharma	0.0%	10
Progestin Only Pills	7.7%	13
Total	**3.3%**	**92**

A3. Cycle time (average)

Fulfillment Channel	Direct Drop Fulfillment		Warehouse Fulfillment		**Total**
Task Order	Air	Sea	Air	Sea	
TO3	**296**	**200**	**287**	**323**	**293**
Combined Oral Contraceptives			575	57	**446**
Copper-Bearing Intrauterine Devices			364	349	**354**
Emergency Oral Contraceptives	299				**299**
Implantable Contraceptives	269	357	118	292	**259**
Injectable Contraceptives		198	252	370	**315**
Other Non-Pharma		183		146	**179**
Progestin Only Pills			212	349	**307**
Total	**296**	**200**	**287**	**323**	**293**

C7a and C7b. Product loss due to expiry, theft, damage, and other causes

Country	Type of Loss	Product Group	Loss Value	Loss Denominator	% Loss
RDC	Expiry	NA	$0	$25,548,990	0.00%
Ghana	Missing product	Progestin Only Pills	$2,862	$923,408	0.31%
Zambia	Other	Combined oral contraceptive	$494	$643,147	0.08%

B6. Quarterly supply plan submissions

Product Group	Supply plan submission rate	# of supply plans required
Condoms	75%	16
FP commodities	78%	18

A8. Shelf life remaining

% Shelf Life Remaining	Inventory Balance
83%	$17,007,309

Crosscutting indicators

A14. Average vendor ratings

Vendor Type	Average vendor rating
Commodity Supplier	74%
Freight Forwarder	84%

Complete Quarterly Results (TO4)

Reporting Period

2019-Q3

Task Order	A1a. OTIF rate		A1b. OTD rate		A16. Backlog perentage		A10. Framework contracting	
	OTIF	Total # of Line Items Delivered	OTD	Total # of Line Items with ADDs in the quarter	Backlog	Total # of line items with ADDs in the last 12 months	Framework contract percentage	Procurement total
TO4	**83%**	**245**	**85%**	**241**	**1.5%**	**742**	**88%**	**$2,329,824**
Food and WASH					0.0%	8		
Laboratory	100%	8	100%	8	16.1%	62		
Other Non-Pharma	82%	206	82%	206	0.4%	226	100%	$1,742,358
Other Pharma	81%	26	100%	22	0.0%	436	100%	$319,176
Other RTK	100%	2	100%	2	0.0%	5	0%	$268,290
TB HIV	100%	3	100%	3	0.0%	5		
Total	**83%**	**245**	**85%**	**241**	**1.5%**	**742**	**88%**	**$2,329,824**

A3. Cycle time (average)

Task Order	Direct Drop Fulfillment	**Total**
TO4	**454**	**454**
Laboratory	417	**417**
Other Non-Pharma	460	**460**
Other Pharma	428	**428**
Other RTK	326	**326**
TB HIV	455	**455**
Total	**454**	**454**

B6. Quarterly supply plan submissions

Product Group	Supply plan submission rate	# of supply plans required
MCH commodities	50%	6

Crosscutting indicators

A14. Average vendor ratings

Vendor Type	Average vendor rating
Commodity Supplier	74%
Freight Forwarder	84%

Indicator Details

Check out the GHSC-PSM IDIQ M&E Plan for complete details on all our indicators.

Delivery Indicators

Indicator Code	Name	Numerator	Denominator	Data Source(s)	Reporting frequency	Other Info
A01a	On Time, In Full Delivery (OTIF) - Percentage of line items delivered on time and in full, within the minimum delivery window (within -14/+7 calendar days of the agreed delivery date (ADD))	Number of line items delivered to the recipient on time and in full during the quarter	Total number of line items delivered to the recipient during the quarter	ARTMIS	Quarterly	Lines items are considered on-time and in-full if the full ordered quantity of the line item is delivered to the recipient within the -14/+7 day delivery window. If the line item is partially delivered witin the window, it may be considered on-time but not in-full.
A01b	On Time Delivery (OTD) — Percentage of line items delivered on time, within the minimum delivery window (within -14/+7 calendar days of the agreed delivery date (ADD))	Number of line items with an ADD during the quarter that were delivered to the recipient on time	Total number of line items with an ADD during the quarter	ARTMIS	Quarterly	
A16	Percentage of backlogged line items	Number of line items with an ADD on or before the reporting period end date, within a rolling 12-month period, that have not been cancelled or put on hold and that are currently undelivered and late	Total number of line items with an ADD on or before the reporting period end date, within a rolling 12-month period, that have not been cancelled or put on hold	ARTMIS	Quarterly	

Cycle time Indicators

Indicator Code	Name	Numerator	Denominator	Data Source(s)	Reporting frequency	Other Info
A03	Cycle time (average)	Sum of cycle time for all line items delivered during the quarter	Count of all line items delivered during the quarter	ARTMIS	Quarterly	Overall cycle time is defined as the number of days between when a customer order is submitted to when the shipment is actually delivered to the customer, inclusive of the start/end days and all holds or other dwell times. The project is implementing new dwell tracking procedures, with the intent of reporting dwell-adjusted cycle time by FY2020.

Indicator Details

Check out the GHSC-PSM IDIQ M&E Plan for complete details on all our indicators.

Quality Assurance Indicators

Indicator Code	Name	Numerator	Denominator	Data Source(s)	Reporting frequency	Other Info
A02	Percentage of QA processes completed within the total estimated QA lead times (on-time completion rate for QA processes)	Number of consignments complying with the pre-established QA lead times during the quarter	Total number of consignments requiring QA processes that were cleared for shipment during the quarter	QA Database	Quarterly	Consignment is defined as a shipment of commodities, including one or more line items. QA process transactions are managed at the consignment level, regardless of the number of line items in the consignment.
A13	Percentage of batches of product for which the final result is showing nonconformity (out of specification percentage)	Total number of batches of product showing nonconformity during the quarter	Total number of batches tested during the quarter	QA Database	Quarterly	
A14b	Average vendor rating score - QA lab services	Sum of all key vendor ratings.	Number of key vendors from whom GHSC-PSM procured lab testing services during the quarter	QA scorecard	Quarterly	All vendors are equally weighted in the overall score, regardless of procurement volume from each vendor.
A15	Percentage of quality assurance Investigation reports submitted within 30 calendar days of outcome determination (QA investigation report submission)	Number of QA investigation reports submitted to PMI within 30 days of outcome determination	Total number of QA investigation reports due during the reporting period	QA Database, email submissions	Semiannual	

Procurement Indicators

Indicator Code	Name	Numerator	Denominator	Data Source(s)	Reporting frequency	Other Info
A07	Percentage of line items imported using a temporary registration waiver (temporary waiver percentage)	Number of line items that were imported using a temporary registration waiver	Total number of line items delivered to the recipient during the quarter	Supplier registration bidding documentation	Quarterly	
A10	Percentage of product procured using a framework contract (framework contract percentage)	Value of product purchased through framework contracts during the quarter	Total value of commodities purchased during the quarter	ARTMIS	Quarterly	

Indicator Details

Check out the GHSC-PSM IDIQ M&E Plan for complete details on all our indicators.

Forecast and Supply Planning Indicators

Indicator Code	Name	Numerator	Denominator	Data Source(s)	Reporting frequency	Other Info
A06a	Absolute percent supply plan error, with variants annual absolute percent error and supply plan bias	Absolute value of the differences between the actual quantities with requested delivery dates during the quarter minus the quantities planned for delivery according to country supply plans	Sum of the actual quantities with requested delivery dates during the quarter	ARTMIS, Country Supply Plans	Quarterly	Supply plan error is currently calculated for adult and pediatric ARVs, HIV lab products, ACTs, and malaria rapid diagnostic tests. Planned quantities are drawn from an aggregation of country supply plans submitted in the prior quarter, including only the quantities that are forecasted to be procured through GHSC-PSM. Actual quantities are derived based on the requested delivery dates for products included in customer ROs submitted to ARTMIS.
A06b	Absolute percent forecast error, with variants annual absolute percent error and forecast bias	Absolute value of the differences between the actual quantities with requested delivery dates during the quarter minus the quantities planned for delivery according to the global demand forecast	Sum of the actual quantities with requested delivery dates during the quarter	ARTMIS, Country Supply Plans, PPMR, other sources	Quarterly	Forecast error is currently calculated for condoms and contraceptives. Forecasted or planned quantities are drawn from the GHSC-PSM global demand forecasts for each product, which are based on an aggregation of country supply plans submitted in the prior quarter and additional inputs, such as country order history, data from coordinated planning groups, and global market dynamics indicators. Actual quantities are derived based on the requested delivery dates for products included in customer ROs submitted to ARTMIS.

Warehouse Indicators

Indicator Code	Name	Numerator	Denominator	Data Source(s)	Reporting frequency	Other Info
A04	Inventory turns (average number of times inventory cycles through GHSC-PSM controlled global facilities)	Total ex-works cost of goods distributed from GHSC-PSM-controlled global inventory stocks (in USD) within the fiscal year	Average monthly inventory balance (in USD)	Inventory extract	Annual	
A08	Average percentage of shelf life remaining for warehoused commodities, weighted by the value of each commodity's stock (product at risk percentage)	Percentage of shelf life remaining at the end of the quarter, weighted by value of commodities, summed across all products	Total value of commodities, summed across all products, at the end of the quarter	Inventory extract	Quarterly	Shelf life requirements vary by country and by product.

Indicator Details

Check out the GHSC-PSM IDIQ M&E Plan for complete details on all our indicators.

3PL and Commodity Vendor Indicators

Indicator Code	Name	Numerator	Denominator	Data Source(s)	Reporting frequency	Other Info
A14a	Average vendor rating score - Commodity suppliers	Sum of all key vendor ratings	Number of key vendors from whom GHSC-PSM procured products/commodities during the quarter	ARTMIS	Quarterly	Scorecards are compiled on one-month lag, i.e. Q1 data represents vendor performance from Sept-Nov. Supplier OTIF is currently reported for high value and/or high risk suppliers. Only suppliers for which one or more order line items were fulfilled in this reporting period were included. All vendors are equally weighted in the overall score, regardless of procurement volume from each vendor.
A14c	Average vendor rating score - Freight forwarders	Sum of all key vendor ratings	Number of key vendors from whom GHSC-PSM procured freight forwarding services during the quarter	3PL scorecard	Quarterly	To allow complete data collection, freight forwarder scorecards are conducted on a one-month lag (i.e. Q1 data represents performance from Sept-Nov, rather than Oct-Dec). Overall score is weighted by delivery volume, such that vendors who deliver a greater number of shipments will have a relatively greater impact on the result.

Product Loss Indicators

Indicator Code	Name	Numerator	Denominator	Data Source(s)	Reporting frequency	Other Info
C07a	Percentage of product lost due to expiry while under GHSC-PSM control (product loss percentage)	Total value of product lost due to expiry during the quarter	Average inventory balance (in USD) during the quarter	Inventory reports	Quarterly	Expiries from the Regional Distribution Centers (RDCS) are presented in the GSC section of this report. Expiries that occur in warehouses that GHSC-PSM manages in countries are reported in the country-specific scections of this report.
C07b	Percentage of product lost due to theft, damage, or other causes, while under GHSC-PSM control (product loss percentage)	Total value of product lost due to theft, damage, or other causes during the quarter	For losses in transit: Total value (in USD) of product delivered during the quarter For losses in storage: Average inventory balance (in USD) during the quarter	GHSC-PSM Continual Improvement system reports	Quarterly	Product losses due to incidents are reported only after the actual value of the loss has been determined, which may be later than the quarter in which the incident took place or was first reported to GHSC-PSM Continual Improvement.

Indicator Details

Check out the GHSC-PSM IDIQ M&E Plan for complete details on all our indicators.

Delivery Impact Indicators

Indicator Code	Name	Numerator	Denominator	Data Source(s)	Reporting frequency	Other Info
NA	Number of ACT treatments delivered	Sum of ACT treatments delivered to countries, where a treatment is equal to one blister strip		ARTMIS	Quarterly	Includes malaria treatments delivered over the life of the project, with "full dose" based on WHO-recommended treatment guidelines. Specific medicines counted are limited to those used only for treatments, and not primarily as prophylaxis. Specifically, it includes only Artemether/Lumefantrine and Artesunate/Amodiaquine formulas.
NA	Number of Couple Years Protection delivered	Total of contraceptive method units delivered to countries, multiplied by the couple-years protection conversion factors per method, summed across all contraceptive methods delivered.		ARTMIS and USAID/MEASURE CYP conversion factors	Quarterly	CYP is a standard indicator calculated by multiplying the quantity of each contraceptive method distributed by a conversion factor to yield an estimate of the duration of contraceptive protection provided per unit of that method. The CYP for each method is then summed for all methods to obtain a total CYP figure. CYP conversion factors are based on how a method is used, failure rates, wastage, and how many units of the method are typically needed to provide one year of contraceptive protection for a couple. The calculation takes into account that some methods, e.g., condoms and oral contraceptives, may be used incorrectly and then discarded, or that intrauterine devices (IUDs) and implants may be removed before their life span is realized. This GHSC-PSM measure includes all condoms, IUDs, and hormone (oral, injectable, and implantable) contraceptives delivered over the life of the project, with the conversion factor provided by USAID/MEASURE (see https://www.usaid.gov/what- we-do/global-health/family-planning/couple-years-protection-cyp for details).
NA	Person-years of ARV treatment delivered	Sum of the monthly treatment units of adult first-line ARV treatments delivered to countries , divided by 12		ARTMIS	Quarterly	This report only includes Adult Efavirenz/Lamivudine/Tenofovir (TLE, Nevirapine/Lamivudine/Zidovudine (NLZ), and Dolutegravir/Lamivudine/Tenofovir (TLD). Doses for calculating treatments are based on World Health Organization (WHO)-recommended guidelines. The calculation of patient-years allows GHSC-PSM to monitor effectiveness and efficiency by a standard unit.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

All

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

SDP Stockout Rates by Country - Overall

FY Quarter

2019-Q3

GHSC-PSM Support	Angola	Botswana	Burkina Faso	Burma	Burundi	Cameroon	Ethiopia	Ghana	Guinea	Haiti	Indonesia	Kenya	Lesotho	Liberia	Malawi	Mali	Mozambique	Namibia	Nepal	Niger	Nigeria	Pakistan	Rwanda	Zambia	Zimbabwe
Not Supported				0.0%														4.2%							
Supported	47.8%	5.8%	8.1%		1.1%	24.6%	8.2%	6.5%	11.0%	0.1%	0.0%	14.3%	13.7%	34.1%	6.8%	10.2%	9.9%	4.2%	12.9%	16.0%	12.3%	21.7%	1.2%	27.5%	14.2%

Out-of-Cycle

Country	Stockout rate
Nepal	11.8%

Uganda

Country	Stockout rate
Uganda	5.7%

Data Notes

Out-of-Cycle refers to countries that report on a full quarter delay due to the reporting and data processing time required in country.

Uganda is reported separately because its overall result includes a composite stockout rate (AL inability to treat). Composite stockout rates for AL inability to treat and PRH methods are excluded from other countries' overall results, so as to prevent double-counting of products included in the composites. For more details on the Uganda case, see "SDP Stockout Rates by Country - Malaria" in the following pages.

SDP Stockout Rates by Country - HIV/AIDS

GHSC-PSM Support	Not Supported		Supported																
Task Order	Burma	Namibia	Angola	Botswana	Burundi	Cameroon	Ethiopia	Ghana	Haiti	Indonesia	Lesotho	Malawi	Mozambique	Namibia	Nigeria	Rwanda	Uganda	Zambia	Zimbabwe
TO1-HIV/AIDS	**0.0%**	**4.2%**	**8.6%**	**5.8%**	**1.3%**	**13.9%**	**7.7%**	**15.6%**	**0.2%**	**0.0%**	**13.7%**	**3.5%**	**5.5%**	**4.2%**	**17.5%**	**1.2%**	**7.4%**	**13.5%**	**10.5%**
1st line adult ARV	0.0%	0.0%	0.0%	6.1%	0.8%	5.7%	3.3%	9.6%	0.0%	0.0%	0.0%	1.4%	0.3%	0.0%	4.6%	1.1%	2.8%	0.5%	0.2%
2nd line adult ARV	0.0%	11.1%	0.0%	0.0%	1.4%	8.1%	9.6%	41.9%	0.0%	0.0%	2.6%	5.3%	2.4%	7.1%	10.6%	1.5%	11.2%	4.9%	4.2%
Pediatric ARV	0.0%	8.9%	0.0%	3.0%	1.0%	9.1%	2.6%	32.5%	0.0%	0.0%	1.2%	1.6%	2.8%	21.4%	6.0%	1.0%	7.8%	10.0%	8.5%
First RTK		0.0%	0.0%	8.7%	2.5%	21.3%	9.9%	14.5%	0.0%	0.0%	0.6%	4.8%	8.3%	0.0%	28.0%	1.4%	2.3%	7.0%	8.1%
Second RTK		2.2%	0.0%	13.0%	0.7%	14.7%	27.6%	14.5%	1.4%	0.0%	6.1%	1.7%	16.9%	0.0%	34.9%	1.5%	3.2%	6.3%	2.8%
Tie-breaker RTK		6.7%					22.4%			0.0%	100.0%			0.0%	22.7%		20.4%		49.4%
Viral load reagent	0.0%			14.3%			0.0%				0.0%		0.0%		4.8%	0.0%	0.0%	9.1%	0.0%
Viral load consumable	0.0%						12.9%								0.0%	0.0%			
EID reagent	0.0%			20.0%			0.0%				0.0%		0.0%		9.5%	0.0%	0.0%	20.0%	0.0%
EID consumable	0.0%			14.3%			8.2%								0.0%	0.0%			
Male condoms (HIV)		0.0%	11.1%	0.0%	1.2%		4.7%	6.7%	0.0%		1.7%	2.2%	12.9%	0.0%	16.1%	0.4%		29.7%	1.2%
Female condoms (HIV)		0.0%	50.0%	3.2%	0.0%			23.3%			0.9%	7.6%	16.8%	0.0%	11.5%	2.2%		28.3%	7.8%
RUTF											5.2%						15.8%		

SDP Stockout Rates by Country - Malaria

FY Quarter

2019-Q3

Table 1. Overall malaria stockout rates with product breakdown

GHSC-PSM Support Task Order	Supported Angola	Burkina Faso	Burundi	Cameroon	Ethiopia	Guinea	Kenya	Liberia	Malawi	Mali	Mozambique	Niger	Nigeria	Rwanda	Zambia	Zimbabwe
TO2-Malaria	**48.5%**	**8.1%**	**1.1%**	**49.0%**	**12.7%**	**5.6%**	**16.1%**	**32.2%**	**5.9%**	**9.7%**	**14.1%**	**16.0%**	**8.6%**	**0.8%**	**28.8%**	**19.6%**
AL 6x1	25.0%	20.7%		50.0%	18.7%	4.6%	13.9%	29.1%	3.6%	4.7%	15.2%	8.6%	3.7%	0.5%	28.4%	33.3%
AL 6x2	33.3%	4.6%		12.5%	17.7%	5.0%	17.3%	27.9%	11.5%	7.0%	22.6%	10.3%	4.0%	1.3%	30.9%	19.5%
AL 6x3	16.7%	10.4%		4.2%	17.8%	4.8%	23.8%	43.0%	8.3%	15.1%	14.0%	24.1%	5.7%	0.5%	23.3%	17.7%
AL 6x4	25.0%	7.1%		16.7%	7.3%	10.2%	20.5%	27.9%	4.5%	27.8%	13.6%	15.5%	3.8%	0.7%	24.1%	12.4%
AS/AQ 100/270mgx3	52.9%		1.6%	80.2%				39.5%					2.4%			
AS/AQ 100/270mgx6	57.3%		1.5%	85.2%				33.7%					2.7%			
AS/AQ 25/67.5mg	60.3%		0.4%	64.2%				48.8%					1.8%			
AS/AQ 50/135mg	55.5%		1.6%	69.1%				33.7%					2.3%			
mRDT	24.9%	0.9%	0.8%	30.5%	7.4%	2.4%	10.0%	17.4%	1.0%	4.5%	5.0%	10.3%	5.5%	1.0%	14.0%	10.4%
SP	16.4%	4.8%	1.1%	14.3%		10.0%	11.0%	16.3%	5.2%	7.5%	11.3%	10.3%	29.2%		56.0%	23.3%
LLINs		8.0%	0.7%			2.6%		37.2%	7.1%	6.8%	19.0%	32.8%	43.3%			

Table 2. Inability to treat with AL (Composite stockout rate of four AL presentations)

GHSC-PSM Support Task Order	Supported Angola	Burkina Faso	Ethiopia	Guinea	Kenya	Liberia	Malawi	Mali	Mozambique	Niger	Nigeria	Rwanda	Uganda	Zambia	Zimbabwe
TO2-Malaria															
AL inability to treat	62.4%	0.7%	5.2%	1.0%	5.1%	7.0%	1.0%	0.7%	2.2%	3.4%	1.0%	0.0%	3.6%	4.4%	4.2%

Table 3. Malaria stockout rates for Uganda

GHSC-PSM Support Task Order	Supported Uganda
TO2-Malaria	**4.8%**
AL inability to treat	3.6%
mRDT	4.3%
SP	6.6%

Data Notes

Table 1:
Overall malaria stockout rates are calculated as an aggregation of stock observations across all malaria products. AL inability to treat is excluded from the overall result, as AL presentations are already factored in individually.

Table 2:
AL inability to treat is presented for each country that uses AL, separately from the overall results in Table 1.

Table 3:
In Uganda, health facilities report on all presentations of AL as a single item, equivalent to AL inability to treat. Stockout data is not available by individual presentation. As a result, GHSC-PSM incorporates AL inability to treat into Uganda's TO2 overall stockout rate to ensure that these essential products are represented.

SDP Stockout Rates by Country - Family Planning

In GHSC-PSM-supported regions

FY Quarter

2019-Q3

Table 1. Family planning stockout rates - Product level

Task Order	Burundi	Ethiopia	Ghana	Guinea	Haiti	Kenya	Liberia	Malawi	Mali	Mozambique	Nepal	Nigeria	Pakistan	Rwanda	Uganda	Zambia
TO3-PRH	**1.0%**	**6.6%**	**5.0%**	**19.1%**	**0.0%**	**7.2%**	**36.9%**	**10.0%**	**10.8%**	**12.8%**	**12.9%**	**14.0%**	**21.7%**	**1.4%**	**3.3%**	**37.9%**
Combined oral contraceptive with iron	0.9%	7.4%	4.8%	30.1%	0.0%		67.5%	9.6%	11.9%		10.8%		18.5%	1.7%		35.5%
Combined oral contraceptive						2.6%				8.9%		14.1%				
DMPA-Subcutaneous injectable							18.8%			18.9%		14.5%				
NET-En Injectable			4.1%									9.1%				50.6%
DMPA-Intramuscular injectable	0.6%	3.8%	2.0%	14.6%	0.0%	3.1%		21.7%	4.1%	12.8%	10.0%	9.5%	24.8%	1.0%	3.3%	34.7%
1-rod implant		10.5%	2.9%			2.2%	25.0%	15.6%				30.8%		1.5%		42.2%
2-rod implant	0.6%	5.1%	2.5%	13.6%	0.0%	3.5%		18.8%	6.2%	11.3%	21.4%	20.8%		2.1%		41.9%
Emergency contraceptive, 2 tablets	4.6%	10.3%				18.3%		4.7%		20.6%						
Progestin only pills	0.4%	8.4%	7.4%	30.4%		15.3%	28.8%	9.2%	19.1%	14.1%		8.7%		2.0%		50.4%
Copper-bearing IUD		2.3%	23.3%	14.5%	0.0%	7.0%	60.0%	2.9%	9.5%	6.7%	23.1%	16.3%	13.1%	0.8%		36.9%
Calendar-based awareness methods					0.0%		38.8%		13.3%					0.9%		
Male condoms (FP)	1.2%	4.7%	6.7%	13.9%	0.0%	5.7%	28.8%	2.2%	8.6%	12.9%	10.3%	16.1%	26.9%	0.4%		29.7%
Female condoms (FP)			23.3%				27.5%	7.6%	20.4%	16.8%		11.5%		2.2%		28.3%

Out-of-Cycle

Task Order	Nepal
TO3-PRH	**11.8%**
Combined oral contraceptive with iron	9.0%
Combined oral contraceptive	
DMPA-Subcutaneous injectable	
NET-En Injectable	
DMPA-Intramuscular injectable	9.3%
1-rod implant	
2-rod implant	20.3%
Emergency contraceptive, 2 tablets	
Progestin only pills	
Copper-bearing IUD	20.3%
Calendar-based awareness methods	
Male condoms (FP)	10.0%
Female condoms (FP)	

Table 2. Family planning stockout rates - Method level

Tracer Product	Burundi	Ethiopia	Ghana	Guinea	Haiti	Kenya	Liberia	Malawi	Mali	Mozambique	Nepal	Nigeria	Pakistan	Rwanda	Uganda	Zambia
Combined oral methods	0.9%	7.4%	4.8%	30.1%	0.0%	2.6%	67.5%	9.6%	11.9%	8.9%	10.8%	14.1%	18.5%	1.7%		35.5%
Injectable contraceptives	0.6%	3.8%	2.0%	14.6%	0.0%	3.1%	18.8%	21.7%	4.1%	12.9%	10.0%	8.9%	24.8%	1.0%	3.3%	28.2%
Implantable contraceptives	0.6%	5.7%	1.7%	13.6%	0.0%	0.0%	25.0%	19.8%	6.2%	11.3%	21.4%	17.7%		0.2%		34.0%
Emergency oral contraceptives	4.6%	10.3%				18.3%		4.7%		20.6%						
Progestin-only methods	0.4%	8.4%	7.4%	30.4%		15.3%	28.8%	9.2%	19.1%	14.1%		8.7%		2.0%		50.4%
Copper-bearing IUD		2.3%	23.3%	14.5%	0.0%	7.0%	60.0%	2.9%	9.5%	6.7%	23.1%	16.3%	13.1%	0.8%		36.9%
Calendar-based awareness methods					0.0%		38.8%		13.3%					0.9%		
Male condoms (FP)	1.2%	4.7%	6.7%	13.9%	0.0%	5.7%	28.8%	2.2%	8.6%	12.9%	10.3%	16.1%	26.9%	0.4%		29.7%
Female condoms (FP)			23.3%				27.5%	7.6%	20.4%	16.8%		11.5%		2.2%		28.3%

Out-of-Cycle

Tracer Product	Nepal
Combined oral methods	9.0%
Injectable contraceptives	9.3%
Implantable contraceptives	20.3%
Emergency oral contraceptives	
Progestin-only methods	
Copper-bearing IUD	20.3%
Calendar-based awareness methods	
Male condoms (FP)	10.0%
Female condoms (FP)	

Data Notes

The PRH "method level" (Table 2) refers to the percentage of facilities stocked out of all products offered within a given method. The stockout rate at the "product" level (Table 1) refers to the percentage of sites stocked out of that particular product (depending on what is offered at a particular facility). A facility could be stocked out of one product and not stocked out at the method level. Only product-level stock observations are factored into overall performance at the task order level, to prevent double-counting between products and methods.

Stocked According to Plan Rates by Country

Country	Stocked according to plan	Overstocked	Understocked	Stocked out
Vietnam	83%		17%	
Burma	65%	24%	11%	
Malawi	52%	19%	29%	
Haiti	45%	27%	27%	
Burundi	43%	14%	36%	7%
Rwanda	39%	33%	27%	1%
Nigeria	35%	42%	23%	
Liberia	35%		55%	10%
Kenya	33%	7%	40%	19%
Mozambique	33%	14%	45%	7%
Pakistan	31%	25%	13%	31%
Zambia	30%	29%	27%	14%
Lesotho	30%	23%	30%	17%
Uganda	29%	46%	21%	4%
Indonesia	25%	17%	50%	8%
Zimbabwe	25%	31%	44%	0%
Namibia	23%	8%	46%	23%
Guinea	23%	39%	21%	17%
Botswana	22%	19%	56%	3%
Ghana	22%	28%	33%	16%
Ethiopia	17%	39%	33%	12%
Cameroon	15%	21%	36%	28%
Burkina Faso	14%	29%	57%	
South Sudan	11%	0%	89%	0%
Mali	8%	48%	5%	39%
Angola	5%	7%	40%	47%

Data Notes

Above data shows observations from the central and first subnational storage levels for which data is available in each country. Data on individual country pages may include additional supply chain levels.

LMIS Reporting Rates by Country

FY Quarter

2019-Q3

Country	Not Supported	Supported
Botswana		100%
Burma	100%	
Haiti		100%
Indonesia		100%
Lesotho		100%
Kenya		100%
Guinea		98%
Nigeria		97%
Rwanda		96%
Malawi		92%
Ethiopia		91%
Zambia		91%
Mali		90%
Namibia	88%	93%
Mozambique		85%
Burundi		82%
Uganda		82%
Pakistan		77%
Angola		63%
Burkina Faso		57%
Cameroon		52%
Zimbabwe		41%
Nepal		41%
Niger	33%	30%

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Angola

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Angola

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**58**	**8.6%**
1st line adult ARV	9	0.0%
2nd line adult ARV	9	0.0%
Pediatric ARV	5	0.0%
First RTK	9	0.0%
Second RTK	9	0.0%
Male condoms (HIV)	9	11.1%
Female condoms (HIV)	8	50.0%
Total	**58**	**8.6%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**3,752**	**50.8%**
AL 6x1	12	25.0%
AL 6x2	12	33.3%
AL 6x3	12	16.7%
AL 6x4	12	25.0%
AL inability to treat	607	62.4%
AS/AQ 100/270mgx3	595	52.9%
AS/AQ 100/270mgx6	595	57.3%
AS/AQ 25/67.5mg	595	60.3%
AS/AQ 50/135mg	595	55.5%
mRDT	607	24.9%
SP	110	16.4%
Total	**3,752**	**50.8%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
Total		

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	9	100%
TO2-Malaria	980	63%
Total	**989**	**63%**

Ref Analysis

Ref	Analysis
B1	For TO1, of the seven HIV tracer products, two were found stocked out (male and female condoms). Male condoms were stocked out in one site. Female condoms had five SDPs stocked out during this quarter. This commodity has not been procured by INLS for more than two years and it was not included in the last quantification exercise. For TO2, all presentations of AL had decreased stock-outs or remained the same. Additionally, no inability to treat was observed in the 12 national hospitals using AL. For the SDPs reporting on AS/AQ presentations in the PMI focus regions, the average stock-out rate of the four ASAQ presentations increased from 50% to 57%. GHSC-PSM has increased the number of sites reporting, which has contributed to the increase in the overall stock-out rate. The delivery of 467,275 treatments of ASAQ on April 15 would have ameliorated the current stockout rate at the SDPs if it had been distributed on time. Despite GHSC-PSM's continuous advocacy efforts and technical assistance to NMCP and the six PMI provinces, approvals of distribution plans have been delayed due to unavailability of senior managers and transportation from the provincial warehouse to municipal and then to SDPs. This has hindered project efforts to reduce stock-outs in the six supported PMI provinces.
B3	For TO1, all nine project-supported SDPs (100%) reported by the deadline or up to one week after. This report submission rate has been observed since Q1FY2018. For TO2, a 63% reporting rate was recorded, representing 607 out of 980 SDPs. This is a marked increased from 47% last quarter. GHSC-PSM Angola's technical advisors in six PMI focus provinces continue to work with facilities to help improve reporting rates.

Warehouse stock status and product losses

Country: Angola

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**87**	**21%**	**58%**	**11%**	**10%**
TO1-HIV/AIDS	21	19%	38%	29%	14%
TO2-Malaria	30	0%	90%	10%	0%
TO3-PRH	36	44%	42%	0%	14%
Subnational level 1	**1,209**	**49%**	**39%**	**5%**	**7%**
TO1-HIV/AIDS	21	19%	48%	14%	19%
TO2-Malaria	540	39%	53%	5%	3%
TO3-PRH	648	58%	27%	4%	10%
Total	**1,296**	**47%**	**40%**	**5%**	**7%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
TO2	Global	Transit	Damage	mRDTs	$20	$478,676	0.00%

Ref	Analysis
C7	Angola had one small loss this quarter, in which two packs of mRDTs were found damaged while in transit to the country.
B2	For TO1, at the central level no significant changes in stock status were observed. The adult first-line ARV had two observations of overstock and one observation stocked according to plan. In the previous quarter it had three observations of overstock. The GoA, through the MoH, is not taking advantage of GHSC-PSM's efforts to update supply plans quarterly for ARVs, RKTs, condoms and lab (HIV diagnostics). Although this activity is carried out with INLS, the agreed quantities for procurement are not met. For TO2, of 12 stock status observations of all four AL presentations, all observations (100%) were found understocked. In the previous quarter 11 observations of AL presentations were found understocked and 1 observation was found stocked out. During the reporting quarter, MoH procured 3,054,661 treatments of all AL presentations, while Global Fund procured 365,460 treatments. The GoA's MoH is not taking advantage of GHSC-PSM's efforts to update supply plans quarterly for malaria commodities according to state-of-the-art supply chain best practices. Although this activity is carried out with MoH through the NMCP, the agreed quantities to be procured are never met. For TO3, no significant changes have been observed from the previous quarter. At the central level, from 36 stock status observations from 12 selected contraceptive tracer commodities, none of the contraceptive were found stocked according to plan. In the previous period, only male condoms were not found stocked according to plan.

Supply plans, innovations, and strategic activities

Country

Angola

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
Malaria commodities	Yes

Analysis

Angola has submitted all required supply plans this quarter.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country: Angola

FY Quarter: 2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	TO2-Malaria	**Total**
Female	4	42	**46**
Male	2	76	**78**
Total	**6**	**118**	**124**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	TO2-Malaria	**Total**
Central	6	27	**33**
Subnational level 1		59	**59**
SDP		32	**32**
Total	**6**	**118**	**124**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	TO2-Malaria	**Total**
Cross-TO		27	**27**
TO-specific	6	91	**97**
Total	**6**	**118**	**124**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	TO2-Malaria	**Total**
Forecasting and Supply Planning	6		**6**
MIS		27	**27**
Monitoring and Evaluation		91	**91**
Total	**6**	**118**	**124**

Analysis

For TO1, six health professionals from INLS were trained on how to use the pipeline tool. For TO2, 49 health professionals working on supply chain at the provincial and municipal levels in Uíge province were trained on data collection tools and reporting. The training, which used a hands-on methodology, explored the monthly malaria reports and the source documents that supports the reports. Another training activity was carried out in Luanda and involved 36 health professionals working in the 12 national hospitals and at NMCP. The three-day training included discussion of data quality issues on the malaria monthly report. Additionally, a cross-TO training was held for the SIGLOFA LMIS implementation. A total of 27 health professionals working at CECOMA and provincial warehouses in Uíge and Huíla provinces were trained on the basic operating system of SIGLOFA. The training introduced the operating system and the inventory and stock management modules.

Molecular Instruments and HIV Tracer Products

Country

Angola

FY Quarter

2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir/Lamivudine/Efavirenz 300/300/600 mg
2nd line adult ARV	Lopinavir/Ritonavir
Pediatric ARV	Abacavir 60mg/Lamivudine 30mg
First RTK	Determine
Second RTK	Uni-Gold
Tie-breaker RTK	Not reported

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Angola

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO2-Malaria	**48.5%**	**3,145**
SP	16.4%	110
mRDT	24.9%	607
AS/AQ 50/135mg	55.5%	595
AS/AQ 25/67.5mg	60.3%	595
AS/AQ 100/270mgx6	57.3%	595
AS/AQ 100/270mgx3	52.9%	595
AL 6x4	25.0%	12
AL 6x3	16.7%	12
AL 6x2	33.3%	12
AL 6x1	25.0%	12
TO1-HIV/AIDS	**8.6%**	**58**
Female condoms (HIV)	50.0%	8
Male condoms (HIV)	11.1%	9
Second RTK	0.0%	9
First RTK	0.0%	9
Pediatric ARV	0.0%	5
2nd line adult ARV	0.0%	9
1st line adult ARV	0.0%	9
Total	**47.8%**	**3,203**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	62.4%	607

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	100%	9
TO2-Malaria	63%	980

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**11%**	**10%**	**58%**	**21%**	**81**
TO1-HIV/AIDS	29%	14%	38%	19%	21
TO2-Malaria	10%	0%	90%	0%	30
TO3-PRH	0%	14%	42%	44%	36
Subnational level 1	**5%**	**7%**	**39%**	**49%**	**1,209**
TO1-HIV/AIDS	14%	19%	48%	19%	21
TO2-Malaria	5%	3%	53%	39%	540
TO3-PRH	4%	10%	27%	58%	648
Total	**5%**	**7%**	**40%**	**47%**	**1,296**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	4	2	**6**
TO2-Malaria	42	76	**118**
Total	**46**	**78**	**124**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
Malaria commodities	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Botswana

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Botswana

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**240**	**5.8%**
1st line adult ARV	33	6.1%
2nd line adult ARV	33	0.0%
Pediatric ARV	33	3.0%
First RTK	23	8.7%
Second RTK	23	13.0%
Viral load reagent	14	14.3%
EID reagent	5	20.0%
EID consumable	14	14.3%
Male condoms (HIV)	31	0.0%
Female condoms (HIV)	31	3.2%
Total	**240**	**5.8%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
Total		

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
Total		

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	33	100%
Total	**33**	**100%**

Ref Analysis

Ref	Analysis
B1	The overall stockout rate for HIV tracer products declined this quarter, from 8.9% to 5.8%. Among ARVs, Botswana transitioned its most-used pediatric tracer product this quarter to Lopinavir/Ritonavir 125mg, due to treatments shifts from Pediatric ART Optimization. The new product was stocked out in only one GHSC-PSM-supported health facility. Stock-outs of first-line adult ARVs (TEE) were reported from two sites. CMS is still procuring in small quantities through waivers due to an ongoing lawsuit that followed new framework contract awards. The local suppliers have had challenges in delivering on time and in full quantity. As such, frequent shipment delays are the main reasons for increasing stockout rate and understocking at central level. Stockouts of RTKs remain higher than ARVs but have come down since the previous quarter. This is due to adequate supplies returning to the central level. Facility level stockout rate for viral load and EID reagents and consumables have improved this quarter. In the previous quarter, the Central Medical Store (CMS) was not resupplying and distributing stocks for an extended time between February and March 2019 due to physical stock-take and Warehouse Management System (WMS) upgrade activities. In the current quarter, however, CMS resumed the regular distribution cycle, leading to a reduction in stockout rates at the facility level.
B3	The reporting rate for the ARV LMIS to CMS in Q2 was 100%, with all 33 PEPFAR-focus SDPs reporting. This is consistent with the previous quarter.

Warehouse stock status and product losses

Country: Botswana

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**36**	**3%**	**56%**	**22%**	**19%**
TO1-HIV/AIDS	36	3%	56%	22%	19%
Total	**36**	**3%**	**56%**	**22%**	**19%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
C7	GHSC-PSM does not have custody of any products in Botswana and therefore does not report on product losses.
B2	Stocked according to plan rates increase slightly overall, from 19% to 22%. Stock-outs decreased, while understocking increased to 56% of observations. First-line adult ARVs remain understocked due to the ongoing lawsuit related to CMS's award of framework contracts. Second-line adult ARVs remain overstocked due to declining consumption as patients switch to other regimens. First RTKs were adequately stocked, while second RTKs were understocked. EID reagents were stocked according to plan, while viral load reagents and consumables were understocked. Similar to last quarter, central level availability for both viral load and EID products has been maintained through local micro-procurements.

Supply plans, innovations, and strategic activities

Country

Botswana

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
ARVs	Yes
RTKs	Yes

Analysis

Botswana submitted all required supply plans this quarter.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Botswana

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	**Total**
Female	11	**11**
Male	9	**9**
Total	**20**	**20**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	**Total**
Central	20	**20**
Total	**20**	**20**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	**Total**
TO-specific	20	**20**
Total	**20**	**20**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	**Total**
Procurement	20	**20**
Total	**20**	**20**

Analysis

In May 2019, GHSC-PSM collaborated with the International Law Institute (ILI) associated with Georgetown University in Washington DC to conduct a face-to-face 5-day course in Botswana on contract management and administration processes for 20 CMS staff (11 female and 9 male). Building staff knowledge and capacity in contract management processes is expected to contribute to increased product availability in the national supply chain system and improved efficiency in managing the outsourced warehousing and distribution services at CMS.

Molecular Instruments and HIV Tracer Products

Country

Botswana

FY Quarter

2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

GHSC-PSM does not manage or support maintenance for any molecular instruments in Botswana.

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir/Emtricitabine/Efavirenz 300/200/600mg
2nd line adult ARV	Lopinavir/Ritonavir 200/50mg
Pediatric ARV	Lopinavir/Ritonavir 125mg
First RTK	Determine
Second RTK	Uni-Gold
Tie-breaker RTK	ELISA Confirmatory Test
Viral load reagent	Cobas Ampliprep/Cobas taqman HIV-1 test 48 tests
Viral load consumable	Cobas Ampliprep/CobasTaqman Wash reagent 5.1L
EID reagent	Kit CAP-G/CTM HIV 1-Qual v2.0 (CEIVD), 48 Tests
EID consumable	Dried Blood Spot Collection Kit

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Botswana

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	**5.8%**	**240**
Female condoms (HIV)	3.2%	31
Male condoms (HIV)	0.0%	31
EID consumable	14.3%	14
EID reagent	20.0%	5
Viral load reagent	14.3%	14
Second RTK	13.0%	23
First RTK	8.7%	23
Pediatric ARV	3.0%	33
2nd line adult ARV	0.0%	33
1st line adult ARV	6.1%	33
Total	**5.8%**	**240**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	100%	33

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**22%**	**19%**	**56%**	**3%**	**36**
TO1-HIV/AIDS	22%	19%	56%	3%	36
Total	**22%**	**19%**	**56%**	**3%**	**36**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	11	9	**20**
Total	**11**	**9**	**20**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
ARVs	1	1
RTKs	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Burkina Faso

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Burkina Faso

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
Total		

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**10,696**	**7.1%**
AL 6x1	1,337	20.7%
AL 6x2	1,337	4.6%
AL 6x3	1,337	10.4%
AL 6x4	1,337	7.1%
AL inability to treat	1,337	0.7%
mRDT	1,337	0.9%
SP	1,337	4.8%
LLINs	1,337	8.0%
Total	**10,696**	**7.1%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
Total		

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO2-Malaria	2,337	57%
Total	**2,337**	**57%**

Ref Analysis

Ref	Analysis
B1	Stockout rates for malaria commodities seemed to have dropped slightly, from 10% to 8%; however, any true change in stockouts may have been masked by the significant drop this quarter in the LMIS reporting rate, from 76% to 57%. According to the sites that reported, stock-outs dropped for six of seven tracer products, with the exception of LLINs, where the rate increased from 7% to 8%. The largest reduction of stock-outs was for AL 6X3, which went from 19% to 10% of SDPs stocked out.
B3	The large drop in the SDP reporting rate to the LMIS from 76% to 57% can be attributed to a series of strikes by the health sector union in May, the month for which data were collected for this report.

Warehouse stock status and product losses

Country: Burkina Faso

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**7**		**57%**	**14%**	**29%**
TO2-Malaria	7		57%	14%	29%
Total	**7**		**57%**	**14%**	**29%**

Ref	Analysis
B2	This quarter, understocking increased from 14% to 57% of observations, while stocking according to plan dropped from 29% to 14%. SP and AL 6X3 were both overstocked, while AL 6X4 was the only product stocked according to plan. The remaining products (AL 6X1, AL 6X2, RDTs, and LLINs) were understocked.

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Supply plans, innovations, and strategic activities

Country

Burkina Faso

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
Malaria commodities	Yes

Analysis

The malaria commodities supply plan review took place in May 2019 and was sent to the home office forecasting and supply planning team.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description
GHSC-PSM supported the development or update of country supply plans, training modules on quantification and supply planning, and the action plan for 2020.

Training for supply chain partners

Country

Burkina Faso

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO2-Malaria	**Total**
Female	16	**16**
Male	39	**39**
Total	**55**	**55**

C2. Number of people trained by supply chain level

Supply Chain Level	TO2-Malaria	**Total**
Central	7	**7**
Subnational level 1	13	**13**
Subnational level 2	35	**35**
Total	**55**	**55**

C2. Number of people trained by funding source and type

Type	TO2-Malaria	**Total**
TO-specific	55	**55**
Total	**55**	**55**

C2. Number of people trained by technical area

Supply Chain Function	TO2-Malaria	**Total**
Transportation and Distribution	55	**55**
Total	**55**	**55**

Analysis

This quarter, GHSC-PSM conducted a training on transportation and distribution for the seasonal chemoprevention campaign that included participants from the central, regional and district levels.

Complete Results and Denominators

Country: Burkina Faso

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO2-Malaria	**8.1%**	**9,359**
LLINs	8.0%	1,337
SP	4.8%	1,337
mRDT	0.9%	1,337
AL 6x4	7.1%	1,337
AL 6x3	10.4%	1,337
AL 6x2	4.6%	1,337
AL 6x1	20.7%	1,337
Total	**8.1%**	**9,359**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	0.7%	1,337

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO2-Malaria	57%	2,337

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**14%**	**29%**	**57%**		**7**
TO2-Malaria	14%	29%	57%		7
Total	**14%**	**29%**	**57%**		**7**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO2-Malaria	16	39	**55**
Total	**16**	**39**	**55**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
Malaria commodities	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Burma

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

For countries with data available from GHSC-PSM non-supported regions

Country: Burma

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - SDPs located in supported regions

GHSC-PSM Support	Stockout rate	# SDP stock observations
Total		

B1. Stockout rate at service delivery points - SDPs located in non-supported regions

GHSC-PSM Support	Stockout rate	# SDP stock observations
Not Supported	**0.0%**	**18**
TO1-HIV/AIDS	**0.0%**	**18**
1st line adult ARV	0.0%	3
2nd line adult ARV	0.0%	3
Pediatric ARV	0.0%	2
Viral load reagent	0.0%	3
Viral load consumable	0.0%	3
EID reagent	0.0%	2
EID consumable	0.0%	2
Total	**0.0%**	**18**

B3. LMIS reporting rate

GHSC-PSM Support	Total # of SDPs required to report	Reporting rate
Not Supported	8,272	100%
Total	**8,272**	**100%**

Ref	Analysis
B1	GHSC-PSM continued its technical support to three ART centers for quarterly ARV stock monitoring, and four viral load PCR sites for quarterly stock monitoring of viral load commodities. In FY19 Q3, all three ART centers and three out of four Abbot viral load sites provide stock monitoring reports, and two have a functioning stock monitoring /EWS system. As result, there were no stockouts at any ART sites, viral load labs and EID labs in the quarter.
B3	For Task Order 1, during Q2, 10 tertiary-level SDPs submitted LMIS reports on time, a reporting rate of 100%. For TO2 and TO2 primary level SDPs, GHSC-PSM continues its support to LMIS in three regions (Ayeyarwaddy, Bago and Magway) at the health facilities level below the township level. All 4,131 facilities requiring reporting submitted LMIS reports within one week for a reporting rate of 100%.

Warehouse stock status and product losses

Country: Burma

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**6**		**17%**	**50%**	**33%**
TO1-HIV/AIDS	3			33%	67%
TO2-Malaria	3		33%	67%	
Subnational level 1	**115**		**10%**	**66%**	**23%**
TO1-HIV/AIDS	76		12%	59%	29%
TO2-Malaria	39		8%	79%	13%
Total	**121**		**11%**	**65%**	**24%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
B2	For TO1, Burma is submitting data not only for government facilities but partner warehouses as well. At the central level is the National AIDS Program (NAP) warehouse. At the subnational level-1 are NAP partners UNION, Alliance, IOM, MSI, MDM, MSFCH, PSI as well as 21 NAP regional warehouses. At the central level, first-line adult ARVs were stocked according to plan (100%) while second-line adult ARVs and first pediatric ARVs were overstocked 100% of the time. At the subnational level, overall stocked according to plan levels for the aforementioned three commodities was 59.21%. For TO2, Burma is reporting the National Malaria Control Program (NMCP) warehouse as the central level, and the 18 regional government warehouses and partner warehouses for Defeat Malaria as the sub-national 1 level. At the central level, AL 6x4 was 100% understocked but LLINs and mRDTs were 100% stocked according to plan. At the subnational 1 level, 79.5% of warehouses were stocked according to plan for the three aforementioned commodities. There was no stock-out of any tracer commodity at any warehouse for any task order during the quarter.

Supply plans, innovations, and strategic activities

Country

Burma

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
Malaria commodities	Yes

Analysis

Burma was included in the supply planning expectations for malaria for the first time in FY2019 Q3. A supply plan was submitted as required.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Burma

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	**Total**
Female	4	**4**
Total	**4**	**4**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	**Total**
Central	4	**4**
Total	**4**	**4**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	**Total**
Cross-TO	4	**4**
Total	**4**	**4**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	**Total**
Quality Assurance	4	**4**
Total	**4**	**4**

Analysis

During the quarter, there was a QUANTB training for quantification of TB medicine at GHSC-PSM's Myanmar office with cross-TO funding. A total four participants attended.

Molecular Instruments and HIV Tracer Products

Country: Burma

FY Quarter: 2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Efavirenz/Lamivudine/Tenofovir DF 600/300/300 mg
2nd line adult ARV	Lopinavir/Ritonavir 200/50 mg
Pediatric ARV	Abacavir/Lamivudine 60/30 mg
Viral load reagent	Abbott RealTime HIV-1 Amplification Reagent Kit – Quantitative
Viral load consumable	2.0 ml skirted base cryovials with knurls
EID reagent	Abbott RealTime HIV-1 Amplification Reagent Kit – Qualitative
EID consumable	Tube, screw cap, conical, 50ml set, box/500

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Burma

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
Total		

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**50%**	**33%**	**17%**		**6**
TO1-HIV/AIDS	33%	67%			3
TO2-Malaria	67%		33%		3
Subnational level 1	**66%**	**23%**	**10%**		**115**
TO1-HIV/AIDS	59%	29%	12%		76
TO2-Malaria	79%	13%	8%		39
Total	**65%**	**24%**	**11%**		**121**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	**Total**
TO1-HIV/AIDS	4	**4**
Total	**4**	**4**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
Malaria commodities	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Burundi

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

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CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Burundi

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**2,423**	**1.3%**
1st line adult ARV	599	0.8%
2nd line adult ARV	72	1.4%
Pediatric ARV	197	1.0%
First RTK	600	2.5%
Second RTK	300	0.7%
Male condoms (HIV)	575	1.2%
Female condoms (HIV)	80	0.0%
Total	**2,423**	**1.3%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**4,870**	**1.1%**
AS/AQ 100/270mgx3	686	1.6%
AS/AQ 100/270mgx6	739	1.5%
AS/AQ 25/67.5mg	667	0.4%
AS/AQ 50/135mg	708	1.6%
mRDT	736	0.8%
SP	643	1.1%
LLINs	691	0.7%
Total	**4,870**	**1.1%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**3,169**	**1.0%**
Female condoms (HIV)	80	0.0%
Combined oral contraceptive with iron	667	0.9%
DMPA-Intramuscular injectable	692	0.6%
2-rod implant	623	0.6%
Emergency contraceptive, 2 tablets	87	4.6%
Progestin only pills	445	0.4%
Copper-bearing IUD	0	
Male condoms (FP)	575	1.2%
Total	**3,169**	**1.0%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	863	79%
TO2-Malaria	863	87%
TO3-PRH	869	82%
Total	**2,595**	**82%**

Ref Analysis

Ref	Analysis
B1	Stockout rates across all three programs (HIV, malaria and family planning) have continued to remain low and stable in Burundi, hovering around 1 percent. Both HIV and malaria have had slight decreases since the previous quarter. The project and its partner programs within the Ministry of Health contine to monitor stock status and analyze data at all supply chain levels. GHSC-PSM's CAMEBU-based staff are also in communication with distirct pharmacy managers to maintain good adherence to the requisition schedule.
B3	May reporting rates to DHIS2 remained constant for the family planning program and showed slight increases for HIV and malaria. The project continues to work with the Direction du Systeme National d'Information Sanitaire (DSNIS) to emphaisse reporting at the district level to ensure timely and complete reporting.

Warehouse stock status and product losses

Country: Burundi

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**46**	**2%**	**34%**	**23%**	**41%**
TO1-HIV/AIDS	17	0%	35%	35%	29%
TO2-Malaria	21	0%	33%	19%	48%
TO3-PRH	8	13%	25%		63%
Subnational level 1	**960**	**7%**	**36%**	**44%**	**13%**
TO1-HIV/AIDS	273	18%	23%	45%	13%
TO2-Malaria	687	3%	41%	43%	13%
Total	**1,006**	**7%**	**36%**	**43%**	**14%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
TO1	Global	Transit	Damage	Laboratory	$84,507	$588,961	14.35%

Ref	Analysis
C7	A shipment of laboratory reagents was lost due to improper cold storage. The shipment was kept cool during customs clearance, but the items required frozen storage, which is not available at the Bujumbura airport. Given the lack of frozen storage, the root cause analysis team determined that frozen items in the future must secure an import waiver to be delivered as soon as the shipments arrive in country. The team also agreed on additional procedures with the 3PL regarding dry ice packing while in transit. A replacement shipment has been ordered and was delivered directly upon arrival. An insurance claim has been filed for the initial lost shipment.
B2	For HIV commodities, stocked according to plan rates remained relatively steady, increasing from 43 to 45 percent from the previous quarter. At the central level, there were no stockouts of any ARV, RTK, or condom tracer products. At the district level, the stocked according to plan rate was also 45 percent, although stockouts of some products were reported (18 percent of observations at this level). First RTKs were especially elevated, with 47 percent of observations stocked out. For malaria products, stocked according to plan rates were similar overall, at 43 percent. At the central level, overstocking was prevalent, at 48 percent. At the district level, 43 percent of observations were stocked according to plan, while 41 percent were understocked. The stockout rate at this level fell since the previous quarter, from 6 to only 3 percent of observations. For family planning, performance fell this quarter, with no items maintaining within their min/max levels. Most (63 percent) were overstocked, including all oral contraceptives, condoms, and copper IUDs. There was also a stockout of one-rod implants. The project is planning to convene with family planning stakeholders in Q4 to discuss strategies to address the FP stock situation. The project credits health districts' good adherence to the requisition schedule established by CAMEBU for the sustained performance for malaria and HIV. There are still improvements that can be made regarding reporting of data used to determine months of stock available. The Supply Chain Logistics Advisor (seconded to CAMEBU), and focal points from the national malaria and AIDS control programs continue to support the requisition and reporting processes. GHSC-PSM will also leverage its newly-recruited Provincial Technical Advisor and its ongoing to collaboration with DSNIS to improve reporting. Finally, supply plan reviews for all program areas will support improved performance on this indicator.

Supply plans, innovations, and strategic activities

Country

Burundi

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
ARVs	Yes
FP commodities	Yes
Lab (HIV diagnostics)	Yes
Malaria commodities	Yes
RTKs	Yes

Analysis

Burundi submitted all required supply plans this quarter.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Burundi

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	Total
Total	

C2. Number of people trained by supply chain level

Supply Chain Level	Total
Total	

C2. Number of people trained by funding source and type

Type	Total
Total	

C2. Number of people trained by technical area

Supply Chain Function	Total
Total	

Analysis

GHSC-PSM did not conduct any training in Burundi this quarter.

Molecular Instruments and HIV Tracer Products

Country: Burundi

FY Quarter: 2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

GHSC-PSM no longer manages or supports maintenance for any molecular instruments in Burundi.

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir/Lamivudine/Efavirenz 300/300/600 mg
2nd line adult ARV	Abacavir/Lamivudine 600/300 mg
Pediatric ARV	Zidovudine/Lamivudine/Nevirapine 60/30/50 mg
First RTK	Determine
Second RTK	STAT-PAK Dipstick
Tie-breaker RTK	Not reported
Viral load reagent	Not reported
Viral load consumable	Not reported
EID reagent	Not reported
EID consumable	Not reported

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Burundi

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	**1.0%**	**3,169**
Male condoms (FP)	1.2%	575
Copper-bearing IUD		0
Progestin only pills	0.4%	445
Emergency contraceptive, 2 tablets	4.6%	87
2-rod implant	0.6%	623
DMPA-Intramuscular injectable	0.6%	692
Combined oral contraceptive with iron	0.9%	667
Female condoms (HIV)	0.0%	80
TO2-Malaria	**1.1%**	**4,870**
LLINs	0.7%	691
SP	1.1%	643
mRDT	0.8%	736
AS/AQ 50/135mg	1.6%	708
AS/AQ 25/67.5mg	0.4%	667
AS/AQ 100/270mgx6	1.5%	739
AS/AQ 100/270mgx3	1.6%	686
TO1-HIV/AIDS	**1.3%**	**2,423**
Female condoms (HIV)	0.0%	80
Male condoms (HIV)	1.2%	575
Second RTK	0.7%	300
First RTK	2.5%	600
Pediatric ARV	1.0%	197
2nd line adult ARV	1.4%	72
1st line adult ARV	0.8%	599
Total	**1.1%**	**10,462**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO3-PRH		
Combined oral methods	0.9%	667
Injectable contraceptives	0.6%	692
Implantable contraceptives	0.6%	623
Emergency oral contraceptives	4.6%	87
Progestin-only methods	0.4%	445

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	79%	863
TO2-Malaria	87%	863
TO3-PRH	82%	869

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**23%**	**41%**	**34%**	**2%**	**44**
TO1-HIV/AIDS	35%	29%	35%	0%	17
TO2-Malaria	19%	48%	33%	0%	21
TO3-PRH		63%	25%	13%	8
Subnational level 1	**44%**	**13%**	**36%**	**7%**	**960**
TO1-HIV/AIDS	45%	13%	23%	18%	273
TO2-Malaria	43%	13%	41%	3%	687
Total	**43%**	**14%**	**36%**	**7%**	**1,004**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	**Total**
Total	

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
ARVs	1	1
FP commodities	1	1
Lab (HIV diagnostics)	1	1
Malaria commodities	1	1
RTKs	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Cambodia

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Training for supply chain partners

Country: Cambodia

FY Quarter: 2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	TO2-Malaria	**Total**
Female	29	148	**177**
Male	62	157	**219**
Total	**91**	**305**	**396**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	TO2-Malaria	**Total**
Central	30	4	**34**
Subnational level 1	61	301	**362**
Total	**91**	**305**	**396**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	TO2-Malaria	**Total**
TO-specific	91	305	**396**
Total	**91**	**305**	**396**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	TO2-Malaria	**Total**
Forecasting and Supply Planning		90	**90**
Human Resources Capacity Development		4	**4**
MIS	91		**91**
Transportation and Distribution		211	**211**
Total	**91**	**305**	**396**

Analysis

In FY2019 Q3, GHSC-PSM Cambodia trained 396 participants (219 male and 177 female). Trainings included:

• An awareness raising training on the malaria and LLINs that was attended by 210 participants – including 130 women – from communities from among the protected area and forest-goers region within Koh Kong province;

• An orientation to an IT data collection tools workshop that introduced participants to the process for extracting malaria consumption data from the DID. Participants included stock officers from HF, CMN and CMS, totaling 90 attendees (including 15 women);

• A series of trainings on mSupply at both the central and subnational levels totaling 91 participants (29 women); and

• Support to 4 participants (3 women) to attend World Malaria Day.

Complete Results and Denominators

Country: Cambodia

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
Total		

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Total					

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	29	62	**91**
TO2-Malaria	148	157	**305**
Total	**177**	**219**	**396**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
Malaria commodities	1	0

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Cameroon

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Cameroon

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**1,440**	**13.9%**
1st line adult ARV	475	5.7%
2nd line adult ARV	37	8.1%
Pediatric ARV	33	9.1%
First RTK	535	21.3%
Second RTK	360	14.7%
Total	**1,440**	**13.9%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**630**	**49.0%**
AL 6x1	24	50.0%
AL 6x2	24	12.5%
AL 6x3	24	4.2%
AL 6x4	24	16.7%
AS/AQ 100/270mgx3	81	80.2%
AS/AQ 100/270mgx6	81	85.2%
AS/AQ 25/67.5mg	81	64.2%
AS/AQ 50/135mg	81	69.1%
mRDT	105	30.5%
SP	105	14.3%
Total	**630**	**49.0%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
Total		

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	913	80%
TO2-Malaria	4,821	47%
Total	**5,734**	**52%**

Ref Analysis

Ref	Analysis
B3	GHSC-PSM has begun including an LMIS reporting rate for TO2, based on reporting to DHIS2. Last quarter, the Ministry of Public Health instructed all health facilities to use DHIS2 for reporting patient and logistics data for priority programs, including HIV and malaria. DHIS2 reporting rates are still quite low, reaching only 47% for malaria this quarter. Under the HIV program, DHIS2 reporting is improving but also remains low. The rate shown here is still based on reporting to OSPSIDA and Excel-based tools, as in previous quarters. This TO1 rate increased slightly this quarter, rising to 80%.
B1	Malaria stockout rates are based on EUV data collection, as the reporting rate and data quality for malaria is still limited in DHIS2. The overall stockout rate across all six target regions and all products was 49%. Use of ACTs is divided between PMI-supported regions and non-supported regions. In non-supported regions, which use AS/AQ as their primary ACT, overall ASAQ stock-outs were observed to be 75%. PMI-supported regions use AL, as amodiaquine-based treatments are used for seasonal malaria chemoprevention (SMC). Stock-outs of AL in the two regions ranged from just 4% for 6x3 to 50% for 6x1. Stockout rates were higher as April is a low-transmission season for Cameroon, and ordering from facilities was low. However, GHSC-PSM supported a push of AL disitrbution to 194 health facilities that did not order, and of mRDTs to community health workers. The project also distributed 6,000 stock cards to over 300 facilities and health districts, and it tracked deliveries using the TransIT tool and direct phone calls to esnure commodities were delivered to SDPs for patients.
B1	The overall stockout rate for HIV tracer products rose this quarter, from 4.4% to 13.9%. Stockouts rates of adult and pediatric ARVs remained under the target of <10 %; pediatric ARVs in particular recovered from a spike in stockout rates the previous quarter (21% in Q2 to 3% in Q3). First and second RTKs stockout rates, however, rose steeply. This is due mainly to a shortage of HIV commodities in the country, stemming from delays in funding disbursements and order validation with the government of Cameroon and other donors. GHSC-PSM supported the country to place an emergency order for Determine test kits with the Global Fund, to be delivered in Q4. Other foundations and faith-based groups also bought and distributed tests in Centre and Littoral regions to reduce the impact of the national shortages.

Warehouse stock status and product losses

Country: Cameroon

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**15**	**47%**	**53%**	**0%**	**0%**
TO1-HIV/AIDS	15	47%	53%	0%	0%
Subnational level 1	**168**	**26%**	**34%**	**17%**	**23%**
TO1-HIV/AIDS	60	25%	40%	22%	13%
TO2-Malaria	108	27%	31%	14%	29%
Total	**183**	**28%**	**36%**	**15%**	**21%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
B2	The overall stocked according to plan rate for HIV remained consistent this quarter, at 17% of stock observations. At the central level, all products are either stocked out or understocked, but the regional level performed better, at 22%. First-line adult ARVs in particular reached 58% stocked according to plan. For malaria products (regiona level data only), the rate was 14%. Twenty-nine percent of observations were overstocked, which may be due to limited distribution during the dry season, when there is reduced malaria transmission.
C7	There are no product losses to report this quarter.

Supply plans, innovations, and strategic activities

Country: Cameroon

FY Quarter: 2019-Q3

Total Innovations implemented this quarter: 1 (New approaches)

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description
Crosscutting	New approaches	In April 2019, the regional supply chain unit for the Littoral regoin, with support from GHSC-PSM, set up a working group to redesign, formalize, and implement an integrated commodity distribution system across several health programs (Malaria, Tuberculosis, reproductive health and HIV). The working group validated orders, reviewed distribution planning, and monitored deliveries. Through this approach, an integrated distribution plan was established to conduct monthly and quarterly distributions, keeping the district and health facilities informed. Furthermore, orders were validated within the working group, providing a medium to build capacity and provide feedback to health facilities on orders and reports. Finally, transportation of commodities had previously been implemented by the Regional Fund for Health Promotion's fleet. However, to ensure that the new integrated approach reached all health facilities in the region, a 3PL provider was contracted to fill the gaps. In May 2019, just one month after this implementation, 17/24 (70%) HD and 44/55 (80%) high volume sites submitted an order, and 100% of them received their commodities. In addition, the lead time was significantly reduced from 14 to six (6) working days. These results sugget that integrated distribution of commodities is efficient and effective, and the Littoral team will document the experience and build a sustainability strategy for it.

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
ARVs	Yes
Lab (HIV diagnostics)	Yes
Malaria commodities	No
RTKs	Yes

Analysis

Cameroon submitted supply plans as usual for ARVs, HIV lab, and RTK commodities. This quarter, the requirements expanded to include malaria supply plans for the first time. The plan was not completed in time for Q3 submission, but it is in progress and is on track to be submitted by August.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description
The project supported the national Directorate of Pharmacy, Medicine and Laboratory to coordinate the revision of the manual of pharmaceutical management Standard Operating Procedures (SOPs). The validation of this manual is ongoing, and GHSC-PSM will support its dissemination once validated.

Training for supply chain partners

Country: Cameroon

FY Quarter: 2019-Q3

C2. Number of people trained by sex

Sex	TO2-Malaria	**Total**
Female	12	**12**
Male	65	**65**
Total	**77**	**77**

C2. Number of people trained by supply chain level

Supply Chain Level	TO2-Malaria	**Total**
Subnational level 1	17	**17**
Subnational level 2	60	**60**
Total	**77**	**77**

C2. Number of people trained by funding source and type

Type	TO2-Malaria	**Total**
TO-specific	77	**77**
Total	**77**	**77**

C2. Number of people trained by technical area

Supply Chain Function	TO2-Malaria	**Total**
MIS	60	**60**
Warehousing and Inventory Management	17	**17**
Total	**77**	**77**

Analysis

The project conducted two training activities this quarter. In the Far North Region, GHSC-PSM trained 60 district logisticians from 30 health districts on the management of distribution tools and data, in preparation for the upcoming LLIN distribution campaign. These district logisticians will in turn train 627 health area logisticians in their respective districts. In the North region, 17 storekeepers were trained in storage, inventory management, the 5S + Safety approach, and the use of performance indicators. The training was timely as it came one week before the semiannual inventory of the RFHP. This training was aimed at equipping the personnel to improve inflow and outflow of goods through the warehouse.

Molecular Instruments and HIV Tracer Products

Country

Cameroon

FY Quarter

2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

GHSC-PSM does not manage or support maintenance for any molecular instruments in Cameroon.

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir/Lamivudine/Efavirenz 300/300/600 mg
2nd line adult ARV	Abacavir/Lamivudine 600/300 mg
Pediatric ARV	Zidovudine/Lamivudine/Nevirapine 60/30/50 mg
First RTK	Determine
Second RTK	OraQuick, Shanghi
Tie-breaker RTK	Not reported
Viral load reagent	Not reported
Viral load consumable	Not reported
EID reagent	Not reported
EID consumable	Not reported

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Cameroon

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO2-Malaria	**49.0%**	**630**
SP	14.3%	105
mRDT	30.5%	105
AS/AQ 50/135mg	69.1%	81
AS/AQ 25/67.5mg	64.2%	81
AS/AQ 100/270mgx6	85.2%	81
AS/AQ 100/270mgx3	80.2%	81
AL 6x4	16.7%	24
AL 6x3	4.2%	24
AL 6x2	12.5%	24
AL 6x1	50.0%	24
TO1-HIV/AIDS	**13.9%**	**1,440**
Second RTK	14.7%	360
First RTK	21.3%	535
Pediatric ARV	9.1%	33
2nd line adult ARV	8.1%	37
1st line adult ARV	5.7%	475
Total	**24.6%**	**2,070**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	80%	913
TO2-Malaria	47%	4,821

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**0%**	**0%**	**53%**	**47%**	**15**
TO1-HIV/AIDS	0%	0%	53%	47%	15
Subnational level 1	**17%**	**23%**	**34%**	**26%**	**168**
TO1-HIV/AIDS	22%	13%	40%	25%	60
TO2-Malaria	14%	29%	31%	27%	108
Total	**15%**	**21%**	**36%**	**28%**	**183**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO2-Malaria	12	65	**77**
Total	**12**	**65**	**77**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
ARVs	1	1
Lab (HIV diagnostics)	1	1
Malaria commodities	1	0
RTKs	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

eSwatini

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Supply plans, innovations, and strategic activities

Country

eSwatini

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
Condoms	Yes

Analysis

The requested supply plan (TO1/TO3 condoms) was submitted to GHSC-PSM during this period.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country: eSwatini

FY Quarter: 2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	**Total**
Female	36	**36**
Male	31	**31**
Total	**67**	**67**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	**Total**
Central	67	**67**
Total	**67**	**67**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	**Total**
TO-specific	67	**67**
Total	**67**	**67**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	**Total**
Forecasting and Supply Planning	57	**57**
Warehousing and Inventory Management	10	**10**
Total	**67**	**67**

Analysis

GHSC-PSM led two trainings in this period: (1) Orientation of pharmaceutical staff on TLD ordering and ART treatment optimization (23 male, 34 female), and (2) Store personnel orientation in inventory management (8 male, 2 female). The majority of trainings for FY2019 are scheduled for the coming quarter.

Molecular Instruments and HIV Tracer Products

Country

eSwatini

FY Quarter

2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	
2nd line adult ARV	
Pediatric ARV	
First RTK	
Second RTK	
Tie-breaker RTK	
Viral load reagent	
Viral load consumable	
EID reagent	
EID consumable	

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: eSwatini

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
Total		

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Total					

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	36	31	**67**
Total	**36**	**31**	**67**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
Condoms	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Ethiopia

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Ethiopia

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**4,278**	**7.7%**
1st line adult ARV	1,100	3.3%
2nd line adult ARV	229	9.6%
Pediatric ARV	924	2.6%
First RTK	394	9.9%
Second RTK	301	27.6%
Tie-breaker RTK	295	22.4%
Viral load reagent	19	0.0%
Viral load consumable	31	12.9%
EID reagent	19	0.0%
EID consumable	268	8.2%
Male condoms (HIV)	698	4.7%
Total	**4,278**	**7.7%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**2,968**	**10.6%**
AL 6x1	331	18.7%
AL 6x2	453	17.7%
AL 6x3	297	17.8%
AL 6x4	728	7.3%
AL inability to treat	820	5.2%
mRDT	339	7.4%
Total	**2,968**	**10.6%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**6,573**	**6.6%**
Combined oral contraceptive with iron	902	7.4%
DMPA-Intramuscular injectable	1,016	3.8%
1-rod implant	908	10.5%
2-rod implant	627	5.1%
Emergency contraceptive, 2 tablets	818	10.3%
Progestin only pills	783	8.4%
Copper-bearing IUD	821	2.3%
Male condoms (FP)	698	4.7%
Total	**6,573**	**6.6%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	1,228	94%
TO2-Malaria	1,044	84%
TO3-PRH	1,149	95%
TO4-MCH	1,164	83%
Total	**4,585**	**89%**

Ref Analysis

B1

Stockout rates this quarter remained constant and relatively low, though malaria stock-outs remained above 10% (13%). The overall stockout rate of 8% was not within the country's target of 5%.

TO1: HIV commodity stock-outs (8%) remained nearly the same as last quarter. The stockout rate was driven by stock-outs of second- and tie-breaker RTKs (28% and 22%, respectively), attributed to data quality problems with the reporting form for RTKs not yet being fully integrated with the Integrated Pharmaceuticals Logistics System. Stock status for RTKs is being shown this quarter from both the old and new algorithms. An RTK assessment conducted last quarter showed that there is a mismatch between the number of testing facilities versus the number of packs of SD Bioline and Abon allocated to each Woreda. Most Woredas therefore have placed the second RTKs at selected high yield public facilities to serve as referral sites. Stock-outs of pediatric ARVs declined to just under 3%, while there were no stock-outs of viral load reagents at any of the 19 lab sites.

TO2: Stock-outs were driven by increases in stock-outs of AL 6X2 (10% to 18%) and AL 6X3 (13% to 18%). These can be attributed to a late delivery of the medicines from the manufacturer and unexpected increases in consumption. Moreover, the culture of using AL 6X4 for all AL combinations might account for higher stock-outs of the other presentations as health workers failed to request sufficient quantities of these presentations. On the other hand, stock-outs of RDTs decreased significantly since last quarter, from 16% to 7%, following a rapid assessment which GHSC-PSM conducted in Q2 (due to increases in stock-outs) that led to recommendations to stakeholders.

TO3: FP/RH stock-outs increased slightly from the previous quarter (6% to 7%), driven by the increase in stock-outs of emergency contraceptives from 6% to 10% due to under-ordering, low fill rate and data quality problems. Consistent with last quarter, stock-outs of 1-rod implants (11%) can be attributed to supply shortages, as there is only one supplier for this product (Merck Sharp). However, we expect improved availability due to procurements by UNFPA and the Ethiopian government that are in the pipeline. The percentage of SDPs without any modern contraceptive methods in stock was only 0.65%.

B3

The SDP reporting rate continues to meet the target of 95%. Reporting rates for TO2 and TO4 (84% and 82%, respectively) fell short of this target. Among regions, one in particular had a lower reporting rate (80%) while 12 of 18 regions met the target of 95% or higher. Timeliness (reporting by the deadline or within one week) ranged from 92% for TO1 to 94% for TO2. For TO3 and TO4 sites, 93% reported on time. GHSC-PSM continued to strengthen regular data quality analysis practices and the use of analysis results to identify low performing service delivery points for more follow up and support.

Warehouse stock status and product losses

Country: Ethiopia

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**24**	**22%**	**43%**	**4%**	**30%**
TO1-HIV/AIDS	11	9%	36%	9%	45%
TO2-Malaria	5	60%	40%		
TO3-PRH	8	13%	50%		38%
Subnational level 1	**360**	**11%**	**32%**	**18%**	**39%**
TO1-HIV/AIDS	126	3%	23%	21%	52%
TO2-Malaria	90	29%	34%	13%	23%
TO3-PRH	144	6%	36%	17%	42%
Total	**384**	**12%**	**33%**	**17%**	**39%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
B2	Across all observations at both central and regional warehouses, stocking according to plan improved slightly, from 15% to 17%. Among task orders, this rate varies from 13% (TO2) to 20% (TO1). The project is working with EPSA to strengthen its cyclical and annual inventory management systems, to triangulate consumption and service data, and to work with regions and sites to improve data quality. TO1: Stocking according to plan has steadily increased for HIV commodities across the last three quarters, from 11% to 20%. However, this is primarily at the regional level, as only 9% of observations at the central warehouse were stocked according to plan. Improvements are mainly due to improved stocking of first RTKs (37% stocked according to plan: 100% at the central level and 33% at regional warehouses). This can be attributed to the smooth nationwide transition to the new HIV testing algorithm. TO2: Stocking according to plan for malaria products varied widely from 0% (AL 6X2) to 16% (AL6X3), while the stocked according to plan rate for AL 6X4 decreased significantly from 32% to 5%. It remains understocked at the central warehouse. TO3: For FP/RH commodities, 41% of observations were overstocked. At the central level, 50% of observations were understocked and 13% stocked out. Stock-outs included 1- and 2-rod implants, emergency contraceptives, progestin only pills, and male condoms, all of which were only in a few regional warehouses. Progestin only pills were also stocked out at the central warehouse.

Supply plans, innovations, and strategic activities

Country: Ethiopia

FY Quarter: 2019-Q3

Total Innovations implemented this quarter: 1 (Operational research studies)

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description
TO4-MCH	Operational research studies	GHSC-PSM Ethiopia supported the Adama Hospital Medical College in designing and executing a study and subsequent interventions on the rational prescribing practices of amoxicillin dispersible tablets and amoxicillin suspension for pneumonia management in children under five. Study findings indicated that only 13 percent of children under five were appropriately treated per the recommendations of standard treatment guidelines. None of the children were given amoxicillin, even though the hospital has stocked it for more than five years. Findings also indicated that prescribers resorted to more expensive second-line drugs. The root cause analysis indicated that the following all contributed to poor prescription of antibiotics: misperceptions about the lack of efficacy of amoxicillin suspension, unsatisfactory experience of prescribers, weak regulation, lack of adequate knowledge, lack of updated guidelines, and absence of clinical pharmacy practices. The results were presented to the drug and therapeutic committee, the pediatric department of the hospital and at a national review meeting. In the meetings, held in June, stakeholders agreed to design and implement interventions to avoid irrational drug use, ensure adherence to the prescription guidelines, and design a user-friendly order sheet to standardize the prescribing practice. The evaluation will be repeated in six months to determine the effectiveness of the interventions.

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
Condoms	Yes
FP commodities	Yes
Lab (HIV diagnostics)	Yes
Malaria commodities	Yes
RTKs	Yes

Analysis

GHSC-PSM updated the required quarterly supply plans for HIV RTKs, laboratory commodities, male condoms, malaria commodities and FP/RH commodities. All quarterly supply plan updates were submitted to the home office.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description
GHSC-PSM provided support to develop a one-page quality policy as per the ISO 9001:2015 QMS requirements. The quality policy shows the commitment of the Ethiopian Pharmaceuticals Supply Agency to satisfy the needs and expectations of its customers and stakeholders, while ensuring continual quality improvement and working toward the agency's mission in a sustainable manner.

Training for supply chain partners

Country: Ethiopia

FY Quarter: 2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Female	0	0	2	3	**5**
Male	8	8	19	28	**63**
Total	**8**	**8**	**21**	**31**	**68**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Central	8	8	21	8	**45**
Subnational level 1				23	**23**
Total	**8**	**8**	**21**	**31**	**68**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Cross-TO	8	8	21	8	**45**
TO-specific				23	**23**
Total	**8**	**8**	**21**	**31**	**68**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Human Resources Capacity Development				23	**23**
Strategy and Planning	8	8	21	8	**45**
Total	**8**	**8**	**21**	**31**	**68**

Analysis

GHSC-PSM provided training for 68 professionals in the following thematic areas:
1. An RMNCH training-of-trainers for 23 (20 male and 3 female) health professionals, categorized as human resource capacity development;
2. Leadership training for 39 (37 male and 2 female) directors and managers from central EPSA, categorized as strategy and planning
3. QMS training was provided to six EPSA central staff (all males); categorized as strategy and planning

Molecular Instruments and HIV Tracer Products

Country

Ethiopia

FY Quarter

2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

75%

Analysis

Out of the 20 molecular instruments, 15 remained functional throughout the quarter. The performance increased from 70% to 75% since the previous quarter. Service at the five affected sites was interrupted for a total of 59 working days, representing a decrease from the 81 working days the previous quarter.

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Efavirenz/Lamivudine/Tenofovir DF 600/300/300 mg
2nd line adult ARV	Atazanavir/Ritonavir 300/100 mg
Pediatric ARV	Lamivudine/Zidovudine/Nevirapine 30/60/50 mg
First RTK	Transitioning from Colloidal Gold to STAT-PAK.
Second RTK	Transitioning from Uni-Gold to Abon HIV 1/2/O kit
Tie-breaker RTK	Transitioning from Vikia to SD Bioline HIV 1/2 3.0 kit
Viral load reagent	Molecular, m2000 Real Time PCR, HIV-1 Amplification Reagent Kit, 96 tests, Quantitative, (4 Packs x 24) Assays Molecular, COBAS, TaqMan, CAP/CTM HIV v2.0, Quantitative, 48 Tests Plasma preparation tube of 100 (for plasma based test)
Viral load consumable	Dry Blood Spot (DBS) kit sample collection bundle of 20 tests
EID reagent	Molecular, m2000 RealTime PCR, HIV-1 Qualitative Amplification Reagent Kit, 96 Tests Molecular, COBAS TaqMan, AmpliPrep, HIV-1, Qualitative, 48 Tests,
EID consumable	Dry Blood Spot (DBS) kit sample collection bundle of 20 tests

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Ethiopia

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	**6.6%**	**6,573**
Male condoms (FP)	4.7%	698
Copper-bearing IUD	2.3%	821
Progestin only pills	8.4%	783
Emergency contraceptive, 2 tablets	10.3%	818
2-rod implant	5.1%	627
1-rod implant	10.5%	908
DMPA-Intramuscular injectable	3.8%	1,016
Combined oral contraceptive with iron	7.4%	902
TO2-Malaria	**12.7%**	**2,148**
mRDT	7.4%	339
AL 6x4	7.3%	728
AL 6x3	17.8%	297
AL 6x2	17.7%	453
AL 6x1	18.7%	331
TO1-HIV/AIDS	**7.7%**	**4,278**
Male condoms (HIV)	4.7%	698
EID consumable	8.2%	268
EID reagent	0.0%	19
Viral load consumable	12.9%	31
Viral load reagent	0.0%	19
Tie-breaker RTK	22.4%	295
Second RTK	27.6%	301
First RTK	9.9%	394
Pediatric ARV	2.6%	924
2nd line adult ARV	9.6%	229
1st line adult ARV	3.3%	1,100
Total	**8.2%**	**12,301**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	5.2%	820
TO3-PRH		
Combined oral methods	7.4%	902
Injectable contraceptives	3.8%	1,016
Implantable contraceptives	5.7%	977
Emergency oral contraceptives	10.3%	818
Progestin-only methods	8.4%	783

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	94%	1,228
TO2-Malaria	84%	1,044
TO3-PRH	95%	1,149
TO4-MCH	83%	1,164

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**4%**	**30%**	**43%**	**22%**	**23**
TO1-HIV/AIDS	9%	45%	36%	9%	11
TO2-Malaria			40%	60%	5
TO3-PRH		38%	50%	13%	8
Subnational level 1	**18%**	**39%**	**32%**	**11%**	**342**
TO1-HIV/AIDS	21%	52%	23%	3%	126
TO2-Malaria	13%	23%	34%	29%	90
TO3-PRH	17%	42%	36%	6%	144
Total	**17%**	**39%**	**33%**	**12%**	**365**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	0	8	**8**
TO2-Malaria	0	8	**8**
TO3-PRH	2	19	**21**
TO4-MCH	3	28	**31**
Total	**5**	**63**	**68**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
Condoms	1	1
FP commodities	1	1
Lab (HIV diagnostics)	1	1
Malaria commodities	1	1
RTKs	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period
20	75%

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Ghana

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Ghana

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**5,072**	**15.6%**
1st line adult ARV	415	9.6%
2nd line adult ARV	415	41.9%
Pediatric ARV	415	32.5%
First RTK	386	14.5%
Second RTK	386	14.5%
Male condoms (HIV)	2,288	6.7%
Female condoms (HIV)	767	23.3%
Total	**5,072**	**15.6%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
Total		

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**21,948**	**5.0%**
Combined oral contraceptive with iron	2,354	4.8%
NET-En Injectable	3,074	4.1%
DMPA-Intramuscular injectable	4,697	2.0%
1-rod implant	3,096	2.9%
2-rod implant	3,524	2.5%
Progestin only pills	1,555	7.4%
Copper-bearing IUD	593	23.3%
Male condoms (FP)	2,288	6.7%
Female condoms (FP)	767	23.3%
Total	**21,948**	**5.0%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
Total		

Ref Analysis

B1 TO2 data were not reported this quarter as these data are currently obtained through the End Use Verification (EUV) survey, which is conducted bi-annually. TO2 data are expected to be reported on in Q4. The TO1 overall stockout rate decreased by 2.5%, while the TO3 overall stockout rate decreased marginally (from 5.2% to 5.0%). The decline in TO1's stock outrate is primarily driven by the most used first-line pediatric ARV, whose stockout rate decreased by nearly 34%. The stockout rate for first-line pediatric ARVs remains high, though, at 32.5%. This is due to the fact some facilities do not see patients that would be treated with this commodity, so they decide not to stock them.

Warehouse stock status and product losses

Country: Ghana

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**81**	**24%**	**15%**	**24%**	**37%**
TO1-HIV/AIDS	21	14%	24%	29%	33%
TO2-Malaria	30	50%	10%	13%	27%
TO3-PRH	30	0%	17%	30%	53%
Subnational level 1	**810**	**16%**	**35%**	**22%**	**27%**
TO1-HIV/AIDS	210	2%	43%	25%	30%
TO2-Malaria	300	32%	30%	18%	20%
TO3-PRH	300	7%	34%	21%	38%
Total	**891**	**16%**	**33%**	**22%**	**28%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
TO2	Central	Storage	Damage	mRDTs	$9	$529,093	0.00%
TO2	Global	Transit	Missing product	mRDTs	$9,108	$5,957,490	0.15%
TO3	Global	Transit	Missing product	Progestin Only Pills	$2,862	$923,408	0.31%

Ref	Analysis
B2	All stocked statuses were similar to or the same as last quarter, with the biggest change being an increase in the understocked rate by 3%. AS/AQ was stocked out 100% of the observations at the central level due to a delay in an AS/AQ shipment caused by product quality concerns. This resulted in stock-outs at the subnational level, with the AS/AQ products being stocked out at least 50% of the observations. No TO3 products were stocked out at the central level.
C7	One pallet with progestin only pills went missing en route to Accra. Four pallets were expected to be delivered, but only three pallets arrived at the central warehouse. The 3PL could not locate the missing pallet. GHSC-PSM was reimbursed $4,756.73.
C7	Two packs (consisting of 25 strips) of mRDTs were damaged and quarantined at the central warehouse. There are plans to dispose of the product.
C7	Two pallets of mRDTs went missing en route to Accra. In total, 20 pallets of mRDTs were meant to arrive at Ghana's central warehouse; however, only 18 arrived. The 3PL was unable to locate the missing pallets. A claim has been filed.

Supply plans, innovations, and strategic activities

Country

Ghana

FY Quarter

2019-Q3

Total Innovations implemented this quarter

New approaches

1

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description
Crosscutting	New approaches	Empowering sub-national structures for supply chain performance. GHSC-PSM has supported the creation regional supply chain technical working group as a mechanism for decentralizing supply chain governance and promoting data use. The regional supply chain technical working group serves as a vehicle for translating policy and strategic decisions at the central level into operational activities at sub-national levels. Without this mechanism, there will be a void in supply chain coordination and decision making below the central level.

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
ARVs	Yes
Condoms	Yes
FP commodities	Yes
Malaria commodities	Yes
RTKs	Yes

Analysis

GHSC-PSM Ghana submitted all five required supply plans for the quarter.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Ghana

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Female	52	54	47	5	**158**
Male	90	93	82	8	**273**
Total	**142**	**147**	**129**	**13**	**431**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
SDP	142	147	129	13	**431**
Total	**142**	**147**	**129**	**13**	**431**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Cross-TO	142	147	129	13	**431**
Total	**142**	**147**	**129**	**13**	**431**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Warehousing and Inventory Management	142	147	129	13	**431**
Total	**142**	**147**	**129**	**13**	**431**

Analysis

A total of 431 commodity managers comprising 273 males and 158 females were trained in warehousing and inventory management.

Molecular Instruments and HIV Tracer Products

Country: Ghana

FY Quarter: 2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir/Lamivudine/Efavirenz 300/300/600 mg
2nd line adult ARV	Liponavir/Retonavir 200mg/50mg
Pediatric ARV	Zidovudine 60 mg + Lamivudine 30 mg Tablet + Nevrapine 10mg/ml or Nevirapine 50mg dispersible tablet
First RTK	First Response
Second RTK	OraQuick
Tie-breaker RTK	Genscreen (ELISA test)
Viral load reagent	CAP/CTM HIV v2.0, Quantitative, 48 Tests
Viral load consumable	Not reported
EID reagent	CAP CTM HIV Qual 48 tests
EID consumable	Not reported

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Ghana

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	**5.0%**	**21,948**
Female condoms (FP)	23.3%	767
Male condoms (FP)	6.7%	2,288
Copper-bearing IUD	23.3%	593
Progestin only pills	7.4%	1,555
2-rod implant	2.5%	3,524
1-rod implant	2.9%	3,096
DMPA-Intramuscular injectable	2.0%	4,697
NET-En Injectable	4.1%	3,074
Combined oral contraceptive with iron	4.8%	2,354
TO1-HIV/AIDS	**15.6%**	**5,072**
Female condoms (HIV)	23.3%	767
Male condoms (HIV)	6.7%	2,288
Second RTK	14.5%	386
First RTK	14.5%	386
Pediatric ARV	32.5%	415
2nd line adult ARV	41.9%	415
1st line adult ARV	9.6%	415
Total	**6.5%**	**23,965**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO3-PRH		
Combined oral methods	4.8%	2,354
Injectable contraceptives	2.0%	4,912
Implantable contraceptives	1.7%	3,969
Progestin-only methods	7.4%	1,555

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**24%**	**37%**	**15%**	**24%**	**75**
TO1-HIV/AIDS	29%	33%	24%	14%	21
TO2-Malaria	13%	27%	10%	50%	30
TO3-PRH	30%	53%	17%	0%	30
Subnational level 1	**22%**	**27%**	**35%**	**16%**	**750**
TO1-HIV/AIDS	25%	30%	43%	2%	210
TO2-Malaria	18%	20%	30%	32%	300
TO3-PRH	21%	38%	34%	7%	300
Total	**22%**	**28%**	**33%**	**16%**	**825**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	52	90	**142**
TO2-Malaria	54	93	**147**
TO3-PRH	47	82	**129**
TO4-MCH	5	8	**13**
Total	**158**	**273**	**431**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
ARVs	1	1
Condoms	1	1
FP commodities	1	1
Malaria commodities	1	1
RTKs	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Guinea

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Guinea

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
Total		

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**4,001**	**5.1%**
AL 6x1	500	4.6%
AL 6x2	503	5.0%
AL 6x3	501	4.8%
AL 6x4	499	10.2%
AL inability to treat	495	1.0%
mRDT	499	2.4%
SP	502	10.0%
LLINs	502	2.6%
Total	**4,001**	**5.1%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**2,338**	**19.1%**
Combined oral contraceptive with iron	376	30.1%
DMPA-Intramuscular injectable	418	14.6%
2-rod implant	405	13.6%
Progestin only pills	349	30.4%
Copper-bearing IUD	379	14.5%
Male condoms (FP)	411	13.9%
Total	**2,338**	**19.1%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO2-Malaria	505	100%
TO3-PRH	454	96%
Total	**959**	**98%**

Ref Analysis

Ref	Analysis
B1	Stockouts of malaria products improved this quarter from 10 to 6 percent, while stockouts of FP/RH products increased from 15 to 19 percent. TO2: Stockouts of all four AL presentations dropped, while the percent of facilities stocked out of all four presentations ("inability to treat") remained low at 1 percent. The main driver of the improvements in stockouts, however, was the reduction in stockouts of LLINs from 19 percent to 3 percent. Successful prepositioning of malaria commodities in PCG (Pharmacie Centrale de Guinée) regional warehouses ahead of distributions may have contributed to the improved stockout rates. This process is based on a forced ordering min-max inventory control system that GHSC-PSM helped to implement a few months ago. Forward shipping of mRDTs from the Global Fund along with PMI shipments of AL 6X1 and 6x3 increased stock levels at warehouses, allowing PCG to adequately fill health facility orders. TO3: The increase in FP/RH stockouts was driven by the increase in combined oral contraceptive and progestin-only pills stockouts (both of which increased from 21 to 30 percent of SDPs stocked out), and injectables (from 9 to 15 percent stocked out), due to the lower stock availability of these products at the central and regional levels. To correct this stock imbalance, the MOH, with GHSC-PSM support, ordered ten months of combined oral contraceptives and four months of progestin-only pills in May, while other government-placed orders have recently arrived.
B3	SDP reporting rates to the LMIS continued to improve this quarter: 100 percent of SDPs required to report on malaria commodities did so (up from 97 percent last quarter), while the reporting rate for FP/RH increased from 93 to 96 percent. Consistent coaching, follow-up and support provided jointly by the Regional Pharmacy Inspectors and the GHSC-PSM Regional Technical Advisors continue to contribute to this strong performance. Regional supply chain performance meetings that GHSC-PSM supports have incentivized health facility-level supply chain personnel to continually report LMIS data in a timely manner, as evidenced by the increase in overall on-time reporting from 67 percent in FY19 Quarter 2 to 80 percent this quarter. A similar trend was observed for both TO2 and TO3, where on-time reporting increased from 62 to 81 percent and from 65to 78 percent, respectively.

Warehouse stock status and product losses

Country: Guinea

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**12**		**33%**	**25%**	**42%**
TO2-Malaria	6		33%	50%	17%
TO3-PRH	6		33%		67%
Subnational level 1	**72**	**19%**	**19%**	**22%**	**39%**
TO2-Malaria	36	11%	25%	19%	44%
TO3-PRH	36	28%	14%	25%	33%
Total	**84**	**17%**	**21%**	**23%**	**39%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
B2	Across products and supply chain levels, stocked according to plan increased substantially from 13 percent to 23 percent of stock status observations, and understocking decreased dramatically from 73 to 21 percent. These trends were similar for both malaria and FP/RH commodities, however FP/RH commodities faced stockouts at 24 percent of observations (up from 0 percent last quarter). These stockouts were all at the regional warehouses. The central warehouse, on the other hand, was largely overstocked with FP/RH commodities (67 percent). Similarly, for malaria commodities, 11 percent of observations at regional warehouses were stocked out, while at the central warehouse, 50 percent were stocked according to plan. As noted under indicator B1, the min-max inventory control system helped improve stock levels, along with a routine assessment of stock levels in all warehouses and prepositioning of stocks in regional warehouses ahead of quarterly distributions. The overstock of FP/RH commodities at the central level is due to the latest deliveries of contraceptives from both the Government of Guinea and UNFPA. This will be corrected over the next quarter as it is anticipated that a portion of the inventory will be distributed to lower levels of the system to meet demand.

Supply plans, innovations, and strategic activities

Country: Guinea

FY Quarter: 2019-Q3

Total Innovations implemented this quarter

Operational research studies: **1**

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description
Crosscutting	Operational research studies	GHSC-PSM Guinea worked with the National Directorate of Pharmacies and Medicines (DNPM) to conduct a comprehensive mapping of all private pharmacies in the country, including developing a dynamic geographic mapping of the pharmacies by urban and rural zones, determining the extent to which pharmacies are located at their allotted sites, and determining which pharmacies are operating legally and which are not, among other questions covered. The study increases information on population coverage by pharmacies and aims to help guide the government in establishing new pharmacies in a way that ensures equitable geographic coverage.

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
Malaria commodities	Yes

Analysis

A malaria supply plan was conducted and shared with the home office FASP team this quarter per requirements.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Guinea

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Female	56	18	17	**91**
Male	80	23	21	**124**
Total	**136**	**41**	**38**	**215**

C2. Number of people trained by supply chain level

Supply Chain Level	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Central	136	41	38	**215**
Total	**136**	**41**	**38**	**215**

C2. Number of people trained by funding source and type

Type	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Cross-TO	44	41	38	**123**
TO-specific	92			**92**
Total	**136**	**41**	**38**	**215**

C2. Number of people trained by technical area

Supply Chain Function	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Forecasting and Supply Planning	46			**46**
MIS	7	7	6	**20**
Monitoring and Evaluation	80	31	30	**141**
Warehousing and Inventory Management	3	3	2	**8**
Total	**136**	**41**	**38**	**215**

Analysis

The National Supply Chain Assessment (NSCA) was conducted this quarter, which included training of central level MOH personnel in mapping and data collection (classified as monitoring and evaluation). Additionally, three central level trainings were held related to forecasting and quantification for malaria: 1) a workshop to update the malaria supply plan, 2) preparatory training for quantification of malaria commodities, and 3) the quantification workshop for malaria commodities. Additionally, data collectors were trained in mapping pharmacies for the private sector pharmacy study (monitoring and evaluation), national hospital personnel were trained in the eLMIS, and central and regional MOH personnel were trained on the use of temperature and humidity sensors (warehousing and distribution).

Complete Results and Denominators

Country: Guinea

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	**19.1%**	**2,338**
Male condoms (FP)	13.9%	411
Copper-bearing IUD	14.5%	379
Progestin only pills	30.4%	349
2-rod implant	13.6%	405
DMPA-Intramuscular injectable	14.6%	418
Combined oral contraceptive with iron	30.1%	376
TO2-Malaria	**5.6%**	**3,506**
LLINs	2.6%	502
SP	10.0%	502
mRDT	2.4%	499
AL 6x4	10.2%	499
AL 6x3	4.8%	501
AL 6x2	5.0%	503
AL 6x1	4.6%	500
Total	**11.0%**	**5,844**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	1.0%	495
TO3-PRH		
Combined oral methods	30.1%	376
Injectable contraceptives	14.6%	418
Implantable contraceptives	13.6%	405
Progestin-only methods	30.4%	349

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO2-Malaria	100%	505
TO3-PRH	96%	454

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**25%**	**42%**	**33%**		**12**
TO2-Malaria	50%	17%	33%		6
TO3-PRH		67%	33%		6
Subnational level 1	**22%**	**39%**	**19%**	**19%**	**72**
TO2-Malaria	19%	44%	25%	11%	36
TO3-PRH	25%	33%	14%	28%	36
Total	**23%**	**39%**	**21%**	**17%**	**84**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO2-Malaria	56	80	**136**
TO3-PRH	18	23	**41**
TO4-MCH	17	21	**38**
Total	**91**	**124**	**215**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
Malaria commodities	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Haiti

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Haiti

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**943**	**0.2%**
1st line adult ARV	147	0.0%
2nd line adult ARV	147	0.0%
Pediatric ARV	147	0.0%
First RTK	147	0.0%
Second RTK	147	1.4%
Male condoms (HIV)	208	0.0%
Total	**943**	**0.2%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
Total		

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**1,248**	**0.0%**
Combined oral contraceptive with iron	208	0.0%
DMPA-Intramuscular injectable	208	0.0%
2-rod implant	208	0.0%
Copper-bearing IUD	208	0.0%
Calendar-based awareness methods	208	0.0%
Male condoms (FP)	208	0.0%
Total	**1,248**	**0.0%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	154	100%
TO3-PRH	219	100%
Total	**373**	**100%**

Ref	Analysis
B1	The stockout rate for GHSC-PSM-supported sites in Haiti improved yet again this quarter with only two sites reporting a stock-out for HIV commodities second-line RTKs) out of 147 sites reporting, and no sites reporting a stock-out of family planning products among the 208 sites reporting.
B3	Health facilities served by GHSC-PSM continued their high performance trend from last quarter, with 100% reporting to the GHSC-PSM LMIS for all commodity types. In terms of timeliness of reporting, facilities offering HIV services increased the timeliness of HIV stock reporting from 92% to 95%; for family planning sites, on-time reporting increased from 86% to 95%.

Warehouse stock status and product losses

Country: Haiti

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**36**		**27%**	**45%**	**27%**
TO1-HIV/AIDS	18		33%	44%	22%
TO3-PRH	18		17%	56%	28%
Total	**36**		**27%**	**45%**	**27%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
TO1	Central	Storage	Expiry	ARVs, laboratory, opportunistic infection	$86,418	$10,956,829	0.79%

Ref	Analysis
C7	Product expiries for HIV/AIDS commodities at the central warehouse decreased from 2.5% to 0.8% this quarter, while no family planning products expired.
B2	TO1: For HIV commodities, the percentage of observations understocked increased from 22% to 33%, while observations stocked according to plan decreased from 50% to 44%. First-line adult ARVs were understocked, overstocked, and stocked according to plan each for one out of three observations. The transition to TLD has been slower than expected. The project also just distributed 7.5 months of stock to sites, and the central warehouse is expecting new orders soon. Second-line ARVs also had the same pattern for understocking, overstocking and stocking according to plan. The overstocking was due to lack of adherence by health facilities to the Ministry of Health guidelines on second-line treatment. After then reinforcing the guidelines, a number of patients were placed on second-line treatments and consumption increased, leading to an understock at the central warehouse. Pediatric ARVs were understocked in two out of three observations due to an increase in consumption. Lab products were understocked in two out of three observations due to delays in receiving orders at the start of the quarter. TO3: FP/RH products were for the most part stocked according to plan, with the exception of injectables that were mostly understocked due to a delay in the order, and calendar-based awareness methods due to low demand.

Supply plans, innovations, and strategic activities

Country

Haiti

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
ARVs	Yes
Condoms	Yes
FP commodities	Yes
Lab (HIV diagnostics)	Yes
MCH commodities	No
RTKs	Yes

Analysis

For Task Orders 1 and 3, there was 100% submission of expected supply plans. However, the project has not yet submitted a supply plan for MNCH. The project is in the process of recruiting for an MNCH position who will oversee the supply planning process for TO4.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description
GHSC-PSM developed standard operating procedures for warehouse cleaning, which has been validated and is in the process of being implemented.

Training for supply chain partners

Country

Haiti

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	**Total**
Female	15	**15**
Male	13	**13**
Total	**28**	**28**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	**Total**
SDP	28	**28**
Total	**28**	**28**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	**Total**
TO-specific	28	**28**
Total	**28**	**28**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	**Total**
Quality Assurance	28	**28**
Total	**28**	**28**

Analysis

Five training sessions were held in the North and Northeast provinces this quarter to improve management of Sysmex lab instruments. The training aimed to build lab technician capacity, reduce recurring outages of lab equipment and optimize use of the machines for best quality results.

Molecular Instruments and HIV Tracer Products

Country

Haiti

FY Quarter

2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

50%

Analysis

In this period only 50% (four of eight) of the molecular instruments were functional at all times. Two complementary viral load instruments experienced outages for two days due to a problem with the scanner not being able to read labels. Another set of two complementary instruments at the same location experienced 29 days of outages due to a broken component that needs to be replaced.

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	TDF/3TC/EFV 300/300/600 mg
2nd line adult ARV	ATV/r 300/100 mg
Pediatric ARV	AZT/3TC/NVP 60/30/50 mg
First RTK	Determine
Second RTK	Uni-Gold
Tie-breaker RTK	Not reported
Viral load reagent	Not reported
Viral load consumable	Not reported
EID reagent	Not reported
EID consumable	Not reported

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Haiti

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	**0.0%**	**1,248**
Male condoms (FP)	0.0%	208
Calendar-based awareness methods	0.0%	208
Copper-bearing IUD	0.0%	208
2-rod implant	0.0%	208
DMPA-Intramuscular injectable	0.0%	208
Combined oral contraceptive with iron	0.0%	208
TO1-HIV/AIDS	**0.2%**	**943**
Male condoms (HIV)	0.0%	208
Second RTK	1.4%	147
First RTK	0.0%	147
Pediatric ARV	0.0%	147
2nd line adult ARV	0.0%	147
1st line adult ARV	0.0%	147
Total	**0.1%**	**1,983**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO3-PRH		
Combined oral methods	0.0%	208
Injectable contraceptives	0.0%	208
Implantable contraceptives	0.0%	208

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	100%	154
TO3-PRH	100%	219

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**45%**	**27%**	**27%**		**33**
TO1-HIV/AIDS	44%	22%	33%		18
TO3-PRH	56%	28%	17%		18
Total	**45%**	**27%**	**27%**		**33**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	15	13	**28**
Total	**15**	**13**	**28**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
ARVs	1	1
Condoms	1	1
FP commodities	1	1
Lab (HIV diagnostics)	1	1
MCH commodities	1	0
RTKs	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period
8	50%

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Indonesia

USAID FROM THE AMERICAN PEOPLE

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CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Indonesia

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**59**	**0.0%**
1st line adult ARV	12	0.0%
2nd line adult ARV	8	0.0%
Pediatric ARV	3	0.0%
First RTK	12	0.0%
Second RTK	12	0.0%
Tie-breaker RTK	12	0.0%
Total	**59**	**0.0%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
Total		

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
Total		

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	12	100%
Total	**12**	**100%**

Ref Analysis

Ref	Analysis
B1	For the second quarter in a row, there was a 0% stock out rate of the selected commodities at the 12 JSD sites.
B3	For over one year, there has been an 100% reporting rate at the 12 JSD sites.

Warehouse stock status and product losses

Country: Indonesia

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**6**	**0%**	**67%**	**33%**	**0%**
TO1-HIV/AIDS	6	0%	67%	33%	0%
Subnational level 1	**6**	**17%**	**33%**	**17%**	**33%**
TO1-HIV/AIDS	6	17%	33%	17%	33%
Subnational level 2	**30**	**3%**	**13%**	**40%**	**43%**
TO1-HIV/AIDS	30	3%	13%	40%	43%
Total	**42**	**5%**	**24%**	**36%**	**36%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
B2	Unlike last quarter, which saw no stock-outs, one product (most used first-line ARV) was stocked out for one observation each at the subnational levels this quarter. Most used first-line ARV was stocked out because of procurement issues with TDF(300)+3TC(300)+EFV(600) Triple FDC. FDC arrived in July 2019 and distribution has begun to facilities.

Supply plans, innovations, and strategic activities

Country

Indonesia

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status

Analysis

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description
GHSC-PSM Indonesia supported an ARV registration workshop in DKI Jakarta in May 2019. The purpose of the workshop was to encourage pharmaceutical companies to register ARVs in the e-catalogue, which will help streamline the procurement process and ensure uninterrupted supply treatment for PLHIV in Indonesia. Currently, 11 out of 15 types of ARVs are registered in the e-catalogue. The four that are not currently registered, including adult and pediatric FDC, can still be procured in country, but must go through a different procurement process (known as Special Access Scheme) that takes longer.

Training for supply chain partners

Country

Indonesia

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	**Total**
Female	34	**34**
Male	34	**34**
Total	**68**	**68**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	**Total**
Central	68	**68**
Total	**68**	**68**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	**Total**
TO-specific	68	**68**
Total	**68**	**68**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	**Total**
Procurement	68	**68**
Total	**68**	**68**

Analysis

GHSC-PSM supported an ARV registration workshop in May 2019 to encourage pharmaceutical companies to register all types of ARVs in the e-catalogue used for procuring these products. Sixty-eight people attended. Currently, 4 of the 15 types of ARVs, including adult and pediatric FDC, have not been registered in the e-catalogue.

Molecular Instruments and HIV Tracer Products

Country: Indonesia

FY Quarter: 2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir/Lamivudine/Efavirenz 300/300/600 mg
2nd line adult ARV	Lopinavir/ritonavir (LPV/r) 200/50mg
Pediatric ARV	Zidovudine (ZDV) 100mg
First RTK	SD Bioline, Fokus
Second RTK	Fokus and Intec
Tie-breaker RTK	Vikia and Oncoprobe
Viral load reagent	Abbott
Viral load consumable	Abbott
EID reagent	Abbott
EID consumable	Abbott

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Indonesia

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	**0.0%**	**59**
Tie-breaker RTK	0.0%	12
Second RTK	0.0%	12
First RTK	0.0%	12
Pediatric ARV	0.0%	3
2nd line adult ARV	0.0%	8
1st line adult ARV	0.0%	12
Total	**0.0%**	**59**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	100%	12

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**33%**	**0%**	**67%**	**0%**	**6**
TO1-HIV/AIDS	33%	0%	67%	0%	6
Subnational level 1	**17%**	**33%**	**33%**	**17%**	**6**
TO1-HIV/AIDS	17%	33%	33%	17%	6
Subnational level 2	**40%**	**43%**	**13%**	**3%**	**30**
TO1-HIV/AIDS	40%	43%	13%	3%	30
Total	**36%**	**36%**	**24%**	**5%**	**42**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	34	34	**68**
Total	**34**	**34**	**68**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Kenya

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U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Kenya

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
Total		

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**8,232**	**14.5%**
AL 6x1	1,176	13.9%
AL 6x2	1,176	17.3%
AL 6x3	1,176	23.8%
AL 6x4	1,176	20.5%
AL inability to treat	1,176	5.1%
mRDT	1,176	10.0%
SP	1,176	11.0%
Total	**8,232**	**14.5%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**1,832**	**7.2%**
Combined oral contraceptive	229	2.6%
DMPA-Intramuscular injectable	229	3.1%
1-rod implant	229	2.2%
2-rod implant	229	3.5%
Emergency contraceptive, 2 tablets	229	18.3%
Progestin only pills	229	15.3%
Copper-bearing IUD	229	7.0%
Male condoms (FP)	229	5.7%
Total	**1,832**	**7.2%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO2-Malaria	1,181	100%
TO3-PRH	252	98%
Total	**1,433**	**100%**

Ref	Analysis
B1	Compared to family planning stockout rates reported in the previous quarter, the rates for May 2019 decreased for five commodities, namely: 3-month injectables, 1-rod and 2-rod implants, combined oral pills and male condoms. However, the rate increased for 3 items, namely: copper IUDs, emergency oral contraceptives (EC) and progestin only pills (POPs). For the items with increased rates, this can be partly attributed to stockouts at central level warehouses. IUD and EC pills were out of stock at central warehouses during Q2, and this affected availability at facilities in Q3. Additionally, some EC pills expired at facilities in April 2019, worsening the situation. POPs were available at central warehouses, but there were gaps in the process of ordering and resupply to facilities in one of the three supported counties. GHSC-PSM does not procure FP commodities for Kenya, but project will advocate for filling the commodity pipeline at national level, regular ordering, and continued analysis and use of data to inform interventions aimed at increasing commodity availability, e.g. ordering and redistribution.
B1	Malaria stockout rates ranged between 14 and 24 percent for individual presentations of AL. However, inability to treat remained at 5 percent, consistent with the previous quarter. Of the stockouts reported, some private health facilities that do not receive anti-malarials from the government may have reported 0s i DHIS2. However, these sites stock AL from alternative sources. The project is working to do additional cleaning of the DHIS2 dataset to exclude facilities that do no receive supplies from the government.
B3	Reporting rates in GHSC-PSM suppported regions remained high, with nearly 100 percent of malaria reports submitted and 98 percent of family planning reports submitted. The few cases of missed reports were due to staff on leave, inadequate supply of reporting tools, and other data challenges. GHSC-PSM is providing on-the-job training on a case by case basis during facility visits and data review meetings in collaboration with MOH supervisors.

Warehouse stock status and product losses

Country: Kenya

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**42**	**19%**	**40%**	**33%**	**7%**
TO2-Malaria	18	17%	33%	50%	
TO3-PRH	24	21%	46%	21%	13%
Total	**42**	**19%**	**40%**	**33%**	**7%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
B2	For family planning products, stocked according to plan rates rose to 21 percent, and stockouts fell by more than half, although understocking is elevated. GHSC-PSM does not support procurement in Kenya, but the project will continue monitoring stock levels on a monthly basis and share updates with stakeholders; advocate for annual forecast to be prepared for FY2019/20; advocate for additional procurement of commodities to fill the FP pipeline; and advocate for delivery of pending shipments to be expedited.
B2	For malaria, stocked according to plan rose to 50 of observations this quarter. However, by the end of the quarter, most items were understocked or stocked out at the central level. There have been long delays in obtaining customs waivers for PMI-funded shipments, which has contributed to the low stock levels. Shipments funded by other sources are in process while the waiver question is pending resolution.
C7	GHSC-PSM does not have custody of any products in Kenya and therefore does not report on product losses.

Supply plans, innovations, and strategic activities

Country

Kenya

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
FP commodities	Yes
Malaria commodities	Yes

Analysis

Afya Ugavi submitted supply plans for family planning and malaria this quarter. The family planning supply plan was developed by the Ministry of Health and other stakeholders and shared with GHSC-PSM in draft. The project developed a supply plan for PMI-funded malaria commodities, although there is uncertainty about these procurement due to challenges in securing customs exemptions. The plan will be updated with any new developments on this matter.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Kenya

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO3-PRH	**Total**
Female	15	**15**
Male	25	**25**
Total	**40**	**40**

C2. Number of people trained by supply chain level

Supply Chain Level	TO3-PRH	**Total**
SDP	40	**40**
Total	**40**	**40**

C2. Number of people trained by funding source and type

Type	TO3-PRH	**Total**
TO-specific	40	**40**
Total	**40**	**40**

C2. Number of people trained by technical area

Supply Chain Function	TO3-PRH	**Total**
Warehousing and Inventory Management	40	**40**
Total	**40**	**40**

Analysis

Afya Ugavi trained a total of 40 people at the SDP level this quarter in one of three project-supported counties. Trainees included selected health care workers (who had not been reached previously) on inventory management (ordering, receiving, storage, issuing, record keeping), pharmacovigilance, continuous quality improvement, and accurate and timely reporting. The project will conduct similar training in the remaining two counties next quarter, targeting newly-employed MOH staff.

Complete Results and Denominators

Country: Kenya

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	**7.2%**	**1,832**
Male condoms (FP)	5.7%	229
Copper-bearing IUD	7.0%	229
Progestin only pills	15.3%	229
Emergency contraceptive, 2 tablets	18.3%	229
2-rod implant	3.5%	229
1-rod implant	2.2%	229
DMPA-Intramuscular injectable	3.1%	229
Combined oral contraceptive	2.6%	229
TO2-Malaria	**16.1%**	**7,056**
SP	11.0%	1,176
mRDT	10.0%	1,176
AL 6x4	20.5%	1,176
AL 6x3	23.8%	1,176
AL 6x2	17.3%	1,176
AL 6x1	13.9%	1,176
Total	**14.3%**	**8,888**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	5.1%	1,176
TO3-PRH		
Combined oral methods	2.6%	229
Injectable contraceptives	3.1%	229
Implantable contraceptives	0.0%	229
Emergency oral contraceptives	18.3%	229
Progestin-only methods	15.3%	229

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO2-Malaria	100%	1,181
TO3-PRH	98%	252

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**33%**	**7%**	**40%**	**19%**	**42**
TO2-Malaria	50%		33%	17%	18
TO3-PRH	21%	13%	46%	21%	24
Total	**33%**	**7%**	**40%**	**19%**	**42**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO3-PRH	15	25	**40**
Total	**15**	**25**	**40**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
FP commodities	1	1
Malaria commodities	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Lesotho

USAID FROM THE AMERICAN PEOPLE

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U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Lesotho

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**1,507**	**13.7%**
1st line adult ARV	200	0.0%
2nd line adult ARV	196	2.6%
Pediatric ARV	167	1.2%
First RTK	180	0.6%
Second RTK	181	6.1%
Tie-breaker RTK	175	100.0%
Viral load reagent	4	0.0%
EID reagent	1	0.0%
Male condoms (HIV)	118	1.7%
Female condoms (HIV)	113	0.9%
RUTF	172	5.2%
Total	**1,507**	**13.7%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
Total		

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
Total		

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	200	100%
Total	**200**	**100%**

Ref Analysis

Ref	Analysis
B3	For the third quarter in a row, the reporting rate is 100percent.
B1	The stockout rate decreased 5.2 percent this quarter (from 18.9 percent to 13.7 percent), which can be attributed to the decrease in the stockout rate for most products, especially RUF, whose stockout rate decreased from 93 percent to 5 percent. While the stockout rate for most products decreased, one product (tie-breaker RTK) saw a significant increase in its stockout rate (32 percent to 100 percent). All SDPs were stocked out of the tie-breaker RTK because the stock expired at the central warehouse (NDSO) so there was no product available for the SDPs. A shipment of SD Bioline (tie-breaker RTK) is scheduled to arrive the first week of August 2019.

Warehouse stock status and product losses

Country: Lesotho

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**30**	**17%**	**30%**	**30%**	**23%**
TO1-HIV/AIDS	30	17%	30%	30%	23%
Total	**30**	**17%**	**30%**	**30%**	**23%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
B2	While the stock out rate remained fairly consistent with the previous quarter, the stocked according to plan rate decreased by 12 percent (from 42 percent to 30 percent). For the second quarter, tie-breaker RTKs were stocked out for all three observations in the quarter. This affected SDPs, which saw an 100 percent stock out rate for the quarter (indicator B1).

Supply plans, innovations, and strategic activities

Country

Lesotho

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status

Analysis

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description
Revised Supply Chain Strategic Plan, Manuals and SOPs were launched on May 2, 2019. These manuals and SOPs are strategic guiding documents that provide detailed instructions, guidance, and direction to SCMD, DHMTs, SDPs and all relevant role players within the supply chain system on procedures to follow when conducting supply chain activities at all levels. The revised strategic plan provides overall direction for a strategic road map for the health supply chain system.

Training for supply chain partners

Country

Lesotho

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	**Total**
Female	301	**301**
Male	172	**172**
Total	**473**	**473**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	**Total**
Central	10	**10**
Subnational level 1	102	**102**
SDP	361	**361**
Total	**473**	**473**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	**Total**
TO-specific	473	**473**
Total	**473**	**473**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	**Total**
Human Resources Capacity Development	473	**473**
Total	**473**	**473**

Analysis

A total of 473 MoH staff in all levels of the supply chain were trained on recently developed supply chain manuals and SOPs.

Molecular Instruments and HIV Tracer Products

Country: Lesotho

FY Quarter: 2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir/Lamivudine/Efavirenz 300/300/600 mg
2nd line adult ARV	Lopinavir/Ritonavir 200/50 mg
Pediatric ARV	Abacavir/Lamivudine 60/30 mg
First RTK	Determine
Second RTK	Uni-Gold
Tie-breaker RTK	Bioline
Viral load reagent	COBAS, TaqMan, CAP/CTM HIV v2.0, Quantitative, 48 Tests
Viral load consumable	Not reported
EID reagent	COBAS TaqMan AmpliPrep, HIV-1 Qualitative Test, v2.0, 48
EID consumable	Not reported

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Lesotho

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	**13.7%**	**1,507**
RUTF	5.2%	172
Female condoms (HIV)	0.9%	113
Male condoms (HIV)	1.7%	118
EID reagent	0.0%	1
Viral load reagent	0.0%	4
Tie-breaker RTK	100.0%	175
Second RTK	6.1%	181
First RTK	0.6%	180
Pediatric ARV	1.2%	167
2nd line adult ARV	2.6%	196
1st line adult ARV	0.0%	200
Total	**13.7%**	**1,507**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	100%	200

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**30%**	**23%**	**30%**	**17%**	**30**
TO1-HIV/AIDS	30%	23%	30%	17%	30
Total	**30%**	**23%**	**30%**	**17%**	**30**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	301	172	**473**
Total	**301**	**172**	**473**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Liberia

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PEPFAR U.S. President's Emergency Plan for AIDS Relief

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CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Liberia

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
Total		

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**1,032**	**30.1%**
AL 6x1	86	29.1%
AL 6x2	86	27.9%
AL 6x3	86	43.0%
AL 6x4	86	27.9%
AL inability to treat	86	7.0%
AS/AQ 100/270mgx3	86	39.5%
AS/AQ 100/270mgx6	86	33.7%
AS/AQ 25/67.5mg	86	48.8%
AS/AQ 50/135mg	86	33.7%
mRDT	86	17.4%
SP	86	16.3%
LLINs	86	37.2%
Total	**1,032**	**30.1%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**640**	**36.9%**
Combined oral contraceptive with iron	80	67.5%
DMPA-Subcutaneous injectable	80	18.8%
1-rod implant	80	25.0%
Progestin only pills	80	28.8%
Copper-bearing IUD	80	60.0%
Calendar-based awareness methods	80	38.8%
Male condoms (FP)	80	28.8%
Female condoms (FP)	80	27.5%
Total	**640**	**36.9%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
Total		

Ref Analysis

Ref	Analysis
B1	GHSC-PSM conducted an End User Verification survey in March and April for 2019. According to the survey, stockout rates for malaria products at SDPs have remained constant since the previous survey, at 32% percent overall. While stockout rates for individual presentations of AL were high, ranging from 28 to 43 percent, only 7 percent of sites were stocked out of all four presentations and therefore unable to treat with AL. The rate increased slightly for family planning products, reaching 37% compared to 33% in the previous survey. The best performing product was 3-month injectables, at only 19 percent stocked out. Other products, including combined oral contraceptives, copper-bearing IUDs, and standard days methods, all approached or exceeded 40 percent stockout rates. Other findings included few stock cards kept updated, shortages of stock cards, and other stock management challenges.
B3	Liberia is in the process of rolling out a new eLMIS solution for county- and facility-level reporting. B3 will be reported once the roll out is complete.

Warehouse stock status and product losses

Country: Liberia

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**60**	**10%**	**55%**	**35%**	
TO2-Malaria	33	15%	55%	30%	
TO3-PRH	27	4%	56%	41%	
Total	**60**	**10%**	**55%**	**35%**	

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
B2	The overall stocked according to plan rate in Liberia increase this quarter, driven mainly by family planning products. This indicator rose from 21% in Q2 to 41% in Q3. Overstocks and understocks both declined, while the stockout rate remained constant. For malaria, stockout rates declined (from 21% to 15%), but understocks increased to more than half of observations. The stocked according to plan rate was 30%. GHSC-PSM orders for several malaria commodities were finalized this quarter, including ASAQ, SP, and mRDTs, all of which are scheduled for delivery by the end of calendar year 2019.
C7	There are no product losses to report this quarter.

Supply plans, innovations, and strategic activities

Country

Liberia

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
FP commodities	Yes
Malaria commodities	Yes

Analysis

Liberia submitted all required supply plans this quarter, including malaria, a new requirement as of FY2019 Q3.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Liberia

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Female	6	12	4	**22**
Male	10	83	10	**103**
Total	**16**	**95**	**14**	**125**

C2. Number of people trained by supply chain level

Supply Chain Level	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Central	16	13	14	**43**
Subnational level 1		82		**82**
Total	**16**	**95**	**14**	**125**

C2. Number of people trained by funding source and type

Type	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Cross-TO	16	13	14	**43**
TO-specific		82		**82**
Total	**16**	**95**	**14**	**125**

C2. Number of people trained by technical area

Supply Chain Function	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Forecasting and Supply Planning	6	7	13	**26**
MIS	10	88	1	**99**
Total	**16**	**95**	**14**	**125**

Analysis

GHSC-PSM trained 26 staff from the MOH Supply Chain Management Unit (SMCU) and Pharmacy Division on the use of forecasting and supply planning tools. These staff learned how to use Quantimed and Pipeline, to support the development of a two-year national essential medicines forecast and a 12-month supply plan.

An additional 17 staff at the Central Medical Store were training in the use of mSupply, the warehouse management system recently installed in the Caldwell central warehouse.

The project also conducted eLMIS refresher training for 82 members of the County and District Health Teams as part of the ongoing rollout of eLMIS in Liberia. (Note that this training was implemented using Ebola funds under Task Order 3).

Complete Results and Denominators

Country: Liberia

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	**36.9%**	**640**
Female condoms (FP)	27.5%	80
Male condoms (FP)	28.8%	80
Calendar-based awareness methods	38.8%	80
Copper-bearing IUD	60.0%	80
Progestin only pills	28.8%	80
1-rod implant	25.0%	80
DMPA-Subcutaneous injectable	18.8%	80
Combined oral contraceptive with iron	67.5%	80
TO2-Malaria	**32.2%**	**946**
LLINs	37.2%	86
SP	16.3%	86
mRDT	17.4%	86
AS/AQ 50/135mg	33.7%	86
AS/AQ 25/67.5mg	48.8%	86
AS/AQ 100/270mgx6	33.7%	86
AS/AQ 100/270mgx3	39.5%	86
AL 6x4	27.9%	86
AL 6x3	43.0%	86
AL 6x2	27.9%	86
AL 6x1	29.1%	86
Total	**34.1%**	**1,586**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	7.0%	86
TO3-PRH		
Combined oral methods	67.5%	80
Injectable contraceptives	18.8%	80
Implantable contraceptives	25.0%	80
Progestin-only methods	28.8%	80

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**35%**		**55%**	**10%**	**60**
TO2-Malaria	30%		55%	15%	33
TO3-PRH	41%		56%	4%	27
Total	**35%**		**55%**	**10%**	**60**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO2-Malaria	6	10	**16**
TO3-PRH	12	83	**95**
TO4-MCH	4	10	**14**
Total	**22**	**103**	**125**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
FP commodities	1	1
Malaria commodities	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Malawi

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

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CDC Centers for Disease Control and Prevention

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Malawi

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**3,900**	**3.5%**
1st line adult ARV	563	1.4%
2nd line adult ARV	452	5.3%
Pediatric ARV	564	1.6%
First RTK	583	4.8%
Second RTK	584	1.7%
Male condoms (HIV)	588	2.2%
Female condoms (HIV)	566	7.6%
Total	**3,900**	**3.5%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**4,825**	**5.2%**
AL 6x1	617	3.6%
AL 6x2	615	11.5%
AL 6x3	614	8.3%
AL 6x4	620	4.5%
AL inability to treat	612	1.0%
mRDT	616	1.0%
SP	597	5.2%
LLINs	534	7.1%
Total	**4,825**	**5.2%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**4,806**	**10.0%**
Combined oral contraceptive with iron	564	9.6%
DMPA-Intramuscular injectable	562	21.7%
1-rod implant	520	15.6%
2-rod implant	410	18.8%
Emergency contraceptive, 2 tablets	556	4.7%
Progestin only pills	522	9.2%
Copper-bearing IUD	518	2.9%
Male condoms (FP)	588	2.2%
Female condoms (FP)	566	7.6%
Total	**4,806**	**10.0%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	643	91%
TO2-Malaria	643	96%
TO3-PRH	643	88%
TO4-MCH	643	89%
Total	**2,572**	**91%**

Ref	Analysis
B3	Malawi's reporting rates remain strong, ranging from the high 80s to mid-90s across task orders. The project helps sustain this rate by providing on-going technical support to the MOH, providing airtime, and conducting follow-up supportive supervision. GHSC-PSM has also onboarded a local vendor to provide end user support for OpenLMIS users. This will contribute to the sustainability of this system to provide logistics data to various health programs.
B1	Overall stockout rate for HIV commodities declined from 7% to 3.5%, with good improvements for RTKs and condoms in particular. First and second RTKs have been consistently available at the central level, and HIV distribution runs have been occurring according to schedule. GHSC-PSM does not make distributions for condoms, but it has supported the HIV department in producing distribution lists using data from OpenLMIS. This data-driven process may have contributed to the improvements in condom stock levels.
B1	Stock-outs of family planning products increased, from 7% to 10% overall. Only copper IUDs and emergency contraceptives fell below the 5% target; 3-month injectables were especially high, at 22% stocked out. Limited supply in country remains a major constraint to health facility stock levels. Any stocks received at the central level are quickly absorbed by facilites. GHSC-PSM shipments of injectables, implants, and combined oral contraceptives are planned to arrive in FY2019 Q4, but the unfunded gap for family planning commodities remains a critical problem.
B1	The overall stockout rate for malaria commodities remained consistent with the previous quarter, at just under 6%. Inability to treat with AL rose slightly, from 0.3% to 1% this quarter. Stockout rates for SP, mRDTs and LLINs, however, all declined. The improvement in the LLINs stockout rate conincided with continued efforts to resupply facilities on a monthly basis with adequate stocks. In addition, the project supported district MOH staff, through Regional Commodity Logistics Officers (RCLOs), to conduct supportive supervision at 192 health facilities and helped staff with LLIN stock card recording and management at both the pharmacy/drug store and the maternity/ANC levels.

Warehouse stock status and product losses

Country: Malawi

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**46**		**29%**	**52%**	**19%**
TO1-HIV/AIDS	14			100%	
TO2-Malaria	14		29%	57%	14%
TO3-PRH	18		44%	22%	33%
Total	**46**		**29%**	**52%**	**19%**

Ref	Analysis
B2	Overall stocked according to plan rates remain consistent in Malawi, at 52%, and no stockouts. HIV commodities are 100% stocked according to plan, while malaria is 57% stocked according to plan. Family planning remained at 22%, the same as the previous quarter, but saw an increase in overstocking (from 22% to 33%).
C7	Some cartons of VMMC were found to be wet and damaged upon arrival in Malawi. A reimbursement claim has been filed with the 3PL for this damage.

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
TO1	Global	Transit	Damage	VMMC	$17,108	$1,955,958	0.87%

Supply plans, innovations, and strategic activities

Country: Malawi

FY Quarter: 2019-Q3

Total Innovations implemented this quarter: 1

Operational research studies

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description
Crosscutting	Operational research studies	The GHSC-PSM project is supporting Malawi Ministry of Health and Population, through VillageReach and the University of Washington Global Medicines Program, in implementing the Pharmacy Assistant (PA) Training Program – a two-year certificate program at the Malawi College of Health Sciences (MCHS). It aims to address key barriers to medicine availability, accountability, record keeping and logistics management information system (LMIS) data quality, by training and deploying Pharmacy Assistants to health centres in Malawi. In Q1FY19 (November-December 2018), the Malawi Ministry of Health and Population (Health Technical Support Services), with funding from GHSC-PSM, and VillageReach conducted an impact assessment of the Pharmacy Assistant (PA) Training Program. Data was analysed in Q2 and Q3 (January - June 2019). The impact assessment evaluated key pharmaceutical management indicators at 39 health centres with Pharmacy Assistants who had been working at the facilities for at least six months, as compared to 39 health centres without any PAs. The assessment involved collection of both quantitative and qualitative data using questionnaires and data from drug stores and dispensing areas in health centres (primarily from stock cards, LMIS reports, RIVs, delivery notes, etc.). Preliminary key findings from the evaluation indicate improvements in: stock management and availability (50%); data and evidence-based decision-making (86% vs. 72%); dispensing quality (85% vs 54%); and contributions to the Health System ("spillover" effect of knowledge of skills in prescription, sharing information and mentoring). The project plans to support MOH to disseminate the findings once the report is finalized.

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
Condoms	Yes
FP commodities	Yes
Malaria commodities	Yes
RTKs	No
VMMC	Yes

Analysis

Malawi submitted VMMC, family planning, malaria and condom supply plans as required this quarter. The RTK supply plan is among Malawi's submission expectations, but it was not submitted as these products are mainly managed by the Global Fund. GHSC-PSM continues to support the MOH in conducting pipeline monitoring and supply planning to further improve commodity availability and reduce stock-outs.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Malawi

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Female	1	3	6	1	**11**
Male	1	3	7	1	**12**
Total	**2**	**6**	**13**	**2**	**23**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
SDP	2	6	13	2	**23**
Total	**2**	**6**	**13**	**2**	**23**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Cross-TO	2	6	13	2	**23**
Total	**2**	**6**	**13**	**2**	**23**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
MIS	2	6	13	2	**23**
Total	**2**	**6**	**13**	**2**	**23**

Analysis

The project trained 23 people at the health facilty level in MIS this quarter.

Molecular Instruments and HIV Tracer Products

Country

Malawi

FY Quarter

2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

GHSC-PSM does not manage or support maintenance for any molecular instruments in Malawi.

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir/Lamivudine/Efavirenz 300/300/600 mg
2nd line adult ARV	Atazanavir/Ritonavir 300/100 mg
Pediatric ARV	Zidovudine/Lamivudine/Nevirapine 60/30/50 mg
First RTK	Determine
Second RTK	Uni-Gold
Tie-breaker RTK	Not reported
Viral load reagent	Not reported
Viral load consumable	Not reported
EID reagent	DBS Bundles for Early infant diagnosis (EID) and Viral Load testing
EID consumable	Not reported

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Malawi

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	**10.0%**	**4,806**
Female condoms (FP)	7.6%	566
Male condoms (FP)	2.2%	588
Copper-bearing IUD	2.9%	518
Progestin only pills	9.2%	522
Emergency contraceptive, 2 tablets	4.7%	556
2-rod implant	18.8%	410
1-rod implant	15.6%	520
DMPA-Intramuscular injectable	21.7%	562
Combined oral contraceptive with iron	9.6%	564
TO2-Malaria	**5.9%**	**4,213**
LLINs	7.1%	534
SP	5.2%	597
mRDT	1.0%	616
AL 6x4	4.5%	620
AL 6x3	8.3%	614
AL 6x2	11.5%	615
AL 6x1	3.6%	617
TO1-HIV/AIDS	**3.5%**	**3,900**
Female condoms (HIV)	7.6%	566
Male condoms (HIV)	2.2%	588
Second RTK	1.7%	584
First RTK	4.8%	583
Pediatric ARV	1.6%	564
2nd line adult ARV	5.3%	452
1st line adult ARV	1.4%	563
Total	**6.8%**	**11,765**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	1.0%	612
TO3-PRH		
Combined oral methods	9.6%	564
Injectable contraceptives	21.7%	562
Implantable contraceptives	19.8%	529
Emergency oral contraceptives	4.7%	556
Progestin-only methods	9.2%	522

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	91%	643
TO2-Malaria	96%	643
TO3-PRH	88%	643
TO4-MCH	89%	643

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**52%**	**19%**	**29%**		**42**
TO1-HIV/AIDS	100%				14
TO2-Malaria	57%	14%	29%		14
TO3-PRH	22%	33%	44%		18
Total	**52%**	**19%**	**29%**		**42**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	1	1	**2**
TO2-Malaria	3	3	**6**
TO3-PRH	6	7	**13**
TO4-MCH	1	1	**2**
Total	**11**	**12**	**23**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
Condoms	1	1
FP commodities	1	1
Malaria commodities	1	1
RTKs	1	0
VMMC	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Mali

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC Centers for Disease Control and Prevention

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Mali

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
Total		

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**7,918**	**8.4%**
AL 6x1	1,058	4.7%
AL 6x2	1,028	7.0%
AL 6x3	882	15.1%
AL 6x4	760	27.8%
AL inability to treat	1,097	0.7%
mRDT	1,056	4.5%
SP	1,010	7.5%
LLINs	1,027	6.8%
Total	**7,918**	**8.4%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**6,784**	**10.8%**
Combined oral contraceptive with iron	894	11.9%
DMPA-Intramuscular injectable	1,037	4.1%
2-rod implant	959	6.2%
Progestin only pills	645	19.1%
Copper-bearing IUD	899	9.5%
Calendar-based awareness methods	804	13.3%
Male condoms (FP)	900	8.6%
Female condoms (FP)	646	20.4%
Total	**6,784**	**10.8%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	149	29%
TO2-Malaria	1,274	93%
TO3-PRH	1,274	93%
TO4-MCH	1,274	93%
Total	**3,971**	**91%**

Ref Analysis

Ref	Analysis
B3	SDP reporting rates to the LMIS for malaria, FP/RH and MNCH commodities fell slightly from 96 to 93 percent, while the reporting rate for HIV commodities continued its slow upward trend of the last three quarters, from 24 to 29 percent this quarter. To improve HIV commodity reporting rates, the project is providing support for data entry and publication of results.
B1	The overall stockout rate for Mali dropped from 16 to 10 percent this quarter, with reductions to both malaria and FP/RH commodity stockouts. The rate was well within Mali's target of 23 percent. Implementation of all National Malaria Control Program distribution plans (with GHSC-PSM's support), as well as the development of a distribution plan for FP/RH commodities contributed to this improved performance. Stock levels are monitored weekly at the central level and monthly at the regional and district levels using OSPSANTE.

Warehouse stock status and product losses

Country: Mali

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**14**	**43%**	**7%**		**50%**
TO2-Malaria	6	50%	17%		33%
TO3-PRH	8	38%			63%
Subnational level 1	**70**	**39%**	**4%**	**10%**	**47%**
TO2-Malaria	30	67%	3%	7%	23%
TO3-PRH	40	18%	5%	13%	65%
Total	**84**	**39%**	**5%**	**8%**	**48%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref Analysis

B2

While stocked according to plan stayed relatively stable (increasing from 7 to 8 percent of observations across supply chain levels), stockouts decreased from 58 percent to 39 percent. Stockouts were higher at the central level as compared to the regional level with 43 percent of observations stocked out, and 50 percent overstocked.

TO2: Sixty-four percent of malaria commodity stock status observations across the two levels were stocked out. At the regional level, this increases to 67 percent of commodity observations stocked out, mostly driven by stockouts of AL 6X3 and 6X4. Stocks of these two products were received later in the quarter and were distributed to sites in June. For AL 6X1 and 6X2 that experienced more overstocking, the NMCP has taken measures to make accommodations for the products that are about to expire in September.

TO3: Sixty-five percent of FP/RH commodity observations were overstocked, while 21 percent were stocked out. At the central level, 38 percent of observations were stocked out. Upcoming social marketing promotion activities at the facility level contributed to the overstock.

The project is playing a significant role in supporting the transition from central warehouses to prefabricated warehouses, including transitioning to SAGE X3 warehouse management software, ensuring that personnel, equipment, and processes are in place to optimize use of the new warehouse, and supporting an upcoming study tour to Nairobi, Kenya, to learn about good practices for stock management, storage, and distribution at the Kenya Medical Supplies Authority (KEMSA). GHSC-PSM is providing support at the regional level to redistribute stock where needed, monitor supply plans, and to follow up with stocked out or understocked sites, including through quarterly meetings.

Supply plans, innovations, and strategic activities

Country: Mali

FY Quarter: 2019-Q3

Total Innovations implemented this quarter	New products	New technologies
	1	1

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description
Crosscutting	New technologies	GHSC-PSM Mali supported the Pharmacie Populaire du Mali (PPM, Mali's central supply chain organization), in its transition from a single central warehouse, to multiple prefabricated warehouses (financed by USAID and the Netherlands Development Cooperation). Key features of this new system include the transition from the LogiPPM warehouse management system (WMS) to SAGE X3, as well as an updated racking system design.
TO4-MCH	New products	In response to a request from the Ministry of Health, GHSC-PSM supported the Ministry of Health, through Direction Nationale de la Santé (DNS), to implement the rollout plan of Chlorhexidine Digluconate 7.1% Topical Gel for umbilical cord care from 11 additional districts to all health districts. GHSC-PSM supported the quantification, supported the procurement of chlorhexidine, and developed a distribution plan for the product. Through OSPSANTE, GHSC-PSM continues to support the DNS to collect monthly actual consumption data that will be compared to forecasted consumption data so that appropriate decisions can be taken to avoid wastage and expires.

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
FP commodities	Yes
Malaria commodities	Yes
MCH commodities	Yes

Analysis

All three required supply plan updates were conducted and submitted to the home office forecast and supply planning team.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Mali

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	Total
Total	

C2. Number of people trained by supply chain level

Supply Chain Level	Total
Total	

C2. Number of people trained by funding source and type

Type	Total
Total	

C2. Number of people trained by technical area

Supply Chain Function	Total
Total	

Analysis

Complete Results and Denominators

Country: Mali

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	**10.8%**	**6,784**
Female condoms (FP)	20.4%	646
Male condoms (FP)	8.6%	900
Calendar-based awareness methods	13.3%	804
Copper-bearing IUD	9.5%	899
Progestin only pills	19.1%	645
2-rod implant	6.2%	959
DMPA-Intramuscular injectable	4.1%	1,037
Combined oral contraceptive with iron	11.9%	894
TO2-Malaria	**9.7%**	**6,821**
LLINs	6.8%	1,027
SP	7.5%	1,010
mRDT	4.5%	1,056
AL 6x4	27.8%	760
AL 6x3	15.1%	882
AL 6x2	7.0%	1,028
AL 6x1	4.7%	1,058
Total	**10.2%**	**13,605**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	0.7%	1,097
TO3-PRH		
Combined oral methods	11.9%	894
Injectable contraceptives	4.1%	1,037
Implantable contraceptives	6.2%	959
Progestin-only methods	19.1%	645

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	29%	149
TO2-Malaria	93%	1,274
TO3-PRH	93%	1,274
TO4-MCH	93%	1,274

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central		**50%**	**7%**	**43%**	**14**
TO2-Malaria		33%	17%	50%	6
TO3-PRH		63%		38%	8
Subnational level 1	**10%**	**47%**	**4%**	**39%**	**70**
TO2-Malaria	7%	23%	3%	67%	30
TO3-PRH	13%	65%	5%	18%	40
Total	**8%**	**48%**	**5%**	**39%**	**84**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	**Total**
Total	

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
FP commodities	1	1
Malaria commodities	1	1
MCH commodities	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Mozambique

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC Centers for Disease Control and Prevention

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Mozambique

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**4,754**	**5.5%**
1st line adult ARV	1,472	0.3%
2nd line adult ARV	491	2.4%
Pediatric ARV	1,162	2.8%
First RTK	424	8.3%
Second RTK	514	16.9%
Viral load reagent	27	0.0%
EID reagent	8	0.0%
Male condoms (HIV)	465	12.9%
Female condoms (HIV)	191	16.8%
Total	**4,754**	**5.5%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**4,592**	**12.4%**
AL 6x1	651	15.2%
AL 6x2	633	22.6%
AL 6x3	636	14.0%
AL 6x4	640	13.6%
AL inability to treat	669	2.2%
mRDT	597	5.0%
SP	524	11.3%
LLINs	242	19.0%
Total	**4,592**	**12.4%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**2,470**	**12.8%**
Combined oral contraceptive	359	8.9%
DMPA-Subcutaneous injectable	159	18.9%
DMPA-Intramuscular injectable	578	12.8%
2-rod implant	97	11.3%
Emergency contraceptive, 2 tablets	126	20.6%
Progestin only pills	255	14.1%
Copper-bearing IUD	240	6.7%
Male condoms (FP)	465	12.9%
Female condoms (FP)	191	16.8%
Total	**2,470**	**12.8%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	2,282	91%
TO2-Malaria	757	75%
TO3-PRH	757	75%
TO4-MCH	757	75%
Total	**4,553**	**83%**

Ref Analysis

Ref	Analysis
B3	The reporting rate for all three task orders increased this quarter, with TO1 increasing by 5% and TO2 and TO3 increasing by 10%. This quarter, the number of facilities required to report to SIGLUS decreased from last quarter as some facilities that were included last quarter were excluded this quarter. Those facilities are ones that: 1) had been trained on SIGLUS, 2) were added to the system and 3) have not begun reporting because they do not have tablets for reporting.
B1	The stockout rate for all three task orders decreased this quarter, with TO2 and TO3's stockout rates each decreasing by more than 10%. TO1's stockout rate decreased by nearly 3%. The primary driver for this was the decrease in the stockout rates for second RTKs, male condoms, and female condoms, all of which saw a decrease of about 10% or greater. For TO2, all products reported saw a decrease in their stockout rate due to decreased consumption use because it is the low season. For TO3 commodities, most products saw a decrease in their stockout rate, though two saw an increase – progestin only pills and emergency contraceptives (2 tablets). The stockout for the latter was due to stockouts at the central and provincial levels.

Warehouse stock status and product losses

Country: Mozambique

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**69**	**5%**	**35%**	**51%**	**10%**
TO1-HIV/AIDS	21	0%	33%	57%	10%
TO2-Malaria	21	0%	62%	33%	5%
TO3-PRH	27	11%	19%	59%	11%
Subnational level 1	**825**	**8%**	**46%**	**32%**	**14%**
TO1-HIV/AIDS	252	4%	37%	46%	14%
TO2-Malaria	249	6%	60%	27%	6%
TO3-PRH	324	12%	39%	24%	24%
Total	**894**	**7%**	**45%**	**33%**	**14%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
TO2	SDP	Transit	Missing product	LLINs	$138	$694,880	0.02%

Ref	Analysis
C7	During a quarterly last mile distribution of LLINs to all health centers in Zambezia province, a bale of LLINS was identified as missing. GHSC-PSM was reimbursed $137.50.
B2	While the overall stocked according to plan and stockout rates remained consistent with the previous quarter, the overstock and understock rates changed with the understocked rate increasing by 7%. Most used first-line ARV (TLE) was stocked out 100% of the observations at the central level due to the transition to TLD. TLE is currently being ordered in minimal quantities to avoid expiries during the transition period. The provincial level experienced some shortages as a result. Sulphadoxine-pyrimethamine was understocked 100% of the observations at the central level and 83% of observations at the subnational level. GHSC-PSM expedited an order to mitigate the risk of a stock -out, with a partial shipment arriving during FY19Q2 and the remaining part arriving during FY19Q3. While the quantity was not sufficient to bring the stock levels at the central warehouse to the minimum levels, the shipments helped mitigate stock-outs at the subnational and SDP levels.

Supply plans, innovations, and strategic activities

Country: Mozambique

FY Quarter: 2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
ARVs	Yes
Condoms	Yes
FP commodities	Yes
Lab (HIV diagnostics)	Yes
Malaria commodities	Yes
MCH commodities	Yes
RTKs	Yes
VMMC	Yes

Analysis

For at least the past six quarters, GHSC-PSM Mozambique has submitted all required supply plans.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description
GHSC-PSM Mozambique is proactively collaborating with the UNFPA to support the MOH RH/FP program's introduction of generics contraceptives in Mozambique. The introduction of generic formulations, an alternative to branded products, which has the same quality and effectiveness, may contribute to cost savings and improve the commodities availability.
The MoH approved a new key policy aimed at reducing the use of DMPA-IM (Depo-Provera) and expanding DMPA-SC (Sayana Press) beyond the actual community-based distribution to the commodity being administered by all Health Providers and users auto-administration. This policy is intended to support the country reaching the FP2020 targets. GHSC-PSM has been asked to participate in the task force composed by MoH, Pathfinder, UNFPA and PSI to support the policy and prepare the scale-up plan.
The Pediatric guidelines for ARVs have been updated by the MOH with the support of PSM Mozambique. However, due to the unavailability of pediatric LPV/r formulations, the country delayed the full implementation of the new guidelines. To achieve pediatric ARV treatment optimization, PSM Mozambique is assisting the MOH in gradually implementing the new guidelines (introduction of DTG 50 mg for children >20 kg and the gradual phase out of ABC/3TC 60/30 mg to be replaced with ABC/3TC 120/60 mg).

Training for supply chain partners

Country: Mozambique

FY Quarter: 2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Female	125	58	11	10	**204**
Male	163	30	11	10	**214**
Total	**288**	**88**	**22**	**20**	**418**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Central	115	17	6	6	**144**
Subnational level 1	19	16	3	2	**40**
Subnational level 2	17	7	2	1	**27**
SDP	137	48	11	11	**207**
Total	**288**	**88**	**22**	**20**	**418**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Cross-TO	236	53	22	20	**331**
TO-specific	52	35			**87**
Total	**288**	**88**	**22**	**20**	**418**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Human Resources Capacity Development	52				**52**
Monitoring and Evaluation	23	6	2	2	**33**
Quality Assurance	32	7	3	2	**44**
Transportation and Distribution	16	4	1	2	**23**
Warehousing and Inventory Management	165	71	16	14	**266**
Total	**288**	**88**	**22**	**20**	**418**

Analysis

This quarter, GHSC-PSM Mozambique has supported the training of 418 people at all levels of the supply chain. The trainings were on the following: LMIS data management, fire prevention and extinguishing, data analysis and use of information systems for decision making, clinical standards and (MDS) differentiated models for HIV, the third edition of an SOP on warehousing and inventory management, the third edition of an SOP on Training of Trainers, and bed net and other malaria commodity management. Twenty-three technicians were certified on Manager and Supervisor Handling Equipment (MHE) operations for forklift use.

Molecular Instruments and HIV Tracer Products

Country

Mozambique

FY Quarter

2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

30%

Analysis

The percentage of molecular instruments that remained functional during the reporting period decreased significantly, from 52% last quarter to 30% this quarter. Of the 27 molecular instruments, 19 had a service disruption. Those disruptions lasted from 1 to 42 days.

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Efavirenz/Lamivudine/Tenofovir 600/300/300 mg
2nd line adult ARV	Atazanavir/Ritonavir (300/100mg)
Pediatric ARV	Lamivudine/Nevirapine/Zidovudine 30/50/60mg, dispersible tablets, 60 Tabs
First RTK	Determine Kit 100 Tests
Second RTK	Uni-Gold Kit 20 tests
Tie-breaker RTK	Not reported
Viral load reagent	Abbot RealTime HIV-1 Aplification Reagent Kit Quant, 4 x 24 tests
Viral load consumable	Not reported
EID reagent	KIT CAP-G/CTM HIV-QUAL 48T CE IVD
EID consumable	Not reported

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Mozambique

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	**12.8%**	**2,470**
Female condoms (FP)	16.8%	191
Male condoms (FP)	12.9%	465
Copper-bearing IUD	6.7%	240
Progestin only pills	14.1%	255
Emergency contraceptive, 2 tablets	20.6%	126
2-rod implant	11.3%	97
DMPA-Intramuscular injectable	12.8%	578
DMPA-Subcutaneous injectable	18.9%	159
Combined oral contraceptive	8.9%	359
TO2-Malaria	**14.1%**	**3,923**
LLINs	19.0%	242
SP	11.3%	524
mRDT	5.0%	597
AL 6x4	13.6%	640
AL 6x3	14.0%	636
AL 6x2	22.6%	633
AL 6x1	15.2%	651
TO1-HIV/AIDS	**5.5%**	**4,754**
Female condoms (HIV)	16.8%	191
Male condoms (HIV)	12.9%	465
EID reagent	0.0%	8
Viral load reagent	0.0%	27
Second RTK	16.9%	514
First RTK	8.3%	424
Pediatric ARV	2.8%	1,162
2nd line adult ARV	2.4%	491
1st line adult ARV	0.3%	1,472
Total	**9.9%**	**10,491**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	2.2%	669
TO3-PRH		
Combined oral methods	8.9%	359
Injectable contraceptives	12.9%	589
Implantable contraceptives	11.3%	97
Emergency oral contraceptives	20.6%	126
Progestin-only methods	14.1%	255

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	91%	2,282
TO2-Malaria	75%	757
TO3-PRH	75%	757
TO4-MCH	75%	757

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**51%**	**10%**	**35%**	**5%**	**63**
TO1-HIV/AIDS	57%	10%	33%	0%	21
TO2-Malaria	33%	5%	62%	0%	21
TO3-PRH	59%	11%	19%	11%	27
Subnational level 1	**32%**	**14%**	**46%**	**8%**	**753**
TO1-HIV/AIDS	46%	14%	37%	4%	252
TO2-Malaria	27%	6%	60%	6%	249
TO3-PRH	24%	24%	39%	12%	324
Total	**33%**	**14%**	**45%**	**7%**	**816**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	125	163	**288**
TO2-Malaria	58	30	**88**
TO3-PRH	11	11	**22**
TO4-MCH	10	10	**20**
Total	**204**	**214**	**418**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
ARVs	1	1
Condoms	1	1
FP commodities	1	1
Lab (HIV diagnostics)	1	1
Malaria commodities	1	1
MCH commodities	1	1
RTKs	1	1
VMMC	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period
27	30%

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Namibia

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

For countries with data available from GHSC-PSM non-supported regions

Country: Namibia

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - SDPs located in supported regions

GHSC-PSM Support	Stockout rate	# SDP stock observations
Supported	**4.2%**	**96**
TO1-HIV/AIDS	**4.2%**	**96**
Pediatric ARV	21.4%	14
2nd line adult ARV	7.1%	14
1st line adult ARV	0.0%	14
First RTK	0.0%	14
Second RTK	0.0%	14
Tie-breaker RTK	0.0%	14
Male condoms (HIV)	0.0%	6
Female condoms (HIV)	0.0%	6
Total	**4.2%**	**96**

B1. Stockout rate at service delivery points - SDPs located in non-supported regions

GHSC-PSM Support	Stockout rate	# SDP stock observations
Not Supported	**4.2%**	**310**
TO1-HIV/AIDS	**4.2%**	**310**
1st line adult ARV	0.0%	45
2nd line adult ARV	11.1%	45
Pediatric ARV	8.9%	45
First RTK	0.0%	45
Second RTK	2.2%	45
Tie-breaker RTK	6.7%	45
Male condoms (HIV)	0.0%	20
Female condoms (HIV)	0.0%	20
Total	**4.2%**	**310**

B3. LMIS reporting rate

GHSC-PSM Support	Total # of SDPs required to report	Reporting rate
Supported	15	93%
Not Supported	51	88%
Total	**66**	**89%**

Ref Analysis

Ref	Analysis
B1	The overall stockout rate of HIV tracer products at project-supprted SDPs this quarter was 4.2%. This includes 0 stockouts for the most used first-line adult ARVs (TLD). Seventeen out of fifty-nine facilities (29%, supported and non-supported sites) that submitted an ART report for the month of May reported a stock-out of one of the following tracer products: second-line adult ARVs, pediatric ARVs, second RTKs and/or tie-breaker RTKs. This is an increase from last quarter where only 8 out of 61 facilities (13%) reported a stock-out of a tracer product. Out of 17 facilities that reported a stock-out of ARVs, 7 reported stock-outs of pediatric ARVs and 6 reported stock-outs of second-line adult ARVs. Stock-outs of these two ARVs were due mainly to the lengthy RFQ procurement process CMS has to go through to procure products, including confirmation of availability of funds before the RFQ process can start. GHSC-PSM worked with district-level MoHSS pharmacy staff to redistribute existing stock of pediatric and second-line adult ARVs. GHSC-PSM also worked with CMS to expedite delivery of stocked out products. Further, GHSC-PSM continues to support SDPs to utilize the available site-level eLMIS tool for proper inventory management and timely ordering.
B3	Above data pertain to Task Order 1. (No other task orders are operating in Namibia.)
B3	Namibia's reporting rate in project-supported regions dropped slightly this quarter, from 100% to 93% of the 15 supported sites. In non-supported regions, the rate was 88%.

Warehouse stock status and product losses

Country: Namibia

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**16**	**44%**	**44%**		**13%**
TO1-HIV/AIDS	16	44%	44%		13%
Subnational level 1	**32**	**13%**	**47%**	**34%**	**6%**
TO1-HIV/AIDS	32	13%	47%	34%	6%
Total	**48**	**23%**	**46%**	**23%**	**8%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
B2	Namibia saw a decrease in observations stocked according to plan, from 33% to 23% across levels. Stock-outs at the central level increased, reaching 44 percent. The lengthy procurement process due to lack of supply contracts to ensure a stable supply of ARVs continues to contribute to high percentage of stocked out and understocked out observations. This quarter, MoHSS signed framework contracts for supply of ARVs with suppliers awarded on tender in May. GHSC-PSM worked with CMS to prepare supply plans for items awarded on tender. MoHSS placed orders as per the supply plan with the contracted suppliers. GHSC-PSM meets regularly with CMS to review ARV and RTK stock status and discuss future demands. Additionally, GHSC-PSM ordered seven pediatric ARVs requested by the MoHSS due to difficulties in sourcing the products. All seven products were delivered to the CMS in Q2 and Q3.
C7	GHSC-PSM does not have custody of any products in Namibia and therefore does not report on product losses.

Supply plans, innovations, and strategic activities

Country

Namibia

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status

Analysis

There are currently no supply plan submission expectations for Namibia.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country: Namibia

FY Quarter: 2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	**Total**
Female	46	**46**
Male	19	**19**
Total	**65**	**65**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	**Total**
SDP	65	**65**
Total	**65**	**65**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	**Total**
TO-specific	65	**65**
Total	**65**	**65**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	**Total**
Warehousing and Inventory Management	65	**65**
Total	**65**	**65**

Analysis

GHSC-PSM trained 65 people from five regions in inventory and patient management. Training on the Electronic Dispensing Tool (EDT) has helped staff at nurse-initiated and managed antiretroviral treatment (NIMART) sites to gain confidence in using the tool, which facilitates reducing the data gap between the electronic Patient Management System (ePMS) and EDT.

Molecular Instruments and HIV Tracer Products

Country

Namibia

FY Quarter

2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

GHSC-PSM does not manage or support maintenance for any molecular instruments in Namibia.

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir DF/Lamivudine/Efavirenz 300/300/400 mg
2nd line adult ARV	Atazanavir/Ritonavir 300/100 mg
Pediatric ARV	Abacavir/Lamivudine 60/30 mg
First RTK	Colloidal Gold Device HIV 1 /2
Second RTK	Uni-Gold HIV 1 /2
Tie-breaker RTK	Sure Check HIV 1 /2
Viral load reagent	Not reported
Viral load consumable	Not reported
EID reagent	Not reported
EID consumable	Not reported

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Namibia

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	**4.2%**	**96**
Female condoms (HIV)	0.0%	6
Male condoms (HIV)	0.0%	6
Tie-breaker RTK	0.0%	14
Second RTK	0.0%	14
First RTK	0.0%	14
Pediatric ARV	21.4%	14
2nd line adult ARV	7.1%	14
1st line adult ARV	0.0%	14
Total	**4.2%**	**96**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	93%	15

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central		**13%**	**44%**	**44%**	**16**
TO1-HIV/AIDS		13%	44%	44%	16
Subnational level 1	**34%**	**6%**	**47%**	**13%**	**32**
TO1-HIV/AIDS	34%	6%	47%	13%	32
Total	**23%**	**8%**	**46%**	**23%**	**48**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	46	19	**65**
Total	**46**	**19**	**65**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Nepal

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country

Nepal

FY Quarter

Multiple selections

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
Total		

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
Total		

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**11,773**	**11.8%**
Combined oral contraceptive with iron	3,079	9.0%
DMPA-Intramuscular injectable	3,091	9.3%
2-rod implant	1,524	20.3%
Copper-bearing IUD	1,001	20.3%
Male condoms (FP)	3,078	10.0%
Total	**11,773**	**11.8%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO3-PRH	4,145	41%
TO4-MCH	4,145	41%
Total	**8,290**	**41%**

Ref	Analysis
B1	The stockout data submitted in FY19Q3 is for October 15, 2018 to Jan. 15, 2019 (FY75/76Q2). The stockout rate is calculated on approximately 74% reporting and on average 2,398 (57%) health facilities per commodity. The reporting rate for each commodity varies. Out of five FP commodities, IUCD and implant stock-outs had a similar performance as last quarter, with 20% stockout. Several factors could have led many health facilities to not stock these commodities, such as lack of service providers at the health facilities, lack of client demand, and the easy and close access to higher-level health facilities to obtain these services. The pharmacists stationed at the 14 district stores and six field support officers stationed across the central and provincial stores continue to monitor the stock status at the district and health facilities. The project is also working with the Management Division to develop the distribution plan for selected commodities.
B3	The SDP reporting rate to the LMIS in terms of timeliness improved significantly, from 24% in Q2 to 41% in Q3. The overall reporting rate at the time of the reporting was 66%. The supply chain pharmacists stationed at the 14 district stores continue to enter quarterly LMIS reports at the district level, increasing the early data visibility. GHSC-PSM's advocacy work at the ministry level and with MD and the provincial health directorate have made this possible. The continuous follow-up with the supply chain pharmacists and FSOs and the coaching and mentoring provided to them have also helped to motivate them to undertake this task seriously.

Warehouse stock status and product losses

Country

Nepal

FY Quarter

Multiple selections

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**5**		**20%**		**80%**
TO3-PRH	5		20%		80%
Subnational level 1	**16**	**6%**	**63%**	**6%**	**25%**
TO3-PRH	16	6%	63%	6%	25%
Subnational level 2	**274**	**6%**	**30%**	**22%**	**42%**
TO3-PRH	274	6%	30%	22%	42%
Total	**295**	**6%**	**32%**	**21%**	**42%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
B2	The stock status at storage sites data is from October 15, 2018 to Jan. 15, 2019. The number of stocked according to plan observations was higher for FP commodities compared to MCH commodities. Similarly, MCH commodities also had higher stockout observations at the subnational 2 level. This could be due to the Ministry of Social Development's delayed budget release to the Provincial Health Directorate, which hindered the ability of the transportation vendor to distribute the health commodities from the provincial medical store to the district store on time. GHSC-PSM continues to share the eLMIS dashboard with the Management Division and FSOs. The FSOs and pharmacists also monitor stock status at their respective storage sites and province.

Supply plans, innovations, and strategic activities

Country

Nepal

FY Quarter

Multiple selections

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
Condoms	No
FP commodities	No

Analysis

Supply plans were not developed in FY19Q3 due to the low LMIS reporting rate and the management division's suggestion for the project to postpone the quarterly supply plan until the reporting rate is at least 70%. GHSC-PSM plans to develop a combined quarterly supply plan for FY75/76Q1, Q2 and Q3 data, provided that Q3 data reach 70%. As of the end of Q3, Q1 and Q2 have above 70% data.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Nepal

FY Quarter

Multiple selections

C2. Number of people trained by sex

Sex	TO3-PRH	TO4-MCH	**Total**
Female	4	3	**7**
Male	77	63	**140**
Total	**81**	**66**	**147**

C2. Number of people trained by supply chain level

Supply Chain Level	TO3-PRH	TO4-MCH	**Total**
Central	11	8	**19**
Subnational level 1	6	5	**11**
Subnational level 2	64	53	**117**
Total	**81**	**66**	**147**

C2. Number of people trained by funding source and type

Type	TO3-PRH	TO4-MCH	**Total**
Cross-TO	81	66	**147**
Total	**81**	**66**	**147**

C2. Number of people trained by technical area

Supply Chain Function	TO3-PRH	TO4-MCH	**Total**
Human Resources Capacity Development	64	53	**117**
MIS	17	13	**30**
Total	**81**	**66**	**147**

Analysis

In FY19Q3, 147 people participated in training related to eLMIS and basic logistics and procurement, slightly lower than the set target.

Complete Results and Denominators

Country: Nepal

FY Quarter: Multiple selections

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	**11.8%**	**11,773**
Male condoms (FP)	10.0%	3,078
Copper-bearing IUD	20.3%	1,001
2-rod implant	20.3%	1,524
DMPA-Intramuscular injectable	9.3%	3,091
Combined oral contraceptive with iron	9.0%	3,079
Total	**11.8%**	**11,773**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO3-PRH		
Combined oral methods	9.0%	3,079
Injectable contraceptives	9.3%	3,091
Implantable contraceptives	20.3%	1,524

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO3-PRH	41%	4,145
TO4-MCH	41%	4,145

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central		**80%**	**20%**		**5**
TO3-PRH		80%	20%		5
Subnational level 1	**6%**	**25%**	**63%**	**6%**	**16**
TO3-PRH	6%	25%	63%	6%	16
Subnational level 2	**22%**	**42%**	**30%**	**6%**	**274**
TO3-PRH	22%	42%	30%	6%	274
Total	**21%**	**42%**	**32%**	**6%**	**295**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO3-PRH	4	77	**81**
TO4-MCH	3	63	**66**
Total	**7**	**140**	**147**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
Condoms	1	0
FP commodities	1	0

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Niger

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC Centers for Disease Control and Prevention

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Niger

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
Total		

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**464**	**14.4%**
AL 6x1	58	8.6%
AL 6x2	58	10.3%
AL 6x3	58	24.1%
AL 6x4	58	15.5%
AL inability to treat	58	3.4%
mRDT	58	10.3%
SP	58	10.3%
LLINs	58	32.8%
Total	**464**	**14.4%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
Total		

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO2-Malaria	327	30%
Total	**327**	**30%**

Ref Analysis

Ref	Analysis
B1	GHSC-PSM Niger is able to report on stockout rates this quarter in the two GHSC-PSM-supported regions of Dosso and Tahoua for the first time through the End Use Verification (EUV) survey conducted in April 2019. The average stockout rate across the malaria tracer commodities in these two regions was 16% , while inability to treat was only 3.4%, meaning nearly 97% of facilities had at least one presentation of AL in stock, all of which were WHO-prequalified products. The highest stockout rates were for LLINs (33%) and AL 6X3 (24%). In addition to delays in stock distributions from the district level, contributing factors for stock-outs included low rates of updated stock cards (only about 50% for most commodities), lack of trained staff or insufficient number of staff to manage stock, and a reported lack of sufficient storage space. The MOH and partners will work to accelerate the implementation of ongoing last mile distributions, while GHSC-PSM will also support formative supervision for health facility personnel to improve updating of stock cards and completion of stock reports.
B3	In January 2019, nationwide stock status reporting in Niger was enabled for the first time through the health management information system, DHIS2. All facilities were required to immediately begin submitting reports electronically. However, due to Internet connection problems at some sites and other implementation challenges, reporting rates have been low so far, currently at only 30% for malaria commodities in the two GHSC-PSM-supported regions of Dosso and Tahoua, and 33% across the other regions, representing only tertiary-level facilities in the system so far. The country is planning rollout of an LMIS within the next year.

Warehouse stock status and product losses

Country

Niger

FY Quarter

2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Total					

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref **Analysis**

Supply plans, innovations, and strategic activities

Country

Niger

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
Malaria commodities	No

Analysis

A supply plan for malaria commodities has not yet been developed. However, an upcoming quantification exercise will also include supply planning, which is expected to take place in late August through early September this year.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Niger

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO2-Malaria	**Total**
Male	12	**12**
Total	**12**	**12**

C2. Number of people trained by supply chain level

Supply Chain Level	TO2-Malaria	**Total**
Central	10	**10**
Subnational level 1	2	**2**
Total	**12**	**12**

C2. Number of people trained by funding source and type

Type	TO2-Malaria	**Total**
TO-specific	12	**12**
Total	**12**	**12**

C2. Number of people trained by technical area

Supply Chain Function	TO2-Malaria	**Total**
MIS	8	**8**
Monitoring and Evaluation	4	**4**
Total	**12**	**12**

Analysis

GHSC-PSM conducted trainings in MIS at the central level this quarter, and a training on the EUV survey which included two central-level personnel from the National Malaria Control Program, and two regional NMCP personnel.

Complete Results and Denominators

Country: Niger

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO2-Malaria	**16.0%**	**406**
LLINs	32.8%	58
SP	10.3%	58
mRDT	10.3%	58
AL 6x4	15.5%	58
AL 6x3	24.1%	58
AL 6x2	10.3%	58
AL 6x1	8.6%	58
Total	**16.0%**	**406**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	3.4%	58

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO2-Malaria	30%	327

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Total					

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Male	**Total**
TO2-Malaria	12	**12**
Total	**12**	**12**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
Malaria commodities	1	0

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Nigeria

USAID FROM THE AMERICAN PEOPLE

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U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Nigeria

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**16,709**	**17.5%**
1st line adult ARV	2,516	4.6%
2nd line adult ARV	727	10.6%
Pediatric ARV	961	6.0%
First RTK	2,775	28.0%
Second RTK	1,965	34.9%
Tie-breaker RTK	1,402	22.7%
Viral load reagent	21	4.8%
Viral load consumable	21	0.0%
EID reagent	21	9.5%
EID consumable	21	0.0%
Male condoms (HIV)	3,557	16.1%
Female condoms (HIV)	2,722	11.5%
Total	**16,709**	**17.5%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**32,261**	**8.6%**
AL 6x1	3,496	3.7%
AL 6x2	3,492	4.0%
AL 6x3	3,480	5.7%
AL 6x4	3,497	3.8%
AS/AQ 100/270mgx3	2,460	2.4%
AS/AQ 100/270mgx6	2,363	2.7%
AS/AQ 25/67.5mg	2,572	1.8%
AS/AQ 50/135mg	2,469	2.3%
mRDT	3,488	5.5%
SP	2,662	29.2%
LLINs	2,282	43.3%
Total	**32,261**	**8.6%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**26,350**	**14.0%**
Combined oral contraceptive	3,384	14.1%
DMPA-Subcutaneous injectable	784	14.5%
NET-En Injectable	3,730	9.1%
DMPA-Intramuscular injectable	3,731	9.5%
1-rod implant	2,064	30.8%
2-rod implant	1,810	20.8%
Progestin only pills	3,270	8.7%
Copper-bearing IUD	1,298	16.3%
Male condoms (FP)	3,557	16.1%
Female condoms (FP)	2,722	11.5%
Total	**26,350**	**14.0%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	3,169	97%
TO2-Malaria	3,687	98%
TO3-PRH	4,070	97%
Total	**10,926**	**97%**

Ref Analysis

Ref	Analysis
B1	For TO1, stock-outs of adult ARVs were reported in 5% of facilities; and of pediatric ARVs in 6% of facilities. The country is currently shifting the preferred regimen for adults to TDF/3TC/DTG (300/300/50 mg) and for pediatrics to ABC/3TC (60/30mg)-based regimen. This has resulted in some inconsistency on the consumption and availability of these commodities. Until the transition is completed, variance in trends of health facilities stock and utilization is expected. RTKs were widely stocked out (23-35% of facilities reporting stock-outs of first, second or "tie-breaker" kits). These numbers reflect changes in PEPFAR guidance on how health facilities are supplied with RTKs based on meeting set targets. About 30% of supported health facilities still do not have targets.
B1	For TO2, stockout rates for ACTs were low for Q3, with only 1% of facilities reporting full AL stock-outs and thus an inability to treat. Stockout rates for AA ACTs are marginally higher than AL (6%-8%, compared to 4-6%), due to issues around health facilities' reluctance to use this commodity. Reported stock-outs of sulphadoxine-pyrimethamine jumped to 29% of reporting facilities in Q3, while 43% of facilities reported stock-outs of mosquito nets.
B1	For TO3, stockout rates for family planning commodities remained high due to continued challenges with in-country availability. Most of these commodities are sole sourced, and the lead times have grown increasingly long. For example, some shipments expected in 2018 have yet to arrive in-country as of Q3 FY2019. In the near term, this is expected to especially impact the supply of Noristerat and Depo Provera. Simultaneously, there is an increased demand for long-acting reversible contraception commodities due to the activities of implementing parties aimed at increasing uptake. Finally, GHSC-PSM has expanded its TO3 activities to two new states of Akwa Ibom and Oyo, which is reflected in the addition of 1,000 facilities to quarterly reporting for this indicator.
B3	Reporting rates remained high throughout the period with over 3,000 service delivery points (SDPs) reporting (97%).

Warehouse stock status and product losses

Country: Nigeria

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**31**		**23%**	**35%**	**42%**
TO1-HIV/AIDS	10			30%	70%
TO2-Malaria	10		10%	50%	40%
TO3-PRH	11		55%	27%	18%
Total	**31**		**23%**	**35%**	**42%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
TO1	Central	Storage	Expiry	ARVs	$58,349	$65,581,957	0.09%
TO2	Central	Storage	Expiry	Laboratory	$92	$7,589,603	0.00%

Ref	Analysis
B2	In Q3, the Nigerian central medical store reported being overstocked on HIV rapid test kits (RTKs), while lower level facilities reported high rates of stock-outs. After this April observation, however, a significant quantity of the commodity was distributed in a May/June "last mile distribution," which likely stabilized supply. The distribution strategy for RTKs within the country remains target-based. AA was overstocked, with between one to two years' supply on hand centrally. As a corrective, GHSC-PSM is collaborating with Global Fund to organize a possible distribution to supported facilities, including an exchange of expired commodities. In the interim, expected shipments have been put on hold indefinitely. Finally, sulphadoxine-pyrimethamine (SP) was reportedly overstocked centrally, yet stocked out at high rates at lower levels. This reflects a confluence of challenging events. First, a delayed procurement of SP arrived only after the start of the planned last mile distribution, thus not in time for inclusion in the distribution. The delay itself was the result of new government policy to halt the importation of SP in preference for local sourcing. Prequalification of local manufacturers took over a year to finalize. With this first successful procurement from local sources, however, the supply is expected to normalize in the coming period.
C7	In FY2019 Q3, GHSC-PSM Nigeria recorded expiration of $58,349 worth of Dolutegravir 50mg tablets (less than 0.1% of the average inventory balance for TO1 commodities), due to a fall in demand and lower quantities required for the ARV regiment component. Additionally, $92 worth of lab reagents with relatively short shelf lives expired (0.001% of the average inventory balance for TO2 commodities).

Supply plans, innovations, and strategic activities

Country

Nigeria

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
ARVs	Yes
Condoms	Yes
FP commodities	Yes
Lab (HIV diagnostics)	Yes
Malaria commodities	Yes
RTKs	Yes

Analysis

Required quarterly supply plans (ARVs, lab, RTKs, condoms, malaria, PRH) continued to be submitted in a timely manner.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Nigeria

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	TO2-Malaria	TO4-MCH	**Total**
Female	3	4	260	**267**
Male	4	4	106	**114**
Total	**7**	**8**	**366**	**381**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	TO2-Malaria	TO4-MCH	**Total**
Subnational level 1	7	8		**15**
SDP			366	**366**
Total	**7**	**8**	**366**	**381**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	TO2-Malaria	TO4-MCH	**Total**
Cross-TO	7	8		**15**
TO-specific			366	**366**
Total	**7**	**8**	**366**	**381**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	TO2-Malaria	TO4-MCH	**Total**
MIS			366	**366**
Monitoring and Evaluation	7	8		**15**
Total	**7**	**8**	**366**	**381**

Analysis

In FY2019 Q3, GHSC-PSM Nigeria trained 366 facility staff (260 female) across Bauchi State on how to use the NHLMIS platform.

Molecular Instruments and HIV Tracer Products

Country

Nigeria

FY Quarter

2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

67%

Analysis

In FY2019 Q3, 15 of 43 supported machines recorded downtime, amounting to 219 days. The most commonly reported causes were hardware error, QS invalid, thermocycler challenge and UPS/electrical/inverter issues. Among the machines experiencing challenges, downtime averaged two weeks (14.6 days).

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir/Lamivudine/Dolutegravir 300/300/50mg
2nd line adult ARV	Lopinavir /Ritonavir 200/50mg and 100/25mg
Pediatric ARV	Zidovudine/Lamivudine/Nevirapine 60/30/50 mg
First RTK	Determine
Second RTK	Uni-Gold
Tie-breaker RTK	STAT-PAK
Viral load reagent	Molecular, m2000 RT PCR, VL Plasma Quantitative, Reagents and Consummable Bundle, 960 Tests, Molecular, m2000 RealTime PCR, HIV-1 Amplification Reagent Kit, Quantitative, 4 Packs x 24 Assays, Molecular, COBAS, TaqMan, CAP/CTM HIV v2.0, Quantitative, 48 Tests
Viral load consumable	Ktube
EID reagent	Molecular, m2000 RT PCR, EID Qualitative, Reagents and Consummable Bundle, 960 Tests, Molecular, COBAS TaqMan, AmpliPrep, HIV-1, Qualitative, 48 Tests,
EID consumable	K tube

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Nigeria

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	**14.0%**	**26,350**
Female condoms (FP)	11.5%	2,722
Male condoms (FP)	16.1%	3,557
Copper-bearing IUD	16.3%	1,298
Progestin only pills	8.7%	3,270
2-rod implant	20.8%	1,810
1-rod implant	30.8%	2,064
DMPA-Intramuscular injectable	9.5%	3,731
NET-En Injectable	9.1%	3,730
DMPA-Subcutaneous injectable	14.5%	784
Combined oral contraceptive	14.1%	3,384
TO2-Malaria	**8.6%**	**32,261**
LLINs	43.3%	2,282
SP	29.2%	2,662
mRDT	5.5%	3,488
AS/AQ 50/135mg	2.3%	2,469
AS/AQ 25/67.5mg	1.8%	2,572
AS/AQ 100/270mgx6	2.7%	2,363
AS/AQ 100/270mgx3	2.4%	2,460
AL 6x4	3.8%	3,497
AL 6x3	5.7%	3,480
AL 6x2	4.0%	3,492
AL 6x1	3.7%	3,496
TO1-HIV/AIDS	**17.5%**	**16,709**
Female condoms (HIV)	11.5%	2,722
Male condoms (HIV)	16.1%	3,557
EID consumable	0.0%	21
EID reagent	9.5%	21
Viral load consumable	0.0%	21
Viral load reagent	4.8%	21
Tie-breaker RTK	22.7%	1,402
Second RTK	34.9%	1,965
First RTK	28.0%	2,775
Pediatric ARV	6.0%	961
2nd line adult ARV	10.6%	727
1st line adult ARV	4.6%	2,516
Total	**12.3%**	**69,041**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	1.0%	3,509
TO3-PRH		
Combined oral methods	14.1%	3,384
Injectable contraceptives	8.9%	3,832
Implantable contraceptives	17.7%	2,236
Progestin-only methods	8.7%	3,270

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	97%	3,169
TO2-Malaria	98%	3,687
TO3-PRH	97%	4,070

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**35%**	**42%**	**23%**		**31**
TO1-HIV/AIDS	30%	70%			10
TO2-Malaria	50%	40%	10%		10
TO3-PRH	27%	18%	55%		11
Total	**35%**	**42%**	**23%**		**31**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	3	4	**7**
TO2-Malaria	4	4	**8**
TO4-MCH	260	106	**366**
Total	**267**	**114**	**381**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
ARVs	1	1
Condoms	1	1
FP commodities	1	1
Lab (HIV diagnostics)	1	1
Malaria commodities	1	1
RTKs	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period
42	67%

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Rwanda

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Rwanda

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**3,452**	**1.2%**
1st line adult ARV	549	1.1%
2nd line adult ARV	533	1.5%
Pediatric ARV	497	1.0%
First RTK	562	1.4%
Second RTK	527	1.5%
Viral load reagent	9	0.0%
Viral load consumable	9	0.0%
EID reagent	6	0.0%
EID consumable	6	0.0%
Male condoms (HIV)	524	0.4%
Female condoms (HIV)	230	2.2%
Total	**3,452**	**1.2%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**3,277**	**0.7%**
AL 6x1	546	0.5%
AL 6x2	544	1.3%
AL 6x3	547	0.5%
AL 6x4	560	0.7%
AL inability to treat	565	0.0%
mRDT	515	1.0%
Total	**3,277**	**0.7%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**3,806**	**1.4%**
Combined oral contraceptive with iron	473	1.7%
DMPA-Intramuscular injectable	478	1.0%
1-rod implant	477	1.5%
2-rod implant	468	2.1%
Progestin only pills	460	2.0%
Copper-bearing IUD	368	0.8%
Calendar-based awareness methods	328	0.9%
Male condoms (FP)	524	0.4%
Female condoms (FP)	230	2.2%
Total	**3,806**	**1.4%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	590	98%
TO2-Malaria	590	96%
TO3-PRH	590	93%
TO4-MCH	569	100%
Total	**2,339**	**97%**

Ref Analysis

Ref	Analysis
B1	During FY2019 Q3, the average stockout rate remained low (1.16%) in Rwanda. This translates to 173 observations of a SDP reporting a stock-out of a tracer product out of nearly 15,000 total observations across more than 500 SDPs. The most frequent reported stock-outs were of TO3/TO4 products, including Oxytocin (11 SDPs reporting a stock-out out of 539 reporting SDPs), 2-rod implants (10 out of 4.68) and ORS (10 of 554). These marginally increased stockout rates appear to reflect an increase in consumption.
B3	The LMIS reporting rate of SDPs remained high in FY2019 Q3. Across all four task orders, over 90% of required SDPs successfully reported their LMIS data. In the case of TO4, all 569 required SDPs reported. Instances of failed reporting likely reflect cases of staff turnover, Internet connectivity issues, etc.

Warehouse stock status and product losses

Country: Rwanda

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**25**		**52%**	**39%**	**9%**
TO1-HIV/AIDS	11		36%	55%	9%
TO2-Malaria	5		20%	60%	20%
TO3-PRH	9		89%	11%	
Subnational level 1	**660**	**1%**	**26%**	**39%**	**34%**
TO1-HIV/AIDS	240	3%	25%	43%	29%
TO2-Malaria	150	0%	28%	33%	39%
TO3-PRH	270	3%	25%	34%	38%
Total	**685**	**1%**	**27%**	**39%**	**33%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
B2	At the central (MPPD) and sub-national (district pharmacy) levels, commodities were generally available in FY2019 Q3. Of 965 total observations of the stock status of tracer products in storage sites, about one-third each were stocked according to plan (36%), overstocked (35%) and understocked (27%). There were only eight instances of a tracer product stock-out. Female condoms were unavailable in 8 of 30 observations, all at the subnational level. This reflects low acceptance and awareness of the product among Rwandans, such that it is rarely ordered by SDPs. More generally, most TO3 and TO4/MNCH products were understocked at the central level, but stocked at greater levels lower in the supply chain. In April, many products were pushed down to the subnational level due to an outreach MNCH campaign organized by MoH. In TO2, observations of understock in AL 6x1 reflect an increase consumption. Finally, in TO1, the country is in the midst of transitioning its main ARV regimen. As a result, the most used ARV at the central level was reportedly understocked, even as the product was stocked according to plan at lower levels for consumption. HIV RTKs were stocked at all levels in the system, due to increased demand compared to the initial forecast.

Supply plans, innovations, and strategic activities

Country

Rwanda

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
ARVs	No
Condoms	No
FP commodities	No
Lab (HIV diagnostics)	No
Malaria commodities	No
MCH commodities	No
RTKs	No

Analysis

During this reporting period, GHSC-PSM Rwanda did not conduct its supply plan updates. The review was pushed to early Q4 due other supply chain activities and MOH priorities.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country: Rwanda

FY Quarter: 2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Female	381	56	272	125	**834**
Male	321	48	230	107	**706**
Total	**702**	**104**	**502**	**232**	**1,540**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
SDP	702	104	502	232	**1,540**
Total	**702**	**104**	**502**	**232**	**1,540**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Cross-TO	702	104	502	232	**1,540**
Total	**702**	**104**	**502**	**232**	**1,540**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Strategy and Planning	702	104	338	155	**1,299**
Warehousing and Inventory Management			164	77	**241**
Total	**702**	**104**	**502**	**232**	**1,540**

Analysis

GHSC-PSM Rwanda implemented three training projects during this period, reaching 1,937 people (1,047 female and 917 male). As part of workforce development initiative, GHSC-PSM supported the Supply Chain Module (SCM) rolled out to all health facilities in all 30 districts of Rwanda. The training aimed to equip health facility staff with skills in storage and inventory management, transportation of commodities from district pharmacies to facilities, re-supply of health commodities, and Rwanda's electronic logistics management information system (eLMIS). In total 1,270 people were trained, including 569 men and 701 women, from April 30 to May 10. GHSC-PSM supported the Ministry of Health in leading a QMIA implementation activity to improve SC performance across all levels. The activity began with a training of 30 district pharmacies (sub-national level 1), followed by a series of cascade trainings at SDPs, with a total of 635 participants (296 men and 339 women) trained across the country. The training focused on inventory management and the proper use of stock management tools for product ordering/reordering and recording consumption. Finally, GHSC-PSM facilitated a GS1 training/workshop for 29 (25 men and 4 women) key stakeholders in Rwanda's health supply chain.

Molecular Instruments and HIV Tracer Products

Country

Rwanda

FY Quarter

2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

100%

Analysis

In FY2019 Q3, all 19 (100%) GHSC-PSM procured/supported molecular instruments were functional and in good condition.

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir/Lamivudine/Efavirenz 300/300/600 mg
2nd line adult ARV	Atazanavir/Ritonavir 300/100 mg
Pediatric ARV	Abacavir/Lamivudine 60/30 mg
First RTK	Determine
Second RTK	STAT-PAK
Tie-breaker RTK	Not reported
Viral load reagent	COBAS TAQMQN HIV-1 TEST V2.0/HI2CAP
Viral load consumable	COBAS AMPILPREP (CAP48)-K TIPS
EID reagent	CAP/TaqMan HIV-1 Qualitative v2.0, 48 Test
EID consumable	Cobas AmpliPrep/TaqMan Specimen Pre-Extraction (SPEX) reagent,5x78 mL

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Rwanda

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	**1.4%**	**3,806**
Female condoms (FP)	2.2%	230
Male condoms (FP)	0.4%	524
Calendar-based awareness methods	0.9%	328
Copper-bearing IUD	0.8%	368
Progestin only pills	2.0%	460
2-rod implant	2.1%	468
1-rod implant	1.5%	477
DMPA-Intramuscular injectable	1.0%	478
Combined oral contraceptive with iron	1.7%	473
TO2-Malaria	**0.8%**	**2,712**
mRDT	1.0%	515
AL 6x4	0.7%	560
AL 6x3	0.5%	547
AL 6x2	1.3%	544
AL 6x1	0.5%	546
TO1-HIV/AIDS	**1.2%**	**3,452**
Female condoms (HIV)	2.2%	230
Male condoms (HIV)	0.4%	524
EID consumable	0.0%	6
EID reagent	0.0%	6
Viral load consumable	0.0%	9
Viral load reagent	0.0%	9
Second RTK	1.5%	527
First RTK	1.4%	562
Pediatric ARV	1.0%	497
2nd line adult ARV	1.5%	533
1st line adult ARV	1.1%	549
Total	**1.2%**	**9,216**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	0.0%	565
TO3-PRH		
Combined oral methods	1.7%	473
Injectable contraceptives	1.0%	478
Implantable contraceptives	0.2%	488
Progestin-only methods	2.0%	460

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	98%	590
TO2-Malaria	96%	590
TO3-PRH	93%	590
TO4-MCH	100%	569

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**39%**	**9%**	**52%**		**23**
TO1-HIV/AIDS	55%	9%	36%		11
TO2-Malaria	60%	20%	20%		5
TO3-PRH	11%		89%		9
Subnational level 1	**39%**	**34%**	**26%**	**1%**	**600**
TO1-HIV/AIDS	43%	29%	25%	3%	240
TO2-Malaria	33%	39%	28%	0%	150
TO3-PRH	34%	38%	25%	3%	270
Total	**39%**	**33%**	**27%**	**1%**	**623**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	381	321	**702**
TO2-Malaria	56	48	**104**
TO3-PRH	272	230	**502**
TO4-MCH	125	107	**232**
Total	**834**	**706**	**1,540**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
ARVs	1	0
Condoms	1	0
FP commodities	1	0
Lab (HIV diagnostics)	1	0
Malaria commodities	1	0
MCH commodities	1	0
RTKs	1	0

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period
19	100%

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

South Sudan

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Warehouse stock status and product losses

Country: South Sudan

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**18**	**0%**	**89%**	**11%**	**0%**
TO1-HIV/AIDS	18	0%	89%	11%	0%
Total	**18**	**0%**	**89%**	**11%**	**0%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
B2	Stocked according to plan observations are collected for six TO1 products in South Sudan: the most used first- and second-line adult ARVs, the most used first-line pediatric ARVs, the most and second-most used HIV RTKs, and male condoms. Three warehouse observations were reported for all six products in this quarter. In most cases in this quarter (88.9%), the central warehouse was understocked. The exception is the most-used first-line adult ARV (Efavirenz 600mg + Lamivudine 300mg + Tenofovir 300mg, tablets), where the central medical store was stocked according to plan in two of three observations, and only understocked in one. The second-line adult ARVs and secondary HIV RTK are both rarely used, which contributes to their being perpetually understocked. In the case of the pediatric ARV, the country is currently phasing out commodities (a process likely to be completed in Jan 2020). The most used HIV RTK is understocked because a planned shipment did not arrive. Finally, TO1 condoms are understocked in the country, mainly because most condoms in-country are procured by UNFPA under TO3, and thus remain outside the reporting visibility of GHSC-PSM South Sudan.

Supply plans, innovations, and strategic activities

Country: South Sudan

FY Quarter: 2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
ARVs	No
FP commodities	No

Analysis

GHSC-PSM South Sudan is expected to submit quarterly supply plans for ARV and FP commodities; however, this quarter the supply plans were not updated. This is due to limited capacity, the fact that GHSC-PSM South Sudan will not have the funds to procure ARVs in FY2020, and that there is no commodity budget for FP.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

South Sudan

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	**Total**
Female	6	**6**
Male	9	**9**
Total	**15**	**15**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	**Total**
Central	15	**15**
Total	**15**	**15**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	**Total**
Cross-TO	15	**15**
Total	**15**	**15**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	**Total**
Warehousing and Inventory Management	15	**15**
Total	**15**	**15**

Analysis

In Q3 FY2019, GHSC-PSM South Sudan trained 15 people (9 male and 6 female) as trainers on commodity supply chain management, with sessions on stock management, reporting and requisition, and mentorship skills.

Molecular Instruments and HIV Tracer Products

Country

South Sudan

FY Quarter

2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir/Lamivudine/Efavirenz 300/300/600 mg
2nd line adult ARV	Lamivudine 300mg/Tenofovir 300mg (3TC+TDF), Tabs + LPV/r 200mg/50mg Tabs
Pediatric ARV	Lamivudine 30mg/Nevirapine 50mg /Zidovudine 60mg Tabs.
First RTK	HIV test kit determine 1+2 , 100 tests
Second RTK	HIV 1+2 Unigold test, Kit /20
Tie-breaker RTK	HIV 1+2 Unigold test, Kit /20
Viral load reagent	Not reported
Viral load consumable	Not reported
EID reagent	Not reported
EID consumable	Not reported

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: South Sudan

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
Total		

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**11%**	**0%**	**89%**	**0%**	**18**
TO1-HIV/AIDS	11%	0%	89%	0%	18
Total	**11%**	**0%**	**89%**	**0%**	**18**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	6	9	**15**
Total	**6**	**9**	**15**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
ARVs	1	0
FP commodities	1	0

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Uganda

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Uganda

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**868**	**7.4%**
1st line adult ARV	214	2.8%
2nd line adult ARV	134	11.2%
Pediatric ARV	129	7.8%
First RTK	132	2.3%
Second RTK	125	3.2%
Tie-breaker RTK	113	20.4%
Viral load reagent	1	0.0%
EID reagent	1	0.0%
RUTF	19	15.8%
Total	**868**	**7.4%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**1,336**	**4.8%**
AL inability to treat	468	3.6%
mRDT	461	4.3%
SP	407	6.6%
Total	**1,336**	**4.8%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**122**	**3.3%**
DMPA-Intramuscular injectable	122	3.3%
Total	**122**	**3.3%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	218	98%
TO2-Malaria	657	97%
TO3-PRH	453	53%
Total	**1,328**	**82%**

Ref Analysis

Ref	Analysis
B1	For TO1 commodities, stockout rates have reduced by 2%, from 9% in FY19Q1 to 7% in FY19Q2. Stockout rates continued to remain at zero for both EID reagents and viral load reagents. Stockout rates for first-line adult ARV, Tenofovir/Lamivudine/Efavirenz, reduced from 4% to 2.8%, for first-line pediatric ARV reduced from 14% to 8%, for HIV first RTK reduced from 4% to 2% and for HIV second RTK reduced from 5% to 3%. However, the HIV tie-breaker RTK stockout rate increased slightly, from 19% to 20%. Generally, stockouts for TO1 commodities were registered mainly at primary-level SDPs compared to secondary and tertiary levels. Regarding TO2 commodities, stockout rates have increased slightly from 4% in Q2 to 5% in Q3 (for ACTs, from 2% to 4% while RDTs stockout rate remained at 4%). Compared to the previous quarter, stockout rates have ncreased for malaria sulphadoxine pyrimethamine (SP), from 6% to 7%. For TO3, stockout rates for Depo reduced to 3% in FY19Q3 from 6% in FY19Q2. Joint Medical Store (JMS) stabilized distribution of TO3 commodities and supported sites to report during the quarter.
B3	TO1 SDPs report directly in the web-based ARV Ordering and Reporting System (WAOS) that is managed by MoH. In the last quarter, the reporting rate for TO1 was 98%. This high reporting rate is sustained due to continuous support to the SDPs to submit their ARV orders/reports online. For TO2, the reporting rate remained at 97% in FY19Q3 from FY19Q1; it still remained high as JMS continued to support the SDPs while encouraging them to submit quality reports even when they had sufficient stock. For TO3, Joint Medical Stores registered 453 SDPs that they had supplied with family planning commodities. However, only 241 (53%) SDPs reported consumption in the DHIS2, a decrease from 80% reported in FY19Q2. This is because some of the recipients like implementing partners, community-based organizations etc., are not registered in the national DHIS2 system, while others did not report "clients served," "FP commodities dispensed," or "FP stock data."

Warehouse stock status and product losses

Country: Uganda

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**84**	**4%**	**21%**	**29%**	**46%**
TO1-HIV/AIDS	36	3%	19%	33%	44%
TO2-Malaria	18		17%	28%	56%
TO3-PRH	30	10%	30%	27%	33%
Total	**84**	**4%**	**21%**	**29%**	**46%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
B2	Overall, commodities stocked according to plan increased from 26% the previous quarter to 28% in FY19Q3. Also, 43% of commodities are over stocked; however, there is no risk of expiries. TO1 commodities stocked according to plan reduced from 42% in FY19Q2 to 33% in FY19Q3. This may be attributed to first-line pediatric ARVs and second-line adult ARVs that remained overstocked from the previous quarter. The overstocks are a result of the ongoing transition to TLD. TO2 commodities stocked according to plan increased from 11% in FY19Q2 to 28% in FY19Q3. This could be attributed to reduction of overstock of 83% in Q2 to 56% in Q3. There is no risk of expiry of the commodities. The over stocks of ALU 6X3 and ALU 6X4 is a result of ALU 6X3 having low consumption and ALU 6X4 that was on hold and later brought into the country. However, consumption of ALU 6X4 is good and does not pose a risk of expiry. The percent of TO3 commodities stocked according to plan in FY19Q2 increased from 21% to 24% in FY19Q3. This is mainly because of understocks of Levonorgestrel 30 mcg 35 Tablets/Cycle, Levonorgestrel 75mg/rod, 2 rod implant, progestin-only pills and male condoms.

Supply plans, innovations, and strategic activities

Country

Uganda

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
ARVs	Yes
Condoms	Yes
FP commodities	Yes
Lab (HIV diagnostics)	Yes
Malaria commodities	Yes
RTKs	Yes
VMMC	Yes

Analysis

All (100%) supply plans were submitted to GHSC-PSM HQ during the quarter.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Uganda

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	Total
Total	

C2. Number of people trained by supply chain level

Supply Chain Level	Total
Total	

C2. Number of people trained by funding source and type

Type	Total
Total	

C2. Number of people trained by technical area

Supply Chain Function	Total
Total	

Analysis

Molecular Instruments and HIV Tracer Products

Country: Uganda

FY Quarter: 2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir/Lamivudine/Efavirenz 300/300/600 mg
2nd line adult ARV	Lopinavir/Ritonavir 200/50 mg
Pediatric ARV	Zidovudine/Lamivudine/Nevirapine 60/30/50 mg
First RTK	Determine
Second RTK	STAT-PAK
Tie-breaker RTK	Bioline
Viral load reagent	COBAS Taqman, CAP/CTM HIV V2.0 Quantitative test, 48 test
Viral load consumable	DBS – VL collection kit
EID reagent	COBAS Taqman Ampliprep HIV-1 Qualitative test, 48 test
EID consumable	Dry blood spot (DBS) – EID collection kit

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Uganda

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	**7.4%**	**868**
1st line adult ARV	2.8%	214
2nd line adult ARV	11.2%	134
Pediatric ARV	7.8%	129
First RTK	2.3%	132
Second RTK	3.2%	125
Tie-breaker RTK	20.4%	113
Viral load reagent	0.0%	1
EID reagent	0.0%	1
RUTF	15.8%	19
TO2-Malaria	**4.8%**	**1,336**
AL inability to treat	3.6%	468
mRDT	4.3%	461
SP	6.6%	407
TO3-PRH	**3.3%**	**122**
DMPA-Intramuscular injectable	3.3%	122
Total	**5.7%**	**2,326**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	3.6%	468
TO3-PRH		
Injectable contraceptives	3.3%	122

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	98%	218
TO2-Malaria	97%	657
TO3-PRH	53%	453

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**29%**	**46%**	**21%**	**4%**	**78**
TO1-HIV/AIDS	33%	44%	19%	3%	36
TO2-Malaria	28%	56%	17%		18
TO3-PRH	27%	33%	30%	10%	30
Total	**29%**	**46%**	**21%**	**4%**	**78**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	**Total**
Total	

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
ARVs	1	1
Condoms	1	1
FP commodities	1	1
Lab (HIV diagnostics)	1	1
Malaria commodities	1	1
RTKs	1	1
VMMC	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Vietnam

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC Centers for Disease Control and Prevention

U.S. President's Malaria Initiative

Warehouse stock status and product losses

Country: Vietnam

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**6**		**17%**	**83%**	
TO1-HIV/AIDS	6		17%	83%	
Total	**6**		**17%**	**83%**	

Ref	Analysis
B2	Vietnam's stocked according to plan rate increased from 50% in Q2 to 83% in Q3. Part of this improvement can be attributed to an increase in the frequency of stock observations (monthly instead of quarterly). Looking more closely, first-line adult ARVs decreased from 100% to 33% stocked according to plan. This swing was caused by a strong increase in consumption rates as patients on the LNZ regiment were switched to the first line ARV regimen of TLE. Multi-month dispensing has also increased the consumption rates. A fresh delivery of medicine arrived in late May and thus stock levels returned to optimal levels by the end of the quarter.

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Supply plans, innovations, and strategic activities

Country

Vietnam

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
ARVs	Yes

Analysis

Vietnam has submitted all required supply plans this quarter.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Vietnam

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	**Total**
Female	33	**33**
Male	9	**9**
Total	**42**	**42**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	**Total**
Central	30	**30**
Subnational level 1	12	**12**
Total	**42**	**42**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	**Total**
TO-specific	42	**42**
Total	**42**	**42**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	**Total**
MIS	42	**42**
Total	**42**	**42**

Analysis

GHSC-PSM trained 42 participants over five days on upgrades and improvements to the national LMIS systems. Topics included drug information, rational use of drugs and using ABC-VEN analysis to review LMIS data to improve drug selection practices.

Molecular Instruments and HIV Tracer Products

Country: Vietnam

FY Quarter: 2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir/Lamivudine/Efavirenz 300/300/600 mg
2nd line adult ARV	Lopinavir/Ritonavir 200/50 mg
2nd line adult ARV	Not reported
First RTK	Not reported
Second RTK	Not reported
Tie-breaker RTK	Not reported
Viral load reagent	Not reported
Viral load consumable	Not reported
EID reagent	Not reported
EID consumable	Not reported

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Vietnam

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
Total		

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**83%**		**17%**		**6**
TO1-HIV/AIDS	83%		17%		6
Total	**83%**		**17%**		**6**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	33	9	**42**
Total	**33**	**9**	**42**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
ARVs	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Zambia

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Zambia

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**7,128**	**13.5%**
1st line adult ARV	396	0.5%
2nd line adult ARV	410	4.9%
Pediatric ARV	370	10.0%
First RTK	1,855	7.0%
Second RTK	1,840	6.3%
Viral load reagent	11	9.1%
EID reagent	10	20.0%
Male condoms (HIV)	1,487	29.7%
Female condoms (HIV)	749	28.3%
Total	**7,128**	**13.5%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**12,352**	**25.1%**
AL 6x1	1,765	28.4%
AL 6x2	1,749	30.9%
AL 6x3	1,786	23.3%
AL 6x4	1,794	24.1%
AL inability to treat	1,893	4.4%
mRDT	1,816	14.0%
SP	1,549	56.0%
Total	**12,352**	**25.1%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
TO3-PRH	**8,685**	**37.9%**
Combined oral contraceptive with iron	1,655	35.5%
NET-En Injectable	948	50.6%
DMPA-Intramuscular injectable	1,431	34.7%
1-rod implant	486	42.2%
2-rod implant	1,068	41.9%
Progestin only pills	758	50.4%
Copper-bearing IUD	103	36.9%
Male condoms (FP)	1,487	29.7%
Female condoms (FP)	749	28.3%
Total	**8,685**	**37.9%**

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	2,168	88%
TO2-Malaria	2,225	92%
TO3-PRH	2,225	92%
TO4-MCH	2,225	92%
Total	**8,843**	**91%**

Ref Analysis

B3

The percentage of facilities reporting to the LMIS has been consistently high, with reporting rates above 85% for at least the last six quarters in all task orders including TO4. This quarter, the reporting rate for Task Orders 2, 3 and 4 was 92%, while it was 88% for TO1. As evidenced by the data, Zambia has achieved consistently high levels of reporting rates against the targets across quarters, a result of USG and partner investments in logistics system capacity building, and eLMIS deployment and training in system use.

B1

Overall stock-outs were up this quarter, at 31 percent, with the highest increases in family planning (from 32% to 38% stocked out) and malaria commodities (from 21% to 29%) from the previous quarter. Contributing factors include transport challenges in last-mile distribution, low demand and low ordering for some family planning products, and low order fill rates due to logistical and resource challenges to meet distribution obligations from the central level, particularly with essential medicines. The project, MSL and USAID developed an emergency response plan that is aimed at improving the operations and distribution capacity of MSL.

TO1: Stock-outs of male condoms (30%) can be attributed to some facilities in Muchinga province using incorrect pack sizes when ordering for resupply coupled with transport challenges to collect from district health offices. Stock-outs of female condoms (28%) are largely attributed to low demand and low ordering. EID reagent stock-outs (20%) may be attributed to the product being ordered by two main hospitals but not received. Service was not interrupted at either site, as one hospital borrowed stock and another received an emergency order from MSL.

TO2: Patients were able to access first-line malaria treatments (ACTs) due to the relatively low "inability to treat" rate of 4 percent. Stockouts for malaria RDTs (14 percent) may be attributed to malaria index testing in pre-elimination communities supported by implementing partners, while stockouts of SP (56 percent) were driven by the central stockout of the commodity which is not procured by GHSC-PSM. However, the MOH has committed to procuring 500,000 bottles of 1,000 tablets this fiscal year to alleviate stockouts. Additionally, GHSC-PSM Zambia generated and shared a supply plan for SP with the MOH, including recommendations for managing the pipeline to maintain a steady flow of the commodity.

TO3: Stockouts of family planning commodities were affected by non-supply due to logistical challenges, low demand for female condoms, copper IUDs (37 percent stocked out), Etonogestrel and Levonorgestrel (both 42 percent stocked out), and a lack of trained staff for implant insertions. Additionally, stockouts for Depo Provera and Microlut (35 and 50 percent respectively) may be attributed to a higher than expected demand for the commodities, while the 51 percent stockout of Norethisterone enathate may be attributed to the long central stockout of the commodity due to procurement challenges by the MOH.

Warehouse stock status and product losses

Country: Zambia

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**72**	**14%**	**27%**	**30%**	**29%**
TO1-HIV/AIDS	27	4%	19%	19%	59%
TO2-Malaria	18	17%	33%	50%	
TO3-PRH	27	22%	33%	26%	19%
Total	**72**	**14%**	**27%**	**30%**	**29%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
TO3	Global	Transit	Other	Combined oral contraceptive	$494	$643,147	0.08%

Ref	Analysis
B2	Across task orders, stocking according to plan stayed largely constant since last quarter, with 30% of all observations stocked according to plan. TO1: HIV commodities were largely overstocked (59 percent). This was driven by the overstock of TLE ARVs due to their phase out and transition to TLD. The pediatric ARV, Lopinavir/Ritonavir 80/20mg, has also been overstocked but due to low demand and utilization. The commodity is not currently at risk of expiring. First-RTKs (Determine) were also overstocked due to reduced forecasts as a result of new policy guidance by the MOH and partners to ration supplies to facilities. Second-RTKs (SD Bioline) were overstocked due to low demand and subsequent revisions to the forecast, but there is no risk of expiry. TO2: Half (50%) of malaria commodity observations were stocked according to plan, while 33% and 17% were understocked and stocked out, respectively. The only product stocked out centrally was SP as discussed above for the SDP stockout rate. Understocks of AL 6X1, 6X2 and 6X4 were due to higher than expected issues to SDPs (demand). However, shipments have recently been received that are expected to bring stock up to the required levels. TO3: Family planning stocking according to plan improved this quarter, from 19% to 26%, while stock-outs ticked up slightly from 19% to 22%. Norethisterone enanthate stocked out due to procurement funding challenges; however two UNFPA shipments are expected shortly. Female condoms were stocked out due to a high quantity issued in November; they are currently at the provincial offices, some of which will be returned to the central medical store.

Supply plans, innovations, and strategic activities

Country

Zambia

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
ARVs	Yes
Condoms	Yes
FP commodities	Yes
Lab (HIV diagnostics)	Yes
Malaria commodities	Yes
MCH commodities	Yes
RTKs	Yes

Analysis

GHSC-PSM Zambia updated and submitted all five required supply plans to the home office.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Zambia

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Female	95	11	24	5	**135**
Male	122	14	32	6	**174**
Total	**217**	**25**	**56**	**11**	**309**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
SDP	217	25	56	11	**309**
Total	**217**	**25**	**56**	**11**	**309**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Cross-TO	217	25	56	11	**309**
Total	**217**	**25**	**56**	**11**	**309**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	TO2-Malaria	TO3-PRH	TO4-MCH	**Total**
Human Resources Capacity Development	217	25	56	11	**309**
Total	**217**	**25**	**56**	**11**	**309**

Analysis

During this reporting period, GHSC-PSM Zambia trained 309 (135 female and 174 male) MOH staff via integrated trainings for essential medicines and HIV test kit logistics systems, laboratory and HIV test kit logistics systems, and essential medicines and ARVs logistics systems. The objective was to equip participants with knowledge, skills, and competencies to manage laboratory, family planning, malaria, ARVs, HIV test kits, and essential medicines commodities.

Molecular Instruments and HIV Tracer Products

Country

Zambia

FY Quarter

2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

94%

Analysis

Ninety-four percent (33 out of 35) of GHSC-PSM supported molecular instruments remained functional throughout the quarter, while 6% (2 out of 35) had outages. The Cobas TaqMan 48 was nonfunctional for 68 days due to low voltage at one hospital, while at another hospital the Cobas TaqMan 48 stopped working for six days due to hard drive malfunctioning. However, the problem was resolved in late June and the machine is now operational. The rental agreement with vendors for the Hologic Panther and Roche machines is ongoing, and two additional Hologic Panthers were installed at two hospitals.

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	TLE 300/300/600mg
2nd line adult ARV	Lopinavir 200mgs/Ritonavir 50mgs
Pediatric ARV	Lopinavir 80mgs/Ritonavir 20mgs
First RTK	Determine
Second RTK	Bioline
Tie-breaker RTK	Not reported
Viral load reagent	Cobas Taqman 48/96: KIT CAP-G /CTM HIV-1 v2.0 Quantitative, 48 Tests
Viral load consumable	Not reported
EID reagent	Cobas Taqman 48/96:HIV-1 Qualitative Test v2.0, 48 Tests
EID consumable	Not reported

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Zambia

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	**37.9%**	**8,685**
Female condoms (FP)	28.3%	749
Male condoms (FP)	29.7%	1,487
Copper-bearing IUD	36.9%	103
Progestin only pills	50.4%	758
2-rod implant	41.9%	1,068
1-rod implant	42.2%	486
DMPA-Intramuscular injectable	34.7%	1,431
NET-En Injectable	50.6%	948
Combined oral contraceptive with iron	35.5%	1,655
TO2-Malaria	**28.8%**	**10,459**
SP	56.0%	1,549
mRDT	14.0%	1,816
AL 6x4	24.1%	1,794
AL 6x3	23.3%	1,786
AL 6x2	30.9%	1,749
AL 6x1	28.4%	1,765
TO1-HIV/AIDS	**13.5%**	**7,128**
Female condoms (HIV)	28.3%	749
Male condoms (HIV)	29.7%	1,487
EID reagent	20.0%	10
Viral load reagent	9.1%	11
Second RTK	6.3%	1,840
First RTK	7.0%	1,855
Pediatric ARV	10.0%	370
2nd line adult ARV	4.9%	410
1st line adult ARV	0.5%	396
Total	**27.5%**	**24,036**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	4.4%	1,893
TO3-PRH		
Combined oral methods	35.5%	1,655
Injectable contraceptives	28.2%	1,571
Implantable contraceptives	34.0%	1,185
Progestin-only methods	50.4%	758

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	88%	2,168
TO2-Malaria	92%	2,225
TO3-PRH	92%	2,225
TO4-MCH	92%	2,225

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**30%**	**29%**	**27%**	**14%**	**66**
TO1-HIV/AIDS	19%	59%	19%	4%	27
TO2-Malaria	50%		33%	17%	18
TO3-PRH	26%	19%	33%	22%	27
Total	**30%**	**29%**	**27%**	**14%**	**66**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	95	122	**217**
TO2-Malaria	11	14	**25**
TO3-PRH	24	32	**56**
TO4-MCH	5	6	**11**
Total	**135**	**174**	**309**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
ARVs	1	1
Condoms	1	1
FP commodities	1	1
Lab (HIV diagnostics)	1	1
Malaria commodities	1	1
MCH commodities	1	1
RTKs	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period
35	94%

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

FY2019 Quarter 3

April - June 2019

Country M&E Indicator Performance

Country

Zimbabwe

USAID FROM THE AMERICAN PEOPLE

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

CDC

U.S. President's Malaria Initiative

Service Delivery Point Stockouts and Reporting Rates

In GHSC-PSM-supported regions

Country: Zimbabwe

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points - HIV/AIDS

Task Order	# SDP stock observations	Stockout rate
TO1-HIV/AIDS	**5,569**	**10.5%**
1st line adult ARV	644	0.2%
2nd line adult ARV	625	4.2%
Pediatric ARV	600	8.5%
First RTK	725	8.1%
Second RTK	725	2.8%
Tie-breaker RTK	725	49.4%
Viral load reagent	8	0.0%
EID reagent	3	0.0%
Male condoms (HIV)	757	1.2%
Female condoms (HIV)	757	7.8%
Total	**5,569**	**10.5%**

B1. Stockout rate at service delivery points - Malaria

Task Order	# SDP stock observations	Stockout rate
TO2-Malaria	**4,633**	**17.2%**
AL 6x1	718	33.3%
AL 6x2	718	19.5%
AL 6x3	718	17.7%
AL 6x4	718	12.4%
AL inability to treat	718	4.2%
mRDT	540	10.4%
SP	503	23.3%
Total	**4,633**	**17.2%**

B1. Stockout rate at service delivery points - Family Planning

Task Order	# SDP stock observations	Stockout rate
Total		

B3. LMIS reporting rate

Task Order	Total # of SDPs required to report	Reporting rate
TO1-HIV/AIDS	1,806	41%
TO2-Malaria	1,705	41%
Total	**3,511**	**41%**

Ref Analysis

Ref	Analysis
B1	With the caveat that denominators are much reduced this quarter due to the disruption in normal reporting and distribution, Zimbabwe noted an increase in stock-outs of malaria commodities. This was especially prevalent for AL 6x1, AL 6x4 and SP. Inability to treat with AL rose from 1.8% to 4.2%. This is the peak season for malaria in Zimbabwe. GHSC-PSM, working together with the Directorate of Pharmacy services, has carried out urgent site visits throughout the country to assess the impact of the accelerated push on commodity availability. The project will be looking at the data gathered from the assessments to come up with possible solutions to ensure commodities are adequately stocked at sites. The GHSC-PSM field offices are also in discussion with HQ to introduce seasonality calculations in determining re-order quantities for malaria commodities.
B3	Reporting rate and stockout data presented for this quarter is to be treated with caution. In late April 2019, MOHCC announced a temporary suspension of all distribution systems (ZAPS and ZADS included) and replaced them with an operation to empty all central level stocks of health commodities to the sites ("accelerated push"). This push included ARVs, condoms and contraceptives, VMMC items, and essential medicines, but excluded malaria commodities. As a result, only 41% of sites reported under the usual ZAPS system. As of the beginning of July 2019, the normal distribution systems have been restored; however, the effects of the accelerated push operation are likely to remain evident in the data into future periods.

Warehouse stock status and product losses

Country: Zimbabwe

FY Quarter: 2019-Q3

B2. Stocked according to plan

Supply Chain Level	Total Observations	Stocked out	Understocked	Stocked according to plan	Overstocked
Central	**16**	**0%**	**44%**	**25%**	**31%**
TO1-HIV/AIDS	10	0%	60%	20%	20%
TO2-Malaria	6	0%	17%	33%	50%
Total	**16**	**0%**	**44%**	**25%**	**31%**

C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Ref	Analysis
B2	Due to the accelerated push initiative conducted by MOHCC this quarter, understocking increased from 31% to 44% of observations. This impacted HIV in particular, which rose to 60% understocked. All ARVs and RTKs are now understocked, while lab commodities remain stocked according to plan and condoms are overstocked. This is expected to persist next quarter, with improvements expected near the end of calendar year 2019. Malaria commodities, which were not included in the push, remain stocked according to plan or overstocked, with the exception of mRDTs, which are now understocked.
C7	There are no product losses to report this quarter.

Supply plans, innovations, and strategic activities

Country

Zimbabwe

FY Quarter

2019-Q3

Total Innovations implemented this quarter

Type of innovation	Number of innovations

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Product Group	Supply Plan Submission Status
ARVs	Yes
Condoms	Yes
Lab (HIV diagnostics)	Yes
Malaria commodities	Yes
RTKs	Yes
VMMC	Yes

Analysis

Zimbabwe has now increased its supply plan submission frequency from semi-annual to quarterly. The team submitted supply plans for all six of its required products categories this quarter. The next quantification and forecasting exercise is planned for August.

C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance

Description

Training for supply chain partners

Country

Zimbabwe

FY Quarter

2019-Q3

C2. Number of people trained by sex

Sex	TO1-HIV/AIDS	**Total**
Female	15	**15**
Male	15	**15**
Total	**30**	**30**

C2. Number of people trained by supply chain level

Supply Chain Level	TO1-HIV/AIDS	**Total**
Subnational level 1	30	**30**
Total	**30**	**30**

C2. Number of people trained by funding source and type

Type	TO1-HIV/AIDS	**Total**
TO-specific	30	**30**
Total	**30**	**30**

C2. Number of people trained by technical area

Supply Chain Function	TO1-HIV/AIDS	**Total**
Warehousing and Inventory Management	30	**30**
Total	**30**	**30**

Analysis

Thirty staff (15 men and 15 women) from the Ministry of Health and Child Care (MOHCC) were trained in the Voluntary Medical Male Circumcision Commodity Logistics System.

Molecular Instruments and HIV Tracer Products

Country

Zimbabwe

FY Quarter

2019-Q3

C10. Percentage of GHSC-PSM managed molecular instruments that remained fucntional for the entire reporting period

Analysis

GHSC-PSM does not manage or support maintenance for any molecular instruments in Zimbabwe.

HIV Tracer Products

Tracer Product	Exact Product Name
1st line adult ARV	Tenofovir/Lamivudine/Efavirenz 300/300/400 mg
2nd line adult ARV	Atazanavir/Ritonavir 300/100 mg
Pediatric ARV	Abacavir/Lamivudine 120/60 mg
First RTK	Determine
Second RTK	Chembio
Tie-breaker RTK	INSTI
Viral load reagent	Roche Ampliprep Automated kits VL
Viral load consumable	Not reported
EID reagent	Roche Ampliprep Automated kits EID
EID consumable	Not reported

HIV tracer products are selected based on the most-used commodities in each country. These products can change from quarter to quarter as products transition and consumption changes. The items listed here will refer to the products used as tracers for the current quarter. Data presented for previous reporting periods will refer to the most-used products *at that time*, which may differ from the current tracer item.

Complete Results and Denominators

Country: Zimbabwe

FY Quarter: 2019-Q3

B1. Stockout rate at service delivery points (GHSC-PSM-supported regions)

Task Order	Stockout rate	# SDP stock observations
TO2-Malaria	**19.6%**	**3,915**
SP	23.3%	503
mRDT	10.4%	540
AL 6x4	12.4%	718
AL 6x3	17.7%	718
AL 6x2	19.5%	718
AL 6x1	33.3%	718
TO1-HIV/AIDS	**10.5%**	**5,569**
Female condoms (HIV)	7.8%	757
Male condoms (HIV)	1.2%	757
EID reagent	0.0%	3
Viral load reagent	0.0%	8
Tie-breaker RTK	49.4%	725
Second RTK	2.8%	725
First RTK	8.1%	725
Pediatric ARV	8.5%	600
2nd line adult ARV	4.2%	625
1st line adult ARV	0.2%	644
Total	**14.2%**	**9,484**

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	4.2%	718

See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts.

B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions)

Task Order	Reporting rate	Total # of SDPs required to report
TO1-HIV/AIDS	41%	1,806
TO2-Malaria	41%	1,705

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	**25%**	**31%**	**44%**	**0%**	**16**
TO1-HIV/AIDS	20%	20%	60%	0%	10
TO2-Malaria	33%	50%	17%	0%	6
Total	**25%**	**31%**	**44%**	**0%**	**16**

B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

C2. Number of people trained

Task Order	Female	Male	**Total**
TO1-HIV/AIDS	15	15	**30**
Total	**15**	**15**	**30**

B6. Quarterly supply plan updates

Product Group	# of supply plans required	# submitted
ARVs	1	1
Condoms	1	1
Lab (HIV diagnostics)	1	1
Malaria commodities	1	1
RTKs	1	1
VMMC	1	1

C10. HIV molecular instrument functionality

# GHSC-PSM-supported instruments	% of instruments that functional for the entire period

For complete results on innovations (C1), strategy, policy, and regulation activities (C11), and product losses (C7a and C7b), please see the specific pages for those indicators.

Indicator Details

Check out the GHSC-PSM IDIQ M&E Plan for complete details on all our indicators.

Indicator Code	Name	Numerator	Denominator	Data Source(s)	Reporting frequency	Other Info
C01	Number of innovations (including operations research studies) that were developed, implemented, or introduced and are related to the health commodity market or supply chain best practices	Number of innovations (including operations research studies) that were developed, implemented, or introduced and are related to the health commodity market or supply chain best practices	NA	Field office reports, work plans	Quarterly	Innovations are reported in the quarter in which they are launched. Activitie are considered innovations if they represent a significant advancement for the country. Similar activities may be reported from multiple countries.
C02	Number of people trained	Number of people trained. "People trained" refers to any type of participant, student, or learner in a training event, regardless of its duration	NA	Registration forms, attendance sheets	Quarterly	Training of USAID and GHSC-PSM personnel is excluded from this indicator. Participants may be counted more than once if they attend multiple discrete training activities.
C07a	Percentage of product lost due to expiry while under GHSC-PSM control (product loss percentage)	Total value of product lost due to expiry during the quarter	Average inventory balance (in USD) during the quarter	Inventory reports	Quarterly	Expiries from the Regional Distribution Centers (RDCS) are presented in the GSC section of this report. Expiries that occur in warehouses that GHSC-PSM manages in countries are reported in the country-specific scections of this report.
C07b	Percentage of product lost due to theft, damage, or other causes, while under GHSC-PSM control (product loss percentage)	Total value of product lost due to theft, damage, or other causes during the quarter	For losses in transit: Total value (in USD) of product delivered during the quarter For losses in storage: Average inventory balance (in USD) during the quarter	GHSC-PSM Continual Improvement system reports	Quarterly	Product losses due to incidents are reported only after the actual value of the loss has been determined, which may be later than the quarter in which the incident took place or was first reported to GHSC-PSM Continual Improvement.
C10	Percentage of GHSC-PSM-procured or supported molecular instruments that remained functional during the reporting period	Total number of GHSC-PSM-procured or supported molecular instruments that remained functional for the entire reporting period	Total number of molecular instruments in the country that were procured or are supported by GHSC-PSM	Lab instrument outage reports	Quarterly	
C11	Supply chain policies, regulations, strategies, or SOPs developed or updated with GHSC-PSM assistance	Description of major GHSC-PSM efforts around developing or updating supply chain policies, regulations, strategies, or SOPs	NA	Field office reports, work plans	Quarterly	

Indicator Details

Check out the GHSC-PSM IDIQ M&E Plan for complete details on all our indicators.

Indicator Code	Name	Numerator	Denominator	Data Source(s)	Reporting frequency	Other Info
B01	Stockout rate at SDPs	Number of SDPs that were stocked out of a specific tracer product according to the ending balance of the most recent logistics report (or on the day of site visit)	Total number of SDPs that reported/were visited in GHSC-PSM-supported countries that offer the tracer product	LMIS reports, End User Verification surveys, other country-specific stock data sources	Quarterly	Stockout rates are provide for all tracer products for which data is available, regardless of whether GHSC-PSM procures or delivers the product. Data is provided for the ending balance of the middle month of each quarter for most countries. "Composite stockouts" are presented for select malaria and family planning commodities, indicating where SDPs are stocked out of all products they offer within the same product type or contraceptive method. At the task order level, aggregated stockout rates are calculated based on all SDP stock observations summed across all tracer products for that TO. TO-level denominators will therefore be greater than the number of SDPs that reported in that health area.
B02	Percentage of stock status observations in storage sites, where commodities are stocked according to plan, by level in supply system	Number of stock status observations for a tracer product that are within the designated minimum and maximum quantities at storage sites	Total number of stock status observations for a tracer product at storage sites	Warehouse management information systems, partner stock reports	Quarterly	Stocked according to plan rates are provided for all tracer products for which data is available, regardless of whether GHSC-PSM procures, delivers, or manages inventory for the product. Stock "observations" are typically based on inventory reports and will include as many observations (monthly, quarterly) from as many storage locations as are available at the time of reporting.
B03	SDP reporting rate to the LMIS	Number of SDPs whose LMIS report(s) or order form(s) were received at the central level within 30 days of the specified in-country deadline	The total number of SDPs in country that are required to report	LMIS reports, other country-specific stock data sources	Quarterly	All sites that have submitted reports within 30 days of the country-specified deadline are considered "reporting" for this indicator. Some countries have limited access to SDP-level data and are reporting rates from a small number of sites. Number of sites reporting for each country is listed on the "Complete Results" page for each country.
B06	Percentage of required supply plans submitted to GHSC-PSM during the quarter	Number of required supply plans that were submitted to GHSC-PSM in the quarter	Total number of required supply plans	Country supply plans, FASP tracker	Quarterly	Supply plan submission expectatations are determined in consultation with USAID, headquarters FASP team, and field office technical leads. Submission rates are only calculated for prioritized submissions. Additional supply plans beyond the requirements are often submitted to GHSC-PSM headquarters.