USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management



Logistics and Warehouse Specialist George Namagara reviews inventory at the central warehouse in Burundi. *Photo credit: Bobby Neptune/GHSC-PSM*







FISCAL YEAR 2019

QUARTERLY REPORT – QUARTER I

October I to December 30, 2018

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GHSC-PSM Quarter | Report, Fiscal Year 2019 | i

The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project is funded under USAID Contract No. AID-OAA-I-15-0004. 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 <u>ghsupplychain.org</u>

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Acronyms

ACT	artemisinin-based combination therapy
ALu	artemether-lumefantrine
API	active pharmaceutical ingredient
ARTMIS	Automated Requisition Tracking Management Information System
ARV	antiretroviral
BI&A	Business Intelligence and Analytics
CAMEG	Central Medical Stores (Burkina Faso)
CARhs	Coordinated Assistance for Reproductive Health Supplies
CDC	U.S. Centers for Disease Control and Prevention
COP	Country Operational Plan
DMPA-IM	depot-medroxyprogesterone acetate intramuscular
DRC	Democratic Republic of the Congo
eLMIS	electronic logistics management information system
EUV	end-use verification
FASP	forecasting and supply planning
FLARE	First-Line ARV Reporting and Evaluation
FP	family planning
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
GHSC-RTK	Global Health Supply Chain-Rapid Test Kit
GHSC-TA	Global Health Supply Chain-Technical Assistance
GLN	global location number
Global FP VAN	Global Family Planning Visibility and Analytics Network
GNCZ	General Nursing Council of Zambia
GTIN	global trade item number
ICFP	International Conference on Family Planning
IDIQ	indefinite delivery, indefinite quantity
IUD	intrauterine device
JMS	Joint Medical Store (Uganda)
LLIN	long-lasting insecticide-treated net
LMIS	logistics management information system
LNG-IUS	levonorgestrel releasing intra-uterine system
MCH	maternal and child health
MMD	multi-month dispensing
MNCH	maternal, newborn, and child health
NMCP	National Malaria Control Program
NOTD	not-on-time-delivery
NOTIF	not-on-time-in-full
OGAC	Department of State Office of the Global AIDS Coordinator
OTD	on-time delivery
OTIF	on-time in-full delivery
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PLHIV	people living with HIV
PMI	U.S. President's Malaria Initiative

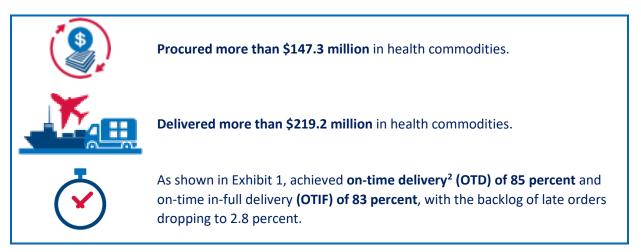
PPM	Pharmacie Populaire du Mali
PPMR	Procurement Planning and Monitoring Report
PPMR-HIV	Procurement Planning and Monitoring Report – HIV/AIDS
PPMRm	Procurement Planning and Monitoring Report – malaria
PrEP	Pre-exposure prophylaxis
PRH	Office of Population and Reproductive Health
Q	quarter
QA	quality assurance
QAMS	quality assurance management system
RDT	rapid diagnostic test
RHSC	Reproductive Health Supplies Coalition
RTK	rapid test kit
SC-FACT	Supply Chain – Facility-level AIDS Commodity Tracking
SCM	supply chain management
SDP	service delivery point
SIGLUS	Sistema de Informação para Gestão Logística nas Unidades Sanitárias (Mozambique)
SOH	stock on hand
SOP	standard operating procedure
SP	sulphadoxine-pyrimethamine
SPAQ	sulphadoxine-pyrimethamine + amodiaquine
ТВ	tuberculosis
TLD	tenofovir, lamivudine, dolutegravir
TLE	tenofovir, lamivudine. efavirenz
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
VMMC	voluntary medical male circumcision

Executive Summary

The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project is pleased to present this report summarizing our work and performance for Fiscal Year 2019 (FY 2019) Quarter I (QI). We describe here our work providing lifesaving commodities and building efficient, reliable, and cost-effective supply chains for delivering health products for the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), the U.S. President's Malaria Initiative (PMI), USAID's voluntary family planning and reproductive health (FP/RH) program, and USAID's maternal and child health (MCH) program, which equitably share the cost of the project.¹

Global Supply Chain

GHSC-PSM's global supply chain procurement and logistics activities and achievements are described in Section CI. Highlights of our global supply chain performance in QI (October I to December 31, 2018) are provided below.



Q1 OTD rates were strong for all health areas: 82 percent for HIV, 94 percent for malaria, 92 percent for FP/RH, and 97 percent for maternal, newborn, and child health (MNCH) commodities, exceeding the eighty percent target. GHSC-PSM continues to conduct root cause analysis of late deliveries and to refine procurement and supply chain processes to improve performance.

Strategic sourcing of health commodities continued to promote market health, reduce prices, and shorten lead times for a variety of products.

The project opened our new regional distribution center in South Africa, providing the U.S. government with a projected logistics cost savings of \$1 million a year, completing our optimized logistics network. GHSC-PSM maintains inventory in regional distribution centers to ensure responsiveness to dynamic country needs. Based on country supply plans and budgets, GHSC-PSM proactively procures and prepositions critical products such as sulphadoxine-pyrimethamine + amodiaquine (SPAQ) for seasonal

¹ For more information on cost sharing by health areas, please see page 37.

² 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.

malaria chemoprevention, first-line antiretrovirals (ARVs), and contraceptives at the regional distribution centers in Belgium, the Republic of South Africa, and the United Arab Emirates. This strategy reduces the time between order and delivery (cycle time) and enhances flexibility.

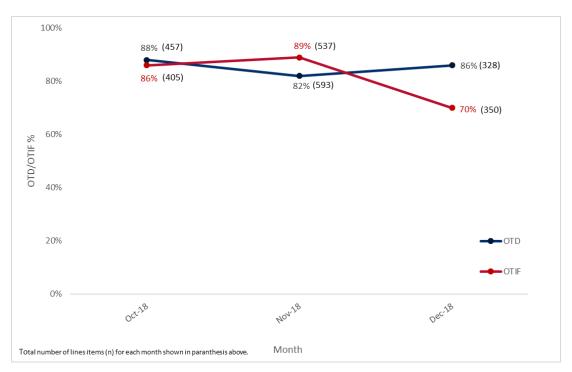


Exhibit I. OTD and OTIF Over the Quarter

Meeting Global Health Objectives

ΗΙΥ

GHSC-PSM continues to contribute to PEPFAR's lifesaving agenda (see box).

The project is heavily involved in supporting the transition to use of tenofovir disoproxil fumarate, lamivudine, and dolutegravir (TLD) as the new first-line ARV therapy. By the end of Q1, the project had delivered more than 11.7 million units (30-count bottles) to 12 countries. Complementing the scale-up of TLD is the drawdown of previous first-line treatment regimens, which the project is monitoring and reporting to PEPFAR each month.

To better ensure the right quantities of HIV commodities (primarily ARVs) are being distributed to health facilities to meet patient needs, GHSC-PSM took the first major step toward triangulating PEPFAR's



GHSC-PSM has delivered enough antiretroviral therapy to provide more than **4.8 million** patient-years of HIV treatment to date.

This includes I million patient-years of TLD treatment delivered over the life of the project.

site-level treatment and testing data with stock data from countries' logistics management information systems (LMISs). In QI, the project matched more than 8,000 health facilities that were listed in PEPFAR's system with health facilities that were listed in 13 countries' LMISs. Many of these sites are among the 13,816 facilities in 17 countries for which the project is receiving and reviewing stock data.

To ensure state-of-the art laboratory performance, GHSC-PSM promotes a reagent rental approach whereby countries pay for actual laboratory tests rather than for laboratory equipment and supplies. This approach was endorsed by PEPFAR and the Global Fund, and the project's reagent rental and laboratory optimization approaches were included in the PEPFAR Country Operational Plan (COP) guidance for the coming year. This quarter, the project assisted three additional countries—the Kingdom of Eswatini, the Federal Republic of Nigeria, and the Republic of Zimbabwe—with laboratory optimization to improve sample processing and delivery of results to patients.

To support PEPFAR priorities, GHSC-PSM helped countries develop forecasting models for preexposure prophylaxis (PrEP) and started collecting data on PrEP treatment; completed a survey on country multi-month dispensing (MMD) practices; and conducted market research on shortages of the active pharmaceutical ingredient (API) for the tuberculosis (TB) treatment isoniazid to support PEPFAR's HIV/TB program.

Malaria

GHSC-PSM works to help PMI reduce malaria deaths and substantially decrease malaria morbidity (see box).

In QI, GHSC-PSM achieved 94 percent OTD for malaria drugs and other health commodities. The project delivered enough treatments³ to treat millions of malaria infections (see box). During QI, the project continued designing a customized Quality Assurance Management System (QAMS) to capture QA-related information for malaria commodity orders that require QA activities.

GHSC-PSM continued to utilize tools to capture and share data and to promote data-driven decision making. Examples include:



GHSC-PSM has delivered enough antimalarials to treat 141.7 million infections to date.

This includes treatment for 15.7 million infections in Q1.

- Lacking availability of malaria commodities in the malaria supply chain in the Republic of Zambia, which has seen low stock-out levels for artemether/lumefantrine (ALu) at health facilities.
- Deciding to delay, reallocate, or expedite shipments to five countries to respond to stock imbalances identified in the Procurement Planning and Monitoring Report for Malaria (PPMRm).
- Developing a database to track the movement of LLINs from customs clearance to the community level in Ethiopia, to be shared with the government for use in upcoming LLIN replacement activities.

The project also supported country counterparts in strengthening management of their health supply chains. As examples, GHSC-PSM helped the governments of Burkina Faso, the Republic of Ghana, and the Republic of Liberia conduct forecasting and supply planning (FASP) workshops.

³ Includes malaria treatments delivered with "full dose" based on WHO-recommended treatment guidelines. Specific medicines are limited to those used only for treatments, and not primarily as prophylaxis. Specifically, they include only artemether/ lumefantrine and artesunate/ amodiaquine formulas this quarter.



GHSC-PSM has delivered enough contraceptives to provide 41 million couple years of protection to date.

This includes 5.2 million couple years of protection in Q1.

Voluntary Family Planning and Reproductive Health

GHSC-PSM support for voluntary family planning/reproductive health programs achieved several major milestones in Q1.

The project launched the new interactive online Contraceptive Security Indicators dashboard. This displays the 2017 contraceptive security indicator survey results related to policy, financing, leadership, and supply chain management issues that facilitate or impede contraceptive availability. For the first time, the dashboard includes indicators related to pharmaceutical quality and public and private sector coordination on contraceptive supplies. Users can explore findings for a particular country, or at a global level.

GHSC-PSM averted a global shortage of a three-month contraceptive injectable, depotmedroxyprogesterone acetate intramuscular injectable (DMPA-IM). Having relied for decades on a single supplier of this critical product for voluntary family planning, global purchasers faced a significant risk that demand would outstrip supply. Early in FY 2018, GHSC-PSM, the GHSC-Quality Assurance (QA) project, and USAID developed a strategy to add a second DMPA-IM supplier, and coordinated closely on a sourcing approach to meet USAID's quality standards. In Q1, the project leveraged an existing agreement to engage the supplier to further reduce sourcing and contracting lead times. Adding this manufacturer mitigated the risk of global shortages by diversifying the supplier base; achieved savings of approximately \$594,000; and reduced the unpredictability of supplier lead times.

The global family planning community completed preparations for launch of the multi-stakeholder Global Family Planning Visibility and Analytics Network (Global FP VAN) platform, for which GHSC-PSM supported the user-acceptance testing of numerous supply chain and analytic modules. Based on positive user experience, the platform will go live with two product families and two countries in January.

In Malawi, GHSC-PSM built a first-of-its kind automated interface between our supply chain information system and an in-country supply chain information system (managed by the private sector Bolloré Group) to enable end-to-end visibility of data. For the first time, users can track commodities for family planning and reproductive health from the initial order with GHSC-PSM to their end delivery points, a capability the consortium can extend to other health products in the future.

Maternal and Child Health

GHSC-PSM works to end preventable child and maternal deaths by increasing access to quality-assured MNCH medicines and supplies, and by providing global technical leadership on MNCH drugs and other commodities (for an example, see box).

In Q1, GHSC-PSM completed The Manual for Procurement and Supply of Quality-Assured Maternal, Newborn, and Child Health Commodities, intended to guide procurement agencies to establish a QA system for procuring these lifesaving products.

GHSC-PSM is working to expand understanding of MNCH product availability. In QI, the project developed two assessment tools: one to assess availability of newborn and child health drugs and commodities



GHSC-PSM, with other MNCH leaders, completed and submitted a manuscript on oxytocin quality issues to a peer-reviewed journal. The project also conducted webinars in Spanish and French on appropriate management of oxytocin. such as oral rehydration salts, zinc, amoxicillin, and newborn equipment and supplies; and another to assess the availability of MNCH products among private- sector wholesalers and distributors.

At the country level, GHSC-PSM improved the availability of maternal-health medicines in the Federal Democratic Republic of Ethiopia. GHSC-PSM held a consultative workshop for state and hospital pharmacy heads on how to get reimbursed for maternal-health drugs and supplies, which will improve the availability of these commodities and allow health facilities to continue to provide free care for expecting and delivering mothers.

Cross-Cutting Investments: Health Supply Chain Systems Strengthening

In FY 2019, GHSC-PSM will continue to manage 34 country or regional field offices, after closing an office in the Republic of Madagascar—as USAID/Madagascar has issued a bilateral contract for supply chain support—while beginning start-up activities for a new office in the Kingdom of Eswatini. These offices, supplemented by headquarters-based experts, provide wide-ranging technical assistance to strengthen national health supply chains.

Several years of investment in supply chain systems have yielded important innovations and positive results on many fronts. For example, the GHSC-PSM office in the Republic of Mozambique, with the Government of Mozambique and several donors, received the *Accelerating Global Health Supply Chain Excellence Award* for the best innovation at the Global Health Supply Chain Summit. The award recognized the cloud-based OpenLMIS tablet application that allows for faster, automated reporting on stocks by local health facilities and easier management of data at all levels.

Other examples of GHSC-PSM's cross-cutting investments this quarter include the following:

- Developing a new web-based system to track the distribution of LLINs in the Federal Republic of Ethiopia.
- Signing a Memorandum of Understanding with the University of Ghana to build regional capacity for supply chain management within the country.
- Supporting the development of a vehicle adherence monitoring tool to improve visibility and adherence to delivery schedules in the Republic of Zambia.
- Helping restructure the Medicines Procurement and Production Division of the Ministry of Health in the Republic of Rwanda to transform it into a legally and financially autonomous state-owned enterprise.
- Helping the National Centralized Drug Procurement Center in Vietnam successfully manage the bidding process to procure ARVs with funding from the national social health insurance program for the first time.
- Helping the government of Malawi conduct the first-ever quantification of supplies for VMMC with the Quantimed and PipeLine software tools.
- Assisting the Central Medical Stores of the Republic of Namibia to persuade the national Ministry of Health to adopt a more cost-effective algorithm for HIV rapid testing.
- Helping the Population Welfare Department in the Province of Punjab in the Islamic Republic of Pakistan to implement a new warehouse management system.

These represent a fraction of the project's diverse efforts to better capture and use data to improve the performance of procurement systems and supply chains.

Section A

INTRODUCTION

AI. Background

The USAID GHSC-PSM project works to ensure uninterrupted supplies of quality health 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 to help reach the Joint United Nations Programme on HIV/AIDS (UNAIDS) global 90-90-90 HIV/AIDS testing, treatment, and viral load suppression targets.
- The U.S. President's Malaria Initiative 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 health commodities, offers comprehensive technical assistance to strengthen national supply chain systems, and provides global supply chain leadership to ensure that lifesaving health supplies reach those most in need.

A2. About this Report

We are pleased to present our performance report for fiscal year 2019 quarter I (October I through December 31, 2018). 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 and accomplishments in each of the health areas— HIV/AIDS; malaria; family planning and reproductive health; maternal, newborn, and child health; and other public health threats.
- Section C describes activities and accomplishments under each of the three main technical objectives (global commodity procurement and logistics, country health supply chain systems strengthening, and global collaboration), including key indicator results for those objectives.
- Annex A provides performance and context indicators for October 1 through December 31, 2018 (quarterly indicators).

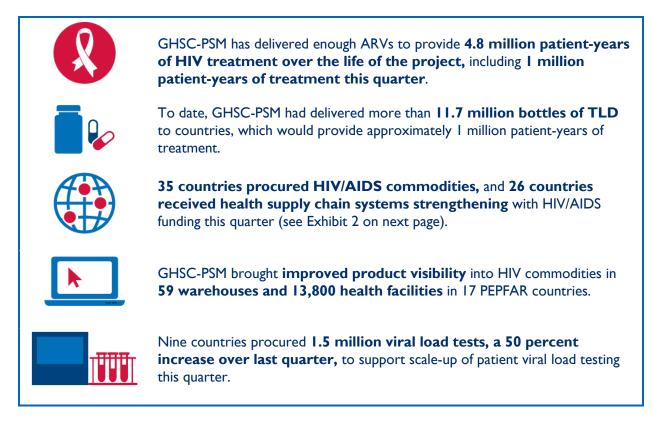
Given the size and complexity of GHSC-PSM, this report summarizes our primary efforts and achievements this quarter and reflects only a fraction of the project's efforts each day to help people around the world live healthier lives.

SECTION B

PROGRESS BY HEALTH AREA

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

BI. HIV/AIDS



GHSC-PSM supports the PEPFAR goal of epidemic control of HIV/AIDS by providing commodities to prevent infection and treat people living with HIV (PLHIV), including scaling up viral load testing to monitor treatment efficacy of PLHIV. Finally, GHSC-PSM is implementing data visibility initiatives that support appropriate procurement and distribution of ARVs to link treatment needs with the necessary commodities.

Exhibit 2. Countries that Received Procurement or Technical Assistance from GHSC-PSM with HIV Funding^ in Q1

AFRICA	AFRICA (cont.)	AFRICA (cont.)	ASIA
Angola 🗧	• Malawi* • •	Zimbabwe*	Burma •
Botswana*	Mali		Cambodia
Burkina Faso	Mozambique	LAC	Indonesia 🗧
Burundi	Namibia*	Barbados •	Nepal
Cameroon •	Niger	Dom. Republic 🕴 📍	Papua New Guinea
Côte d'Ivoire*	Nigeria	El Salvador	Vietnam • •
DRC	Rwanda*	Guatemala	EUROPE/EURASIA
Eswatini*	 Senegal 	Haiti* •	Kazakhstan
Ethiopia 🗧	South Sudan	Honduras	Kyrgyzstan •
Ghana	 Tanzania* 	Jamaica 🗧 📍	Tajikistan
Kenya*^ 🗧	Uganda* •	Panama	Ukraine
Lesotho*	Zambia*	Suriname 🗧 🔍	

• GHSC-PSM provided technical assistance to strengthen supply chains.

- GHSC-PSM procured HIV commodities.
- * High HIV burden PEPFAR focus country
- ^ GHSC-PSM provides support in Kenya under a unique task order overseen by USAID/Kenya.

Supporting PEPFAR's HIV Prevention Agenda

Multiple clinical trials have shown that daily oral PrEP using the ARV drugs tenofovir and emtricitabine dramatically reduces the risk of HIV infection for people who take it as directed. In response, GHSC-PSM continued supporting scale-up of PrEP planned under COP18 for PEPFAR's Determined, Resilient, Empowered, AIDS-free, Mentored and Safe Partnership for adolescent girls and young women and for initiatives for other key populations.

Our PrEP achievements this quarter include developing guidelines to estimate PrEP commodity needs; helping countries develop national commodity forecasting models for PrEP; starting to evaluate regulatory issues affecting procurement of PrEP commodities in countries where it is not yet approved; starting to collect data from countries to understand dual-regimen consumption for prevention versus treatment; and starting to work with suppliers to promote uninterrupted global supply for PrEP.

Similar efforts are being carried out to understand and address supply chain issues for post-exposure prophylaxis.

GHSC-PSM's voluntary medical male circumcision (VMMC) program provides forecasting and supply planning, strategic sourcing, and procurement support to this critical HIV prevention intervention. In Q1, GHSC-PSM supported VMMC quantification in Tanzania and began developing early infant male circumcision (EIMC) kits for the country. In addition, the program actively promotes the FASP tool for VMMC, which helped improve procurement efficiencies and delivery times in Q1.

Condoms

To efficiently manage condom procurement, given that condoms are key commodities for both family planning and HIV prevention, GHSC-PSM started developing a standardized procurement management

process for all condom orders. Under USAID's technical direction, the project now instructs countries to use a forecasting algorithm that addresses both family planning and HIV prevention program needs. This quarter, the project received 10 supply plans for condoms that incorporate this approach.

Another efficiency comes from GHSC-PSM's analysis of the costs and benefits of vendor-managed inventory of condoms. We found that shifting from managing condoms in the project's regional distribution centers to having vendors manage condom inventory on behalf of the project would reduce logistics costs by 32 percent. Based on these findings, USAID approved scale up of vendor-managed inventory for male and female condoms.

GHSC-PSM continued its collaboration with USAID, the United Nations Population Fund (UNFPA), the Bill and Melinda Gates Foundation, and others to provide timely and accurate condoms procurement information to meet our partners' respective needs. As part of this global collaboration, GHSC-PSM and USAID have started working on a new methodology for the analyses found in the FY 2018 Contraceptives and Condoms report.

HIV/TB Prevention and Treatment

Worldwide, TB is one of the leading causes of death among PLHIV. TB occurs more often and is more severe among PLHIV due to their weakened immune systems. GHSC-PSM participated in HIV/TB sessions at the USAID implementing partners' meeting to better understand HIV/TB programmatic issues and to identify supply chain–

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

specific challenges in scaling up HIV/TB programs in PEPFAR countries. GHSC-PSM also started reviewing inventories of TB prevention and treatment commodities to identify potential supply gaps.

GHSC-PSM conducted research on the current global shortage of the API for isoniazid, a product used for TB prevention and treatment. These market insights are informing conversations by USAID and the Department of State's Office of the Global AIDS Coordinator (OGAC) around scaling up procurement of TB prevention commodities.

Supporting the First 90: Testing

GHSC-PSM actively supports rapid test kit (RTK) availability to reach the first 90, or 90 percent of people living with HIV diagnosed. GHSC-PSM leadership meets regularly with the GHSC-RTK project (implemented by Remote Medical International, RMI) to get updates on its RTK procurements, to ensure a smooth transfer of country orders to GHSC-RTK, and to coordinate GHSC-PSM field office facilitation of orders and deliveries. GHSC-PSM helps countries forecast and quantify the number of RTKs they need and shares countries' RTK procurement plans up to 18 months into the future with GHSC-RTK. Finally, GHSC-PSM collects and manages data on RTK stock status at the central and regional levels and on planned deliveries from all sources in the Procurement Planning and Monitoring Report for HIV (PPMR-HIV).

Country-level advocacy. GHSC-PSM helped Namibia's Central Medical Stores successfully engage and persuade the government to adopt a more cost-effective HIV rapid testing algorithm. It is estimated that the new algorithm will save up to 75 percent of the government's current HIV screening test costs annually.

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 supports TLD scale-up by supplying the treatment to countries that are transitioning (see box). This quarter, the project delivered TLD to eight countries, including first-time deliveries to the Democratic Republic of the Congo (DRC), Tanzania, and Ukraine. GHSC-PSM communicated regularly with country counterparts and

Scaling Up Supply of TLD

By the end of Q1, the project had delivered 11.7 million units of TLD to 12 countries. This is enough to provide almost 1 million patient-years of TLD treatment.

suppliers to balance country demand with manufacturing capacity and to ensure timely delivery. The project also worked closely with countries to support scale-up of their use of TLD and monitored the drawdown of legacy ARVs, especially those containing nevirapine. GHSC-PSM ensured tight coordination with USAID on all facets of this dynamic transition through weekly first-line ARV transition meetings, monthly transition reports, and reviews of the First-Line ARV Reporting and Evaluation reports (see below).

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 launched the new First-Line ARV Reporting and Evaluation (FLARE) initiative. Each month, GHSC-PSM collects, reviews, and compiles monthly inventory data from more than 59 warehouses in 16 countries for all first-line ARVs. For example, the project is monitoring the drawdown of lamivudine, nevirapine, and zidovudine (LNZ). As shown in Exhibit 3, reflecting information about governments' and other donors' shipments, the last shipment of LNZ should be consumed in September 2020. This information is shared each month with the Coordinated HIV/AIDS Supplies Group to inform decisions about LNZ shipments and support the transition to TLD.

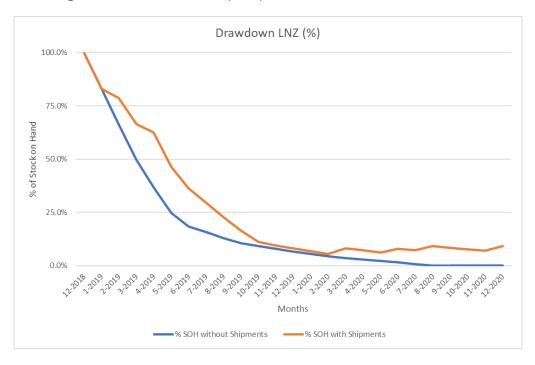


Exhibit 3. Percentage of LNZ Stock on Hand (SOH) Drawn Down from the Current Total

Multi-Month Dispensing

GHSC-PSM discussed MMD⁴ requirements with suppliers and learned that three of our suppliers are ready to provide 90-count bottles of first-line ARVs. Also, GHSC-PSM surveyed 18 countries on MMD policy and practices. We learned:

- Seventeen countries are implementing MMD nationally or regionally and 14 countries have a national MMD policy in place.
- Most countries (13 out of 17) dispense up to three months of treatment, though some countries allow dispensing of up to six months of treatment (Ethiopia, Ghana, and Lesotho).
- Best practices for supporting scale-up of MMD include extensive stakeholder engagement, clear coordination and communication between logistics and program staff, regular use of reliable stock and patient data, and strong monitoring and follow-up to address MMD challenges early in implementation.

Other Treatment Supply Chain Analyses

HIV packaging analysis. As part of a broader packaging study, GHSC-PSM solicited feedback on carton-less packaging for ARVs in Mozambique, Rwanda, Zambia, and Zimbabwe. The project learned that most countries prefer to receive bottles of ARVs without individual boxes. This is more discreet for patients and reduces waste and waste management costs. The study also pointed to the need for

⁴ With MMD, stable patients receive several months of ARVs at one time and do not need to return to health facilities each month to receive their supplies. MMD supports improved adherence to treatment and reduces burden on health facility staff.

carefully planned secondary packaging. GHSC-PSM negotiated improved carton-less packaging options with ARV suppliers.

Shelf-life research. In Zimbabwe, GHSC-PSM traced batch numbers of second-line ARVs through the supply chain from the central level to clinical sites. This elucidated the requirements for minimum months of supply for MMD given the risk of expiration. The analysis also showed that high minimum stock levels drive that country's high shelf-life percentage requirements for drug importation. Additional details on these important findings are provided in Section C3a. GHSC-PSM provided these data to USAID in preparing for discussions on ARV shelf-life requirements with the World Health Organization (WHO) and the Global Fund in India in November.

Supporting the Third 90: Viral Load Testing

GHSC-PSM continued to support countries in reaching their viral load and early infant diagnosis targets, including building capacity for procuring viral load testing reagents, specimen collection consumables, and testing equipment. The project conducts quarterly viral load instrument surveys in 11 countries to inform procurement decisions and to determine if additional instrument capacity is necessary before further investments are made. These data also inform laboratory network optimization, which should lead to cost savings through consolidation or reallocation of laboratory equipment.



Lab technician Anita Nshimirimana conducts viral load testing in Burundi. Photo Credit: Bobby Neptune/GHSC-PSM

GHSC-PSM's targeted technical assistance this quarter to strengthen laboratory procurement, supply chain functionality, and laboratory networks included training more than 60 health ministry and national quantification team personnel in Botswana, Cameroon, Eswatini, and Ghana. The project provided training on viral load and early infant diagnosis laboratory commodity forecasting using the ForLAB 2.0 forecasting software and consumption, service, and demographic forecasting methodologies.

Laboratory Optimization Yields Benefits in Efficiency and Scale

In Eswatini, laboratory optimization will **more than double national testing capacity.**

In Nigeria, network integration will:

- Reduce sample transport time by 66 percent (from 21 to 7 days)
- Expand testing services to an additional 250,000 patients

In Zimbabwe, network optimization will **increase national viral load coverage from 40 to 65 percent** of patients on treatment. The project continued to support laboratory optimization this quarter. In Eswatini, laboratory optimization will increase national testing capacity from the current 185,760 tests to 378,720 tests. In Nigeria, with project support, HIV and TB laboratory networks were integrated, increasing network efficiency, expanding coverage, and increasing communication and collaboration among PEPFAR, the Global Fund, and the Government of Nigeria. In Zimbabwe, GHSC-PSM worked closely with the Ministry of Health, USAID, U.S. Centers for Disease Control and Prevention (CDC), United Nations Development Programme (UNDP), and the Global Fund to optimize the viral load and early infant diagnosis network and to develop a national integrated sample transportation network. GHSC-PSM also helped the Zimbabwe health ministry develop a budget for this transportation network. Efficiencies and ability to scale services from these efforts are highlighted in the box.

As part of our global collaboration this quarter, GHSC-PSM hosted two seminars at the African Society for Laboratory Medicine conference in Abuja, Nigeria. The sessions focused on the laboratory network approach for procurement and supply management⁵ and on sharing best practices for laboratory optimization, FASP, commodity strategic sourcing, and performance management. GHSC-PSM co-led with the CDC the equipment maintenance sessions at the conference's laboratory quality improvement and management accreditation symposium.

Stock Tracking, Oversight, and Planning for HIV/AIDS

This quarter, GHSC-PSM carried out multiple efforts to support PEPFAR's vision for increased visibility into HIV commodity inventories at all levels. Under the new Supply Chain – Facility-level AIDS Commodity Tracking (SC-FACT) initiative, each month GHSC-PSM now tracks stock data on first- and second-line adult and pediatric ARVs, RTKs, and condoms in PEPFAR countries at all service delivery site levels. The ongoing PPMR-HIV activity collects and reports HIV commodity stock data at central and subnational warehouses. These two initiatives will provide end-to-end stock data visibility for HIV commodities. The final step is to triangulate site-level HIV commodity inventory data with patient volume using PEPFAR's Monitoring, Evaluation and Results indicators to ensure that every facility has the health commodities needed to provide the desired PEPFAR treatment, prevention, laboratory services, and surgical procedures. The plan for this is depicted in Exhibit 4.

Pilot Patient Data Triangulation Conduct patient data triangulation for Nigeria to determine whether patients receive the products they require Facility Crosswalk Crosswalk facility names for Nigeri and Zimbabwe to standardize Patient Data Triangulation Adaptation facility names across platforms Conduct patient data triangulation for othe countries Collect Site-Level Data Country Diagnostics & Collect and standardize sitelevel data into Global Templates Mitigation (CDM) Tool for 16 countries Develop CDMs to enable easy use of Global Templates for 8 countries

Exhibit 4. Phases in Plan to Triangulate Stock and Patient-Level Data

⁵ See https://www.ghsupplychain.org/laboratory-network-approach-procurement-and-supply-management

Site-Level Data Visibility at 13,800 Health Facilities in 17 Countries

Each month, the SC-FACT team reviews data from 13,816 facilities at all levels in 17 countries, which are captured in more than 400 Excel files with 800,000 data lines. Important outputs include:

- **Standardized reports.** The team processes site-level data for 13 countries⁶ on a monthly basis using standardized, readily accessible Excel files.
- **Country Diagnostics and Mitigation tool.** The project-developed Country Diagnostics and Mitigation tool supports easy assessment of site-level stock status through visualizations and graphs. The project has trained staff in eight countries to use this tool.
- **Facility crosswalk.** The team has worked with 13 GHSC-PSM field offices to link sites included in the country's LMIS to PEPFAR's service delivery site list. The project is now able to link LMIS and PEPFAR site data for more than 8,000 facilities.
- **Patient data triangulation pilot.** The team supported a patient data triangulation pilot using data from 307 high-volume ARV sites in Nigeria. An interactive tool enables users to view facilities with potential stock issues on maps and through graphs. In coming months, the team will adapt this approach and tool for other PEPFAR countries.

HIV Commodity Data Visibility at 59 Warehouses

Each month, GHSC-PSM reviews PPMR-HIV inventory data for more than 20 HIV commodities in 16 PEPFAR countries to identify stock imbalances and, where possible, to help mitigate stock imbalances by raising awareness, identifying opportunities to shift GHSC-PSM shipments, and/or supporting redistribution. GHSC-PSM also uses PPMR-HIV data for reports to USAID and OGAC on the status of first-line ARV drawdown, the transition to TLD and tenofovir disoproxil fumarate, lamivudine, and efavirenz (TLE), and HIV commodity stockout risk.

In Q1, GHSC-PSM helped seven new countries start reporting into PPMR-HIV, which now provides data from 16 countries. GHSC-PSM provides detailed reviews of country data on the PPMR-HIV GHSC-Business Intelligence and Analytics (BI&A) dashboard and is helping improve display of shipment data for almost 70 products. Since November 2018, GHSC-PSM has reviewed countries' requests for donor actions and shared these with USAID, which then coordinates actions with the Coordinated HIV/AIDS Supplies group.

Innovative Data Tools: GSI and FASP

Two other HIV priorities in FY 2019 are (1) scale-up of GS1 standards to facilitate end-to-end visibility of commodities in the health supply chain and (2) modernization of the FASP PipeLine tool to improve forecast quality. Details of these efforts are discussed in Sections C2a and C3 respectively.

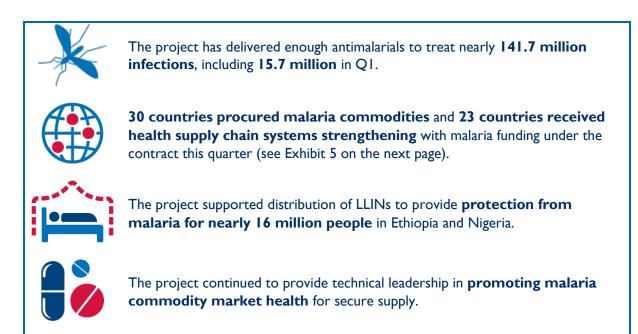
Country Support

The HIV task order funds supply chain system strengthening work in 26 countries. Our work with viral load and early infant diagnosis testing in Ethiopia illustrates what targeted support can achieve. Ethiopia's

⁶ Thirteen countries are able to report site-level data each month. Those countries are Angola, Botswana, Cameroon, Côte d'Ivoire, Haiti, Lesotho, Malawi, Mozambique, Namibia, Nigeria, Uganda, Zambia, and Zimbabwe.

Pharmaceutical Supply Agency partnered with GHSC-PSM to identify challenges at the country's viral load/early infant diagnosis testing facilities that were leading to poor assessment results. The project identified test process failure that was leading to reagent wastage, with failure at 21.6 percent for one platform and 4.6 percent for a second platform in early 2018. With support from GHSC-PSM and the Ethiopian Public Health Institute, these percentages dropped to 9.6 percent and 1.3 percent, respectively, by November 2018. These significant improvements resulted from implementing guidance in a GHSC-PSM *Manual for Laboratory Commodity Proportion Per Test*. GHSC-PSM also helped develop training guidelines for Pharmaceutical Supply Agency logistics officers and a viral load/early infant diagnosis product management tool. The tool manages lab reagent orders and logistics and service data and supports service data triangulation.

B2. Malaria



Under the PMI-funded malaria task order, GHSC-PSM supplies lifesaving 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 introduction of new malaria 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

Strategic sourcing of malaria commodities in Q1 included:

- Developing a request for proposals for LLINs
- Evaluating proposals for artemisinin-based finished pharmaceutical products and laboratories that test LLIN quality

GHSC-PSM also hosted MedAccess and USAID to discuss how to improve accessibility of new and improved LLINs through market-shaping opportunities.

Procurement and Deliveries

Since the start of the project, GHSC-PSM has procured malaria commodities for 30 countries (all PMI countries including two USAID-designated malaria countries). Over the life of the project, GHSC-PSM has procured \$424.8 million in malaria commodities, including \$48 million this quarter.

Exhibit 5. Countries that Received Procurement or Technical Assistance from GHSC-PSM with Malaria Funding in Q1.

AFRICA	AFRICA (cont.)	AFRICA (cont.)		
Angola 🗧 🔍	Liberia • •	Tanzania •		
Benin	Madagascar	Uganda 🗧 🔍		
Burkina Faso 🗧 🔍	Malawi • •	Zambia 🗧 🔍		
Burundi 🗧 🔍	Mali •	Zimbabwe • •		
Cameroon • •	Mozambique • •			
Cote d'Ivoire	Niger •	ASIA		
DRC	Nigeria • •	Burma 🔍 🔍 🔍		
Ethiopia 🗧 🔍	Rwanda • •	Cambodia 🗧 🔍		
Ghana • •	Senegal	Laos		
Guinea •	Sierra Leone 🗧 🔍	Thailand • •		
Kenya^ •	South Sudan 🗧 🔍			

GHSC-PSM provides technical assistance to strengthen supply chains.

GHSC-PSM procures malaria commodities.

^ GHSC-PSM provides support in Kenya under a unique task order overseen by USAID/Kenya.

GHSC-PSM continued to provide timely delivery of malaria commodities, achieving 94 percent OTD in Q1.

Commodities Procured for Malaria Programs

- Artemisinin-based combination therapies (ACTs)
- Laboratory consumables
- LLINs
- Malaria rapid diagnostic tests (RDTs)
- Other non-pharmaceuticals, such as accessories for LLINs
- Other pharmaceuticals, such as quinine, chloroquine, sulfadoxine-pyrimethamine + amodiaquine (SPAQ), etc.
- Medicines to treat severe malaria, such as artesunate injectables, artesunate rectal suppositories, etc.
- Sulfadoxine-pyrimethamine (SP)

Quality Assurance

During QI, the project continued designing a customized Quality Assurance Management System (QAMS) to capture QA-related information for malaria commodity orders that require QA activities. Integrated with the project's automated requisition tracking management information system (ARTMIS), QAMS will improve tracking and reporting of the QA status of orders. During the quarter, GHSC-PSM and PMI reviewed an initial design and procured the platform.

Support for Prioritizing Orders and Transferring Stock

In Q1, 26 countries that report in the PPMRm submitted data. Sierra Leone submitted data for the PPMRm for the first time. The DRC reported late because of delays related to national elections.

PPMRm information was used to identify overstocks and understocks at the central level, resulting in several actions

at the global supply chain level. For example:

• Angola asked to delay a shipment of ASAQ 100/270 and RDTs due to overstock.

- Kenya requested reallocation to another country of some of artemether-lumefantrine (ALu) 6x2 that was overstocked and at risk of expiry in country, leading GHSC-PSM to assess options to mitigate the risk, including seeking countries that have request orders or are at risk of shortage, or other donors that may be able to take the ALu.
- Ghana requested that GHSC-PSM expedite parts of an order of ALu 6x4, which arrived in December, to alleviate a risk of stockout.
- Côte d'Ivoire communicated that it is experiencing an ALu 6x4 shortage, leading GHSC-PSM to assess options to mitigate the stock risk.
- Mali communicated a stock shortage of sulfadoxine-pyrimethamine (SP) due to a tranche expiring last quarter, leading GHSC-PSM to assess options to mitigate the stock risk, including offering the country SP from the stockpile.

Country Support

GHSC-PSM procured malaria commodities for 30 countries and provided supply chain systems strengthening for malaria commodities in 23 countries in Q1. These are shown in Exhibit 5. Examples of our work in Q1 follow.

Better communication improves stock and distribution of antimalarial medicines in Mali. GHSC-PSM helped the central medical stores in Mali (Pharmacie Populaire du Mali – PPM) launch regular discussions of central commodity stocks with counterparts at the National Malaria Control Program (NMCP) and Directorate of Pharmacy and Medicines. PPM began monthly stakeholder coordination meetings to discuss stock on hand, average monthly consumption, and months of stock. The monthly discussions improved the use of information for procurement and distribution, and the execution of malaria commodity distribution plans by reducing the turnaround time for order processing from 60 days or more to 30 days at most.

Support leads to a three-year forecast for antimalarials in Ghana. In Ghana, GHSC-PSM supported the NMCP and the National Quantification Team in conducting a comprehensive forecast of artemisinin-combination therapies, RDTs, SP, and severe malaria medicines. The exercise informed a three-year (2019 to 2021) forecast, supply plan assumptions, and pipeline update for all malaria commodities.

Support leads to a three-year forecast for antimalarials in Liberia. In Liberia, GHSC-PSM supported the NMCP and the National Quantification Team in conducting a comprehensive forecast of artemisinin-combination therapies, RDTs, SP, and severe malaria medicines. The exercise informed a 39-month (October 2018 to December 2021) forecast, supply plan assumptions, and pipeline update for all malaria commodities.

Capacity building is institutionalized in Burkina Faso. In early November, GHSC-PSM provided technical support to the Burkinabe malaria commodity quantification committee as it performed its annual quantification and procurement exercise. The project's support helped build capacity and sustain quantification skills in FASP activities. Results will be used to develop the Malaria Operational Plan for FY 2020. Also, in Burkina Faso, GHSC-PSM trained 345 health facility head nurses on standard operating procedures (SOPs) for the country's integrated LMIS. Head nurses now can use the integrated LMIS tools and help their health facility storekeepers improve stock management and data reporting, which, in turn, will increase supply chain visibility. Leveraging limited resources, GHSC-PSM coordinated the training with the GHSC-Technical Assistance Francophone task order (implemented by Chemonics International) to plan training for an additional 600 head nurses on the SOPs.

Storage units for commodities installed in Malawi. GHSC-PSM continued installing 239 prefabricated pharmacy storage units to improve storage and management of health commodities, including malaria commodities, in Malawi. By the end of QI, 83 percent of the planned storage units had been completed and handed over to Malawi's Ministry of Health and Population. The units are a result of collaboration between PEPFAR, PMI, and the United Kingdom's Department for International Development (DFID). Earlier, in November, the U.S. ambassador to Malawi, DFID's senior representative in



Storage units for malaria commodities were completed in Malawi. *Photo credit:* GHSC-PSM

the country, and several senior Malawi government officials attended a ceremony to commission the storage activity.

End use verification (EUV) survey in Zambia reveals improvement. In Zambia, GHSC-PSM supported the EUV survey, a quarterly activity designed to provide quick, real-time, actionable information concerning the health of the malaria supply chain and a snapshot of how malaria is diagnosed and treated at lower-level health facilities. During Q1, GHSC-PSM staff and their counterparts from provincial and district governments visited 80 facilities throughout Zambia to collect information. Results from the data analysis showed:

- The EUV survey revealed a high ability to treat malaria due to a low (one percent) rate of sites showing complete stockout of all Alu presentations.
- Most facilities were managing malaria cases according to the malaria treatment guidelines.
- However, the following challenges were also observed:
- Delayed delivery or non-delivery caused by the health ministry's internal distribution delays resulted in more than a third of reported stock-outs.
- Too few staff-64 percent-were trained in stock management.

Based on the findings, GHSC-PSM recommended to Zambian health officials that they provide more training on the Essential Medicines Logistics Improvement Program for staff at health facilities. The project also urged the health ministry and partners to address delayed delivery of medicines at some facilities.

LLIN Distribution Support

In Q1, many countries launched or continued large-scale LLIN campaigns as a key 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 pre-positioning the nets take months.

New database helps monitor LLIN distribution in Ethiopia. In October 2018, GHSC-PSM developed a web-based database to monitor LLIN distribution in four Ethiopian regional states or

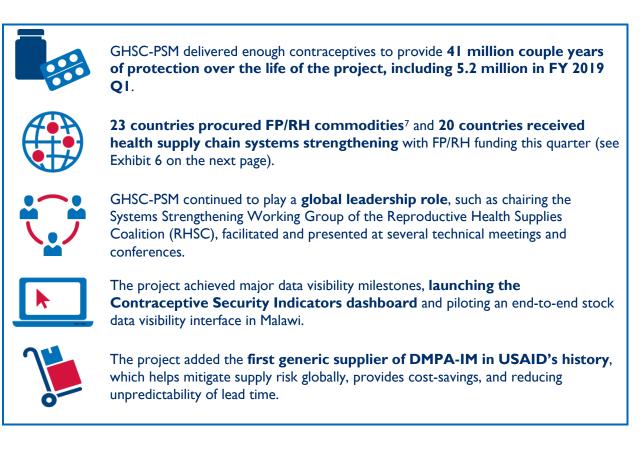


LLINs are transported by boat in Mozambique. *Photo credit: Randa Arra/GHSC-PSM*

chartered cities. The database was used to track the movement of more than 4 million LLINs from customs clearance to the community level. A November 2018 assessment of the new LLIN distribution database showed it was user friendly; simplified data aggregation, analysis, and visualization; improved data quality; and increased use of data for decision making. The project will share the database with the Ministry of Health to support planning, allocation, and transportation of LLINs for the coming LLIN replacement activities.

Preparation with state government leads to successful LLIN campaign in Nigeria. During Q1, PMI and the National Malaria Elimination Program in Nigeria helped the Bauchi state government run an LLIN campaign that reached more than 7 million people. PMI procured more than 3.8 million LLINs for the campaign. At GHSC-PSM's recommendation, the Bauchi state government conducted a baseline survey of LLIN status since the previous 2015 campaign. This survey revealed a substantial population increase in the state, possible security issues, and the need for effective knowledge management within the government to support future campaigns. In response, the National Campaign Implementation Team added new distribution points for LLINs. To address security, the government funded real-time tracking devices and provided full-time guards for the LLINs stored at the state warehouse and during their transport to local warehouses. The government enhanced protocols for screening and training personnel and developed a database of more than 18,000 individuals who were trained to conduct the campaign. Those trained will be tapped for future campaigns.

B3. Family Planning and Reproductive Health (FP/RH)



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

Collaborating with Global Stakeholders

In QI, 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.

⁷ Per USAID guidance, all condom procurements are counted under the HIV/AIDS task order.

Exhibit 6. Countries that Received Procurement or Technical Assistance from GHSC-PSMGHSC-PSM Support with FP/RH Funding^ in QI $\,$

AFRICA		AFRICA (c	ont.)	AFRICA (c	cont.)	LAC	
Angola	•	Kenya^	•	Rwanda	• •	Guatemala	•
Benin	•	Liberia	• •	Senegal	•	Haiti	• •
Burkina Faso	•	Madagascar	• •	South Sudan	•	ASIA/NEAF	REAST
Burundi	•	Malawi	• •	Tanzania		Afghanistan	•
DRC	•	Mali	• •	Uganda	• •	Bangladesh	•
Ethiopia	•	Mauritania	•	Zambia	• •	Nepal	• •
Ghana	•	Mozambique	• •			Pakistan	•
Guinea	•	Nigeria	• •			Yemen	•

GHSC-PSM provides technical assistance to strengthen supply chains.

GHSC-PSM procures FP/RH commodities.

^ GHSC-PSM provides support in Kenya under a unique task order overseen by USAID/Kenya.

A major milestone in QI was launch of the Contraceptive Security Indicators dashboard on the GHSC-PSM website⁸, described in the box. Data collection for the next round of the survey will start in June and reporting of the results will be completed in FY 2020.

Tracking Contraceptive Security

The Contraceptive Security Indicators dashboard is a new interactive online dashboard that displays the 2017 Contraceptive Security Indicators survey results. It provides country-specific data that can be used by country commodity coordination committees, ministries of health, professional obstetrics and gynecology associations, and other stakeholders to guide policy, financing, leadership, and supply chain management strategies to promote increased contraceptive availability and use. As part of its November 2018 release, GHSC-PSM and USAID presented the dashboard at a meeting of USAID mission FP/RH liaisons, the RHSC Systems Strengthening Working Group, the International Conference on Family Planning (ICFP) in Kigali, Rwanda, and the European Evaluation Society's annual conference. The dashboard has attracted significant website traffic. The project will continue to publicize the important information available through the dashboard.

In October, GHSC-PSM FP/RH task order's global collaboration manager was reelected for a second, two-year term as chair of the RHSC's Systems Strengthening Working Group (SSWG). She then chaired the biannual two-day meeting of the SSWG in Washington, D.C. The SSWG works to ensure that these health systems are better aligned, more data-driven, and more coordinated. Thirty-four participants attended from as far away as China and Uganda. The working group identified new workstreams for the coming year, provided critical feedback on the soon-to-be-updated supply chain management brief of the

Family Planning High Impact Practice Series⁹; and advised on an upcoming Jhpiego study around consumables and equipment availability.

In November, GHSC-PSM staff attended the biennial International Conference on Family Planning (ICFP) in Kigali, Rwanda. The project organized three panels, made five presentations, and conducted a half-day side event as part of the conference proceedings. To illustrate, one presentation was on how to better target actions to increase availability of family planning commodities (see box). GHSC-PSM participated in a panel with the UNFPA and Concept Foundation titled, "Introducing generic family planning health products to improve supply security." The panel highlighted the important role that generic products can play in the market and showcased the value from investing in healthy, competitive markets. Also, GHSC-PSM held a side event titled, "From local decisions to global markets: A workshop on improving family planning sector market health to impact long-term client outcomes." Several in-country stakeholders attended the side

Tool to Prioritize Limited Resources

At the ICFP, GHSC-PSM presented a tool to help teams prioritize limited resources for maximizing improvements in access to family planning. The tool uses a decision tree that combines demographic data (from WorldPop), family planning indicators (from the Demographic and Health Survey), and logistics data on inventory turnover to prioritize actions and determine where to target limited resources to have the greatest impact.

event, which was attended by several in-country stakeholders that demonstrated strong interest in understanding the key principles of market dynamics and how local decisions around family planning product procurement practices may impact global markets in order to inform their local procurement practices.

At the end of November, the project participated in the UNFPA Contraceptives Suppliers Workshop, co-leading presentations on management of commodity registration data, packaging harmonization, and GSI implementation. The meeting brought together vendors of oral, injectable, and implantable contraceptives and of male and female condoms. It highlighted key metrics and accomplishments of the past year and provided a forum to highlight challenges and strategic initiatives. Project staff met with key contraceptive suppliers, furthered coordination with UNFPA on joint initiatives, and presented progress on these initiatives to suppliers.

In December 2018, GHSC-PSM attended the levonorgestrel releasing intra-uterine system (LNG-IUS) technical meeting and coordination platform meeting. While the LNG-IUS is one of the most effective forms of reversible contraception and has important non-contraceptive benefits, it currently is not used at scale in any Family Planning 2020 focus country. Market intelligence from the December meetings will inform future sourcing strategies.

Also, in December, the project attended the West African Ouagadougou Partnership annual meeting in Senegal, which brought together 350 donors, journalists, members of parliament, and partners in the West Africa region to review progress in accelerating use of family planning services. GHSC-PSM participated in a side event on supply chain intervention coordination with the nine Ouagadougou Partnership countries. This one-day supply chain forum brought together key organizations with ministries of health in the region to explore their respective areas of intervention with the aim to create synergies and reduce duplication. As a procurement service provider, GHSC-PSM is committed to

⁹ High Impact Practices in Family Planning (HIP). "Supply Chain Management: Investing in contraceptive security and strengthening health systems." Washington, DC: USAID; 2012 Nov. Available at: <u>https://www.fphighimpactpractices.org/beliefs/supply-chain-management/</u> accessed March 2019)

working with the West African Health Organization (WAHO) and UNFPA within the existing CARhs and Coordinated Supply Planning Group coordination mechanisms to ensure commodity availability.

Contraceptive and Condom Packaging Rationalization

GHSC-PSM, in coordination with UNFPA, completed case studies in Rwanda, Zambia, and Zimbabwe to better understand how packaging impacts in-country supply chains. Initial observations were that packaging of otherwise identical products can vary based on supplier, procurement agent, or program need. As a result, some countries manage multiple stock-keeping units in their in-country supply chains for otherwise interchangeable products. In-country stakeholders expressed a preference for consistency in packaging. USAID and UNFPA presented an overview of the activity to suppliers at UNFPA's contraceptive suppliers meeting. GHSC-PSM completed analysis of the case study data to generate evidence to inform recommendations for harmonized packaging among major procurers in February 2019.

Enhancing Visibility of Data on Family Planning Supplies

GHSC-PSM continued to support development of the Global Family Planning Visibility and Analytics Network (Global FP VAN), the reproductive health community's pioneering undertaking to increase supply chain visibility and improve collaboration across stakeholders. In OI, GHSC-PSM completed user acceptance testing of the order, shipment, supply planning, ticketing, and analytics modules of the Global FP VAN platform. This was important preparation for the platform to go live in January 2019 for two product families (implants and oral contraceptive pills) in two countries (Malawi and Nigeria).



Nurse Jeanine Munyana counsels a patient on family planning products in Rwanda. Photo credit: Bobby Neptune/GHSC-PSM

Collaborating Globally to Avert Stockouts and Expiries

In QI, the GHSC-PSM PPMR team received and processed reports from 63 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 nine new shipments for DRC, Madagascar, and Niger.
- Postpone six shipments to five countries (Burundi, Kenya, Ghana, Mali, and Mauritania) to reduce or avoid overstock situations and prevent commodity expiries.
- Expedite five shipments to Liberia, Madagascar, and Mali to prevent or mitigate stockouts.

Furthermore, through the PPMR, donors responded to 35 information requests, providing in-country counterparts with valuable information on their upcoming shipments.

End-to-End Data Visibility In-Country

In Malawi, GHSC-PSM built a first-of-its-kind automated interface between ARTMIS and a parallel supply chain (managed by the private sector Bolloré Group) to foster end-to-end data visibility between the global and country supply chains. With this system, for the first time, USAID and GHSC-PSM users can track goods from the initial order until they reach SDPs. The success of this pilot demonstrates the potential for further integration of data sources and increased visibility at the country level. In Malawi, GHSC-PSM built a first-of-its-kind automated interface between ARTMIS and a parallel supply chain (managed by the private sector Bolloré Group) to foster end-to-end data visibility for reproductive health commodities between the global and country supply chains. With this system, for the first time, USAID and GHSC-PSM users can track goods from the initial order until they reach SDPs. The success of this pilot demonstrates the potential for further integration of data sources increased visibility for reproductive health commodities between the global and country supply chains. With this system, for the first time, USAID and GHSC-PSM users can track goods from the initial order until they reach SDPs. The success of this pilot demonstrates the potential for further integration of data sources, increased visibility at the country level, and extension of this visibility into other health commodity areas.

Commodity Sourcing and Procurement

This quarter, GHSC-PSM realized important elements of USAID's RH sourcing strategy.

GHSC-PSM achieved a major milestone in averting a global shortage of a three-month contraceptive injectable, DMPA-IM, a critical family planning product. With several decades of reliance on a single supplier, global FP/RH procurers faced a significant risk that demand would outstrip supply, leading to stockouts and restricted access to family planning. Early in FY 2018, GHSC-PSM, GHSC-QA (implemented by FHI 360), and USAID conducted a global supply analysis and developed a strategy to add a second supplier. We then coordinated closely with the GHSC-QA contractor on a sourcing approach to ensure that USAID's quality standards were met. GHSC-PSM leveraged an existing contract with the supplier to further reduce sourcing and contracting lead times. In QI, GHSC-

Commodities Procured for FP/RH Programs

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

PSM achieved several wins as a result of these proactive, collaborative, and strategic efforts, including mitigating global supply risk, diversifying the supplier base for this important contraceptive by adding a generic supplier, attaining lower prices (saving \$594,000 to date) through that supplier, reducing the unpredictability of lead times, and quickly contracting for this product through an existing agreement.

The project also made progress with sourcing other FP/RH commodities, including:

- Receiving the first orders for emergency contraceptives, for which GHSC-PSM did not have reliable sources in the past, from a generic oral contraceptive supplier.
- Convening a technical evaluation panel for contraceptive implant kits.

GHSC-PSM also conducted a landscape analysis of key USAID-supported global social marketing organizations. The goal of the analysis is to improve visibility into social marketing organizations' orders and to better tailor procurement offerings to their needs.

Country Support

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

Joint Medical Store begins handling FP/RH commodities in Uganda. The project contracted the

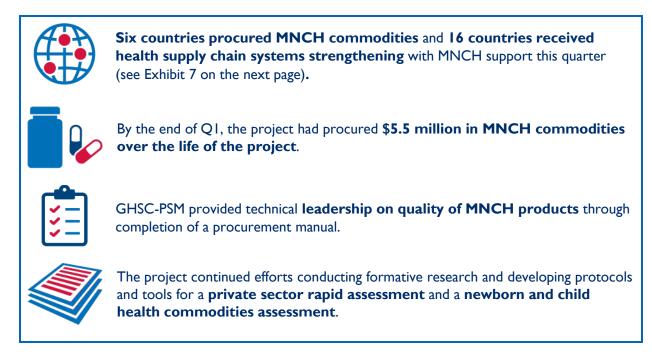
Joint Medical Store (JMS) in Uganda to handle warehousing and distribution of commodities to private, nonprofit SDPs in Q4 FY 2018. In Q1, GHSC-PSM worked closely with JMS and the Ministry of Health to develop a list of recipient sites, update and disseminate the order/report form for the SDPs, coordinate between programs responsible for delivering commodities and service delivery projects, and agree on how to improve the quality and frequency of SDP reporting. These efforts facilitated integration of FP/RH commodities into JMS' normal delivery schedules and SDPs' ordering process, with positive results (see box).

Careful Coordination Smooths Speedy Transition in Uganda

Though JMS had no previous experience handling FP/RH commodities donated by USAID, with GHSC-PSM coordination support, SDPs did not experience an interruption in commodity availability despite the change.

Pakistan moves toward self-reliance through indigenous production of contraceptives. GHSC-PSM helped commission a feasibility study for local manufacturing of contraceptives in Pakistan. In collaboration with Pakistan's health ministry, GHSC-PSM convened a consultative meeting on this topic in Karachi in October 2018. Stakeholders agreed on a proposal that ultimately will improve contraceptive availability in the country, increase cost effectiveness and procurement efficiencies, reduce lead times, and enhance commodity security at the last mile. The meeting was attended by national and international pharmaceutical company representatives and high-level federal and provincial government functionaries. Participants discussed opportunities for local production of contraceptives, the government's vision for indigenous production, and the regulators' perspective on creating a conducive enabling environment for investors in this area.

B4. Maternal, Newborn, and Child Health



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 data availability, ensuring the quality of MNCH commodities, and providing technical leadership.

Improving Availability of Data on MNCH Commodities

GHSC-PSM continues to support ongoing efforts to improve the availability of data on MNCH commodities through EUV surveys. In QI, GHSC-PSM created MNCH-specific training content for EUV data collectors and supervisors. Also, the project developed an MNCH reporting template for the EUV and will disseminate this template in Q2.

Ensuring the Availability of High-Quality MNCH Commodities

In QI, GHSC-PSM made progress in researching and developing tools to assess newborn and child health commodity availability. These assessments will be used to increase access to newborn and child health commodities, including oral rehydration salts, zinc, amoxicillin dispersible tablets, and newborn equipment and supplies.

GHSC-PSM completed The Manual for Procurement and Supply of Quality-Assured Maternal, Newborn, and Child Health Commodities in Q1. The manual is intended to guide procurement agencies in establishing a QA system for procuring MNCH products. It provides comprehensive information on quality requirements that must be met to ensure the quality, safety, and efficacy of the products across the full supply chain to the point of use. In Q2, GHSC-PSM plans to disseminate this manual widely and has developed an abstract to present the manual at the RHSC meeting in March 2019.

Exhibit 7. Countries that Received Procurement or Technical Assistance from GHSC-PSM with MNCH Funding^ in QI

AFRICA		AFRICA (cont.)		AFRICA (cont.)		ASIA	
DRC	•	Liberia	• •	Nigeria	•	Nepal	•
Ethiopia	•	Madagascar	• •	Rwanda	• •	Pakistan	•
Ghana	•	Malawi	•	Zambia	•	LAC	
Guinea	•	Mali	• •			Guatemala	•
Kenya^	•	Mozambique	• •			Haiti	•

GHSC-PSM provided technical assistance to strengthen supply chains.

GHSC-PSM procured MNCH commodities.

^ GHSC-PSM provides support in Kenya under a unique task order overseen by USAID/Kenya.

In Q1, GHSC-PSM conducted formative research and developed draft data collection tools for a rapid assessment of MNCH products carried by private sector wholesalers and distributors. While conducting this research, we identified other similar activities currently being implemented in MNCH priority countries by other partners, such as the Bill & Melinda Gates Foundation and the William Davidson Institute at the University of Michigan. GHSC-PSM will collaborate and harmonize approaches and share findings where feasible. GHSC-PSM will implement the assessment in Mozambique in Q2 and later carry out the assessment in additional countries.

Providing Technical Leadership in MNCH

In anticipation of new WHO guidance on postpartum hemorrhage and in response to concerns raised by the Maternal Health Supplies Caucus on the need for consistent messaging, GHSC-PSM developed a high-level document on uterotonics for preventing or treating postpartum hemorrhage. The document highlights key characteristics of each medicine to inform strategic decisions on how the products can be used, where the products should be made available within the health system, and under what conditions. GHSC-PSM plans to finalize and disseminate the document in Q2.

GHSC-PSM collaborated with USAID, WHO, Monash University, the U.S. Pharmacopeial Convention's Promoting the Quality of Medicines program, and the Concept Foundation to draft a technical review paper focused on oxytocin quality issues. In QI, GHSC-PSM finalized and submitted the manuscript to a peer-reviewed journal.

GHSC-PSM continued promoting the messaging framework on appropriate management of oxytocin that was developed in FY 2018 with the RHSC and PATH. In Q1, GHSC-PSM conducted webinars in Spanish and French to share the oxytocin messaging framework.

Country Support

GHSC-PSM supported commodity procurement for six countries and provided supply chain systems strengthening for MNCH commodities in 16 countries in Q1, as shown in Exhibit 7.

As an example of technical assistance, in Ethiopia, GHSC-PSM worked to improve availability of maternal medicines. Hospitals and health facilities in Ethiopia provide labor and delivery services free of charge to encourage women to give birth in a health facility with the assistance of a skilled birth attendant. However, free maternal health services and commodities require significant financial resources. Hospitals and health facilities have experienced budget shortfalls and they have not been able to procure and maintain supplies of lifesaving maternal health commodities. In response, the Federal Ministry of Health of Ethiopia allocated additional funds from the Sustainable Development Goals Fund to reimburse hospitals for maternal health commodities and supplies. The reimbursement protocol was not consistently and properly implemented, resulting in stockouts and uneven availability throughout the country.

In collaboration with the Federal Ministry of Health, GHSC-PSM held a consultative workshop with key partners from across the country—including chief executive officers, pharmacy heads, regional pharmacy directors, and maternal and child health focal persons—to raise awareness about how to implement the protocol. As a result, budget shortfalls have declined, hospitals have now started to consistently replace medicines when maternal health services are provided, and availability of these medicines has improved.

Procurement and Deliveries

In Q1, GHSC-PSM procured MNCH commodities for six countries.

Also, in Q1, GHSC-PSM continued with deliveries of a large order of essential medicines and laboratory commodities to DRC. This large, complex order with six delivery destinations throughout the country is expected to be completed by the end of June 2019. Delivery to DRC is often challenging because of inconsistent and time-consuming procedures for obtaining import waivers and other requirements. From this large order, all but one of the line items due in Q1 was delivered on time or before the agreed delivery date.

B5. Other Emerging Health Threats



GHSC-PSM **delivered 730,000 bottles of mosquito repellent** across four countries for use by pregnant women to prevent Zika infection. GHSC-PSM also **delivered 591,000 male condoms** to five countries¹⁰ for pregnant women to give to their partners to prevent sexual transmission of the 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 launched a technical assistance activity to build the capacity of Ministry of Health supply chain teams to **prepare for future outbreaks** of infectious disease.

GHSC-PSM is working to build 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 often causes severe birth defects when it infects women during pregnancy. GHSC-PSM is equipping health ministries with male condoms, mosquito repellent, and technical assistance to resist Zika's spread. Deliveries of commodities to prevent infection are summarized in the box.

In QI, GHSC-PSM oversaw the distribution of repellent to

Deliveries to Prevent Zika Infections

In QI, GHSC-PSM delivered:

- **591,000 male condoms** to five countries in the Caribbean, including to four countries to which GHSC-PSM had never made deliveries (Antigua, St. Kitts, St. Lucia, and St. Vincent)
- **730,000 bottles of mosquito repellent** to four countries in the Caribbean and Central America

antenatal care facilities in the Dominican Republic, El Salvador, Haiti, Honduras, and Jamaica. Ministries of health began dispensing this repellent to pregnant women for Zika prevention. In the Dominican Republic and Haiti, GHSC-PSM conducted last-mile delivery to clinics. Cumulatively, over the past two quarters, GHSC-PSM has delivered 914,000 bottles of repellent to warehouses and clinics across five countries. This ultimately will reach more than 200,000 pregnant women for Zika prevention.

The project ensured that clinics had proper guidance on how to store the repellent and to advise pregnant women on safe use of the product. GHSC-PSM printed and delivered informational posters and brochures in local languages (see the example in Creole on the next page). The project had worked with ministries of health and USAID service delivery partners to tailor the content to local contexts.

¹⁰ The countries for which GHSC-PSM air-shipped male condoms in Q1 were Antigua and Barbuda, Barbados, St. Kitts and Nevis, Saint Lucia, and Saint Vincent and Grenadines.

GHSC-PSM also collaborated with these partners to distribute the materials alongside the repellent and to see that the materials were being used at the clinics as intended.

To ensure that the repellent was stored under appropriate conditions and that the project was fulfilling the terms of its Environmental Mitigation and Monitoring Plan, GHSC-PSM completed environmental compliance inspections in central and regional warehouses in the Dominican Republic, El Salvador, and Honduras.

GHSC-PSM prepared to assess repellent availability and use by antenatal care clinics. The study will assess:

- The availability of mosquito repellent at the clinics and any supply chain-related issues
- The conditions in which the repellent is being stored
- Providers' perceptions and knowledge of use and distribution of repellent for Zika prevention
- The extent to which pregnant women have received the donated product

GHSC-PSM selected local partners who will conduct these assessments in the Dominican Republic, El Salvador, Haiti, and Honduras.

Also, in QI, GHSC-PSM adapted the Emergency Supply Chain Playbook, which was developed under the Global Health Security Agenda to address future outbreaks of Ebola

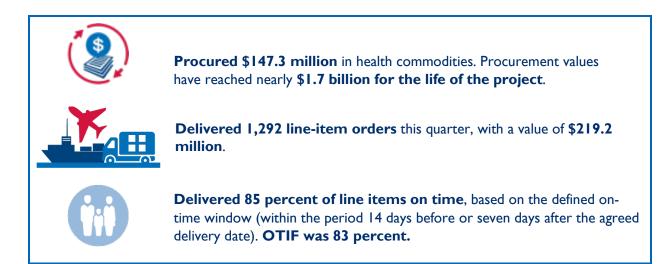


Creole-language guidance poster on safe repellent use developed, translated, and distributed by GHSC-PSM for use by pregnant women in the Dominican Republic and Haiti.

virus in West Africa. The playbook now provides guidance on how to prepare for future outbreaks of the Zika virus in Latin America and the Caribbean. These materials include commodity planning and supply chain operations modules, job aides, and simulations on how to respond to infectious disease outbreaks.

PROGRESS BY OBJECTIVE

CI. Global Commodity Procurement and Logistics



Cla. 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).

The Global Supply Chain at a Glance

- 64 countries served
- 3,665 products in the catalog provided by 278 suppliers
- Five international freight forwarders responsible for 3,476 shipping lanes

In Q1, we built on FY 2018 successes by maintaining strong OTD while lowering overall commodity and supply chain costs. We did so by focusing on the following initiatives.

Driving Performance with Analytic Tools

As part of the project's continual improvement processes, GHSC-PSM used the not-on-time-delivery (NOTD) tool to identify the causes of late deliveries each month. This informed targeted efforts to address root causes. For example, focused attention on supplier failure to meet promised goods availability dates, identified as one of the most frequent causes for late deliveries, reduced the impact of supplier delays on OTD from 11 percent in Q3 FY 2018 to 6 percent in Q1 FY 2019.

The project developed and rolled out several new tools that support global supply chain processes. These include:

- Internal Requisition Order Pipeline Dashboard. This allows procurement specialists to easily see which of their orders are at risk of falling behind so they can prioritize their efforts.
- **Not-on-time-in-full (NOTIF) Tool**. Modeled after the NOTD tool, the NOTIF tool identifies the reasons orders are not-on-time and not-in-full. This tool will help the project address those causes to improve OTIF performance.
- **Goods Availability Date Dashboard**. This allows staff to identify orders with goods availability date data that tracks 1) supplier agreed-to date, 2) changes in supplier estimated availability date, and 3) the actual date that goods are available. This will help improve data quality and facilitate data-driven discussions on goods availability performance with suppliers.

Addressing Challenges with Specific Countries

Each country for which GHSC-PSM procures commodities has its own procurement and delivery requirements and timetables that the project must manage. In Q1, GHSC-PSM analyzed and worked to address challenges with two countries:

- Tanzania Procurement and delivery strategy. In November, prompted by supply chain • challenges, including shelf life concerns, key Tanzania Ministry of Health stakeholders and representatives from USAID/Tanzania, USAID/Washington, GHSC-PSM TA-Tanzania, and GHSC-PSM met to discuss procurement and delivery of U.S. government-donated commodities to Tanzania. As a result of these discussions, GHSC-PSM agreed to submit a draft procurement and delivery strategy for Tanzania to address key issues highlighted in the November meeting, including supply planning on the part of Tanzanian health programs and GHSC-PSM's ability to fulfill the Tanzania government requirement to deliver product with greater than 80 percent remaining shelf life. GHSC-PSM continues to work closely with Tanzanian health programs and drafted the strategy. Immediate actions taken in November to increase the likelihood of delivering product with greater than 80 percent shelf life included: 1) shipping all commodities (except VMMCs, condoms, and three- to five-year family planning products) directly from the supplier to Tanzania (i.e., not leveraging the project's Regional Distribution Center network); and, 2) procuring products with 36-month shelf life wherever one or more sources for such products exist, provided the product is registered in Tanzania and conforms to the requirements found in USAID operational policy.¹¹
- DRC Waiver Process Analysis. DRC has a protracted and somewhat inconsistent process for obtaining importation waivers for each shipment into the country. (Waivers allow commodities to be imported into the country on a duty-free basis in accordance with the Government-to-Government agreement). The waiver process for the DRC involves multiple stakeholders including GHSC-PSM, the GHSC-TA contractor (Chemonics International), USAID/DRC, the Ministry of Foreign Affairs (MFA), the Customs Office (DGDA), and 3PLs. Each stakeholder is responsible for a separate portion of the waiver process. Due to the lack of visibility at the MFA and DGDA, it is often difficult for GHSC-PSM to understand reasons for delays and project accurate timelines for making deliveries. To combat these challenges, GHSC-PSM established the DRC Task Force in early 2018 comprised of members of USAID/DRC, USAID/Washington,

¹¹ For more information, see, USAID, "ADS Chapter 312: Eligibility of Commodities" found at https://www.usaid.gov/ads/policy/300/312 (last accessed February 2019)

GHSC-TA, and GHSC-PSM. The task force outlined short-, intermediate- and long-term goals for reducing waiver times and ensuring commodities reach their final destination on time. In the monthly task force meetings, GHSC-PSM shares an updated DRC cycle time analysis, which shows the average processing times for each step in the waiver process. This analysis allows the task force to identify steps that exceed expected timelines and propose actions for improvement. GHSC-PSM analyzed the actual time it took for waivers to be processed in FY 2018 and found it be around 135 calendar days. This will inform future delivery commitments.

Meeting Logistical Challenges

Regional Distribution Centers. In QI, the project launched the last of three regional distribution centers in our optimized network and improved support for another center. The new South Africa regional distribution center, which is projected to save \$I million a year in warehousing costs, became operational in October. The first shipment was delivered within two weeks of contract signature; 1,775 pallets (mostly of adult ARVs) were delivered over QI. To support the United Arab Emirates regional distribution center, the project opened a satellite office in Dubai. This will improve cycle time for processing warehouse-bound shipments, inventory accuracy, and timeliness of transmission of inventory transactions from that facility.

Complex Deliveries to DRC. DRC is one of the project's more challenging delivery destinations, both due to the inconsistent and unpredictable waiver process described above and because the project delivers to six different destinations in DRC serviced by three air entry points (Kinshasa, DRC; Lubumbashi, DRC; and Kigali, Rwanda) and two ocean entry points (Dar Es Salaam, Tanzania; and Matadi, DRC). GHSC-PSM currently is managing a large, complex order of 446 order lines of essential medicines bound for DRC. Over Q1, 117 lines (26 percent) of the 446 order lines of essential medicines were expected to be delivered. Of that amount, 116 were delivered on time or ahead of the agreed delivery date.

Improving Decentralized Procurement

The project is continuing our efforts to enhance best value by procuring more 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 and to establish long-term framework contracts with vendors who meet the required quality, performance, and competitiveness standards.

GHSC-PSM has experienced increased need to validate information from local distributors. The project now is including manufacturers in our communications with local distributors to ensure the manufacturers can execute what the local distributors promise.

CIb. 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 Q1, GHSC-PSM continued to drive efficiencies in global supply chain processes, while sustaining the timeliness of our deliveries. We averaged 85 percent OTD, and 83 percent OTIF, reducing the backlog to 2.8 percent of annual volume. Specifically, in Q1, GHSC-PSM developed the Not On Time In Full (NOTIF) tool to provide analysis of orders that failed to be delivered on time and in full. This helped the project identify and then address challenges and improve OTIF.

100% 87% (1,374) 85% (1,378) 80% 83% (1,292) 73% (1,498) 73%(1,341) 79% (1,468) 67% (1,500) OTD/OTIF % 60% 60%(1,535) 40% 20% OTD 0% FY1802 FY1803 FY1804 FY1901 Total number of lines items (n) for each guarter shown in paranthesis above

Exhibit 8. OTD and OTIF Over the Last Four Quarters

Percentage of Product Procured Using a Framework Contract

This indicator refers to the proportion of products by value purchased through contracts that represent long-term agreements with suppliers. Examples of framework contracts include indefinite delivery, indefinite quantity contracts (IDIQs), blanket purchase agreements, and basic ordering agreements. The indicator is used to assess whether GHSC-PSM is promoting strategic sourcing and, as a result, ensuring the best value for GHSC-PSM customers. An established mechanism such as a framework contract should also eliminate significant steps in the procurement process, reducing cycle time and transaction costs.

In Q1, the percentage of product procured using a framework contract for each health area is shown in Exhibit 9.

Health Area	Percentage procured using a framework contract	Target percentage	Value of procurements
HIV	72%	75%	\$84.6 million
Malaria	60%	39 %	\$48.1 million
FP/RH	100%	95 %	\$14.2 million
MNCH	98 %	90%	\$428,000

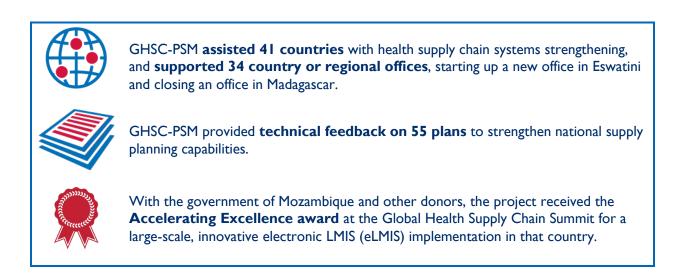
Exhibit 9. Percentage of Product (by Value) Procured Using a Framework Contract

Percentage of procurements by value using a framework contract for HIV products, at 72 percent in Q1, is slightly below the target of 75 percent. This is because the large expected drop in procurement of ARVs in Q1 increased the relative weight of much smaller procurement categories like laboratory and other non-pharmaceutical products that use framework contracts much less frequently.

There was a large increase in the percentage of procurements using a framework contract for malaria products (from 40 percent to 60 percent) between FY 2018 Q4 and FY 2019 Q1. This was driven primarily by procurement of RDTs, for which framework contracts were recently executed.

Almost all procurement of FP/RH and MNCH products has been through framework contracts for the last year, as per agreed sourcing approaches.

C2. Systems Strengthening Technical Assistance



GHSC-PSM's vision is for every country to have a government-led health supply chain that is integrated, optimized, accountable, agile, lean, and able to sustainably supply quality products to all citizens. Each supply chain system should emphasize automated data capture, real-time end-to-end data visibility, pharmaceutical-grade infrastructure, and efficient distribution. Each supply chain should be managed by supply chain professionals dedicated to quality improvement, and, where advisable, develop strategies to outsource functions to accountable private sector providers.

Different health areas fund health supply chain systems strengthening assistance in each country. The costs of technical assistance and supply chain system strengthening activities are proportionally shared across health task order (HIV, malaria, FP/RH, and MCH). Cost-sharing formulas are reviewed annually for each office to verify that each task order'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. Health area support for each field office is shown in Exhibit 10 on the following page.

As can be seen from the list, 32 percent (11) of field offices have funding from one health area only, while nearly 68 percent (23 field offices) have funding from two or more health areas. More than 26 percent (nine field offices, including Kenya) have funding from all four health areas. Supported countries' supply chains benefit from substantial synergies and efficiencies available from this cross-funding.





🗉 🛛 + Barbados, Guyana, Jamaica, Suriname 🔹 El Salvador, Guatemala, Honduras, Panama 🛊 Laos, Thailand 📕 GHSC-PSM country office

Country	Health Area	Country	Health Area
Angola	• • •	Liberia	• • •
Botswana	•	Malawi	• • • •
Burkina Faso	•	Mali	• • • •
Burma	• •	Mozambique	• • • •
Burundi	• • •	Namibia	•
Cambodia	• •	Nepal	• •
Cameroon	• •	Nigeria	• • • •
Caribbean	•	Niger	•
Central America	• • •	Pakistan	• •
Eswatini	•	RDMA (Thailand/Laos)	•
Ethiopia	• • • •	Rwanda	• • • •
Ghana	• • • •	Sierra Leone	•
Guinea	• • •	South Sudan	• • •
Haiti	• • •	Uganda	• • •
Indonesia	•	Vietnam	•
Kenya	• • • •	Zambia	• • • •
Lesotho	•	Zimbabwe	• •

C2a. Activities and Achievements

The project's work to strengthen health supply chain systems by bringing tailored systems strengthening assistance continued to yield important achievements and results. Following are highlights of where and

¹²Kenya: GHSC-PSM's work in Kenya is funded through a separate task order with USAID/Kenya. The Kenya field office receives funding for HIV, malaria, FP/RH, and MNCH activities and thus is included in the count of field

how GHSC-PSM has applied health supply chain systems strengthening approaches globally and in specific countries.

Workforce Development

GHSC-PSM is helping strengthen public health supply chain workforces through 22 field offices. These interventions are building sustainable workforces through professionalization and systematic approaches to workforce development, putting countries on a path to self-reliance. The most common interventions are supporting the development of:

- Supply chain management in-services courses and/or mentoring programs.
- Supportive supervision and/or performance appraisal systems.
- Leadership and change management competencies.

In **Burkina Faso**, GHSC-PSM conducted a training needs assessment of 280 employees to inform logistics and

Supply Chain Systems Strengthening Technical Areas

- Forecasting and supply planning
- Governance and leadership
- Global standards
- Health-care waste management
- Laboratory networks
- Management information systems
- Process improvement
- Procurement
- Quality assurance
- Strategy and planning
- VMMC
- Warehousing and distribution
- Workforce development

warehousing training for the Central Medical Store (CAMEG) personnel. In November and December 2018, GHSC-PSM trained 58 central and regional staff on warehousing and distribution, management, and strategy development. This training will help CAMEG refine its warehouses reconfiguration activities and develop the staff training and strategic plans for 2019.

In Q1, the project signed a memorandum of understanding with the University of **Ghana** to build regional supply chain management capacity within the country. GHSC-PSM will provide technical assistance to the university to develop curriculum, trainings, and certifications. GHSC-PSM will collaborate with the university to design and demonstrate evidence-based, region-specific interventions for health supply chain improvement. Long-term activities include development and delivery of preservice training programs and on-the-job learning opportunities. The project will provide guest lecturers and internship opportunities for students in the project field office.

In **Zambia**, for the first time since institutionalizing supply chain management (SCM) in the national nursing curriculum in 2016, 72 nursing schools (including private training institutions) administered the SCM exam. GHSC-PSM supported the General Nursing Council of Zambia (GNCZ) by formulating the SCM examination questions, which focused on effective ordering, receiving, storage, and management of health commodities. The scale of this initiative and positive results are summarized in the box.

At the global level, in QI, GHSC-PSM helped the People that

A first for nursing students in Zambia

Nearly 3,000 nursing students took the SCM exam, with 73 percent passing. They were the first cohort to take the exam since SCM was incorporated into the nursing curriculum.

Deliver Initiative review its tool to assess human resources for supply chain management. Together, we

offices with funding for all health areas. Madagascar: Please note that the Madagascar office closed in Q1, so it does not appear in Exhibit 10. In Q1, however, there was funding to close out the Madagascar field office and/or to procure commodities, so Madagascar is included in the relevant country tables in Section B.

piloted the recently published People that Deliver theory of change for human resources in supply chain management in **Rwanda**. The theory of change shows the necessary outcomes (the causal linkages) that must be in place to optimize workforce performance in supply chain management. These findings will help the Ministry of Health prioritize investments to improve the availability of skilled supply chain management cadres. The study also provided indicators that can be used to monitor the performance of human resources systems. Results from these two activities are being leveraged by other development partners, such as the Bill and Melinda Gates Foundation-funded African Resource Centre and the Global Fund, in their efforts to impact countries' supply chain workforces.

In Q1, GHSC-PSM delivered the Introduction to Supply Chain Management course to staff from seven USAID missions and the Emerging Trends course to staff from six USAID missions, along with DC-based USAID personnel.

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. GHSC-PSM's most common LMIS interventions are:

- Helping countries improve their paper-based LMISs.
- Upgrading or implementing new eLMISs.



A warehouse worker at Burundi's Central Medical Store (CAMEG) reviews stock lists. *Photo credit: Bobby Neptune/GHSC-PSM*

• Enabling interoperability between existing systems for data exchange.

In November, **Mozambique's** Ministry of Health and GHSC-PSM, in collaboration with the Clinton Health Access Initiative and VillageReach, received the *Accelerating Global Health Supply Chain Excellence Award* for the best innovation at the 2018 Global Health Supply Chain Summit. The award recognized

SIGLUS Implementation

As of November, GHSC-PSM had trained staff at 866 facilities on the use of SIGLUS, and 628 facilities were actively reporting in the system. the cloud-based OpenLMIS tablet application, Sistema de Informação para Gestão Logística nas Unidades Sanitárias (SIGLUS), which allows for faster, automated reporting for local health facilities and easier data management at all levels. With SIGLUS, critical consumption and stock data are available in real time to inform distribution activities, strategic decisions, and FASP. Judges noted the scope, expansion (see box), and government leadership in all aspects of the SIGLUS rollout as areas that distinguished this innovation from others presented at the conference.

In **Honduras**, GHSC-PSM rolled out an eLMIS tool, Sistema Informático de Administración Logística de Medicamentos e Insumos, to improve health commodity management. The project helped the Ministry of Health scale up the information system, which currently is used to record, manage, and report consumption logistics data for HIV RTKs and laboratory supplies. The project conducted several one-

day guidance workshops followed by on-the-job training and on-site implementation of the tool at laboratories and health centers in three USAID-prioritized regions.

Warehousing and Distribution

GHSC-PSM continues to improve country warehousing and distribution systems through 33 field offices. Our approaches seek to improve datadriven decision making across the supply chain, optimize in-country warehouse networks, and increase efficiencies in warehousing and distribution operations. The project's most common interventions are:

- Conducting inventory and/or warehouse network optimization.
- Conducting distribution planning, frequency of delivery, and/or route network optimization and modeling.
- Monitoring temperature and other ambient conditions in warehouses and during transportation.



View from above: warehouse in Mozambique. *Photo credit: Mickael Breard/GHSC-PSM*

• Supporting proper application of statistical cycle counting methodology and developing/updating warehousing and inventory management standard operating procedures.

In **Zambia**, GHSC-PSM supported the development of a vehicle adherence monitoring tool to improve visibility and adherence to the delivery schedule. The tool will be used to improve operational performance of the Medical Stores Limited transport resources. Also, the project is continuing a simulation analysis of inventory movements from the central warehouse to health facilities to support better allocation of storage and transportation resources and to identify ways to increase the use and effectiveness of Medical Stores Limited's resources.

GHSC-PSM completed the first phase of activity-based costing implementation in **Rwanda** with a scoping visit to the Medical Procurement and Production Division in November. Rwanda is the third GHSC-PSM country to adopt an activity-based management approach, which gives supply chain leadership the tools to reinforce decisions and proactively manage resources. Activity-based costing calculates the true costs of warehousing and transporting donor-funded products. It will be used to establish a fair and transparent handling and storage fee for health commodities, to replace a tax based on product value. It also supports a transition to activity-based management, where data on activity costs can inform decisions.

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 most common interventions are:

- Improving health supply chain governance and leadership coordination, specifically supporting development of cross-cutting supply chain steering committees across all health sectors, including representation from the Ministry of Finance.
- Adopting and implementing appropriate policies, guidelines, and legislation.

GHSC-PSM continues to strengthen leadership and governance in the Ministry of Health in **Rwanda**. The Rwanda Biomedical Center, a department within the ministry, is undergoing a major institutional restructuring that will merge the existing Medicines Procurement and Production Division with Rwanda's 30 district pharmacies. That division handles procurement, operates central warehouses, and delivers pharmaceuticals and equipment to the district level. This restructuring will transform the division into a legally and financially autonomous state-owned enterprise, to be named Rwanda Medical Supplies Limited. In Q1, the project worked with Rwandan counterparts to develop a roadmap for future technical assistance. The project will:

- Facilitate alignment among key stakeholders on the business rationale and the future-state vision for Rwanda Medical Supplies Limited.
- Develop detailed business and implementation plans.
- Facilitate ownership and coordination of stakeholders in the ministry, donors, and technical partners.
- Help design a performance management infrastructure to drive implementation progress.

The last step will include developing key milestones, high-level costing, resource mobilization, and an implementation approach, including developing a Responsible, Accountable, Consulted, and Informed matrix for the Ministry of Health.

Procurement

Procurement of pharmaceuticals and medical supplies accounts for as much as 40 to 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 system strengthening through 32 field offices. The most common interventions are:

- Providing training and skills development for procurement staff.
- Overseeing procurements and/or monitoring compliance with procurement requirements.
- Supporting market analysis and/or development of procurement strategies.

In **Vietnam**, the National Centralized Drug Procurement Center, with support from GHSC-PSM, successfully managed the bidding process to procure ARVs with social health insurance funding for the first time (see box). The bid package, valued at approximately \$5.9 million, covers procurement of ARVs to serve 48,000 PLHIV eligible for social health insurance reimbursement in 2019. Six bids were submitted, which generated enough price competition to achieve savings of \$1.1 million, or approximately 19 percent of the overall bid package value. The secured purchase prices are comparable to the prices of drugs purchased by international donors. Timely completion of the bidding process was critical in ensuring availability of ARVs for PLHIV beginning in early 2019.

Government of Vietnam Procurement Represents Significant Step Forward

With GHSC-PSM support, the recent government of Vietnam tender for ARVs marks decreased reliance on international donor funding for HIV/AIDS treatment as well as the government of Vietnam's strong commitment to gradually assuming full financial responsibility for its HIV/AIDS program.

Moreover, more than \$1.1 million in savings will allow the government of Vietnam to purchase more lifesaving health commodities for much-needed treatments for its PLHIV.

Forecasting and Supply Planning

GHSC-PSM continues to provide FASP support through 34 field offices to help institutionalize processes so countries move from reliance on external technical support to developing their own fully integrated FASP capabilities. The most common interventions include:

- Assisting countries develop annual national forecasts.
- Helping health programs develop routine—usually quarterly—supply plans.
- Providing training on FASP tools (e.g., Quantimed and PipeLine).
- Collaborating with in-country staff in the development of FASP standard operating procedures and/or work aids.

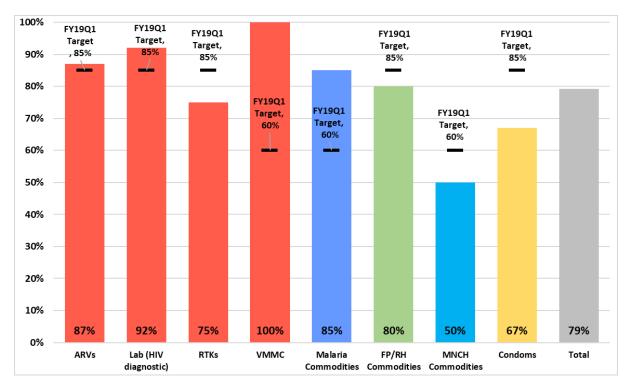
Health commodity FASP in **Malaw**i has previously been disjointed across different programs, resulting in lack of coordination, poor data visibility, and gaps in commodity availability. GHSC-PSM is helping the Ministry of Health establish a fully functional national FASP team. GHSC-PSM trained 18 members of the team in use of software tools (Quantimed and PipeLine) in October 2018. Malawi subsequently conducted the first-ever quantification of VMMC supplies using the software tools. The training helped standardize and integrate best practices into the quantification process in Malawi, enhance visibility into commodity management, and strengthen commodity security across the different programs.

Indonesia's National HIV/AIDS Program is working to achieve goals established in the *Indonesia National Roadmap for Getting to Zero by 2030* (zero new HIV infections, zero discrimination, zero AIDSrelated deaths) and the UNAIDS 90-90-90 strategy by 2020. Availability of RTKs, ARVs, CD4, and viral load commodities is critical to reaching these goals. GHSC-PSM helped the Indonesian Ministry of Health conduct a workshop with HIV coordinators and pharmacy staff from all 34 provinces on quantification and forecasting of HIV commodities. The workshop generated evidence-based recommendations for months of HIV commodity stocks in each province and of central buffer stocks for 2019 and 2020. These findings were disseminated to national and international stakeholders to help prevent overstock and understock of HIV commodities.

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. Starting this quarter, 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 will be made available for GHSC-PSM field offices to explore with in-country stakeholders.

Below, in Exhibit 11, 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.



Percentage of Countries Conducting Quarterly Supply Plan Updates

Exhibit 11. Percentage of Required Supply Plans Submitted During Q1 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 QI, GHSC-PSM received 92 supply plans from 20 countries, including 76 required

plans¹³. The team has reviewed and provided technical feedback on 55 supply plans, 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.

People Trained

The number of people trained provides a basic illustration of where the project is focusing its capacitybuilding resources and where it might expect related supply chain outcomes to improve. A high number of individuals were trained in Q1, with a total of 1,565 trainees (944 men and 621 women).

Most trainings were cross-cutting, meaning they addressed topics relevant to multiple health areas. By funding source, 52 percent were trained with HIV/AIDS funding; 36 percent with malaria funding; 6 percent with FP/RH funding; and 6 percent with MNCH funding. Trainings focused on warehousing and inventory management, LMIS, governance and finance, transportation and distribution, and human resources capacity development.

¹³ 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



Our global collaboration in Q1 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 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 availability of health commodities. We do so by providing supply chain expertise to important global fora, working with other 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.

Providing Supply Chain Expertise 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. Participation in these meetings also helps GHSC-PSM to stay current with emerging 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 two seminars at the African Society for Laboratory Medicine conference in Abuja, Nigeria, and co-led with the CDC the equipment maintenance sessions at the laboratory quality improvement and management accreditation symposium.

- Hosted MedAccess and USAID for a discussion on global collaboration to improve accessibility of new and improved LLINs through market-shaping opportunities.
- Chaired the biannual two-day meeting of the RHSC Systems Strengthening Working Group in Washington, DC. Thirty-four participants attended from as far away as China and Uganda.
- Attended the biennial ICFP, where project staff organized three panel discussions, presented a poster on the new Contraceptive Security Indicators dashboard, conducted a half-day side event workshop, held side meetings with advocates and the West African Ouagadougou Partnership, and engaged new members to join the RHSC.
- Participated in the UNFPA Contraceptives Suppliers Workshop, co-leading presentations on registration data management, packaging harmonization, and GS1 implementation.
- Attended the LNG-IUS technical and coordination platform meetings.
- Collaborated with USAID, WHO, Monash University, the Promoting the Quality of Medicines (PQM) project (implemented by the U.S. Pharmacopeial Convention), and the Concept Foundation to draft a technical review paper focused on quality issues of oxytocin.

Promoting Harmonization

GHSC-PSM shares our methods with the global community to promote broad improvement in product availability. For example, this quarter, the project aligned development of PrEP guidelines to the USAID-funded and FHI 360-led PrEP research project.

Managing Commodity Stock Information as a Global Good

GHSC-PSM serves as an information resource on commodity availability, sharing our supply chain information and collecting and managing additional country data on stocks. As described in Section B, through the PPMR process in the HIV, malaria, and FP/RH sectors, GHSC-PSM manages collection of data on country-level stocks of critical health commodities. These data are shared with countries and donors in user-friendly dashboards to inform planning and prioritization. Every quarter, based on this information, the global community considers actions to address imbalances (such as redistributing stock to mitigate stockouts and minimize waste).

GHSC-PSM is an active participant in developing the Global FP VAN, which will increase supply chain visibility and improve collaboration between USAID and other major procurers of contraceptives. This quarter, GHSC-PSM completed user acceptance testing of the order, shipment, supply planning, ticketing, and analytics modules of the Global FP VAN platform. For more information, see Section B3.

Research and Innovation

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

Market Dynamics

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

Shelf-life research. In Zimbabwe, GHSC-PSM traced batch numbers of second-line ARVs through the supply chain from the central level to clinical sites. Using these data, the project assessed the requirements for minimum months of supply for MMD with larger count pill bottles (90- or 180-count) given the risk of expiration before consumption by the patient. The analysis also showed that high minimum stock levels may contribute to Zimbabwe's high shelf-life percentage requirements for drug importation. These minimums were set when supply chain information below the central level was limited. With improved data on stock status at lower levels of the supply chain, many countries could operate efficiently with lower minimums. Such changes could help rationalize requirements for remaining shelf-life of imported drugs. GHSC-PSM provided the data to USAID in preparing for discussions with WHO and the Global Fund in November regarding shelf-life requirements.

As part of the essential medicines portfolio, the project identified market issues that present risks to scale up and is evaluating risk mitigation approaches with USAID. Also, GHSC-PSM is piloting an early warning system with wholesalers to obtain advanced market knowledge of supply risks due to raw material or API shortages. If the early warning system is successful, GHSC-PSM will use it for other health areas.

Other market dynamics work done this quarter, as described in greater detail in Sections B1 and B3, included:

- Conducting an HIV medicine packaging analysis.
- Leading a side event workshop at the ICFP titled From local decisions to global markets: A workshop on improving family planning sector market health to impact long-term client outcomes.
- Completing analysis of case study data collected and developing recommendations for harmonizing contraceptive and condom packaging among major procurers.
- Participating in technical and coordination platform meetings for LNG-IUS.

Country-level Innovations

Examples of innovations at the country level are summarized below. They include new approaches, products, and technologies.

New approaches

- **Cameroon:** GHSC-PSM supported annual reviews of supply chain data in two projectsupported clusters. The reviews brought together leaders from the districts, regions, and some selected high-volume sites. The meetings included presentation of best performance awards to three districts and sites. The districts were encouraged to provide similar performance awards to sites to stir healthy competition and improve performance. Supervisory visits shortly after the annual review meetings noted positive changes in staff attitude to work.
- **Ethiopia:** GHSC-PSM developed a new web-based LLIN distribution tracking system. Previously, the data were managed using an Excel database, with distribution sites reporting information through emails.
- **Malawi:** The project trained Ministry of Health staff on use of Quantimed and PipeLine and on quantification for VMMC medicines and supplies. With GHSC-PSM support, the government completed its first-ever commodity quantification exercise for VMMC commodities after the training.

• Zambia: GHSC-PSM worked with the GNCZ to conduct supportive supervision visits to selected training institutions following the introduction of a revised curricula with a supply chain management component. The project also supported the GNCZ in formulating supply chain management examination questions, which were administered to students in the leadership and management course for the first time in December 2018.

New technologies

• **Pakistan:** The project implemented a new Warehouse Management System for the Population Welfare Department in Punjab to make the LMIS more robust with added controls to ensure quality data. The project also introduced a Configuration Management System for Alerts/Notifications. Now, a user can configure rules based on specific facility requirements, including but not limited to province, district, and product.

Building Awareness and Advocacy for Change in Supply Chain Issues

GHSC-PSM works to build awareness of key supply chain issues and advocates for change around them at global and country levels. Examples are provided below.

Global Standards

GHSC-PSM's long-term requirement, to be implemented over several years, is to have suppliers identify and label commodities in accordance with GS1 global standards for health care and to exchange product master data through the GS1 GDSN. To give suppliers time to make necessary investments for compliance, the requirement is being implemented in phases. To start, in January 2018, GHSC-PSM required suppliers of pharmaceuticals, medical devices, laboratory reagents, and sterile kits to identify and label their commodities in accordance with GS1 global standards. Suppliers need to submit the global location numbers (GLNs) that identify their business entities; submit global trade item numbers (GTINs) that identify their items and various levels of packaging; and label the tertiary pack trade item with a barcode encoding the GTIN, batch/lot, and expiration date. By the end of FY 2019 Q1, GHSC-PSM had received GLNs for 61 percent of in-scope¹⁴ suppliers and GTINs for 37 percent of in-scope items. Fifteen percent of in-scope items have confirmed compliance with the tertiary pack labeling requirement.

In October 2018, IDA Foundation became the first USAID preapproved pharmaceutical wholesaler to sign up for the GDSN and synchronize data with GHSC-PSM. In this first phase, IDA and GHSC-PSM successfully synchronized all required data for three items—two essential medicines and one antimalarial. This provides GHSC-PSM with critical master data to support operational supply chain functions. For example, it provides volumetric data at each level of the packaging hierarchy to enable transport load optimization.

An Important Global Standards First

USAID's vision of traceability achieved an exciting milestone in October 2018 when IDA Foundation became the first supplier to synchronize data with GHSC-PSM.

¹⁴ In-scope items are pharmaceuticals, medical devices, sterile kits, and laboratory reagents that have been ordered before, are currently saleable, and are procured under long-term agreements (e.g., IDIQs, basic ordering agreements, and blanket purchase agreements).

In Q1, GHSC-PSM launched an initiative to develop a joint donor/procurement agency Global Standards Technical Implementation Guideline. Over the past two years, USAID and GHSC-PSM have collaborated with global health commodity donors and procurement agents to align around a common set of standards for identification, labeling, and data exchange. In November, GHSC-PSM hosted a meeting of the Interagency Supply Chain Group with Global Fund, UNFPA, United Nations Children's Fund (UNICEF), UNDP, Gavi, and Pan-American Health Alliance participation. The group established requirements for the joint guideline and developed a plan to complete the guidelines in Q2. GHSC-PSM is leading development of the joint guideline, which is based largely on the GHSC-PSM Global Standards Technical Implementation Guide published in January 2018. The first draft is currently circulating with partners for feedback and endorsement.

GHSC-PSM presented at a Global GSI Healthcare Conference and presented a poster at the Global Digital Health Forum and the GSI Global Healthcare Conference Forum. The project's breadth and depth of GSI implementation allows us to offer lessons about traceability implementation to the broader global community, beyond our immediate development assistance community.

Country-Level Advocacy

GHSC-PSM field offices support advocacy efforts to address procurement and/or supply chain issues in country. For example, GHSC-PSM assisted the Central Medical Stores of Namibia to successfully engage and persuade the government of Namibia HIV Program to adopt a more cost-effective HIV rapid testing algorithm (see Section B1).

Collaborating Across GHSC-PSM Health Areas

The GHSC-PSM contract combines procurement and supply chain support for all global health areas into one project for the first time. This consolidation has generated benefits for all health areas that are felt every day. Below we summarize three areas—contracting, innovation and research, and training—where the cross-pollination and benefits of consolidation were particularly notable this quarter.

GHSC-PSM continued to leverage our methods, approaches, and infrastructure across all four health areas. For example, in Q1, the project quickly accessed the newly approved generic supplier for the FP product DMPA-IM through an existing contract for essential medicines. GHSC-PSM also is piloting an early warning system with wholesalers to obtain advanced market knowledge of supply risks due to raw material or API shortages. This is being piloted for essential medicine APIs but will be used by other health areas if successful.

Collaborating with Other 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 Q1.

In Burkina Faso, GHSC-PSM trained 345 health facility head nurses on SOPs for the country's integrated LMIS during QI. Leveraging limited resources, GHSC-PSM planned scale-up of the training on SOPs to an additional 600 head nurses with the GHSC-Technical Assistance (TA) contractor for Francophone countries (Chemonics International).

As described in Section B1, GHSC-PSM supports the GHSC-RTK project in ensuring availability of HIV RTKs, including collecting and managing data on RTK stock status at central and regional levels and planned deliveries from all sources in the PPMR-HIV reports.

GHSC-PSM interacts continuously with GHSC-QA to coordinate QA efforts for HIV, FP/RH, and MCH commodities. In Q1, with close coordination among USAID, GHSC-QA, and GHSC-PSM, the project identified a new supplier who could meet quality standards for a key three-month contraceptive injectable.

The GHSC-BI&A project, implemented by IntelliCog, aggregates data from all GHSC projects so that USAID and external parties can examine performance and perform additional analysis across projects. In Q1, GHSC-PSM provided detailed reviews of country data on the PPMR-HIV GHSC-BI&A dashboard and helped improve display of shipment data for almost 70 products.

GHSC-PSM met with the GHSC-TA contractor for Tanzania (Guidehouse), USAID, and the government of Tanzania to identify key issues related to commodity procurement and delivery of U.S. government-donated commodities to Tanzania, including supply planning, procurement, and shelf life.

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

Global Supply Chain M&E Indicator Performance FY2019 Quarter 1, October - December 2019

Delivery Impact to Date



Number of ACT treatments delivered 141,719,375



Number of Couple Years Protection delivered 40,997,518



Person-years of ARV treatment delivered 4,851,020

Delivery Indicators (OTIF, OTD and Backlog)	Cycle Time Indicators	Quality Assurance Indicators (TO2 only)	Procurement Indicators
Forecast and Supply Planning Indicators	Warehousing Indicators	Vendor Performance Indicators	GHSC-BI&A Data Sharing Indicators
HIV Complete Quarterly Results (TO1)	Malaria Complete Quarterly Results (TO2)	FP/RH Complete Quarterly Results (TO3)	MNCH & Zika Complete Quarterly Results (TO4)







Fiscal Year 2019 Key Performance Overview - IDIQ

		FY 2019 QI	FY 2019 Q2	FY 2019 Q3	FY 2019 Q4	FY 2019
Repor	ting Period (Quarter) Start Date	10/01/18	01/01/19	04/01/19	07/01/19	10/01/18
Repor	ting Period (Quarter) End Date	12/31/18	03/31/19	06/30/19	09/30/19	09/30/19
Globa	l Supply Chain					
Ala.	Percentage of line items delivered on time and in full, within the minimum delivery window	84%				
Alb.	Percentage of line items delivered on time, within the minimum delivery window	85%				
A3.	Cycle time (average) – # days per shipment	249				
A4.	Inventory turns (average number of times inventory cycles through GHSC-PSM-controlled global facilities) – ratio			Annual Indicator		
A5.	Total landed cost (logistics costs)	Semiannu	al Indicator	Semiannuo	al Indicator	
A13.	Percentage of batches of product showing nonconformity (out of specification percentage)	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 or more granular data.

Fiscal Year 2019 Key Performance Overview - IDIQ

			FY 2019 QI	FY 2019 Q2	FY 2019 Q3	FY 2019 Q4	FY 2019
Repor	ting Period (C	Quarter) Start Date	10/01/18	01/01/19	04/01/19	07/01/19	10/01/18
Repor	ting Period (C	Quarter) End Date	12/31/18	03/31/19	06/30/19	09/30/19	09/30/19
In-Co	untry						
BI.	Stockout rat	e at SDPs	13%				
B2.	•	of stock status observations in storage sites nodities are stocked according to plan, by level tem	25%				
B3.	•	ng rate to the logistics management system (LMIS)	76%				
CI.	Number of	TO-Specific Trainings Combined	1,143				
	people trained – #	Cross-TO Trainings	456				
		All Trainings (TO-Specific & Cross-TO)	1,599				

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 or more granular data.

Fiscal Year 2019 Key Performance Overview By Task Order

		IDIQ	1	Fask Ord	er I – H	IV/AIDS			Task Or	-der 2 - N	Malaria			Task C	order 3 –	PRH			Task Or	der 4 – N	1NCH	
	Indicator	FY19 Target	FY19 Target	2018 Q2	2018 Q3	2018 Q4	2019 Q1	FY19 Target	2018 Q2	2018 Q3	2018 Q4	2019 Q1	FY19 Target	2018 Q2	2018 Q3	2018 Q4	2019 Q1	FY19 Target	2018 Q2	2018 Q3	2018 Q4	2019 Q1
Glob	oal Supply Chain																					
Ala	Percentage of line items delivered on time and in full, within the minimum delivery window (Total number of line items delivered)	80%	80%	61% 1042	61% 1240	82% 87	82% 912	80%	43% 137	50% 220	65% 195	89% 188	80%	94% 311	78% 60	83% 54	83% 46	80%	70% 10	67% 15	63% 32	87% 146
Alb	Percentage of line items delivered on time within the minimum delivery window (Total number of ADDs in the quarter)	80%	80%	69% 1013	75% 1059	87% 44	82% 1007	80%	46% 145	63% 218	88% 156	94% 189	80%	94% 331	72% 47	95% 43	92% 48	80%	89% 9	82% 17	68% 31	97% 133
A3	Cycle time (average) – days per line item delivered	NA	227	212	213	228	233	311	267	296	309	328	RDC: 232 DD: 272	RDC: 189 DD: 129	RDC: 193 DD: 285	RDC: 221 DD: 262	RDC 272 DD: 353	216	235	233	225	308
A4	Inventory turns – ratio	NA	4		6.2		An- nual	3		4.6		An- nual	3		3.3		An- nual	NA		No inven	ntory 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.

		IDIQ		Fask Ord	ler I – H	IV/AIDS			Task Or	⁻ der 2 - 1	Malaria			Task C	order 3 –	PRH			Task Or	der 4 – N	INCH	
	Indicator	FY19 Target	FY19 Target	2018 Q2	2018 Q3	2018 Q4	2019 Q1	FY19 Target	2018 Q2	2018 Q3	2018 Q4	2019 Q1	FY19 Target	2018 Q2	2018 Q3	2018 Q4	2019 Q1	FY19 Target	2018 Q2	2018 Q3	2018 Q4	2019 Q1
A5	Total landed cost (logistics costs)	11%	8%		9.1%		Semi -an- nual	18%		21.2%		Semi -an- nual	21%		12.5%		Semi -an- nual	21%		20.6%		Semi -an- nual
A6a A6b	Absolute percent supply plan error, with variants annual absolute percent error and supply plan bias <i>And</i> Absolute percent forecast error, with variants annual absolute percent error and forecast bias	See Forec	orecast and Supply Plan Performance pages for detailed indicator results.																			
A7	Temporary waiver percentage	GHSC-PS FY2019.	M is in the	process o	f finalizinş	g definitio	n, data so	ources, and	calculatio	n method	l for this i	ndicator.	lt will be re	borted for	Task Or	ler 2 beg	inning FY.	2019 Q2 aı	nd Task C)rder 3 be	fore the	end of
A8	Average percentage of shelf life remaining for warehoused commodities, weighted by the value of each commodity's stock	NA	78%	81%	81%	84%	81%	70%	74%	74%	70%	77%	78%	81%	84%	86%	85%	NA		No inven	tory held	
A10	Percentage of product procured using a framework contract (framework contract percentage)	NA	77%	70%	65%	85%	72%	39%	29%	37%	40%	60%	95%	99%	100%	100%	100%	90%	100%	100%	100%	98%
A16	Percentage of backlogged line	<5%	<5%	4%	2%	2%	4%	<5%	7%	7%	١%	١%	<5%	2%	2%	0.2%	0%	<5%	0%	3%	0%	١%

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 – Malari	a	
	indicator	FY19 Target	2018 Q2	2018 Q3	2018 Q4	2019 QI
A2	Percentage of QA processes completed within the total estimated QA lead times	80%	99%	84%	83%	84%
A13	Percentage of batches of product for which the final result is showing nonconformity (out of specification percentage)	<1%	0.2%	0.0%	0.0%	0.0%
AI4b	Average vendor rating score – QA labs	NA	86%	80%	76%	79%
A15	Percentage of QA investigation reports submitted within 30 calendar days of outcome determination (QA investigation report submission)	90%	100%	10	00%	Semiannual
	Indicator			Crosscutting		
A14a	Average vendor rating score – Suppliers	NA	NA	NA	NA	75%
AI4c	Average vendor rating score – Freight Forwarders	NA	76%	73%	76%	82%
C4	Percentage of required files submitted to BI&A in the reporting period	NA	88%	92%	84%	84%
C5	Percentage of required files timely submitted to BI&A in the reporting period	NA	86%	92%	84%	84%
	Indicator		Т	ask Order I – HIV/All	DS	
C6	Average percent variance between GHSC-PSM ARTMIS and GHSC-BI&A calculations of key supply chain indicators for Task Order I	NA	NA	NA	NA	0.2%

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).

			Task C	Order I -	- HIV/AI	DS		Task	Order 2	- Malari	a		Tas	k Order	3 – PRH		Task	Order 4	– MNC	н		Crosscu	tting	
	Indicator		2018 Q2	2018 Q3	2018 Q4	2019 Q1		2018 Q2	2018 Q3	2018 Q4	2019 Q1		2018 Q2	2018 Q3	2018 Q4	2019 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1
In-c	ountry Context, Perfor	rma	ance, a	nd Sus	tainab	oility																		
BI	Stockout rate at SDPs		9%	9%	8%	8%		16%	16%	18%	13%		18%	17%	18%	15%		Ν	IA			N	IA	
B2	Percentage of stock status observations in storage sites where commodities are stocked according to plan, by level in supply system		34%	36%	35%	35%		24%	28%	25%	25%		15%	16%	16%	19%		N	IA			N	IA	
B3	SDP reporting rate to the logistics management information system (LMIS)		88%	91%	89%	96%		89%	89%	91%	90%		82%	80%	69 %	68%		NA		52%		N	IA	
B4	Average rating of in- country data confidence at the central, subnational, and SDP levels – (0-9 scale)			6.2		An- nual			6.5		An- nual			6.7		An- nual		6.7		An- nual		N	IA	
B5	Percentage of required annual forecasts conducted	Se	e country-	specific i	ndicator ț	bages for c	letai	iled data (for this ind	licator (re	eported ar	nnua	ılly).											
B6	Percentage of required supply plans submitted to GHSC-PSM during the quarter	Se	e Supply I	Plan Subr	nission ar	nd country	-spe	cific indica	itor þages	s for deta	iled data (for ti	his indicat	or.										

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

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			Task C	Order I -	– HIV/AI	DS	Task	Order 2	2 - Malari	a		Tasl	< Order	3 – PRH			Task	Order 4	– MNCI	4			Crosscu	tting	
	Indicator		2018 Q2	2018 Q3	2018 Q4	2019 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1		2018 Q2	2018 Q3	2018 Q4	2019 Q1		2018 Q2	2018 Q3	2018 Q4	2019 Q1		2018 Q2	2018 Q3	2018 Q4	2019 Q1
In-co	ountry Context, Perfor	rma	nce, a	nd Sus	stainab	oility			·																
Β7	Percentage of total spent or budgeted on procurement of commodities for public sector services by funding source	See	e country-	-specific i	ndicator ‡	oages for de	tailed data j	for this inc	dicator (re	eported an	nual	lly).													
B8	Percentage of initially GHSC-PSM-supported supply chain functions carried out by national authorities without external technical assistance	Thi	is indicator is being redefined in consultation with USAID during FY2019, with the intent of reporting results in the FY2019 fourth quarter/annual report.																						
В9	Supply chain technical staff turnover rate	See	e country-	-specific i	ndicator ‡	ages for de	tailed data	for this in	dicator (re	eported an	nual	lly).													
B10	Percentage of countries that have a functional logistics coordination mechanism in place			85%		An- nual		82%		An- nual			63%		An- nual			63%		An- nual			Ν	A	
BII	Percentage of leadership positions in supply chain management that are held by women			60%		An- nual		42%		An- nual			18%		An- nual			7%		An- nual			26%		An- nual

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

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tacticesSee Warehouse Performance and country-specific indicator pages for detailed data for this indicator.see Warehouse Performance and country-specific indicator pages for detailed data for this indicator.see 3PL and Commodity Vendor Performance and country-specific indicators pages for detailed data for this indicator. | Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 y Context, Performance, and Sustainability solute percent number of innovations in an umber of innovations cluding operations search studies) that red eveloped, plemented, or roduced and are ated to the health modity market or opply chain best action to expiry while determined for poly chain best actions that the to expiry while determined of people ined Solute percent solutions of the determined | Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3y Context, Performance, and Sustainabilitysolute percent
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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.

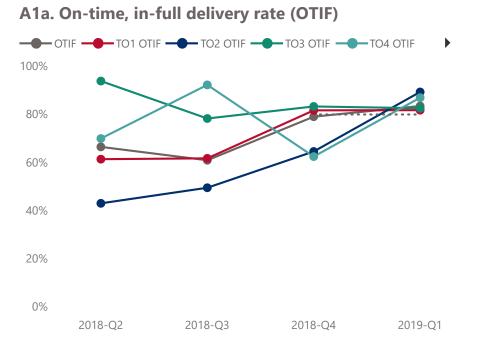
			Task (Order I –	– HIV/AI	DS		Task	Order	2 - Malaria	ia		Tas	k Order	3 – PRH			Task	Order	4 – MNCH	н		Crosscu	itting	
	Indicator		2018 Q2	2018 Q3	2018 Q4	2019 Q1		2018 Q2	2018 Q3	2018 Q4	2019 Q1		2018 Q2	2018 Q3	2018 Q4	2019 Q1		2018 Q2	2018 Q3	2018 Q4	2019 QI	2018 Q2	2018 Q3	2018 Q4	2019 Q1
In-co	untry Context, Perfor	rma	ince, a	nd Sus	stainal	bility																			
C8	advocacy engagements in support of improved availability of essential health commodities 4 4 Semi -an- nual 3 1 -an- nual 10 4 Semi -an- nual Semi -an- nual 3 1 -an- nual 10 4 Semi -an- nual Semi -an- 															0		0	Semi -an- nual	5		4	Semi -an- nual		
C10	Percentage of GHSC- PSM-procured or supported molecular instruments that remained functional during the reporting period		72%	68%	74%	63%			r	NA				N	A				,	NA			N	NA	
CII	Supply chain policies, regulations, strategies, or SOPs developed or updated with GHSC- PSM assistance	See	e country-	-specific iı	ndicator †	pages for de	letai	iled narraı	tives for t	:his indica [.]	tor.														

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.

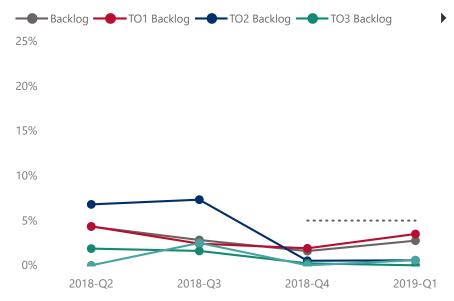
Overall Project Performance

USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM-Procurement and Supply Management

Delivery Performance

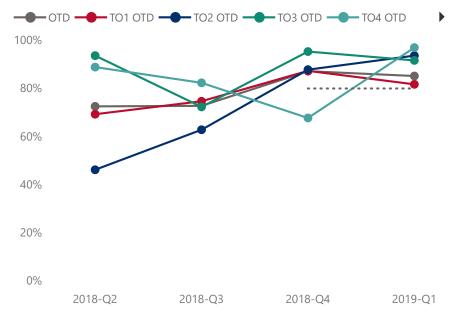


A16. Backlog percentage



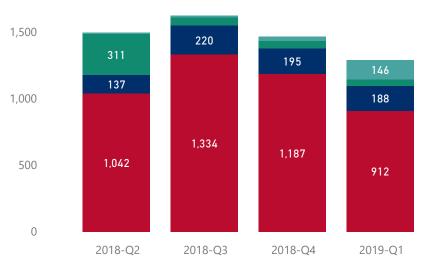
T	ask Order	\sim	Product Category	\sim
	All	\sim	All	\sim

A1b. On-time delivery rate (OTD)



Total number of line items delivered

Task Order • TO1 **•** TO2 **•** TO3 **•** TO4



Analysis

Across the project, performance exceeded the targets on three key delivery indicators. OTIF rose to its highest performance so far, at 84 percent. OTD was 85 percent, and backlog was 2.8 percent.

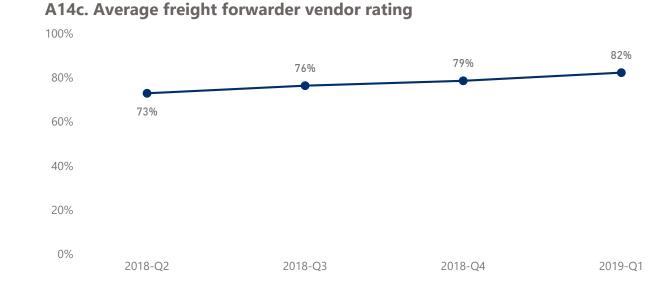
D	ata	notes	
-			

Tracer product disaggregations for these indicators are available in the "Complete Quarterly Results" pages of this Annex. 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.

3PL and Commodity Vendor Performance



A14a. Average commodity supplier vendor rating (Supplier OTIF)



Analysis

Freight forwarder (3PL) performance has improved steadily over the past few quarters, currently with an average score of 82 percent across the five 3PLs for this quarter. On-time performance, a critical component comprised of both on-time delivery within the agreed delivery date window and on-time RFQ transit time, increased from 67 percent in FY2018 Quarter 3, to 81 percent in Quarter 4 and now to 88 percent this quarter. Some of the strategies used by the GHSC-PSM Deliver/Return team which contributed to this performance include:

- Providing greater data visibility to 3PLs and weekly follow-up with them to quickly address any negative performance;

- Enabling 3PLs to provide routine feedback on the management and support provided by GHSC-PSM and to give context for performance issues that were out of their manageable control;

- Non-compliance reports (NCRs) serve as a tool to address immediate challenges and poor performance, creating a platform for 3PLs to analyze root causes of problems and devise workable solutions.

GHSC-PSM is reporting for the first time the on time in full (OTIF) order fulfillment rate for commodity suppliers. Supplier order fulfillment timeliness and completeness are both important elements of supplier performance management, which has a direct impact on the overall GHSC-PSM on time in full delivery performance. GHSC-PSM continues to perform rigorous supplier performance management and consistent and comprehensive analysis that identifies root causes of underperformance. Supplier reviews are held monthly and quarterly to discuss key areas of improvement and corrective actions. Supplier OTIF results are used to inform sourcing decisions and volume allocations.

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.

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

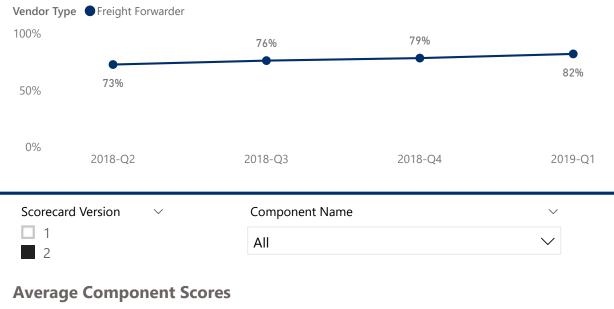
Task Order	Country	Type of Loss	Product Group	Loss Value	Loss Denominator	% Loss
TO1	South Sudan	Damage	Adult ARV	\$2,004	\$112,356	1.78%
TO1	Nigeria	Damage	ARVs	\$67,637	\$35,574,828	0.19%
TO1	Rwanda	Damage	ARVs	\$6	\$4,195,060	0.00%
TO1	Nigeria	Other	ARVs	\$9,935	\$35,574,828	0.03%
TO1	Ethiopia	Damage	Food and WASH	\$3,933	\$2,745,393	0.14%
TO1	RDC	Damage	Other Pharma	\$110	\$61,124	0.18%
TO1	Rwanda	Damage	VMMC	\$4	\$737,558	0.00%
TO2	RDC	Damage	ACTs	\$58	\$3,999,806	0.00%
TO2	Nigeria	Damage	LLINs	\$725	\$15,336,948	0.00%
TO2	RDC	Damage	Severe Malaria Meds	\$401	\$4,380,052	0.01%

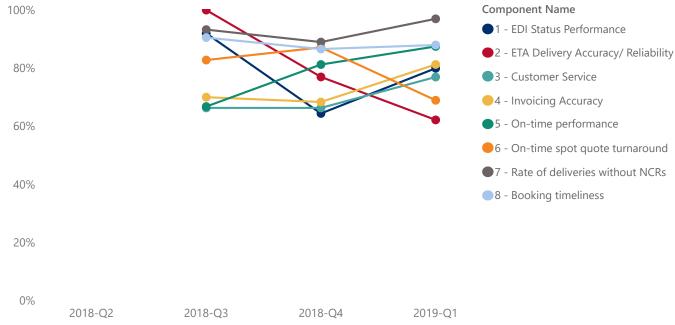
Data notes

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

Detailed Vendor Performance

A14. Average vendor rating score - Overall





Vendor Type	\checkmark
Freight Forwarder	\sim

Data notes

Average vendor rating score is a composite indicator, assessing performance across several components. Component scores are based on 3PL performance against selected indicators, which are then weighted and summed to determine the overall average vendor rating.

Components and indicators for the 3PL scorecard were updated in FY2018 Q3. Version 1 of the scorecard was in effect up to FY2018 Q2. Version 2 has been in effect since FY2018 Q3.

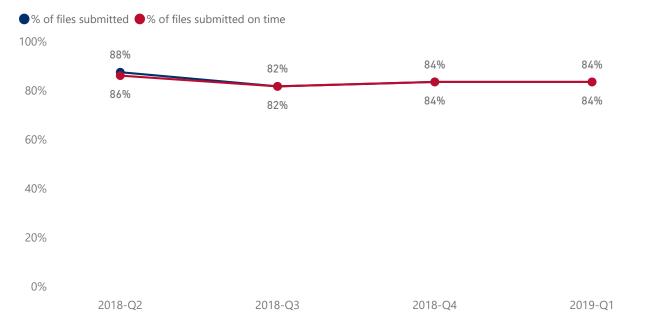
Per the GHSC-PSM M&E plan, targets are not required for vendor performance indicators.

Component Indicators, Weighting, and Indicator Scores for Current Period

Component Name	Indicator Name Ir S		Indicator Weight (Overall)	Overall Weighted Score
1 - EDI Status Performance	Timeliness	42%	3%	1%
1 - EDI Status Performance	Completeness	87%	3%	2%
2 - ETA Delivery Accuracy/ Reliability	Percentage of shipments arriving within 2 days of the ETA	73%	5%	4%
2 - ETA Delivery Accuracy/ Reliability	Percentage of shipments arriving within 5 days of the ETA	84%	3%	3%
3 - Customer Service	3- Quarterly Perception Survey score	63%	4%	3%
3 - Customer Service	2- Quarterly Perception Survey score	67%	4%	3%
3 - Customer Service	1- Quarterly Perception Survey score	70%	4%	3%
4 - Invoicing Accuracy	Timeliness	47%	2%	1%
4 - Invoicing Accuracy	Completeness	73%	3%	2%
4 - Invoicing Accuracy	Accuracy	74%	5%	4%
5 - On-time performance	RFQ Transit Time	75%	20%	15%
5 - On-time performance	Delivery	88%	20%	18%
6 - On-time spot quote turnaround	Spot/Emergency Timeliness		0%	
6 - On-time spot quote turnaround	Spot/Non-emergency Timeliness	87%	10%	9%
7 - Rate of deliveries without NCRs	Percent of shipments delivered without NCRs during the reporting period	89%	10%	9%
8 - Booking timeliness	Timeliness	87%	5%	4%
Total			100%	79%

Data Sharing with GHSC-BI&A

C4. Files submitted to GHSC-BI&A and C5. Files submitted on time



	File Type	% of files submitted	% of files submitted on time
Submissions	Trade item	100%	100%
breakdown by file	Financial	100%	100%
	Fulfillment request	100%	100%
type	Price quote	100%	100%
	Purchase order	100%	100%
	Sales order	100%	100%
	Goods received note	40%	40%
	Inventory management	100%	100%
Reporting Period \sim	Logistics	100%	100%
2019-Q1 🗸 🗸	QA	100%	100%
	FASP		
	ТА	0%	0%
	Supplier contracts	100%	100%
	M&E	100%	100%
	Reference data	100%	100%
	Total	84%	84%

C6. Average percent variance between GHSC-BI&A and ARTMIS on key indicators (TO1 only)

80%

60%

40%

20%

0%



Analysis

GHSC-PSM file submissions to GHSC-Bl&A have remained consistent over the last several quarters. TA files are not being submitted while USAID and both projects work to determine the needs and format requirements. FASP files in the form of Pipeline databases are submitted every quarter and are accessible to Bl&A users. However, the format and contents of the files create challenges for standardizing submission measurement. USAID has therefore exempted this file category from reporting while a solution is identified.

The project is also reporting on a new indicator this year, illustrating the variance between key TO1 indicators in GHSC-BI&A's Order Performance dashboard and GHSC-PSM's ARTMIS data. Looking at OTD and order line counts, GHSC-BI&A shows only 0.2% variance from ARTMIS.

Data notes

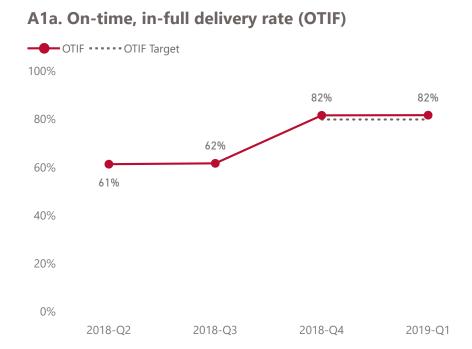
Data requirements, including file types, data elements, submission formats, and frequency, are governed by the Bl&A Information Specification for Implementing Partners (the "Infospec"). Exceptions may be specified by USAID.

The USAID Global Health Supply Chain Program-Business Intelligence and Analytics (GHSC-BI&A) mechanism is a data warehouse and analysis platform that integrates data across USAID's family of GHSC projects.

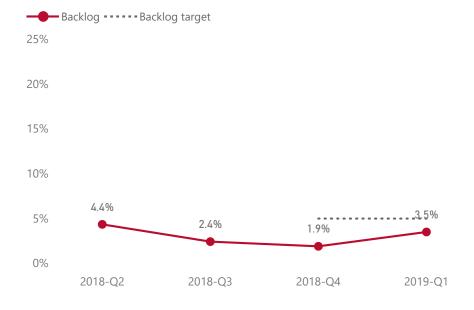
Task Order | Performance

USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM-Procurement and Supply Management

Delivery Performance



A16. Backlog percentage

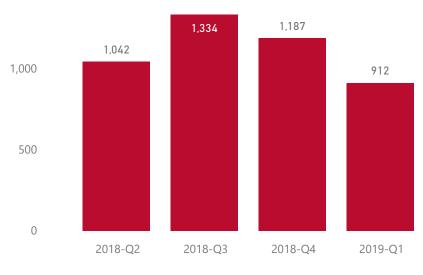


Task Order	\sim	Product Category	\checkmark	
TO1	\sim	All	\sim	

-----OTD -----OTD Target 100% 87% 75% 80% 82% 69% 60% 40% 20% 0% 2019-01 2018-Q2 2018-03 2018-04

Total number of line items delivered

Task Order TO1



Analysis

Across the project, performance exceeded the targets on three key delivery indicators. OTIF rose to its highest performance so far, at 84 percent. OTD was 85 percent, and backlog was 2.8 percent.

All delivery indicators (OTD, OTIF, and backlog) performed above or within the target for Task Order 1 this guarter. OTIF remained constant at 82 percent, while OTD declined slightly, also landing at 82 percent. An increase in backlog is consistent with the dip in OTD, indicating that some line items with past ADDs remained undelivered. Within key categories, performance for Adult ARVs is climbing for OTIF and remains above the target for OTD. Pediatric ARVs have been above 80 percent OTD for three quarters and reached 89 percent OTIF in Q1. For both adult and pediatrics, backlog has fallen to its lowest level in the past year.

Procurement and delivery of HIV rapid test kits is managed by the USAID GHSC-RTK contract. GHSC-PSM has managed these products only in exceptional circumstances.

The project had two undelivered HIV line items with ADDs before the 12-month period of the backlog indicator.

Data notes
Tracer product disaggregations for these indicators are available in the "Complete Quarterly Results" pages of this Annex.
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.

A1b. On-time delivery rate (OTD)

Cycle Time Performance

Task Order	\sim	Product Category
TO1	\sim	All

Fulfillment channel

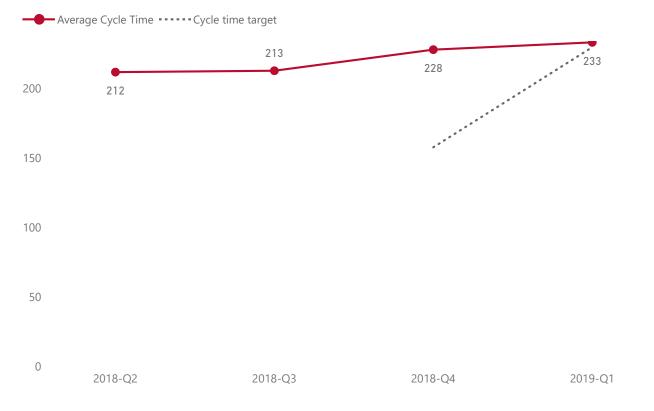
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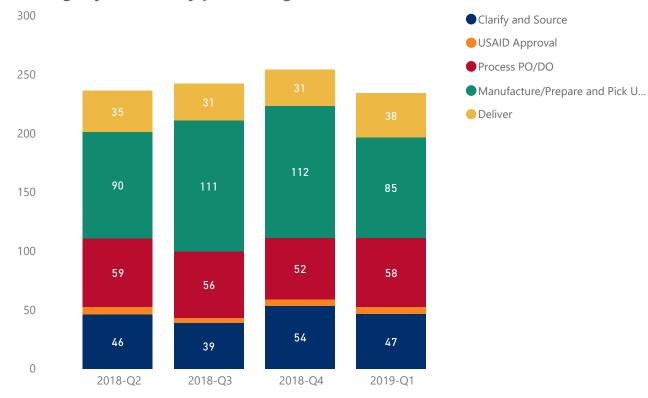
All

 \sim \sim

A3. Average Overall Cycle Time



Average cycle times by process segment



Analysis

Overall cycle time for HIV items came very close to its target this guarter, performing at 233 days compared to a target of 230.

Cycle times for the Manufacture/Prepare, Pick Up, and Deliver segments exclude any deliveries shipped under C and D Incoterms because these deliveries are handled by suppliers. Due to the large line item volume of these types of orders for TO1, the segment data reported for TO1 direct drops represents only about 40 percent of all TO1 direct drops.

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.

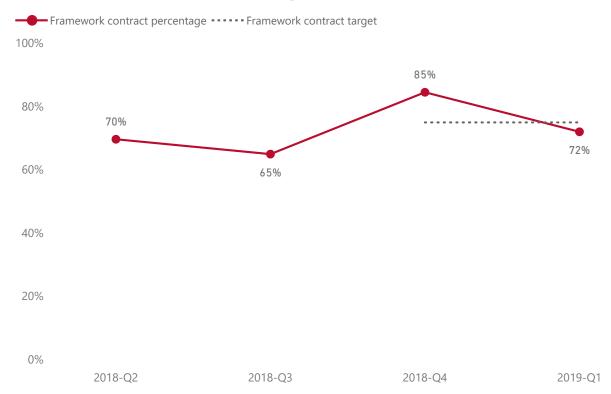
Tracer product disaggregations for this indicator are available in the "Complete Quarterly Results" pages of this Annex.

Procurement Performance

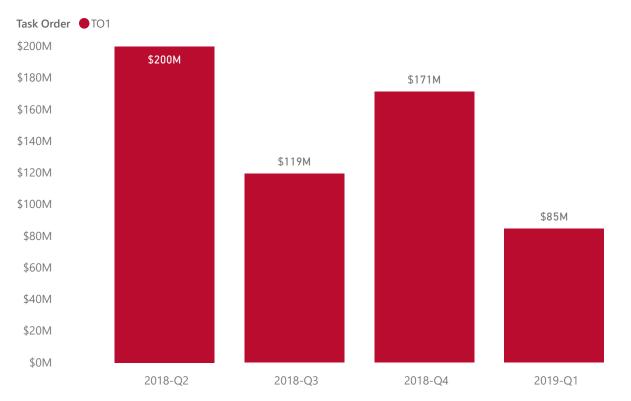
Task Order	\checkmark	Pro
TO1	\sim	Al

oduct Category	\checkmark	
11	\checkmark	

A10. Framework contract percentage



Procurement totals



Analysis

Overall procurement totals are down this quarter from last quarter for TO1. This was expected as the end of the fiscal year brings increased procurement activity, and thus a decrease is expected the following quarter. A decrease from FY17 Q4 into FY18 Q1 was also observed this time last year. The biggest decrease was an \$87 million decrease in procurement of adult ARVs.

The percentage of products procured through a framework contract has decreased to 72 percent from 85 percent at the end of FY18. While the percentage of products procured through framework contracts has increased or remained constant in almost every category (condoms have decreased slightly), the overall volume (as discussed above) has decreased. This means that the outsized role that ARVs play in keeping the overall percentage for TO1 has had less of an effect this quarter because of the small totals. As with any indicator, smaller denominators usually lead to increased volatility in the overall performance.

Data notes

Tracer product disaggregations for these indicators are available in the "Complete Quarterly Results" pages of this Annex.

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.

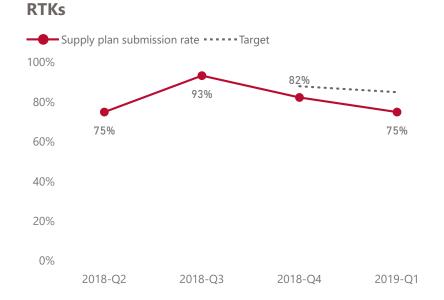
Framework contracts include indefinite delivery, indefinite quantity contracts (IDIQs), blanket purchase agreements (BPAs), and basic ordering agreements (BOAs). Non-framework contracts include firm fixed price and fixed unit price subcontracts, simplified purchase agreements, and other types of one-off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

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

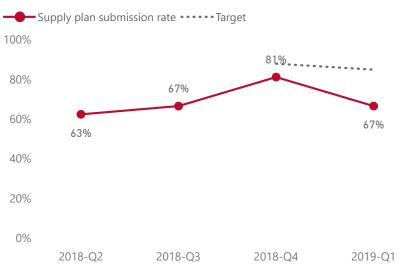
Supply Plan Submission

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





Condoms



VMMC

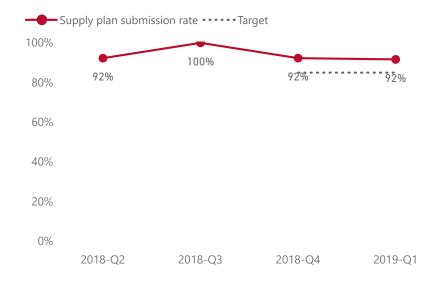


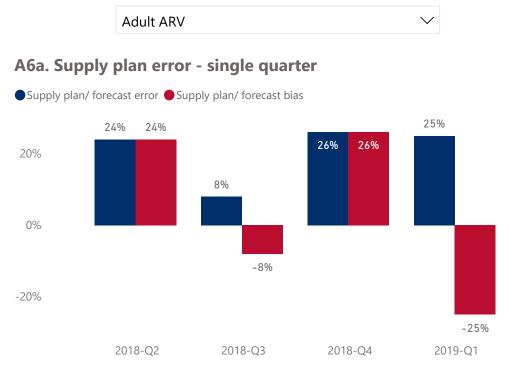
Analysis

The project met or exceeded its targets for ARV, VMMC, and lab supply plan submissions. RTKs, which GHSC-PSM does not procure but for which we provide some forecasting support, are still below the submission target. Condoms also fell below the target, with submissions missing from five countries where GHSC-PSM does not have a field office.

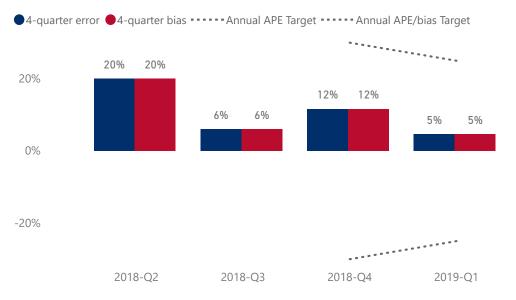
Data ▼	notes
Target FY201	s reflect desired project performance on the four-quarters indicator, beginning 8 Q4.
See "Ir	ndicator Details" pages in this report for more information.

Lab (HIV diagnostics)



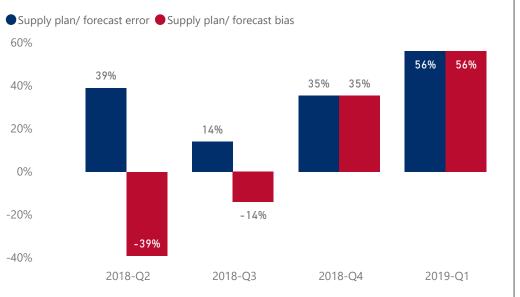


A6a. Supply plan error - rolling four quarters

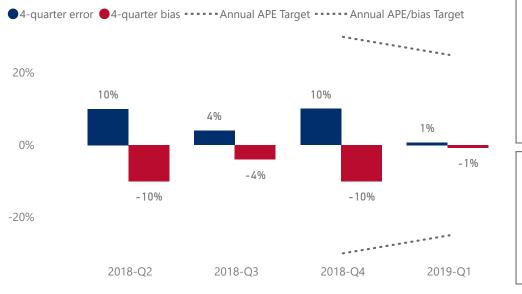


Pediatric ARV

A6a. Supply plan error - single quarter



A6a. Supply plan error - rolling four quarters



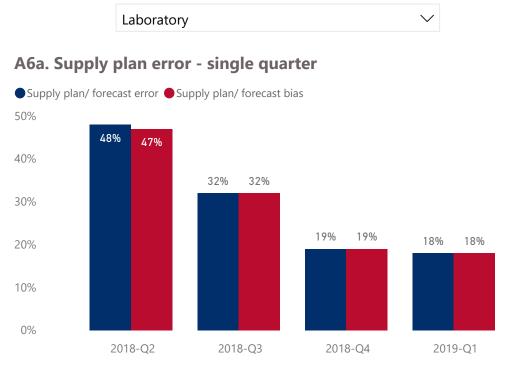
Analysis

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Supply plan error for adult and pediatric ARVs over the last four guarters is small and well within the target, at 5 percent and 1 percent, respectively. Variance was greater in the current guarter, with adult ARVs overforecasted and pediatrics underforecasted compared to actual orders. For pediatric ARVs, variance is due to orders placed for Uganda that had not appeared in supply plans. For adult ARVs, this was likely driven by the first line transition process. When supply plans for this period were created over the summer, many countries were still updating their plans for the transition to TLD. The Plan team has worked closely with the FASP and Commodity Security teams to respond to questions regarding TLD use during this time. Moving forward, the project does not expect large deviations between plans and orders as they are being finalized.

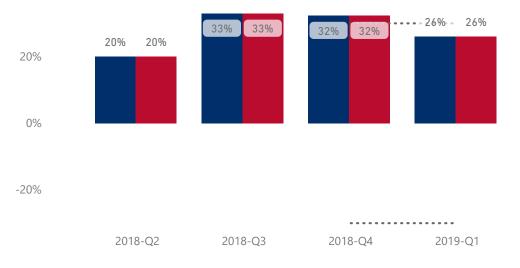
Data notes

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



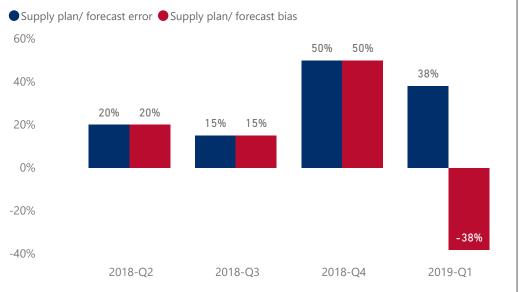
A6a. Supply plan error - rolling four quarters





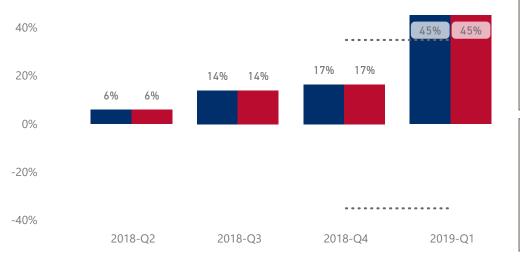






A6b. Forecast error - rolling four quarters

●4-quarter error ●4-quarter bias ••••• Annual APE Target ••••• Annual APE/bias Target



Analysis

 \sim

Quarterly absolute percent error has fallen for lab supply plans over the last year and held steady since the previous quarter. Laboratory forecasting continues to require close monitoring to align supply plans and order data, although information has improved with routine review and communication with field offices. There is better sharing among parties that use VL and EID supply plan data, in support of GSC strategic initiatives. One example of this is quarterly meetings with the suppliers to review the planned orders by country. The project uses this as an opportunity to understand supplier material planning process as well as any potential GAD delays. The team is also developing a more robust tool that will help the supply plan reviewer more easily identify any order/plan discrepancies.

Condom forecast error shrank slightly this quarter, although there was still a sizeable overforecast. This was due mainly to an ARTMIS order entry error that resulted in duplicate order quantities, and one order for Senegal that was requested for a later period. Two quarters of wider variance has pushed the four-quarter performance outside the target range. The Plan and Procurement teams are monitoring orders closely to flag potential entry errors early on, especially for countries that have had these types of errors in the past.

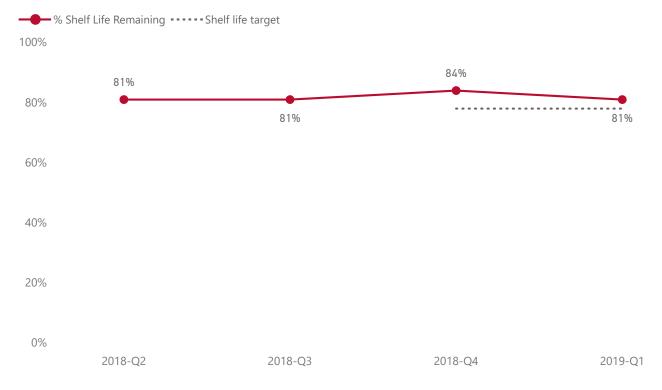


See "Indicator Details" pages in this report for more information.

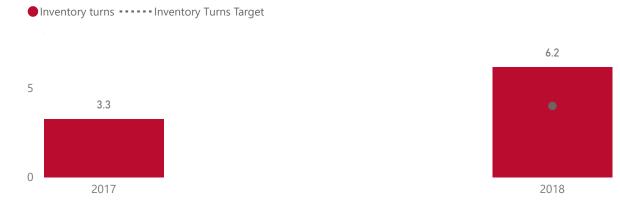
Warehouse Performance

Task Order	\sim
TO1	\checkmark

A8. Shelf life remaining



A4. Inventory turns



C7a. Product losses due to expiry in GHSC-PSM-controlled warehouses

Reporting Period	Task Order	Product Group	Loss Value	% Loss
2019-Q1	TO1	Other Pharma	\$58,130	0.18%
2018-Q4	TO1	Adult ARV	\$4,120	0.01%
2018-Q4	TO1	Pediatric ARV	\$10	0.00%
2018-Q3	TO1	Adult ARV	\$15	0.00%
2018-Q2	TO1	Multiple	\$7,046	0.05%

Analysis	Data notes	
Shelf life remaining in the RDCs for TO1 products has decreased slightly to 81 percent from 84 percent last quarter but is still above the target of 78 percent. While there was a decrease, the TO has seen this level of performance for several quarters in FY18 as well.	Average inventory balance (A4 and C7a denominator) is calculated using the ending balance at the close of each month.	
There are some legacy ARV stocks in the RDCs from the TLD transition that may be affecting this quarter's performance. The Plan team is actively working to reallocate these products and ensure they are utilized.	Expired inventory is excluded from shelf life calculations (A8). It is reported under product loss.	
TO1 has one expiry to report this quarter. The expiry occurred when stock that was rejected by a country in early 2018 was re-routed	Inventory turns is an annual indicator, reported Q4 of each fiscal year.	
back to the RDC. Product packaging posed limited options in reallocating the stock to other countries. However, the overall product due to shelf life is less than 1% of the average inventory balance for the quarter.	Quarterly indicator targets are effective beginning FY2018 Q4. Per the project M&E plan, no targets are required for indicator C7a. Product loss due to expiry.	
	Task Order 1 inventory includes all condoms. GHSC-PSM does not hold any inventory for Task Order 4.	

Complete Quarterly Results (TO1)

	A1a. C	OTIF rate	A1b.	OTD rate	A16. Bac	klog perentage	A10. Fra	mework contractin
Task Order	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
T01	82%	912	82%	1,007	3.5%	4,284	72%	\$84,590,019
Adult ARV	71%	138	83%	134	1.6%	435	100%	\$34,091,429
Condoms	73%	41	77%	48	1.6%	186	95%	\$4,148,967
Food and WASH						29		
HIV RTK						3		
Laboratory	86%	496	81%	550	4.1%	2,627	16%	\$27,169,416
Other Non-pharma	79%	53	88%	81	2.4%	380	24%	\$755,554
Other Pharma	73%	78	74%	85	6.0%	282	100%	\$8,541,192
Other RTK	100%	1	100%	1		13	100%	\$14,520
Pediatric ARV	89%	66	89%	66	1.4%	218	100%	\$7,419,410
Vehicles and Other Equipment	100%	2	50%	4	20.0%	10	0%	\$64,591
VMMC	86%	37	89%	38	1.0%	101	100%	\$2,384,940
Total	82%	912	82%	1,007	3.5%	4,284	72%	\$84,590,019

Reporting Period

2019-Q1

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	25%	-25%	5%	5%
Laboratory	18%	18%	26%	26%
Pediatric ARV	56%	56%	1%	-1%
A6b - Forecast error				
Condoms	38%	-38%	45%	45%

B6. Quarterly supply plan submissions

Product Group	Supply plan submission rate	# of supply plans required
ARVs	87%	15
Condoms	67%	15
Lab (HIV diagnostics)	92%	12
RTKs	75%	16
VMMC	100%	4

A8. Shelf life remaining

% Shelf Life Remaining	Inventory Balance	
81%	\$34,110,907	

C6. Average percent indicator variance between ARTMIS and GHSC-BI&A (TO1 only)

Average percent indicator variance

0.2%

 \sim

 \checkmark

Crosscutting indicators A14. Average vendor ratings Vendor Type Average vendor rating Commodity Supplier 75% Freight Forwarder 82% C4. and C5. Bl&A Submissions

% of files submitted	% of files submitted on time
84%	84%

A3. Cycle time (average)

Fulfillment Channel	Direc	t Drop	Fulfillment		Ware	house I	ulfillment	Total
Task Order	Air	Land	Multiple	Sea	Air	Land	Sea	
T01	249	207	401	285	226	325	238	233
Adult ARV	287		401	327	273	194	263	284
Condoms	102			239	74		173	193
Laboratory	218	213		431				217
Other Non-pharma	286	173						224
Other Pharma	317	251		258	168	420	298	307
Other RTK	193							193
Pediatric ARV	247			365	242		264	255
Vehicles and Other Equipment		46						46
VMMC		124		239	96	111	157	145
Total	249	207	401	285	226	325	238	233

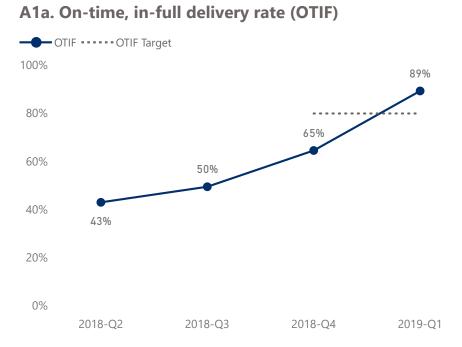
C7a and C7b. Product loss due to expiry, theft, damage, and other causes

Country	Type of Loss	Product Group	Loss Value	Loss Denominator	% Loss
South Sudan	Damage	Adult ARV	\$2,004	\$112,356	1.78%
Nigeria	Damage	ARVs	\$67,637	\$35,574,828	0.19%
Rwanda	Damage	ARVs	\$6	\$4,195,060	0.00%
Ethiopia	Damage	Food and WASH	\$3,933	\$2,745,393	0.14%
RDC	Damage	Other Pharma	\$110	\$61,124	0.18%
Rwanda	Damage	VMMC	\$4	\$737,558	0.00%
RDC	Expiry	Other Pharma	\$58,130	\$32,809,243	0.18%
Nigeria	Other	ARVs	\$9,935	\$35,574,828	0.03%

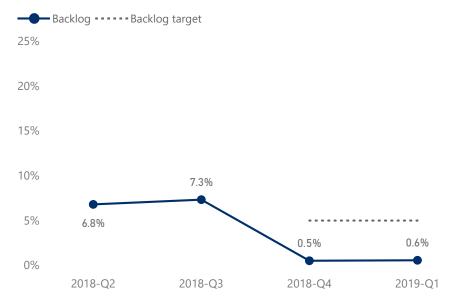
Task Order 2 Performance

USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM-Procurement and Supply Management

Delivery Performance



A16. Backlog percentage



Task Order	\checkmark	Product Category	\sim
TO2	\checkmark	All	\sim

-----OTD -----OTD Target 100% 88% 94% 80% 63% 60% 40% 46% 20% 0% 2018-Q2 2019-01 2018-03 2018-04

Total number of line items delivered

Task Order TO2 195 220 188 200 150 137 100 50 0 2018-Q2 2018-Q3 2018-Q4 2019-Q1

Analysis

Across the project, performance exceeded the targets on three key delivery indicators. OTIF rose to its highest performance so far, at 84 percent. OTD was 85 percent, and backlog was 2.8 percent.

Task Order 2 had its strongest guarter of the last year, reaching 89 percent OTIF and 94 percent OTD. Backlog percentage remains very low. Performance for ACTs was particularly strong, reaching 100 percent OTD and with zero line items remaining in backlog at the end of the quarter.

Data notes
Tracer product disaggregations for these indicators are available in the "Complete Quarterly Results" pages of this Annex.
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.

A1b. On-time delivery rate (OTD)

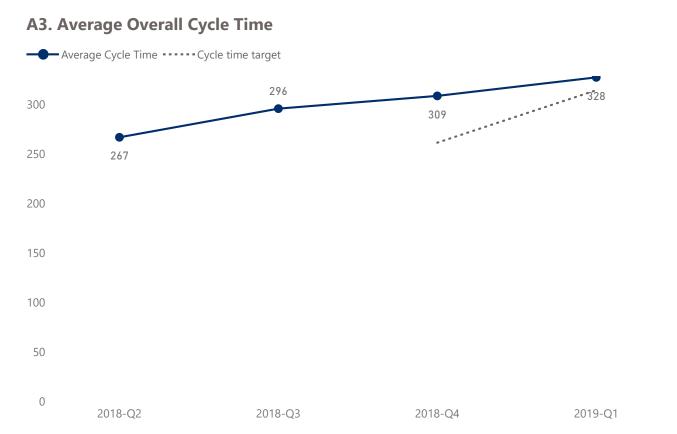
Cycle Time Performance

Task Order		Product Category
TO2	\sim	All

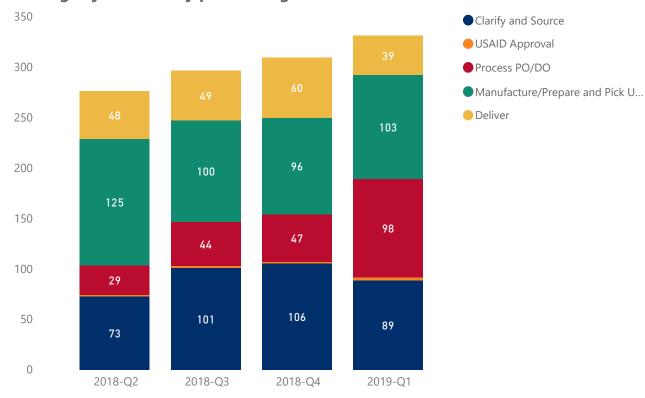
Fulfillment channel

 \sim

All



Average cycle times by process segment



Analysis

End-to-end cycle time for malaria products increased this quarter, although there was an improvement in the cycle time for direct drops. The increase for RDC deliveries was largely driven by a large group of about 30 Severe Malaria Medicines line items for DRC with cycle times of more than one year. These long cycles were anticipated and planned for, and all arrived on-time and in-full. At the product category level, performance was strong for ACTs, and mRDTs, both of which came down significantly from Q4 performance over 300 days to Q1 performance in the 250s.

Due to system requirements, items that are fulfilled by the supplier but then transit through the RDC are tracked and reported as RDC fulfilments for this indicator.

Cycle time for TO2 QA processes averaged 45 days from Actual GAD to QA complete date.

Data notes

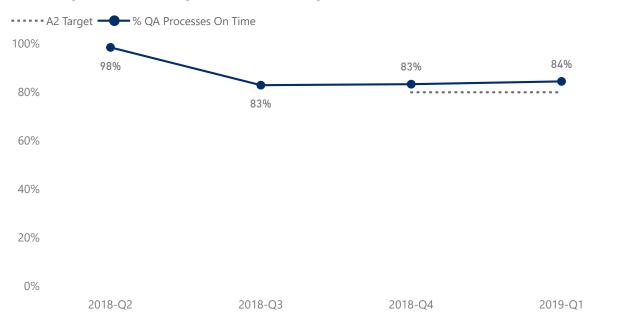
Data on overall cycle start and end dates are complete for all line items delivered this quarter. However, internal milestone data may not be complete for some line items. In these cases, line items with incomplete data are excluded from the segment averages. For this reason, the sum of all segments 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.

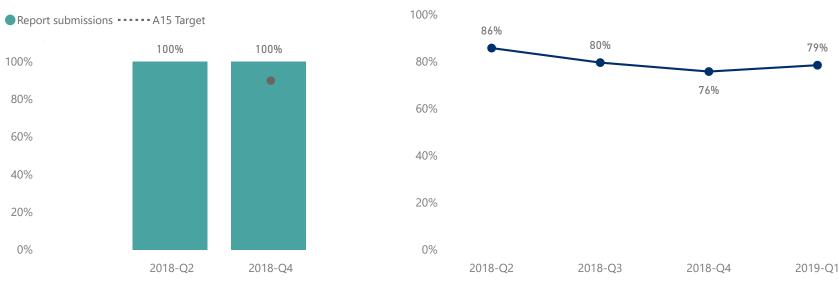
Tracer product disaggregations for this indicator are available in the "Complete Quarterly Results" pages of this Annex.

Quality Assurance Performance (TO2 only)



A2. QA processes completed within required lead times

A15. QA investigation reports submitted on-time A14b. Average QA lab vendor rating



A13. Percent out-of-spec	Indicators	Analysis
2019-Q1 0.0% 2018-Q4 0.0%	A2	The percentage of QA processes completed within the required lead times is above the target and on par with the previous two quarters. Performance for LLINs is particularly strong, with 100 percent of processes completed on time for the last four quarters. mRDTs and severe malaria medicines also performed above the target, and ACTs improved from the previous quarter.
	A15	This is a semi-annual indicator. It will next be reported in FY2019 Q2.
2018-Q3 0.2%	A13	This quarter, 280 batches of product were tested, none of which were out of specification.
2018-Q2 0.2%	A14b	This quarter, an additional lab vendor began performing quality assurance testing services, bringing the number of labs to four. Performance overall has remained relatively stable, hovering at about 80 percent for the last three quarters. The weakest components this quarter were reliability (timeliness of service- -58 percent) and service (67 percent); however, several labs performed well in these areas while others did not.

Product Category

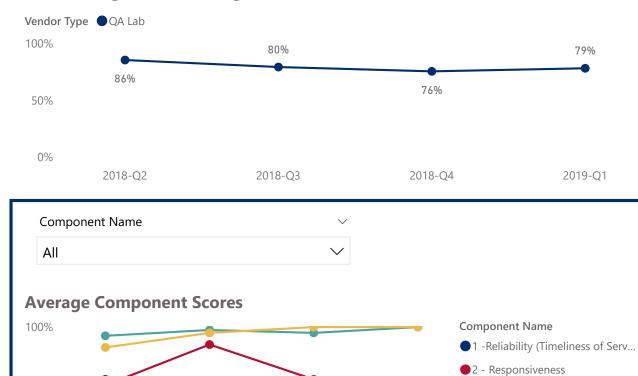
All

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TO3, and TO	ties for TO2 are conducted by GHSC-PSM. All QA activities for TO1, 4 are managed by the USAID GHSC-QA contract. GHSC-QA may be or data related to these TOs.
from indicat method trar	procedures outside of routine QA testing and clearance are exclude or A2. This includes consignments requiring QA investigations, sfers, non-PMI procurements, post-shipment quality control, and nts requiring witnessing of loading and/or sealing of goods.
Quarterly in	dicator targets are effective beginning FY2018 Q4.

Detailed Vendor Performance



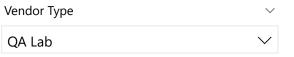
• 3 - Completeness of Document...

4 - Cost5 - Service

A14. Average vendor rating score - Overall

80%

60%



Data notes Per the GHSC-PSM M&E plan, targets are not required for vendor performance indicators. See "Indicator Details" pages in this report for more information.

Component Indicators, Weighting, and Indicator Scores for Current Period

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?	58%	43%	25%
2 - Responsiveness	Does the lab provide prompt response after receipt of GHSC-PSM request for testing	82%	15%	12%
3 - Completeness of Documentation	Frequency of modification to Certificates of Analysis (CoA)	98%	18%	17%
4 - Cost	Submitted invoices for routing testing adhere to set IDIQ pricing	100%	15%	15%
5 - Service	Adherence to other terms and conditions, not related to reliability, responsiveness, completeness, and cost (Qualitative)	67%	10%	7%
Total			100%	76%

40%					
20%					
0%	2018-Q2	2018-Q3	2018-Q4	2019-Q1	

29

Procurement Performance

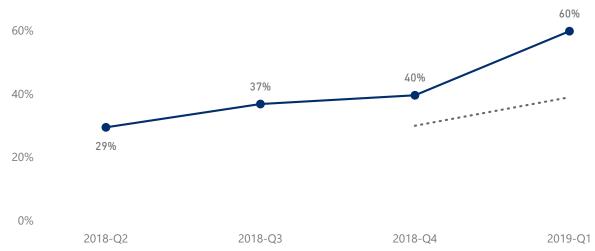
Task Order	\sim	Produ
TO2	\checkmark	All

Product Category	\checkmark
All	\sim

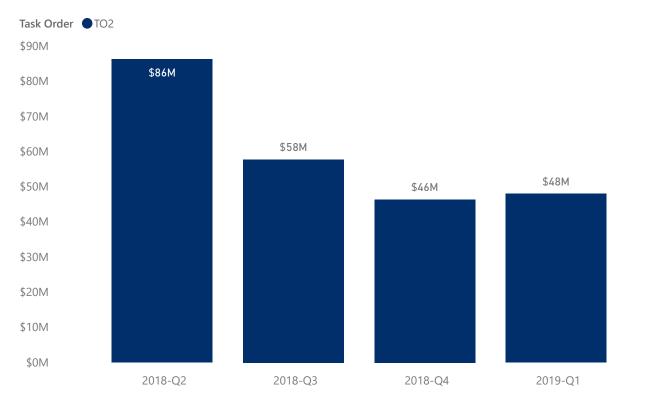
A10. Framework contract percentage







Procurement totals



Analysis

Overall procurement totals for TO2 are up slightly this quarter from last quarter, bucking the normal trend found during Q1 of a new fiscal year (which usually sees less procurement). This uptick in procurement activity can be attributed to a \$7 million increase in procurement of malaria rapid diagnostic tests (mRDTs) coupled with a decrease in several other categories (notably ACTs and LLINs) which together netted the \$2 million procurement total increase for TO2.

The percentage of products procured through a framework contract has increased significantly to 60 percent, up from 40 percent at the end of FY18. This increase is driven primarily by mRDTs, for which framework contracts were recently executed. This quarter saw \$9.4 million worth of mRDTs procured through framework contracts, representing 92 percent of all mRDT procurements this quarter.

Data notes

Tracer product disaggregations for these indicators are available in the "Complete Quarterly Results" pages of this Annex.

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.

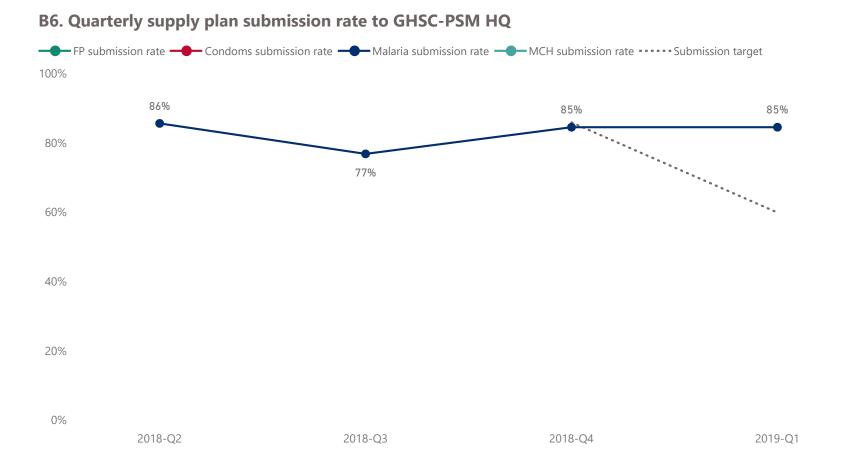
Framework contracts include indefinite delivery, indefinite quantity contracts (IDIQs), blanket purchase agreements (BPAs), and basic ordering agreements (BOAs). Non-framework contracts include firm fixed price and fixed unit price subcontracts, simplified purchase agreements, and other types of one-off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

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

Supply Plan Submission

Product Group

Malaria commodities \checkmark



Analysis

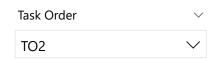
Malaria supply plans submission exceeded the target this quarter. While expectations and submissions remained steady from Q4 to Q1, the malaria program is expanding its requirements for central level supply plan submissions this year. Submissions may fluctuate in future quarters as new countries are incorporated into the planning requirements.

Data notes

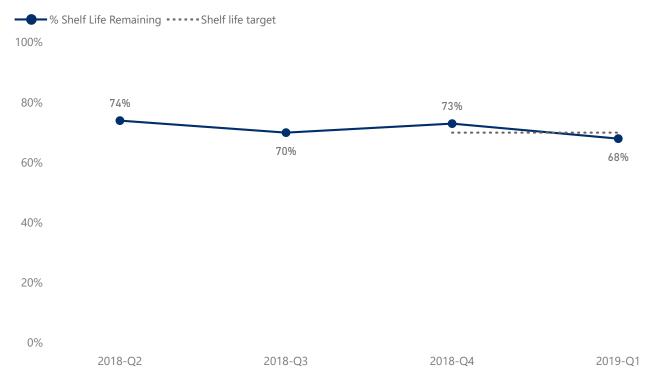
See "Indicator Details" pages in this report for more information.

Targets reflect desired project performance on the four-quarters indicator, beginning FY2018 Q4.

Warehouse Performance



A8. Shelf life remaining



A4. Inventory turns



C7a. Product losses due to expiry in GHSC-PSM-controlled warehouses

Reporting F	eriod Task Order	Product Group	Loss Value	% Loss	
-------------	------------------	---------------	------------	--------	--

Analysis

Shelf life remaining in the RDCs for TO2 products has decreased slightly to 68 percent from 73 percent last quarter and has dipped below the target. Despite the decrease, most of the products with low shelf life have already been allocated to countries and there is no concern or risk of expiry. Additionally, TO2 has been utilizing the RDCs differently than other TOs, notably for holding products during waiver approval processes (which can be multi-month holds for some countries) or for QA testing purposes, meaning that shelf life will be lower because of these extended processes.

There are no expiries to report for TO2 this quarter.

Data notes

Quarterly indicator targets are effective beginning FY2018 Q4. Per the project M&E plan, no targets are required for indicator C7a. Product loss due to expiry.

Inventory turns is an annual indicator, reported Q4 of each fiscal year.

Expired inventory is excluded from shelf life calculations (A8). It is reported under product loss.

Average inventory balance (A4 and C7a denominator) is calculated using the ending balance at the close of each month.

Complete Quarterly Results (TO2)

Reporting Period

2019-Q1

0.0%

0.0%

9

280

A1a. OTIF rate A16. Backlog perentage A10. Framework contracting A2. QA processes on time A13 Out-of-spec A15. QA report submission A1b. OTD rate Task Order Total # of Line Procurement total % QA # of reports OTIF Total # of Line OTD Backlog Total # of line Framework Total # of QA Out-of-Total # of Report batches items with ADDs in contract Processes specification submissions due Items Delivered Items with ADDs processes the last 12 months On Time in the quarter percentage completed percentage tested TO2 0.6% 708 84% 58 280 89% 188 94% 189 60% \$48,052,153 0.0% ACTs 93% 60 100% 61 263 98% \$11,533,056 77% 13 0.0% 131 55 Laboratory 100% 4 100% 4 0% \$7,050 91% 56 1.2% 167 0% \$17,978,765 100% 0.0% 24 LLINs 54 88% 19 mRDTs 44% 16 82% 11 63 92% \$10,279,129 91% 11 0.0% 41 28 0% 0 Other Non-pharma 4 100% 4 \$192,000 100% Other Pharma 100% 3 100% 4 31 100% \$1,113,439 50% 6 0.0% 40 47 2.3% 87 6 35 Severe Malaria Meds 45 94% 100% \$5,808,062 100% 0.0% 96%

100%

60%

14

708

A3. Cycle time (average)

100%

89%

SP

Total

Fulfillment Channel	Direct Drop Fulfillment			Ware	Total	
Task Order ▲	Air	Land	Sea	Air	Land	
ТО2	242	113	358	425	97	328
ACTs	230			315	97	257
Laboratory	194		382			241
LLINs		170	358			347
mRDTs	232		437	287		255
Other Non-pharma		56	274			111
Other Pharma	324					324
Severe Malaria Meds	280			515		452
SP				343		343
Total	242	113	358	425	97	328

2

188

100%

94%

2

189

0.6%

A6a. Absolute percent supply plan error

A6 Indicator	Supply plan/	Supply plan/	4-quarter	4-quarter
•	forecast error	forecast bias	error	bias

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

33%

84%

3

58

\$1,140,653

\$48,052,153

Country	Type of Loss	Product Group	Loss Value	Loss Denominator	% Loss
RDC	Damage	ACTs	\$58	\$3,999,806	0.00%
Nigeria	Damage	LLINs	\$725	\$15,336,948	0.00%
RDC	Damage	Severe Malaria Meds	\$401	\$4,380,052	0.01%

B6. Quarterly supply plan submissions

Product Group	Supply plan submission rate	# of supply plans required
Malaria commodities	85%	13

A8. Shelf life remaining

% Shelf Life Remaining	Inventory Balance
77%	\$21,517,197

A14. Average vendor rating - QA labs

Average vendor rating

79%

A14. Average vendor ratingsCrosscutting
indicatorsVendor TypeAverage vendor ratingCommodity Supplier75%Freight Forwarder82%

C4. and C5. BI&A Submissions

% of files submitted	% of files submitted on time
84%	84%

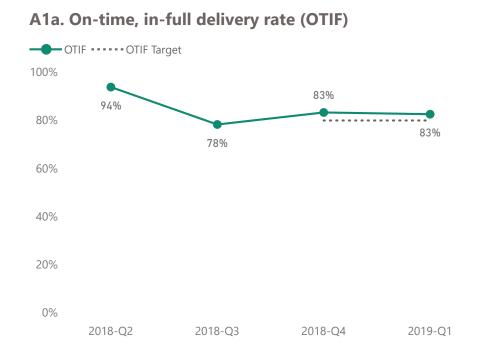
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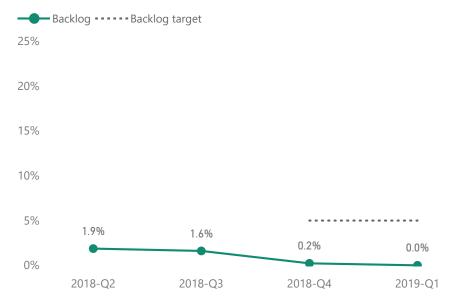
Task Order 3 Performance

USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM-Procurement and Supply Management

Delivery Performance



A16. Backlog percentage

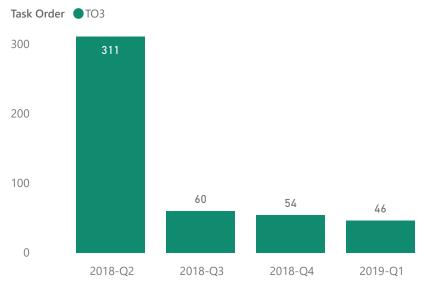


Task Order	\sim	Product Category	\sim	
TO3	\sim	All	\sim	

A1b. On-time delivery rate (OTD)

-----OTD -----OTD Target 100% 95% 94% 92% 80% 72% 60% 40% 20% 0% 2018-Q2 2018-03 2018-04 2019-01

Total number of line items delivered



Analysis

Across the project, performance exceeded the targets on three key delivery indicators. OTIF rose to its highest performance so far, at 84 percent. OTD was 85 percent, and backlog was 2.8 percent.

Task Order 3 performance has remained strong for OTD, and all backlog was cleared this quarter. OTIF performance has also remained steady, at 83 percent.

Data notes
Tracer product disaggregations for these indicators are available in the "Complete Quarterly Results" pages of this Annex.
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.

35

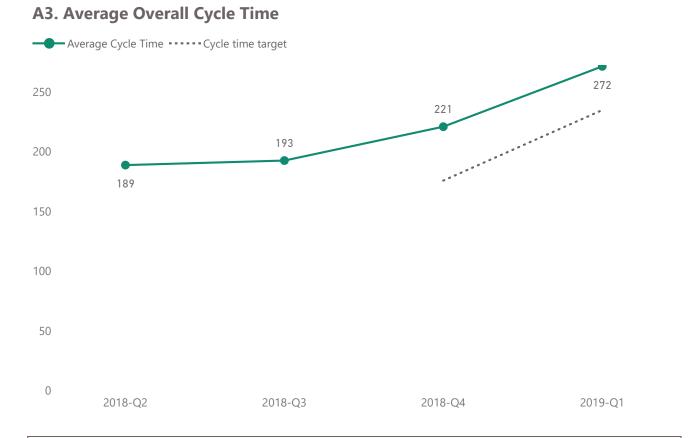
Cycle Time Performance

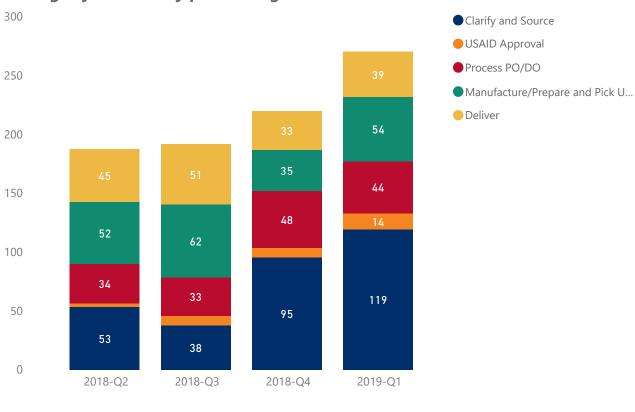
Task Order		Product Category
ТОЗ	\sim	All



Average cycle times by process segment

 \sim





Analysis

Overall cycle time for Task Order 3 increased for both direct drop and warehouse fulfillments this quarter. Both were driven by outliers. A single direct drop implants line item for Senegal was ordered two and a half years ahead of the requested delivery date and had a final cycle time of over 900 days.

If this line is excluded, direct drop performance is almost exactly at the target (277 days, against a target of 275). Another early order from Senegal drove up the RDC cycle time, with an 838-day cycle time.

Even with these outliers, long cycle times on TO3 are believed to be mainly due to long periods of hold or dwell time, when orders are placed early and do not need to be processed until closer to their Requested or Agreed Delivery Dates. The project is moving to implement new functionalities and policies to begin tracking this inactive time and enable more focused reporting on active cycle time.

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.

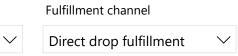
Overall cycle time is defined as the number of days between when a customer order is submitted to when the shipment is actually delivered to the customer, inclusive of the start/end days and all holds or other dwell times. The project is implementing new dwell tracking procedures, with the intent of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

Quarterly indicator targets are effective beginning FY2018 Q4.

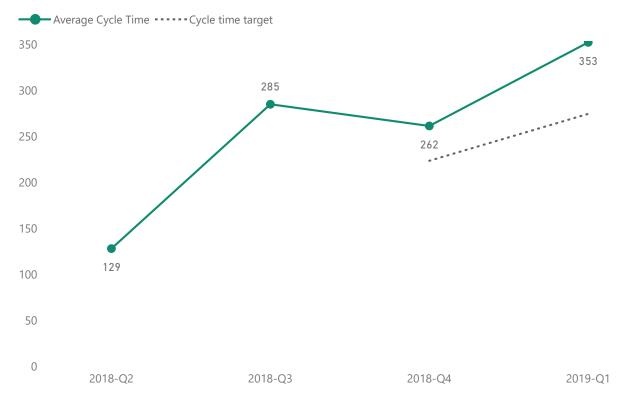
Tracer product disaggregations for this indicator are available in the "Complete Quarterly Results" pages of this Annex.

Cycle Time Performance

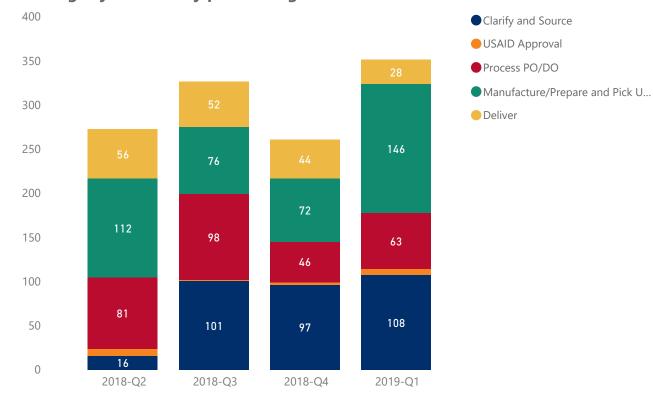
Task Order		Product Category
ТОЗ	\sim	All



A3. Average Overall Cycle Time



Average cycle times by process segment



Analysis

Overall cycle time for Task Order 3 increased for both direct drop and warehouse fulfillments this quarter. Both were driven by outliers. A single direct drop implants line item for Senegal was ordered two and a half years ahead of the requested delivery date and had a final cycle time of over 900 days.

If this line is excluded, direct drop performance is almost exactly at the target (277 days, against a target of 275). Another early order from Senegal drove up the RDC cycle time, with an 838-day cycle time.

Even with these outliers, long cycle times on TO3 are believed to be mainly due to long periods of hold or dwell time, when orders are placed early and do not need to be processed until closer to their Requested or Agreed Delivery Dates. The project is moving to implement new functionalities and policies to begin tracking this inactive time and enable more focused reporting on active cycle time.

Data notes

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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.

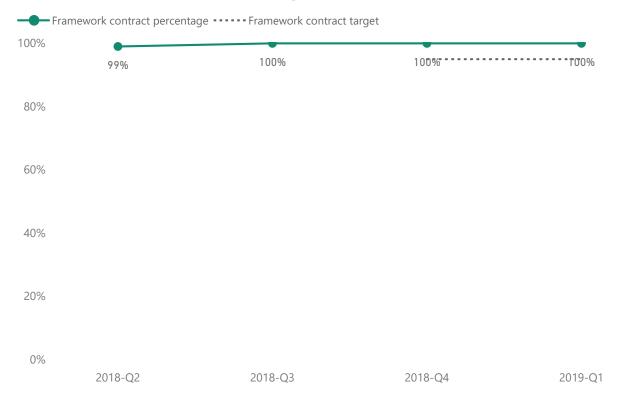
Tracer product disaggregations for this indicator are available in the "Complete Quarterly Results" pages of this Annex.

Procurement Performance

Task Order	\sim
ТОЗ	\sim

Product Category	\sim
All	\sim

A10. Framework contract percentage



Procurement totals



Analysis

Overall procurement totals for TO3 are up this quarter from last quarter, bucking the normal trend found during Q1 of a new fiscal year (which usually sees less procurement). This uptick in procurement activity can be attributed to a \$6.9 million increase in procurement of injectable contraceptives. FY18 saw global shortages of some injectable contraceptives and this may indicate that purchasing is returning to normal levels.

The percentage of products procured through a framework contract has remained at 100 percent for TO3 for the last three quarters.

Data notes

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

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.

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.

Tracer product disaggregations for these indicators are available in the "Complete Quarterly Results" pages of this Annex.

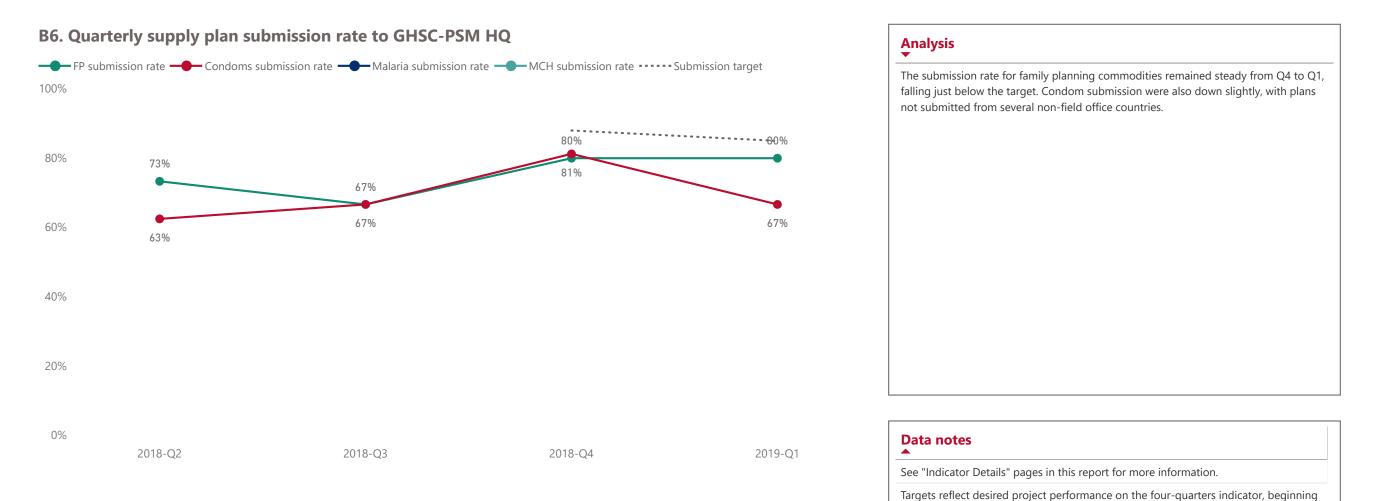
Supply Plan Submission

Product Group

Multiple selections ~~

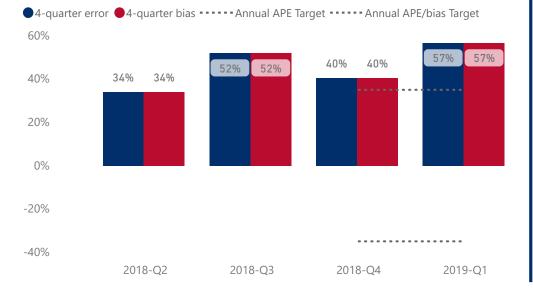
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FY2018 Q4.



Implantable Contraceptives \checkmark A6b. Forecast error - single quarter • Supply plan/ forecast error • Supply plan/ forecast bias 60% 57% 57% 39% 39% 40% 20% 1% 1% 0% 0% 0% 2018-Q2 2018-Q3 2019-Q1 2018-Q4

A6b. Forecast error - rolling four quarters



Injectable Contraceptives

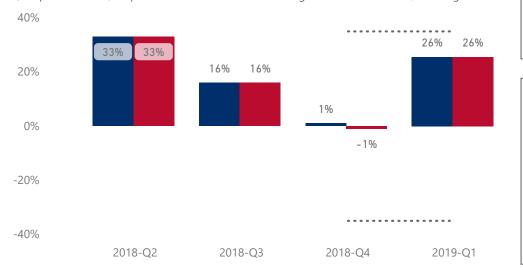
A6b. Forecast error - single quarter





●4-quarter error ●4-quarter bias •••••Annual APE Target •••••Annual APE/bias Target

A6b. Forecast error - rolling four quarters



Analysis

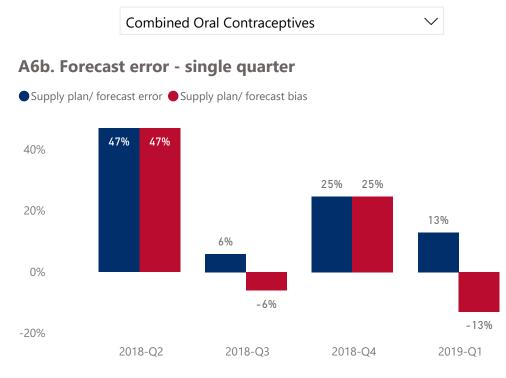
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For most family planning products, quarterly forecast error has shrunk (combined oral contraceptives, copper-bearing intrauterine devices, injectables, progestin-only pills) or remained small (implants) since the previous quarter. Discrepancies are usually driven by countries requesting orders with less than three months of lead time, so that they do not appear in the forecast, or shifting the requested delivery date into another quarter. The project is reminding countries of the 90-day lead time recommendation and closely monitoring countries with frequent order changes or cancellations.

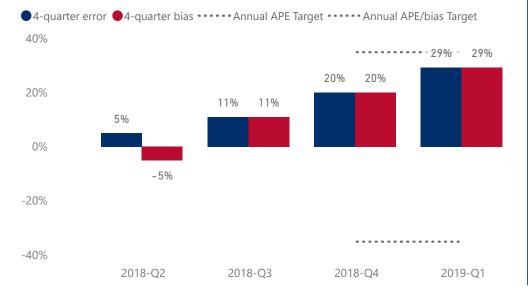
Condom forecast error shrank slightly this quarter, although there was still a sizeable overforecast. This was due mainly to an ARTMIS order entry error that resulted in duplicate order quantities, and one order for Senegal that was requested for a later period. Two quarters of wider variance has pushed the four-quarter performance outside the target range. The Plan and Procurement teams are monitoring orders closely to flag potential entry errors early on, especially for countries that have had these types of errors in the past.

Data notes

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

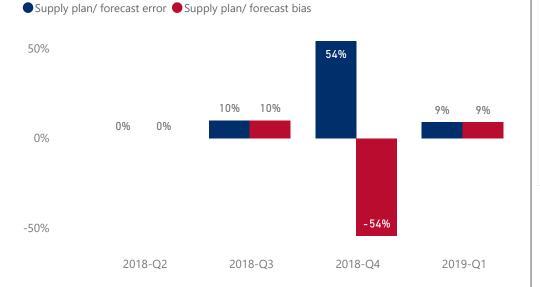


A6b. Forecast error - rolling four quarters



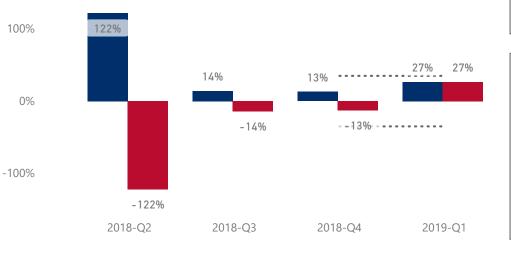
Progestin Only Pills

A6b. Forecast error - single quarter



A6b. Forecast error - rolling four quarters

●4-quarter error ●4-quarter bias •••••Annual APE Target •••••Annual APE/bias Target



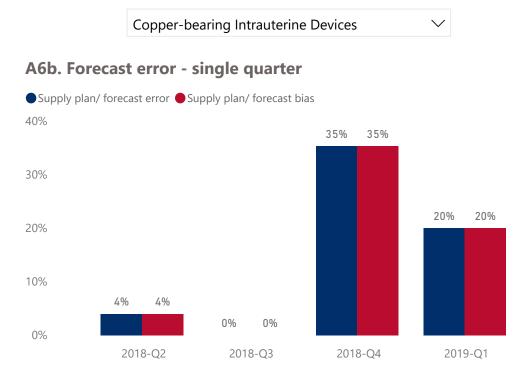
Analysis

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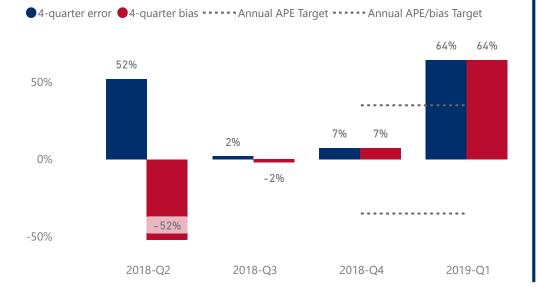
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Data notes See "Indicator Details" pages in this report for more information.

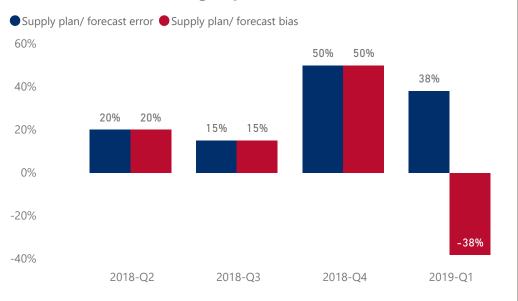


A6b. Forecast error - rolling four quarters

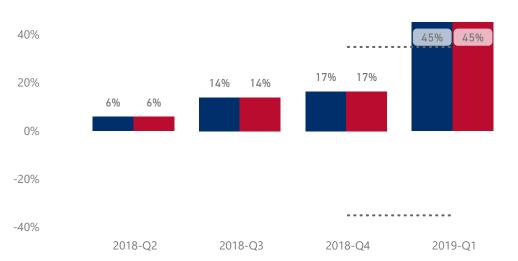


Condoms

A6b. Forecast error - single quarter



A6b. Forecast error - rolling four quarters



●4-quarter error ●4-quarter bias •••••Annual APE Target •••••Annual APE/bias Target

Analysis

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For most family planning products, quarterly forecast error has shrunk (combined oral contraceptives, copper-bearing intrauterine devices, injectables, progestin-only pills) or remained small (implants) since the previous quarter. Discrepancies are usually driven by countries requesting orders with less than three months of lead time, so that they do not appear in the forecast, or shifting the requested delivery date into another quarter. The project is reminding countries of the 90-day lead time recommendation and closely monitoring countries with frequent order changes or cancellations.

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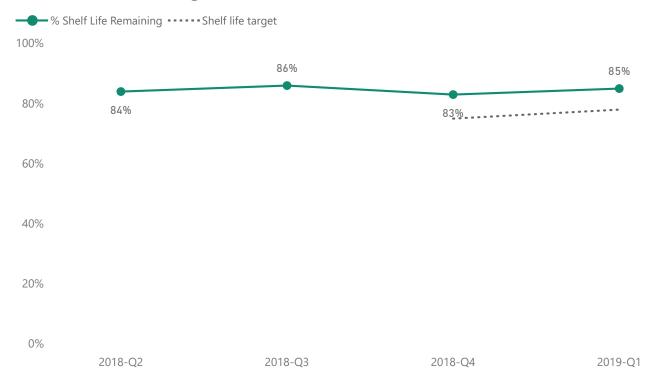
Data notes

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

Warehouse Performance

Task Order	\checkmark
ТОЗ	\checkmark

A8. Shelf life remaining



A4. Inventory turns



C7a. Product losses due to expiry in GHSC-PSM-controlled warehouses

Reporting Pe	riod Task Ord	r Product Group	Loss Value	% Loss	
--------------	---------------	-----------------	------------	--------	--

Analysis	Data notes
Shelf life remaining in the RDCs for TO3 products has increased slightly to 85 percent from 83 percent last quarter and is well above the target of 78 percent. Large volumes of long shelf life products (such as implantable contraceptives) continue to keep this indicator performing well. There are no expiries to report this quarter.	Average inventory balance (A4 and C7a denominator) is calculated using the ending balance at the close of eac month.
	Expired inventory is excluded from shelf life calculations (A8). It is reported under product loss.
	Inventory turns is an annual indicator, reported Q4 of each fiscal year.
	Quarterly indicator targets are effective beginning FY2018 Q4. Per the project M&E plan, no targets are require indicator C7a. Product loss due to expiry.
	Task Order 1 inventory includes all condoms. GHSC-PSM does not hold any inventory for Task Order 4.

Complete Quarterly Results (TO3)

Reporting Period

2019-Q1

	A1a. C	OTIF rate	A1b.	OTD rate	A16. Bac	klog perentage	A10. Fra	mework contracting	A6b. Absolute percent fore	cast error		
Task Order	OTIF	Total # of Line Items Delivered	OTD	Total # of Line Items with ADDs	5	Total # of line items with ADDs in		Procurement total	A6 Indicator	Supply plan/ forecast error	Supply plan/ forecast bias	4-quarter error
A				in the quarter		the last 12 months	percentage		A6b - Forecast error			
тоз	83%	46	92%	48	0.0%	462	100%	\$14,247,022	Combined Oral Contraceptives	13%	-13%	29%
All Other TO3 Products	100%	1							Condoms	38%	-38%	45%
Combined Oral Contraceptives	79%	14	93%	14	0.0%	40	100%	\$260,208	Copper-bearing Intrauterine	20%	20%	64%
Copper-bearing Intrauterine Devices	100%	4	100%	4	0.0%	14	100%	\$33,567	Devices			
Emergency Oral Contraceptives	50%	2	100%	2	0.0%	6	100%	\$8,640	Implantable Contraceptives	1%	1%	57%
Implantable Contraceptives	100%	5	100%	7	0.0%	47	100%	\$6,660,056	Injectable Contraceptives	22%	-22%	26%
Injectable Contraceptives	86%	14	87%	15	0.0%	55	100%	\$6,979,703	Progestin Only Pills	9%	9%	27%
Laboratory					0.0%	4						
Other Non-pharma	50%	2	100%	1	0.0%	72	100%	\$89,496				
Other Pharma					0.0%	202						
Other RTK					0.0%	2						
Progestin Only Pills	67%	3	75%	4	0.0%	14	100%	\$215,352				
Standard Days Method	100%	1	100%	1	0.0%	6						
Total	83%	46	92 %	48	0.0%	462	100%	\$14,247,022				

A3. Cycle time (average)

Fulfillment Channel	Direc	t Drop Fulfillment	Ware	house Fulfillment	Total
Task Order ▲	Air	Sea	Air	Sea	
тоз	496	281	323	228	287
All Other TO3 Products	70				70
Combined Oral Contraceptives		280	388	206	294
Copper-bearing Intrauterine Devices			316		316
Emergency Oral Contraceptives	456			241	349
Implantable Contraceptives	961		347	159	432
Injectable Contraceptives		170	147	243	224
Other Non-pharma		327			327
Progestin Only Pills			286	241	271
Standard Days Method		303			303
Total	496	281	323	228	287

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

C	Country	Type of Loss	Product Group	Loss Value	Loss Denominator	% Loss	
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B6. Quarterly supply	plan submissions
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Product Group	Supply plan submission rate	# of supply plans required
Condoms	67%	15
FP commodities	80%	15

A8. Shelf life remaining

% Shelf Life Remaining	Inventory Balance
Remaining	
85%	\$15,859,252

Crosscutting indicators A14. Average vendor ratings

Vendor Type	Average vendor rating
Commodity Supplier	75%
Freight Forwarder	82%

C4. and C5. BI&A Submissions

% of files submitted	% of files submitted on time
84%	84%

 \sim

 \checkmark

29%

45%

64%

57%

26%

27%

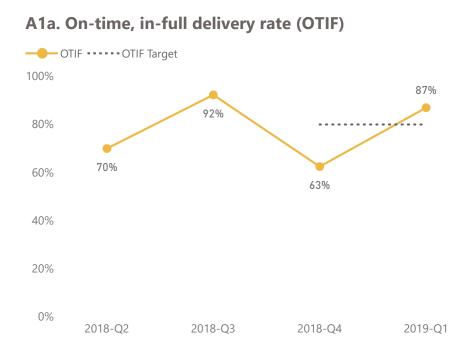
4-quarter

bias

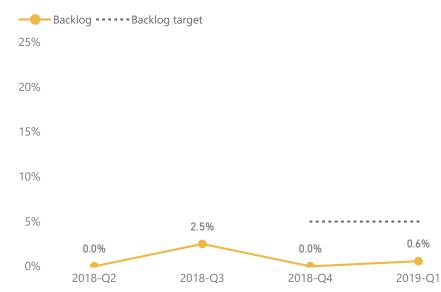
Task Order 4 Performance

USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM-Procurement and Supply Management

Delivery Performance



A16. Backlog percentage



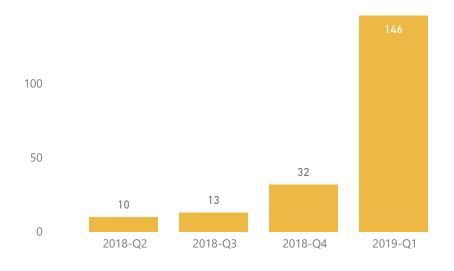
Task Order	\sim	Product Category	\sim	
TO4	\sim	All	\sim	

A1b. On-time delivery rate (OTD)

----- OTD ----- OTD Target 100% 89% 97% 82% 80% 68% 60% 40% 20% 0% 2018-Q2 2018-Q3 2018-Q4 2019-Q1

Total number of line items delivered

Task Order
TO4



Analysis

Across the project, performance exceeded the targets on three key delivery indicators. OTIF rose to its highest performance so far, at 84 percent. OTD was 85 percent, and backlog was 2.8 percent.

Task Order 4 saw a large spike in deliveries this quarter, driven mainly by a large order of over 130 line items for DRC. Despite this increased volume and the complexities of shipping to this destination, OTIF and OTD performance were both very high for the quarter, at 87 and 97 percent respectively. Backlog increase was minimal, with only one outstanding line item at the end of the quarter.

▼
Tracer product disaggregations for these indicators are available in the "Complete Quarterly Results" pages of this Annex.
See "Indicator Details" pages in this report for more information.

Data notes

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.

Cycle Time Performance

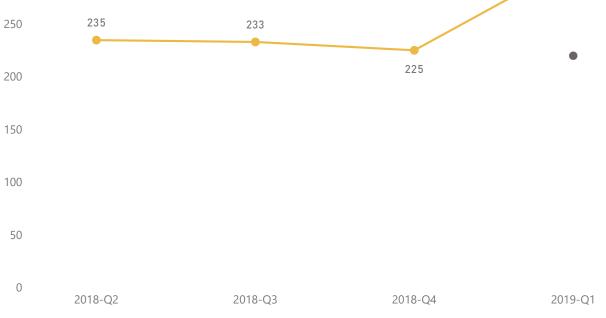
Task Order		Product Category
TO4	\sim	All

308

Fulfillment channel

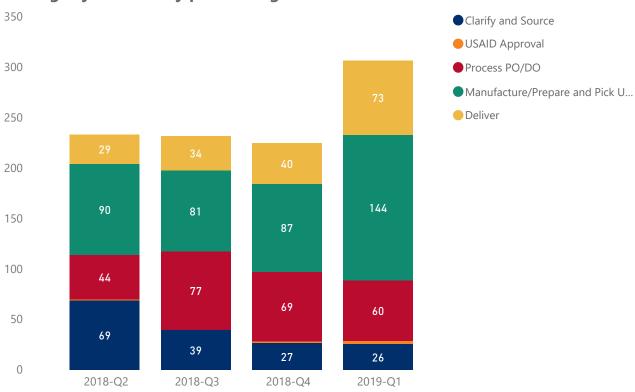
 \checkmark All

A3. Average Overall Cycle Time ----- Average Cycle Time ----- Cycle time target 235 233



Average cycle times by process segment

 \checkmark



Analysis

300

TO4 cycle time spiked this quarter, mainly due to a large delivery of more than 130 line items for DRC. For comparison, typical delivery volume for this task order has been only a few dozen lines. Given DRC's lengthy waiver process, long lead times for these items are taken into account during order processing. Despite the long cycle times, 90 percent of these lines were delivered on time.

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.

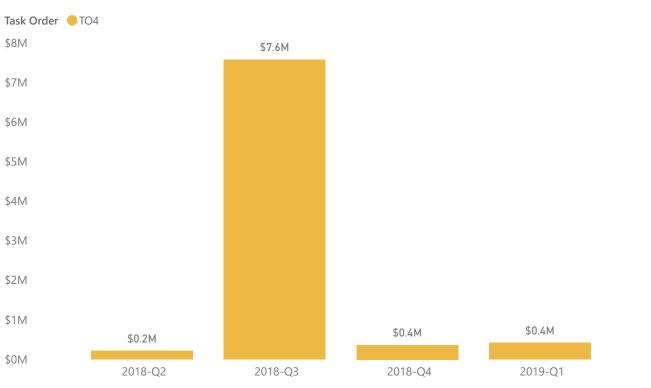
Tracer product disaggregations for this indicator are available in the "Complete Quarterly Results" pages of this Annex.

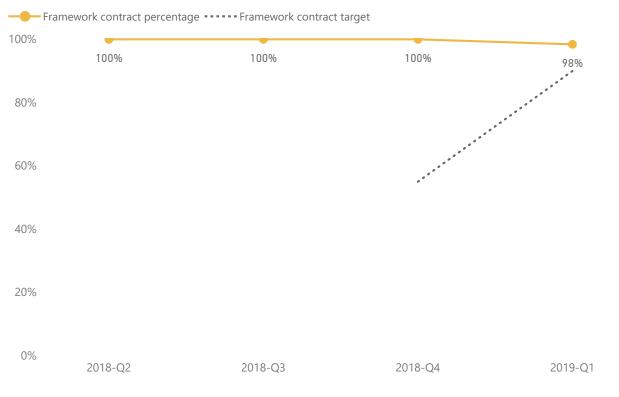
Procurement Performance

Task Order	\sim
TO4	\sim

Product Category	\checkmark
All	\checkmark

A10. Framework contract percentage





ooking at A10, the percentage of products procured through a framework contract decreased slightly to 98 percent. This vas due to a special order for DRC that was not anticipated.
Overall procurement totals are up slightly from last quarter. TO4 procurements are more limited, so they are not affected b seasonal influences found in other TOs.
TO4 procurement totals include purchases of both MNCH and Zika commodities.

Data notes

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

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.

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.

Tracer product disaggregations for these indicators are available in the "Complete Quarterly Results" pages of this Annex.

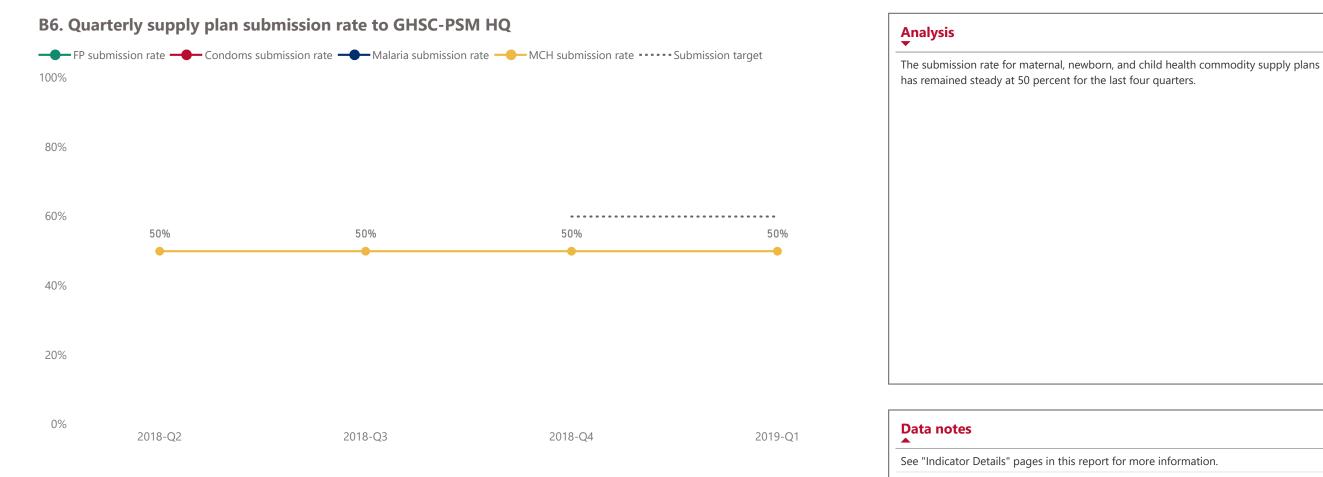
Procurement totals

Supply Plan Submission

Product Group

MCH commodities ~~

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Targets reflect desired project performance on the four-quarters indicator, beginning FY2018 Q4.

Complete Quarterly Results (TO4)

	41a. 0 1	TIF rate	41b. O	TD rate A	16. Back	log perentage	A10. Fram	nework contract
Task Order	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	87%	146	97 %	133	0.6%	174	98 %	\$427,997
Food and WASH	100%	8	100%	8		8		
Laboratory							0%	\$6,743
Other Non-pharma	57%	7	57%	7	3.4%	29	100%	\$421,254
Other Pharma	88%	128	99%	115		134		
Other RTK	100%	3	100%	3		3		
Total	87%	146	97 %	133	0.6%	174	98 %	\$427,997

Reporting Period

2019-Q1

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

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Vendor Type	Average vendor rating
Commodity Supplier	75%
Freight Forwarder	82%

C4. and C5. BI&A Submissions

% of files submitted	% of files submitted on time
84%	84%

A3. Cycle time (average)

Fulfillment Channel	Direc	Total	
Task Order	Air	Sea	
TO4	297	321	308
Food and WASH	292		292
Other Non-pharma		249	249
Other Pharma	302	330	315
Other RTK	186		186
Total	297	321	308

Check out the <u>GHSC-PSM IDIQ M&E Plan</u> 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.

Check out the <u>GHSC-PSM IDIQ M&E Plan</u> 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
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	

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

Forecast and Supply Planning Indicators

Indicator Code	Name	Numerator	Denominator	Data Source(s)	Reporting frequency	Other Info
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.
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, and HIV lab products. Malaria commodities will be added to reporting in FY2019 Q2. 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.

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.

Check out the <u>GHSC-PSM IDIQ M&E Plan</u> 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.

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

GHSC-BI&A Data Sharing Indicators

Indicator Code	Name	Numerator	Denominator	Data Source(s)	Reporting frequency	Other Info
C04	Percentage of required files submitted to GHSC-BI&A in the reporting period	Number of required files submitted to BI&A during the quarter	Total number of files required for submission to BI&A during the quarter	GHSC-BI&A File Submission dashboard	Quarterly	Data requirements, including file types, data elements, submission formats, and frequency, are governed by the BI&A Information Specification for Implementing Partners (the "Infospec"). Exceptions may be specified by USAID.
C05	Percentage of required files timely submitted to GHSC- BI&A in the reporting period.	Number of required files timely submitted to BI&A during the quarter	Total number of files required for submission to BI&A during the quarter	GHSC-BI&A File Submission dashboard	Quarterly	Data requirements, including file types, data elements, submission formats, and frequency, are governed by the BI&A Information Specification for Implementing Partners (the "Infospec"). Exceptions may be specified by USAID.
C06	Average percent variance between GHSC-PSM ARTMIS and GHSC-BI&A calculations of key supply chain indicators for Task Order 1	Absolute value of GHSC-BI&A Order Performance indicator value minus GHSC- PSM ARTMIS dashboard indicator value	GHSC-PSM ARTMIS indicator value	ARTMIS, GHSC- BI&A Order Performance dashboard	Quarterly	The two indicators used to asses this variance are: 1) on-time delivery, 2) count of order lines with ADDs in the current period

Check out the <u>GHSC-PSM IDIQ M&E Plan</u> 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 conversation 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

Country M&E Indicator Performance







FY2019 Quarter 1 October - December 2018

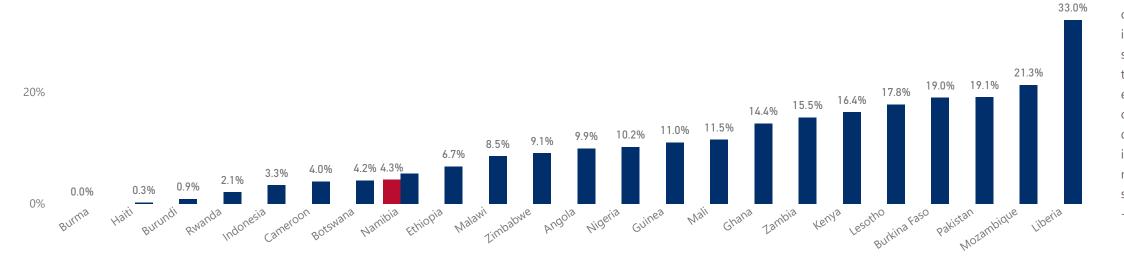
SDP Stockout Rates by Country

GHSC-PSM Support
Not Supported Supported

80%

60%

40%



Task Order Tracer Product \sim \sim All All \checkmark \checkmark Out-of-Cycle Uganda 100% 100% 50% 50% 12.8% 7.8% 0% Uganda 0% Nepal

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 Su	oported	Support	ted															
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%	4.3%	6.7%	4.2%	1.5%	4.0%	6.5%	16.9%	0.2%	3.3%	17.8%	5.2%	13.5%	5.4%	7.3%	2.3%	11.5%	8.5%	8.3%
1st line adult ARV	0.0%	0.0%	0.0%	0.0%	1.1%	2.3%	1.7%	7.6%	0.0%	0.0%	1.0%	0.2%	0.4%	0.0%	4.3%	1.1%	2.8%	25.2%	0.0%
2nd line adult ARV	0.0%	27.3%	0.0%	0.0%	1.2%		12.8%	35.4%	0.7%	0.0%	4.2%	6.0%	2.8%	35.7%	6.1%	2.0%	10.5%	5.4%	8.7%
Pediatric ARV	0.0%	3.0%	0.0%	6.7%	0.8%	5.4%	2.5%	39.5%	0.0%	0.0%	2.4%	2.5%	2.2%	0.0%	5.2%	3.8%	11.7%	6.9%	14.0%
First RTK		0.0%	0.0%	10.0%	2.4%	4.5%	23.4%	2.5%	0.0%	8.3%	11.7%	4.2%	28.5%	0.0%	4.4%	2.5%	6.4%	4.3%	1.4%
Second RTK		0.0%	0.0%	20.0%	2.4%	4.9%	19.0%	4.2%	0.0%	0.0%	34.3%	9.6%	34.7%	0.0%	10.9%	2.8%	10.3%	2.4%	5.3%
Tie-breaker RTK		0.0%					16.0%			8.3%	29.4%			0.0%	7.1%		23.8%		32.6%
Viral load reagent	0.0%			0.0%			0.0%				25.0%		0.0%		4.5%	0.0%	0.0%	0.0%	0.0%
Viral load consumable	0.0%						16.0%								9.1%	0.0%			
EID reagent	0.0%			20.0%			10.5%				0.0%		0.0%		9.1%	0.0%	0.0%	0.0%	0.0%
EID consumable	0.0%			0.0%			5.6%								9.1%	0.0%			
Male condoms (HIV)		0.0%	0.0%	0.0%	0.8%		4.5%	14.7%	0.5%		4.3%	6.0%	30.3%	0.0%	12.8%	2.6%		15.8%	1.4%
Female condoms (HIV)		0.0%	44.4%	3.4%	0.5%			19.3%			7.3%	9.8%	51.9%	0.0%	7.7%	0.0%		20.8%	3.2%
RUTF							10.9%				62.9%						21.9%		
	1																		

SDP Stockout Rates by Country - Malaria

Table 1. Overall malaria stockout rates with product breakdown

GHSC-PSM Support	Support	ed												
Task Order	Angola	Burkina Faso	Burundi	Ethiopia	Guinea	Kenya	Liberia	Malawi	Mali	Mozambique	Nigeria	Rwanda	Zambia	Zimbabwe
TO2-Malaria	13.1%	19.0%	0.9%	10.2%	5.3%	18.8%	32.8%	7.7%	10.0%	27.2%	11.1%	0.6%	15.1%	10.3%
AL 6x1	16.7%	23.9%		17.1%	5.6%	43.8%	21.0%	11.5%	7.1%	31.3%	8.3%	1.0%	9.9%	7.4%
AL 6x2	8.3%	12.3%		10.6%	5.1%	33.6%	21.0%	5.6%	12.1%	25.6%	11.6%	0.8%	15.3%	16.8%
AL 6x3	8.3%	24.3%		11.8%	5.3%	9.1%	33.3%	2.7%	23.4%	35.1%	18.1%	0.7%	11.7%	12.6%
AL 6x4	8.3%	17.8%		5.7%	9.4%	8.5%	40.7%	4.4%	10.4%	33.2%	10.9%	0.7%	15.3%	5.9%
AS/AQ 100/270mgx3		36.4%	0.0%				43.2%				5.2%			
AS/AQ 100/270mgx6		38.6%	2.6%				16.0%				6.9%			
AS/AQ 25/67.5mg			0.2%				66.7%				4.7%			
AS/AQ 50/135mg			0.7%				45.7%				6.1%			
mRDT	16.7%	5.9%	1.1%	9.3%	3.0%	11.5%	17.3%	3.2%	4.9%	15.7%	12.1%	0.0%	5.1%	2.6%
SP	100.0%	6.5%	0.8%		3.8%	6.4%	33.3%	7.3%	4.4%	24.4%	8.5%		36.3%	24.3%
LLINs		5.4%	0.7%				22.2%	21.8%	11.1%	22.7%	34.6%			

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

GHSC-PSM Support	Support													
Task Order	Angola	Burkina Faso	Ethiopia	Guinea	Kenya	Liberia	Malawi	Mali	Mozambique	Nigeria	Rwanda	Uganda	Zambia	Zimbabwe
TO2-Malaria														
AL inability to treat	0.0%	4.1%	3.9%	0.2%	2.2%	3.7%	0.3%	1.1%	0.0%	4.2%	0.0%	7.1%	8.9%	0.8%

Table 3. Malaria stockout rates for Uganda

GHSC-PSM Support Task Order	Supported Uganda
TO2-Malaria	9.9%
AL inability to treat	7.1%
mRDT	10.2%
SP	13.0%

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 exlcded 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, seprately 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

Table 1. Family planning stockout rates - Product level

Task Order	Burundi	Ethiopia	Ghana	Guinea	Haiti	Kenya	Liberia	Malawi	Mali	Mozambique	Nigeria	Pakistan	Rwanda	Uganda	Zambia
TO3-PRH	0.4%	5.3%	13.9%	17.5%	0.3%	6.5%	33.2%	12.4%	13.0%	30.8%	11.3%	19.1%	3.0%	30.9%	24.0%
Combined oral contraceptive with iron	0.3%	5.0%	14.5%	23.9%	0.5%	8.7%	22.1%	12.5%	16.1%			18.0%	4.5%		29.8%
Combined oral contraceptive										26.5%	11.5%				
1-month injectable										60.5%					
2-month injectable											8.7%				37.9%
3-month injectable	0.3%	2.3%	13.5%	12.6%	0.5%	5.8%	11.7%	23.0%	7.9%	34.0%	10.2%	18.5%	4.5%	30.9%	9.6%
1-rod implant		10.0%				5.8%		16.6%			17.9%		7.4%		28.5%
2-rod implant	0.0%	5.0%	10.8%	14.9%	0.0%	3.9%	23.4%	8.6%	7.5%	22.8%	23.3%		1.2%		32.7%
Emergency contraceptive, 2 tablets	0.7%	8.1%				7.2%	98.6%	8.6%		27.1%					
Progestin only pills	0.8%	5.9%	12.0%	27.1%		7.7%	9.1%	13.8%	21.3%	25.9%	9.9%		1.2%		
Copper-bearing IUD	0.0%	2.1%	28.2%	19.4%	0.0%	5.3%	66.2%	4.4%	11.7%	18.5%	8.5%	23.8%	3.5%		
Calendar-based awareness methods					0.5%		26.3%		13.7%				0.0%		
Male condoms (FP)	0.8%	4.5%	14.7%	10.6%	0.5%	7.7%	11.7%	6.0%	9.8%	30.3%	7.7%	16.3%	2.9%		15.8%
Female condoms (FP)	0.5%		19.3%				34.2%	9.8%	18.6%	51.9%	12.8%		0.0%		20.8%

Table 2. Family planning stockout rates - Method level

Tracer Product	Burundi	Ethiopia	Ghana	Guinea	Haiti	Kenya	Liberia	Malawi	Mali	Mozambique	Nigeria	Pakistan	Rwanda	Uganda	Zambia
Combined oral methods	0.3%	5.0%	14.5%	23.9%	0.5%	8.7%	22.1%	12.5%	16.1%	26.5%	11.5%	18.0%	4.5%		29.8%
Injectable contraceptives	0.3%	2.3%	13.5%	12.6%	0.5%	5.8%	11.7%	23.0%	7.9%	27.0%	3.6%	18.5%	4.5%	30.9%	3.7%
Implantable contraceptives	0.0%	4.2%	10.8%	14.9%	0.0%	1.0%	23.4%	3.1%	7.5%	22.8%	14.7%		0.0%		6.0%
Emergency oral contraceptives	0.7%	8.1%				7.2%	98.6%	8.6%		27.1%					
Progestin-only methods	0.8%	5.9%	12.0%	27.1%		7.7%	9.1%	13.8%	21.3%	25.9%	9.9%		1.2%		
Copper-bearing IUD	0.0%	2.1%	28.2%	19.4%	0.0%	5.3%	66.2%	4.4%	11.7%	18.5%	8.5%	23.8%	3.5%		
Calendar-based awareness methods					0.5%		26.3%		13.7%				0.0%		
Male condoms (FP)	0.8%	4.5%	14.7%	10.6%	0.5%	7.7%	11.7%	6.0%	9.8%	30.3%	7.7%	16.3%	2.9%		15.8%
Female condoms (FP)	0.5%		19.3%				34.2%	9.8%	18.6%	51.9%	12.8%		0.0%		20.8%

Out-of-Cycle

Task Order	Nepal
TO3-PRH	7.8%
Combined oral contraceptive with iron	6.7%
Combined oral contraceptive	
1-month injectable	
2-month injectable	
3-month injectable	6.1%
1-rod implant	
2-rod implant	13.6%
Emergency contraceptive, 2 tablets	
Progestin only pills	
Copper-bearing IUD	11.8%
Calendar-based awareness methods	
Male condoms (FP)	7.1%
Female condoms (FP)	

Out-of-Cycle

Tracer Product	Nepal
Combined oral methods	6.7%
Injectable contraceptives	6.1%
Implantable contraceptives	13.6%
Emergency oral contraceptives	
Progestin-only methods	
Copper-bearing IUD	11.8%
Calendar-based awareness methods	
Male condoms (FP)	7.1%
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

Stocked according to plan Overstocked Ounderstocked Stocked out

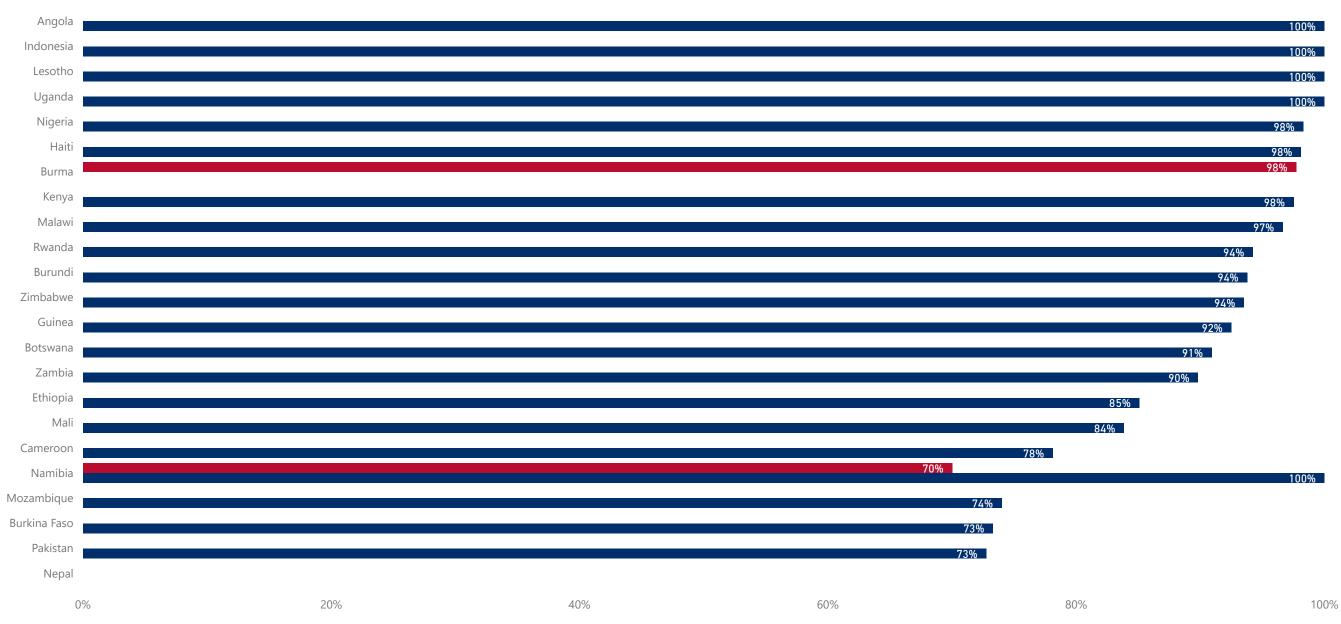
Burma			740	%						26%	
Vietnam			67%						33%)	
Malawi		57	%				19%		14%		10%
Burkina Faso		56%						33%			11%
Burundi		47%				16%		25%			12%
Nigeria		40%			20%				40%		
Uganda	3	7%				41%				20%	3%
Mozambique	35	Ж			23%			38	8%		4%
Rwanda	33%				33%				33%		
Namibia	29%		8%			44%				19%)
South Sudan	28%		6%				61%				6%
Lesotho	27%			3	6%			2	7%		9%
Zambia	26%			33%				30%			11%
Indonesia	25%			4	42%				33%)	
Pakistan	25%				50%					25%	
Ghana	23%		24%				28%			25%	
Haiti	23%				55%					23%	
Botswana	19%		25%				47%				8%
Kenya	19%		26%				38%			1	7%
Mali	19%		29%				29%			24%	
Zimbabwe	19%		38	8%					44%		
Guinea	18%	15%				50%					7%
Liberia	17%				58%					23%	
Ethiopia	14%		39%				32%				6%
Cameroon	12% 3%			56%						29%	
Angola	6% 10%		41	%					42%		
0'	%	20%		40%		60%	%		80%		100

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	Task Order	\sim
Livits Reporting Rates by Country	All	\checkmark

GHSC-PSM Support
Not Supported



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GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

Country M&E Indicator Performance

-





FY2019 Quarter 1 October - December 2018

Country

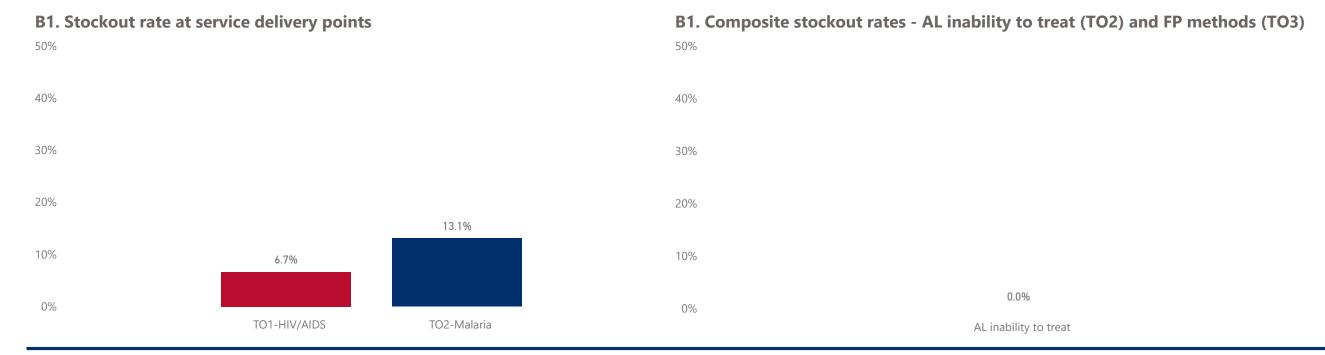
Angola

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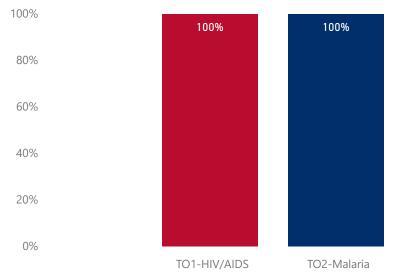
Service Delivery Point Stockouts and Reporting Rates

Country	\sim	Task Order	\sim	Tracer Product		\sim
Angola	\sim	All	\sim	All	``	~

In GHSC-PSM-supported regions



B3. LMIS reporting rate



Analysis

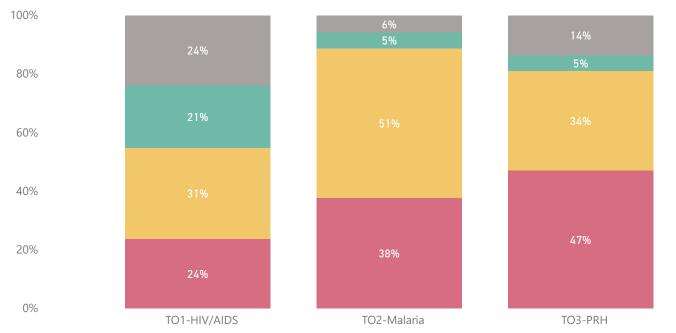
TO1 products experienced no stockouts except female condoms. Female condoms are no longer being procured by INLS, which explains the stockout. For TO2 products, three AL presentations had a better performance than last quarter in all 12 national hospitals. AL 6 x 1 was the sole outlier. The decrease in AL stockouts during this quarter was linked to the NMCP's decision to distribute the AL only to national hospitals, as the quantities available would not cover the 18 provinces. TO1: All nine project-supported SDPs (100 percent) reported by the deadline or up to one week after. This report submission rate was observed throughout FY18. TO2: During this quarter, 12 SDPs reported to NMCP. Of the national hospitals that reported, 6 out of 12 reported by deadline or one week after, and 2 reported between one and two weeks after the deadline. The delays in report submission have been associated with difficulties in accessing the internet as needed to send reports to NMCP. Two national hospitals have reported between two weeks and one month after deadline.

65

Warehouse stock status and product losses

B2. Stocked according to plan

Stocked out Overstocked Stocked according to plan Overstocked



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

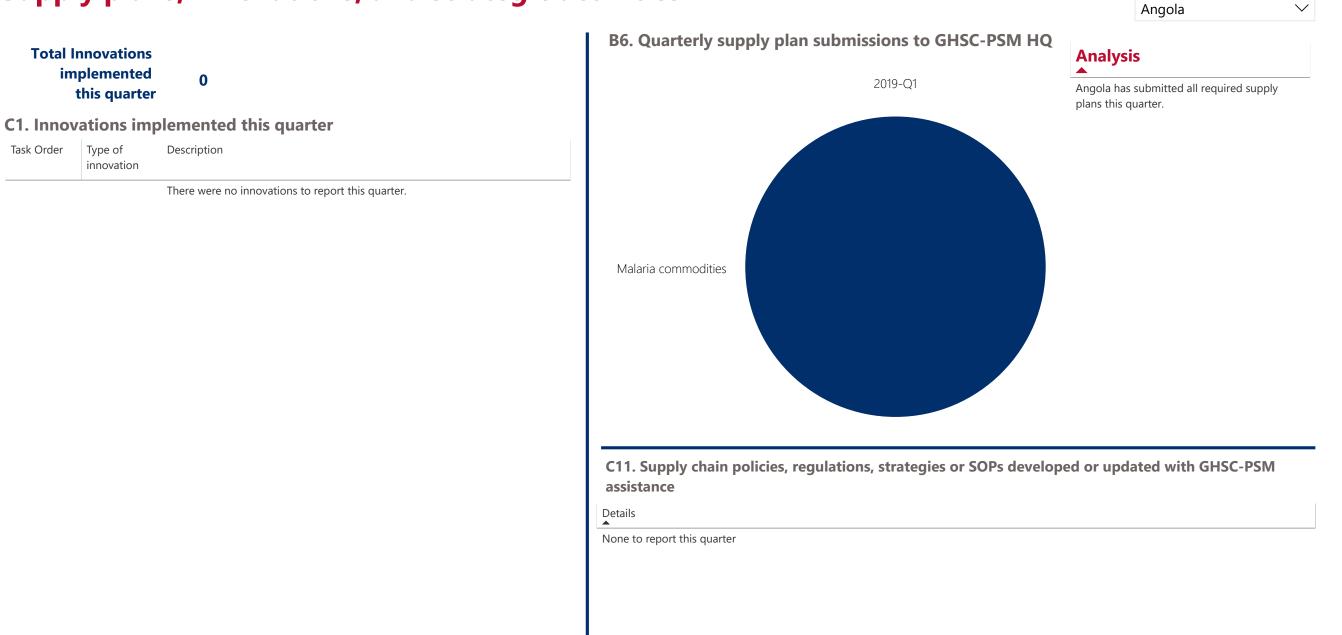
		1					
TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
			51	21			

Country	\sim	Task Order	\checkmark	Supply Chain Level	\sim	Tracer Product	\sim
Angola	\sim	All	\sim	All	\sim	All	\checkmark

Indicator Analysis

C7No losses to report this quarter.B2For TO1, no significant changes in stock status were observed. However, both RTKs (Determine and UniGold) had one observation as overstocked due to recent delivery. For TO2, there were 12 stock status observations of all four AL-based ACTs at the central level. Of these, 11 (92 percent) found understocks and 1 (8 percent) found a stockout. In the previous quarter, all four AL presentations were found understocked. For two consecutive quarters, all RDT stock was stocked according to plan. For TO3, no significant changes have been observed from the previous quarter. No distributions were conducted this quarter. GHSC-PSM continues to advocate for adequate contraceptive security.	_		
and UniGold) had one observation as overstocked due to recent delivery. For TO2, there were 12 stock status observations of all four AL-based ACTs at the central level. Of these, 11 (92 percent) found understocks and 1 (8 percent) found a stockout. In the previous quarter, all four AL presentations were found understocked. For two consecutive quarters, all RDT stock was stocked according to plan. For TO3, no significant changes have been observed from the previous quarter. No distributions were conducted this quarter. GHSC-PSM continues to advocate for adequate		С7	No losses to report this quarter.
		B2	and UniGold) had one observation as overstocked due to recent delivery. For TO2, there were 12 stock status observations of all four AL-based ACTs at the central level. Of these, 11 (92 percent) found understocks and 1 (8 percent) found a stockout. In the previous quarter, all four AL presentations were found understocked. For two consecutive quarters, all RDT stock was stocked according to plan. For TO3, no significant changes have been observed from the previous quarter. No distributions were conducted this quarter. GHSC-PSM continues to advocate for adequate

Supply plans, innovations, and strategic activities



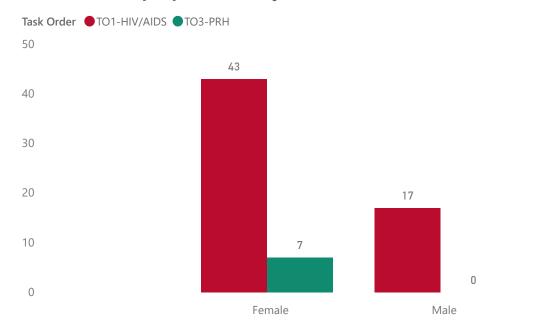
Country

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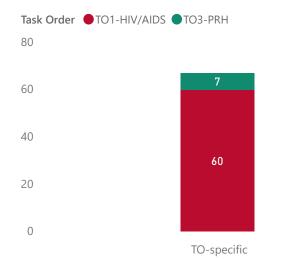
Training for supply chain partners

Country	\sim	Task Order	\sim	Supply Chain Level	\sim	Туре	\sim
Angola	\sim	All	\sim	All	\sim	All	\sim

C2. Number of people trained by sex



C2. Number of people trained by funding source and type



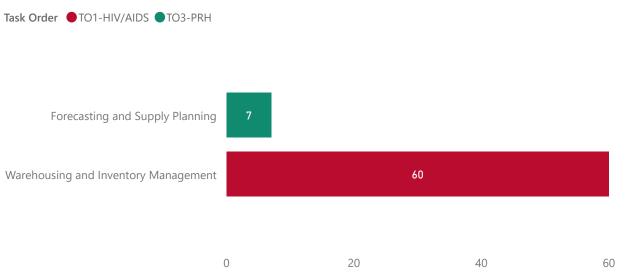
C2. Number of people trained by technical area

60

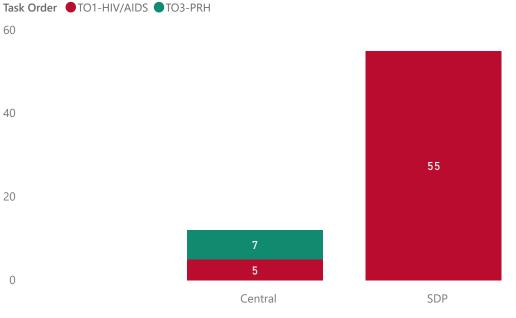
40

20

0



C2. Number of people trained by supply chain level



Analysis

TO1: 19 health professionals from three PEPFARsupported SDPs benefited from inventory management training. Another 41 health professionals were trained on pharmaceutical management of HIV/AIDS products as well as product selection, procurement, distribution, dispensing, and information management. TO3: seven health professionals in Luanda were trained on using the pipeline to estimate needs for contraceptives.

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

	Ana	lysis				
	0%					
	20%					
	40%					
	60%					
	80%					
1	00%					

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

Country ~

Angola

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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

Complete Results and Denominators

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

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	6.7%	60
1st line adult ARV	0.0%	9
2nd line adult ARV	0.0%	9
Pediatric ARV	0.0%	6
First RTK	0.0%	9
Second RTK	0.0%	9
Male condoms (HIV)	0.0%	9
Female condoms (HIV)	44.4%	9
TO2-Malaria	13.1%	61
AL 6x1	16.7%	12
AL 6x2	8.3%	12
AL 6x3	8.3%	12
AL 6x4	8.3%	12
mRDT	16.7%	12
SP	100.0%	1
Total	9.9%	121

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	0.0%	12

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	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	9%	17%	51%	23%	81
TO1-HIV/AIDS	10%	38%	38%	14%	21
TO2-Malaria	17%	0%	73%	10%	30
TO3-PRH	0%	17%	39%	44%	36
Subnational level 1	6%	10%	41%	43%	1,209
TO1-HIV/AIDS	33%	10%	24%	33%	21
TO2-Malaria	5%	6%	50%	39%	540
TO3-PRH	6%	13%	34%	47%	648
Total	6%	10%	41%	42%	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.

Country

Angola

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FY Quarter

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2019-Q1 🗸 🗸

C2. Number of people trained

Task Order	Female	Male	Total
TO1-HIV/AIDS	43	17	60
TO3-PRH	7	0	7
Total	50	17	67

B6. Quarterly supply plan updates

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

C10. HIV molecular instrument functionality

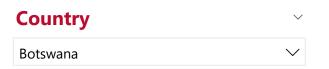
# GHSC-PSM-	% of instruments that functional
supported instruments	for the entire period

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

Country M&E Indicator Performance





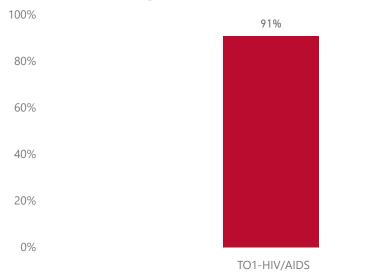




FY2019 Quarter 1 October - December 2018

Country Task Order Tracer Product \sim \sim **Service Delivery Point Stockouts and Reporting Rates** All All \checkmark \checkmark \sim Botswana In GHSC-PSM-supported regions **B1. Stockout rate at service delivery points B1.** Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3) 50% 50% 40% 40% 30% 30% 20% 20% 10% 10% 4.2% 0% TO1-HIV/AIDS 0%

B3. LMIS reporting rate



Analysis

Botswana reported no stockouts for 5 out of 10 tracer products this quarter, including both first- and second-line adult ARVs. Two SDPs reported stockouts of pediatric ARVs in their pharmacy stores where stock data are captured, although some stock was still available in their dispensaries. Despite one stockout of EID reagents, stock levels for lab products have improved, with central stock available as a main factor. Male condoms also had no stockouts. Availability of condoms has steadily increased since CMS revised and adjusted the forecast upwards around mid-2018, based on a reported increase in consumption from health facilities.

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Note that prior to the on-boarding of Site Monitors in FY2018 Q3, GHSC-PSM was not providing support beyond the central level. SDP data were "non-supported" during this period.

Of 33 priority sites, 30 submitted LMIS reports this period, a decline from previous quarters. This decline coincided with some LMIS staff turnover and holiday leave in the health facilities.

72

Warehouse stock status and product losses

Stocked out & Understocked & Stocked according to plan & Overstocked
 10%
 25%
 80%
 19%
 19%
 40%
 40%
 40%
 40%
 40%
 500
 8%
 TD1-HIV/AIDS

B2. Stocked according to plan

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 %

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Botswana	\sim	All	\sim	All	\sim	All	\sim

Indicator	Analysis
C7	GHSC-PSM does not have custody of any products in country and therefore does not report on product losses.
B2	Central level availability of HIV RTKs has shown significant improvement over the preceding quarter, following deliveries from GHSC-RTK and donations from PEPFAR in the quarter. First-line adult and pediatric ARVs remain understocked at the central level. Deliveries by local suppliers have been delayed or undersupplied. A long-term framework contract has been identified as a lasting solution for understocks of ARVs. Despite some delays so far, there is some progress with awarding of new framework contracts; it is hoped that awards will be made by Q2. Second-line adult ARVs remain overstocked due to decreasing consumption attributed to patients shifting regimens. Viral load and EID stocks have fluctuated but improved this quarter, following delivery of a shipment procured by CMS in November. Delays in awarding new contracts in previous quarters had led CMS to take remedial actions with local micro-procurements, most of which were delivered by Q1.

Supply plans, innovations, and strategic activities

Total Innovations

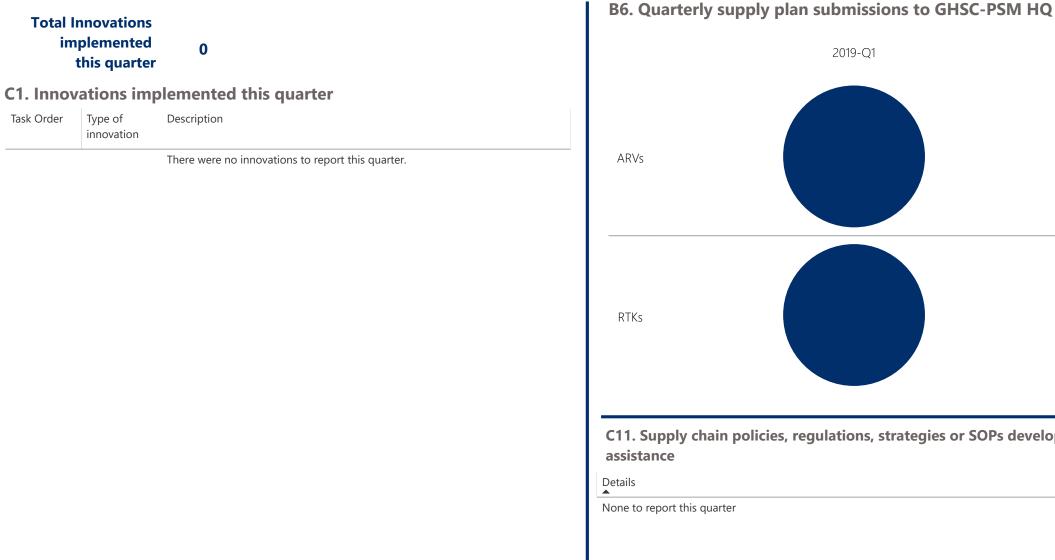
Task Order

implemented

Type of

innovation

this quarter



Country

Botswana

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Analysis

Botswana submitted all required supply plans this quarter. The ARV management team, of which GHSC-PSM is a member, meets every fortnight and uses Pipeline for monitoring stock and making supply and procurement decisions for ARVs and RTKs.

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

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

Anal	lysis			
0%				
20%				
40%				
60%				
80%				
100%				

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

ountry	
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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	Efavirenz 50mg				
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

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

Task Order	Stockout Rate	# SDP stock observations
TO1-HIV/AIDS	4.2%	238
1st line adult ARV	0.0%	30
2nd line adult ARV	0.0%	30
Pediatric ARV	6.7%	30
First RTK	10.0%	20
Second RTK	20.0%	20
Viral load reagent	0.0%	20
EID reagent	20.0%	5
EID consumable	0.0%	25
Male condoms (HIV)	0.0%	29
Female condoms (HIV)	3.4%	29
Total	4.2%	238

B1. Composite stockout rates

Task Order	Stockout Rate	# of SDPs that reported
A		•
ee "Indicator Details" for	B01 at the end of this annex for m	ore detail about composite stockouts
33. SDP reporting rate	to LMIS (GHSC-PSM-supported	regions)
33. SDP reporting rate Task Order	to LMIS (GHSC-PSM-supported Reporting rate	regions) 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	19%	25%	47%	8%	36
TO1-HIV/AIDS	19%	25%	47%	8%	36
Total	19%	25%	47%	8%	36

B6. Quarterly supply plan updates

C2. Number of people trained

Total

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

C10. HIV molecular instrument functionality

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

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.

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.

Country Y FY Quarter

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Botswana

Total

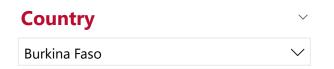
Task Order

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GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

Country M&E Indicator Performance







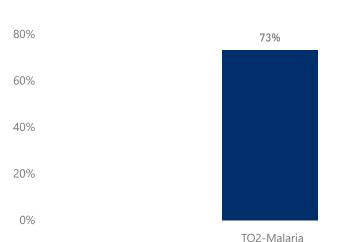


FY2019 Quarter 1 October - December 2018

Country \sim Task Order Tracer Product \sim \sim **Service Delivery Point Stockouts and Reporting Rates** All All Burkina Faso \sim \checkmark \sim In GHSC-PSM-supported regions **B1. Stockout rate at service delivery points B1.** Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3) 50% 50% 40% 40% 30% 30% 19.0% 20% 20% 10% 10% 4.1% 0% 0% TO2-Malaria AL inability to treat

B3. LMIS reporting rate

100%



Analysis

The overall stockout rate (TO2 only) for Burkina Faso decreased from 24 percent last quarter to 19 percent in Quarter 1 of FY19. This reduction may have been precipitated by the recent introduction of subsidized Alu 6x3 and Alu 6x4 into the supply chain, the distribution of which began in earnest in September 2018. The effect of these products can be seen in the dramatic reduction in their stockout rates since last quarter, from 52 percent to 24 percent, and 41 percent to 18 percent of SDPs stocked out for Alu 6x3 and Alu 6x4, respectively. Also of note were slight reductions in the stockout rates of SP from 8 percent to 7 percent and LLINs from 8 percent to 5 percent. RDTs registered a slight increase in stockouts from 5 percent to 6 percent, while the stockout rate for AS/AQ stayed constant. The percent of SDPs unable to treat malaria ("inability to treat," meaning having no Alu formulations in stock), remained low at 4 percent.

The SDP reporting rate to the LMIS decreased from 78 percent to 73 percent since last quarter, owing in part to staff mobility and insecurity at the end of the year, a trend that was also observed in the FY18 first quarter report.

Warehouse stock status and product losses

B2. Stocked according to plan Stocked out Understocked Stocked according to plan Overstocked 100% 80% 33% 60% 40% 56% 20% 11% 10%

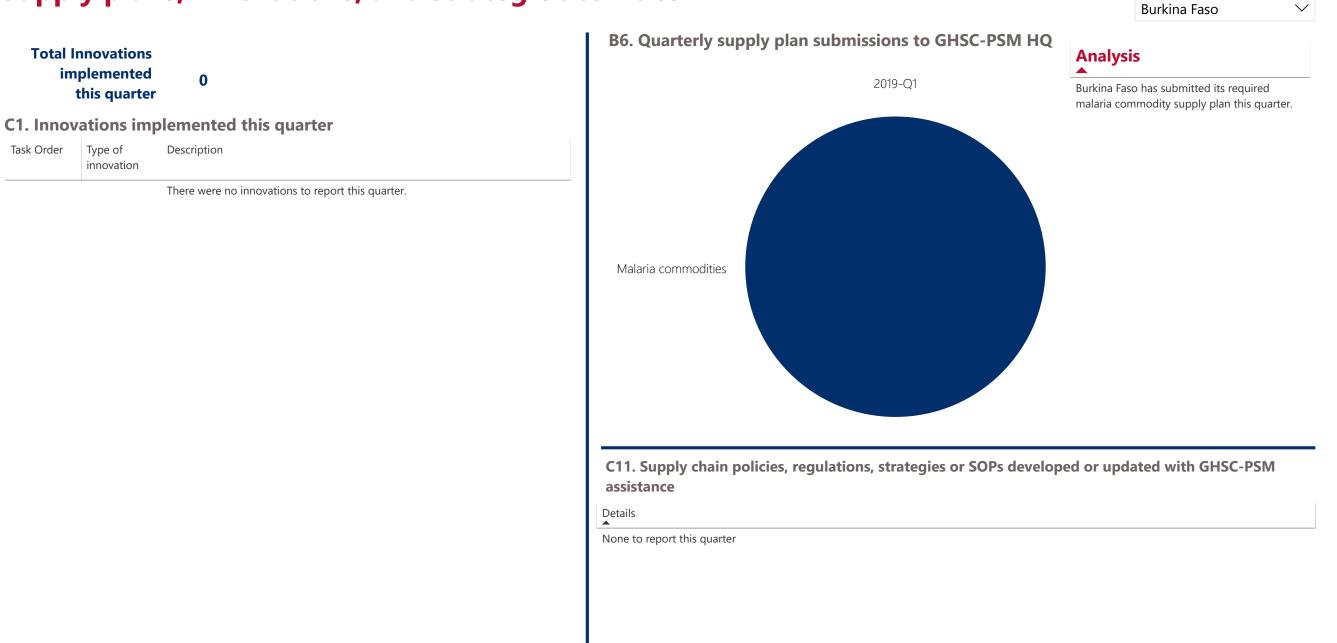
TO2-Malaria

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

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

Country	\checkmark	Task Order	\sim	Supply Chain Level	\checkmark	Tracer Product	\sim
Burkina Faso	\sim	All	\checkmark	All	\checkmark	All	\checkmark
1	ndicator	Analysis					
В	2	understocked deci	reased fi	e, no stockouts were obse rom 14 percent to 11 perce creased notably, from 14 p	ent since l	ast quarter. On the other	

Supply plans, innovations, and strategic activities



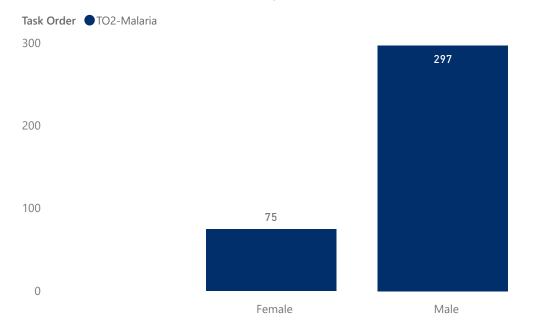
Country

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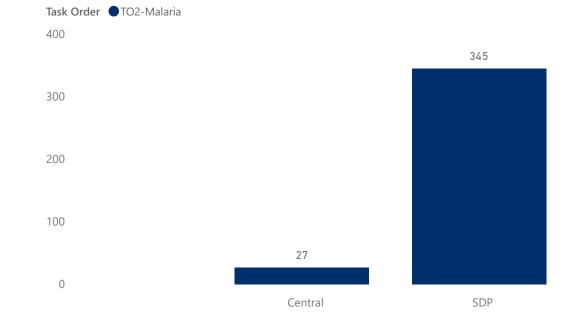
Training for supply chain partners

Country	\sim	Task Order	\sim	Supply Chain Level	\sim	Туре	\sim
Burkina Faso	\checkmark	All	\sim	All	\checkmark	All	\sim

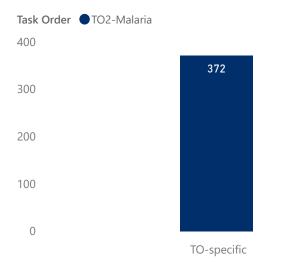
C2. Number of people trained by sex



C2. Number of people trained by supply chain level



C2. Number of people trained by funding source and type



C2. Number of people trained by technical area

Task Order TO2-Malaria



0



200

300

400

100

Analysis

A total of 372 participants were trained this quarter, 345 at the SDP level in MIS and 27 at the central level in human resources capacity building. Eighty percent (297) of those trained this quarter were men.

Complete Results and Denominators

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

Task Order	Stockout Rate	# SDP stock observations
TO2-Malaria	19.0%	15,192
AL 6x1	23.9%	1,688
AL 6x2	12.3%	1,688
AL 6x3	24.3%	1,688
AL 6x4	17.8%	1,688
AS/AQ 100/270mgx3	36.4%	1,688
AS/AQ 100/270mgx6	38.6%	1,688
mRDT	5.9%	1,688
SP	6.5%	1,688
LLINs	5.4%	1,688
Total	19.0%	15,192

B1. Composite stockout rates

Task Order	Stockout Rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	4.1%	1,688

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	73%	2,303

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	56%	33%	11%		9
TO2-Malaria	56%	33%	11%		9
Total	56%	33%	11%		9

Country

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FY Quarter

Burkina Faso \checkmark

2019-Q1 🗸 🗸

C2. Number of people trained

Task Order	Female	Male	Total
TO2-Malaria	75	297	372
Total	75	297	372

B6. Quarterly supply plan updates

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

C10. HIV molecular instrument functionality

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

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.

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

Country M&E Indicator Performance









FY2019 Quarter 1

October - December 2018

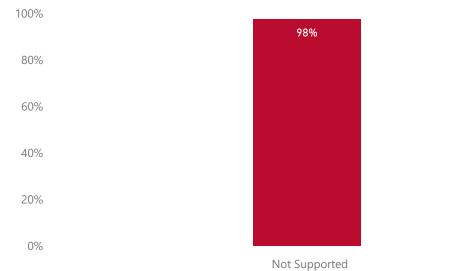
Service Delivery Point Stockouts and Reporting Rates

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

Country	\checkmark	Task Order	\checkmark	Tracer Product	\sim
Burma	\sim	All	\sim	All	\sim

B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3) **B1. Stockout rate at service delivery points** 50% 50% 40% 40% 30% 30% 20% 20% 10% 10% 0.0% 0% 0% Not Supported

B3. LMIS reporting rate



Analysis

In Q1, nine tertiary-level SDPs (three ARV centers, three Abbot viral load/EID sites, and three TB labs) submitted LMIS reports on time, with a reporting rate of 90 percent. GHSC-PSM continues its support to LMIS in three regions (Ayeyarwaddy, Bago and Magway) at the health facilities level below the township level. Out of 4,119 facilities required to report, 4,025 submitted LMIS reports within one week, a reporting rate of 98 percent.

In Myanmar (Burma), 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. No ART sites, viral load labs, or EID labs had a stockout of tracer commodities in FY19 Q1.

Warehouse stock status and product losses

B2. Stocked according to plan

 • Stocked out
 • Understocked
 • Stocked according to plan
 • Overstocked

 100%
 29%
 100%

 60%
 100%
 100%

 40%
 71%
 100%

 20%
 100%
 100%

 0%
 T01-HIV/AIDS
 T02-Malaria

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

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

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Burma	\sim	All	\sim	All	\checkmark	All	\sim

Indicator	Analysis
B2	GHSC-PSM continued its support to the NAP and its partners for the activity for review of quarterly stock status, pipeline quantity and shipment schedule, transition plan, and patient transfer data. At the central level in NAP, all three tracer ARV drugs are stocked according to plan At the subnational level, GHSC-PSM received the data from partners (UNION, Alliance, IOM, MSI, MDM, MSFCH, PSI). Among them, first-line adult ARV in all observations are stocked according to plan. For second-line ARVs, three out of seven are stocked according to plan and the rest are overstocked. For first-line pediatric ARVs, data come from four partners: UNION, Alliance, IOM, MSI and MSFCH. Data showed that two are stocked according to plan and two are overstocked. Among the TO2 commodities, malaria first-line ACT and RDT were stocked according to plan.
C7	Burma does not report on this indicator.

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Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

	Anal	ysis				
	0%					
2	20%					
2	40%					
6	60%					
8	80%					
1(00%					

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

Country

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Burma

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

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

-		
Task Order	Stockout Rate	# SDP stock observations
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

B1. Composite stockout rates

Stockout Rate # of SDPs that reported Task Order C2. Number of people trained Task Order Total 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 Overstocked Understocked Stocked Total Stock

Supply Chain Level	Stocked according	Overstocked	Understocked	Stocked	Total Stock
•	to plan			out	Observations
Central	100%				3
TO1-HIV/AIDS	100%				3
Subnational level 1	70%	30%			20
TO1-HIV/AIDS	67%	33%			18
TO2-Malaria	100%				2
Total	74%	26%			23

B6. Quarterly supply plan updates Product Group # of supply # submitted plans required

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Total

FY Quarter

2019-Q1

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Country

Burma

C10. HIV molecular instrument functionality

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

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.

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.

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GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

Country M&E Indicator Performance



FY2019 Quarter 1

October - December 2018

Country

Burundi ^





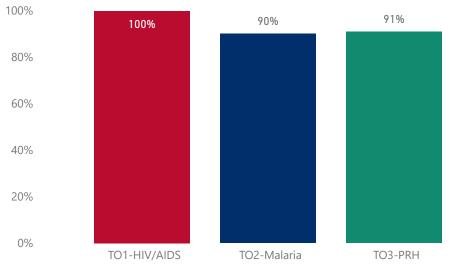
Service Delivery Point Stockouts and Reporting Rates

Country	\sim	Task Order	\sim	Tracer Product	\checkmark
Burundi	\sim	All	\sim	All	\checkmark

B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3) **B1. Stockout rate at service delivery points** 50% 50% 40% 40% 30% 30% 20% 20% 10% 10% 0.7% 0.8% 0.3% 0.3% 0.0% 0.0% 1.5% 0% 0.9% 0.4% 0% Combined oral Iniectable Implantable Emergency oral Progestin-only Copper-bearing TO1-HIV/AIDS TO2-Malaria TO3-PRH methods contraceptives contraceptives contraceptives methods IUD

B3. LMIS reporting rate

In GHSC-PSM-supported regions



Analysis

In Burundi, GHSC-PSM provides technical assistance at the health district level, to support data analysis and supervision. SDPs will therefore be considered located in "supported regions" for stockout rate and LMIS reporting rate indicators starting in FY2019.

Reporting rates improved across all health areas this quarter, reaching 100 percent for HIV and climbing over 90 percent for malaria and family planning. This can be at least partly attributed to a shift in the denominator, which reduced the number of sites required to report based on whether tracer products for the program areas had been offered in the last three months. GHSC-PSM will continue to coordinate with the Directorate of Health Information Systems to ensure that health districts maximize the timeliness and completeness of reporting.

Stockout rates for Burundi have remained strong, performing under 1 percent for both malaria and family planning overall. HIV is slightly higher, but still low at 1.5 percent. Good performance may be due to close attention to logistics management at lower levels, with improved management and follow up. Supportive supervision has focused on logistics management with GHSC-PSM support. Computerization of stock management using Channel software and real-time communications via WhatsApp groups are also believed to be contributing factors.

Warehouse stock status and product losses

B2. Stocked according to plan

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

1	0	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Burundi	\sim	All	\sim	All	\sim	All	\sim

Indicator	Analysis
C7	No product losses to report this quarter.
B2	At the district level, stock observations within the min/max levels improved a bit for HIV products and declined slightly for malaria products. (Family planning inventory is not held at the district level). Data at this level is still reliant on paper-based reporting by the district pharmacies when they need to restock from CAMEBU. Data from DHIS2 is not sufficient to calculate months of stock. GHSC-PSM is supporting initiatives to improve data capture at this level, including supporting better adherence to the requisition schedule and advocating to partners for the complete use of logistics information in DHIS2.
Β2	At the central level, stocked according to plan rates declined across health areas. HIV saw more instances of both under and overstocking, while malaria and family planning were both generally overstocked. Delivery delays in December led to some stock reductions for HIV. For malaria, deliveries that were scheduled to arrive during the peak season did not arrive until later. Reduced consumption after the end of the malaria season has led to overstocks. In the short-term, GHSC-PSM is supporting reallocation of excess stocks to serve the age groups most in need and coordinating with the National Malaria Control Program monitor stock levels.

Supply plans, innovations, and strategic activities

Task Order

Type of

innovation



Supported the Ministry of Public Health and the Fight Against AIDS to develop the Strategic Plan for Reproductive, Maternal, Neonatal, Infant and Adolescent Health for 2019-2023.

Burundi

Burundi submitted all required supply plans

Analysis

this quarter.

Country

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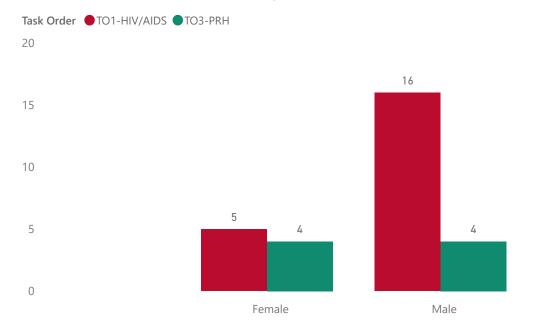
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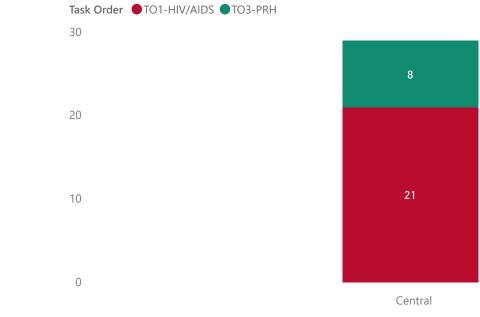
Training for supply chain partners

Country	\sim	Task Order	\checkmark	Supply Chain Level	\sim	Туре	\sim
Burundi	\sim	All	\checkmark	All	\sim	All	\sim

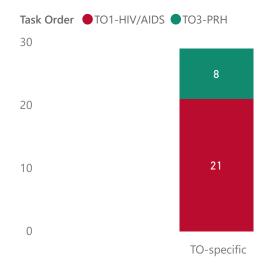
C2. Number of people trained by sex



C2. Number of people trained by supply chain level

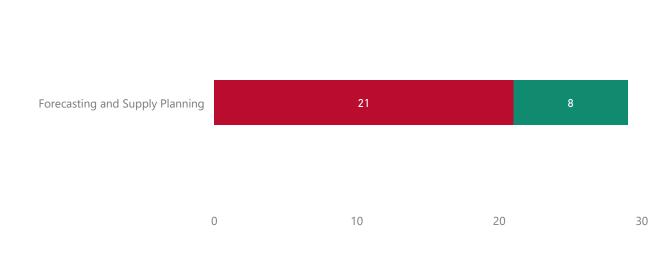


C2. Number of people trained by funding source and type



C2. Number of people trained by technical area

Task Order OT01-HIV/AIDS TO3-PRH



Analysis

GHSC-PSM provided forecasting and supply planning training at the central level for a total of 29 people this quarter. The trainings were focused on the family planning and HIV program areas.

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

	0%			
1	10%			
6	50%			
8	80%			
10	00%			

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

Country	\sim
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Burundi

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HIV Tracer Produ	ucts
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

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

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	1.5%	3,373
1st line adult ARV	1.1%	709
2nd line adult ARV	1.2%	85
Pediatric ARV	0.8%	260
First RTK	2.4%	808
Second RTK	2.4%	574
Male condoms (HIV)	0.8%	715
Female condoms (HIV)	0.5%	222
TO2-Malaria	0.9%	5,116
AS/AQ 100/270mgx3	0.0%	729
AS/AQ 100/270mgx6	2.6%	736
AS/AQ 25/67.5mg	0.2%	665
AS/AQ 50/135mg	0.7%	714
mRDT	1.1%	803
SP	0.8%	712
LLINs	0.7%	757
TO3-PRH	0.4%	4,807
Combined oral contraceptive with iron	0.3%	736
3-month injectable	0.3%	747
2-rod implant	0.0%	694
Emergency contraceptive, 2 tablets	0.7%	600
Progestin only pills	0.8%	616
Copper-bearing IUD	0.0%	477
Male condoms (FP)	0.8%	715
Female condoms (FP)	0.5%	222
Total	0.9%	12,359

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO3-PRH		
Combined oral methods	0.3%	736
Injectable contraceptives	0.3%	747
Implantable contraceptives	0.0%	694
Emergency oral contraceptives	0.7%	600
Progestin-only methods	0.8%	616

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%	808
TO2-Malaria	90%	808
TO3-PRH	91%	808

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	23%	50%	27%	0%	44
TO1-HIV/AIDS	35%	24%	41%	0%	17
TO2-Malaria	10%	71%	19%	0%	21
TO3-PRH	25%	63%	13%		8
Subnational level 1	49 %	14%	25%	13%	767
TO1-HIV/AIDS	49%	12%	21%	18%	233
TO2-Malaria	49%	15%	26%	10%	534
Total	47%	16%	25%	12%	811

Country

Burundi

 \checkmark

FY Quarter

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2019-Q1 🗸 🗸

C2. Number of people trained

Task Order	Female	Male	Total
TO1-HIV/AIDS	5	16	21
TO3-PRH	4	4	8
Total	9	20	29

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-	% of instruments that functional
supported instruments	for the entire period

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.

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

Country M&E Indicator Performance







FY2019 Quarter 1 October - December 2018

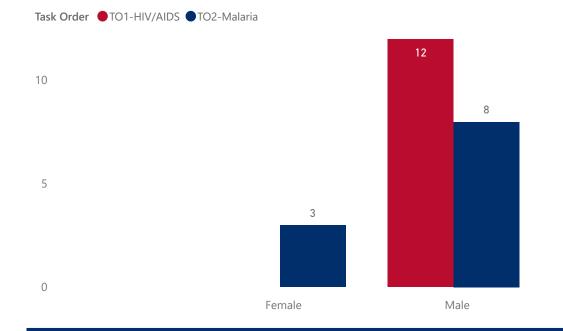


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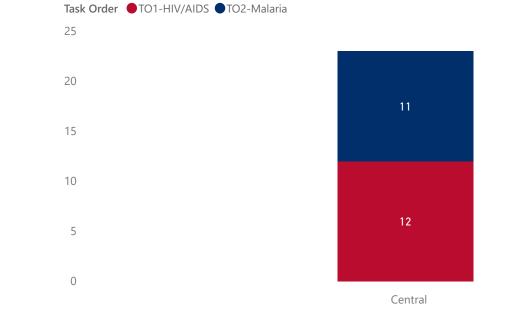
Training for supply chain partners

Country	\sim	Task Order	\sim	Supply Chain Level	\sim	Туре	\sim
Cambodia	\sim	All	\sim	All	\sim	All	\sim

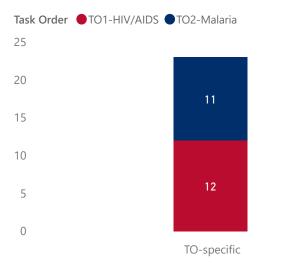
C2. Number of people trained by sex



C2. Number of people trained by supply chain level

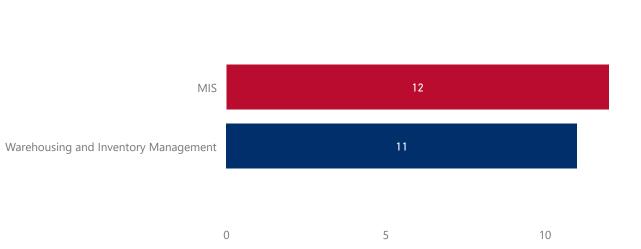


C2. Number of people trained by funding source and type



C2. Number of people trained by technical area

Task Order TO1-HIV/AIDS TO2-Malaria



Analysis

GHSC-PSM in Cambodia trained 23 participants (20 males and 3 females) in Q1 FY19. One training was a study tour to Burma which GHSC-PSM organized for a 12-member team from Cambodia's Ministry of Health to learn more about Burma's eLMIS. Another was a national-level training attended by 11 participants on curriculum review for subnational level inventory management of malaria commodities.

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Complete Results and Denominators

2019-Q1 Cambodia \sim \sim B1. Stockout rate at service delivery points (GHSC-PSM-supported regions) B1. Composite stockout rates Task Order Stockout Rate # SDP stock observations Task Order # of SDPs that reported Stockout Rate C2. Number of people trained Total Task Order Female Male Total TO1-HIV/AIDS 12 12 TO2-Malaria 3 8 11 3 20 23 Total See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts. B6. Quarterly supply plan updates B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions) **Product Group** # of supply # submitted plans required Task Order Reporting rate Total # of SDPs required to report B2. Stocked according to plan at storage sites Supply Chain Level Stocked according Overstocked Understocked Stocked Total Stock to plan out Observations Total C10. HIV molecular instrument functionality # GHSC-PSM-% of instruments that functional supported instruments for the entire period For complete results on innovations (C1), strategy, policy, and B1 and B2 denominator note: For countries that report male and female condoms under both regulation activities (C11), and product losses (C7a and C7b), B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that please see the specific pages for those indicators. reported) for all tracer products, minus one set of observations for condoms.

Country

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FY Quarter

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

Country M&E Indicator Performance







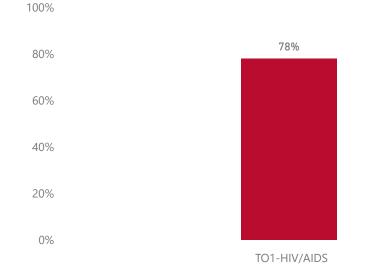
FY2019 Quarter 1 October - December 2018



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Country \sim Task Order Tracer Product \sim \sim **Service Delivery Point Stockouts and Reporting Rates** All All \sim Cameroon \checkmark \checkmark In GHSC-PSM-supported regions **B1.** Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3) **B1. Stockout rate at service delivery points** 50% 50% 40% 40% 30% 30% 20% 20% 10% 10% 4.0% 0% TO1-HIV/AIDS 0%

B3. LMIS reporting rate



Analysis

Reporting rates saw a small increase, from 74 percent to 78 percent. The Supply Chain teams at the district and regional levels have focused on improving the reporting performance.

Stockout rates for HIV products have declined overall, especially for first-line adult ARVs and first- and second-line RTKs. An increase was reported for pediatric ARVs, from 0 to 5 percent, although this still remains under the country target of less than 10%.

The next EUV survey is scheduled to take place in February. Stockout data for malaria will be available in FY19 Q2.

Warehouse stock status and product losses

B2. Stocked according to plan

Stocked out & Understocked & Stocked according to plan & Overstocked
 10%
 12%
 80%
 60%
 56%
 40%
 20%
 20%
 29%
 TD1-HIV/AIDS

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

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

Country	\sim	Task Order	\checkmark	Supply Chain Level	\sim	Tracer Product	\checkmark
Cameroon	\checkmark	All	\checkmark	All	\sim	All	\checkmark

Indicator	Analysis
B2	Overall HIV stock status at both central and regional levels declined in FY19 Q1. Stockouts of pediatric and second-line adult ARVs occurred at both central and regional levels, and understocks of RTKs at both levels as well. Low stocks at the central level are impacting regional inventory, however the team notes that efforts to reallocate and distribute excess stock between facilities has limited the impact on patients. GHSC-PSM is supporting the central warehouse in quantification and procurement plans to improve the stock situation in the warehouses.
C7	No product losses to report this quarter.

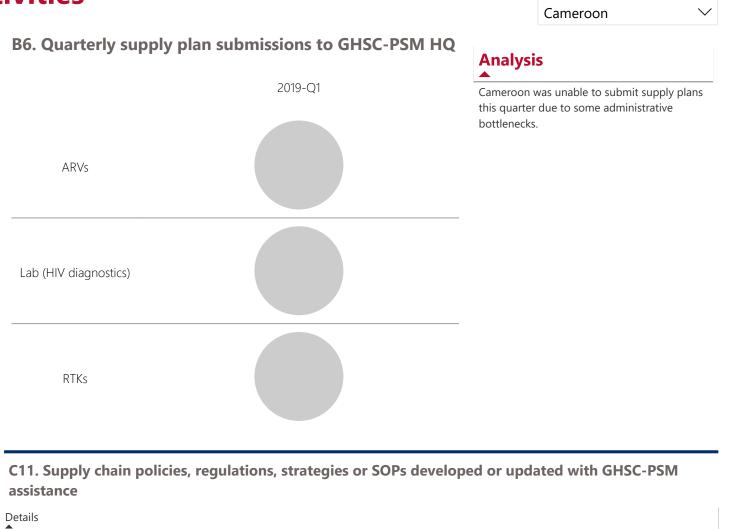
Supply plans, innovations, and strategic activities

Total Innovations	Nev
implemented	
this quarter	

New approaches

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description
TO1- HIV/AIDS	New approaches	GHSC-PSM Cameroon supports over 800 sites spread over 12 health districts in the Yaoundé and Douala clusters. These districts cover over 80 percent (94,414 out of 117,678 patients) of the HIV burden in the Centre and Littoral regions, which harbor more than 55 percent (117,678 out of 212,039) of HIV patients in Cameroon. In 2018, the team intensified district and regional involvement in supply chain management by building capacity, improving visualization of data, and strengthening data-driven decision making. Each supported district reviewed supply chain data from the sites and used the data to place orders, reallocate commodities, and plan supervision on a monthly basis. At the end of FY19, annual data reviews were held in each of the two clusters. The reviews brought together the leaders of the districts, regions, and some selected high-volume sites. Each district gave a presentation highlighting its achievements, challenges and the way forward. These annual review meetings provided an opportunity for district staff to share best practices. A special feature of the three-day meeting was the presentation of best performance awards to three districts and sites. The recipients of the awards were appreciative and vowed to keep the award in subsequent years, while those who who were not awarded promised to work harder. The districts were encouraged to provide similar performance awards to sites to promote healthy competition and improve performance. During supervisory visits shortly after the annual review meetings, some positive in change work attitude has been observed among the district and regional staff.



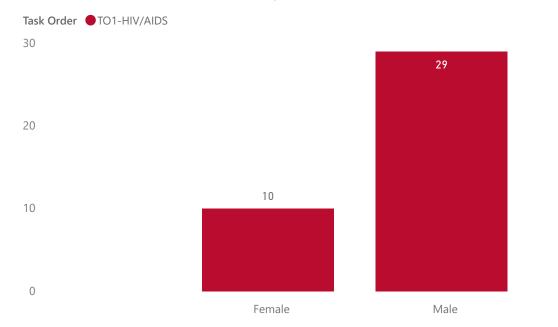
None to report this quarter

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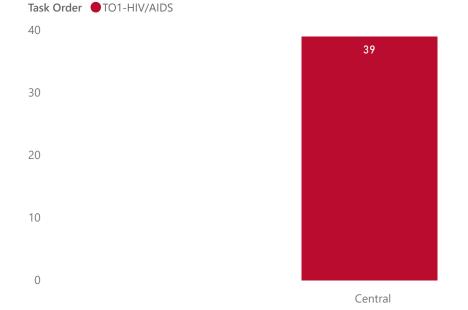
Training for supply chain partners

Country	\sim	Task Order	\sim	Supply Chain Level	\sim	Туре	\sim
Cameroon	\sim	All	\sim	All	\sim	All	\sim

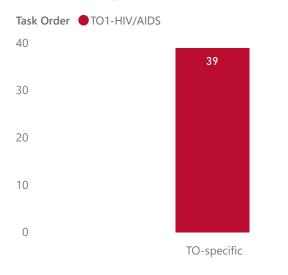
C2. Number of people trained by sex



C2. Number of people trained by supply chain level



C2. Number of people trained by funding source and type



C2. Number of people trained by technical area



Analysis

40

39 people were trained on quantification, procurement, and other aspects of supply chain management at the national level.

Warehousing and Inventory Management



0 10 20 30

102

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

Anal	lysis			
0%				
20%				
40%				
60%				
80%				
100%				

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

Country

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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

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

Task Order	Stockout Rate	# SDP stock observations
TO1-HIV/AIDS	4.0%	1,525
1st line adult ARV	2.3%	471
Pediatric ARV	5.4%	37
First RTK	4.5%	552
Second RTK	4.9%	465
Total	4.0%	1,525

B1. Composite stockout rates

	5	Stockout Rate	# of SDP	s that repo	orted	
			1			
ee "Indicator Details"	for B01 at the end	of this annex for	more detail abo	out compo	site stockouts.	
B3. SDP reporting ra	ite to LMIS (GHSC	C-PSM-supporte	ed regions)			
Task Order	R	Reporting rate	Total # of	Total # of SDPs required to report		
A		700/		827		
TO1-HIV/AIDS		18%		827		
IOT-HIV/AIDS		78%		827		
ΙΟΙ-ΠΙν/ΑΙDS		78%		827		
IOI-niv/AiDS		18%		827		
		78%		827		
				827		
32. Stocked accordin	ig to plan at stora			827		
	ig to plan at stora Stocked accordin	age sites	Understocked	Stocked	Total Stock	
32. Stocked accordin		age sites	Understocked		Total Stock Observations	
32. Stocked accordin Supply Chain Level	Stocked accordin	age sites	Understocked	Stocked		
32. Stocked accordin	Stocked accordin to plan	age sites g Overstocked		Stocked out	Observations	
32. Stocked accordin Supply Chain Level ▲ Central	Stocked accordin to plan 7%	age sites g Overstocked 0%	53%	Stocked out 40%	Observations 15	
32. Stocked accordin Supply Chain Level ▲ Central TO1-HIV/AIDS	Stocked accordin to plan 7% 7%	age sites g Overstocked 0%	53% 53%	Stocked out 40%	Observations 15 15	
32. Stocked accordin Supply Chain Level ▲ Central TO1-HIV/AIDS Subnational level 1	Stocked accordin to plan 7% 7% 13%	age sites g Overstocked 0% 3%	53% 53% 57%	Stocked out 40% 27%	Observation 15 15 60	
32. Stocked accordin Supply Chain Level ▲ Central TO1-HIV/AIDS Subnational level 1	Stocked accordin to plan 7% 7% 13%	age sites g Overstocked 0% 3%	53% 53% 57%	Stocked out 40% 27%	Observations 15 15 60	

Country ~ F

FY Quarter ~

Cameroon 🗸 🗸

2019-Q1 🗸 🗸

C2. Number of people trained						
Task Order	Female	Male	Total			
TO1-HIV/AIDS	10	29	39			
Total	10	29	39			

B6. Quarterly supply plan updates

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

C10. HIV molecular instrument functionality

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

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.

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

Country M&E Indicator Performance







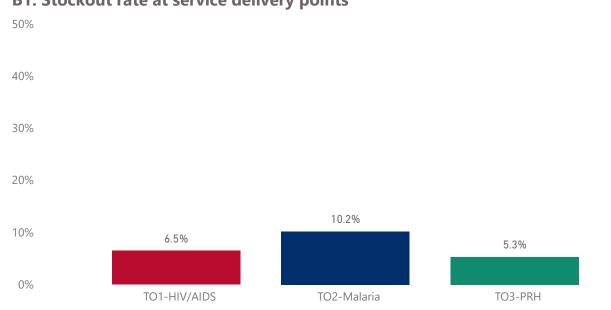
Country

Ethiopia

Service Delivery Point Stockouts and Reporting Rates

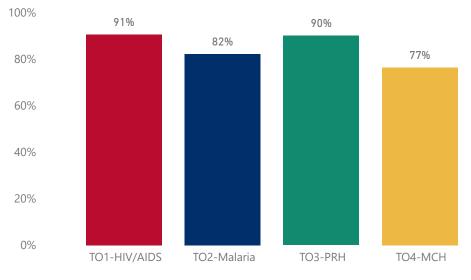
Country	\checkmark	Task Order	\sim	Tracer Product	\checkmark
Ethiopia	\checkmark	All	\sim	All	\sim

In GHSC-PSM-supported regions



B1. Stockout rate at service delivery points

B3. LMIS reporting rate



Analysis

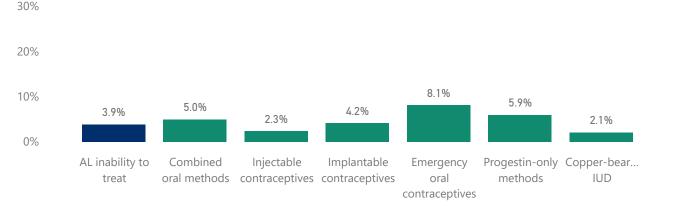
50%

40%

Stockout rates largely held constant this quarter at 7, 10, and 5 percent for TO1, TO2, and TO3, respectively. Primary reasons for stockouts included data quality problems (e.g. failing to report stock in the dispensary) and distribution problems between the central and regional levels. HIV product stockouts were driven by high stockouts of RTKs (21 percent across the three tracer products). RTKs, viral load consumables, and EID reagents and consumables were the only TO1 products whose stockout rates increased this quarter. RTK shortages may have been affected by the country's recent shift in its HIV testing algorithm. The increase in EID reagent stockouts from 0 to 11 percent was due to a communication problem between PFSA central and hubs after launching the new integrated distribution system. In the new system, lab products are distributed from central to hubs to SDPs in line with other commodities, rather than directly from central PFSA to labs. The combined stockout rate for adult first-line, second-line, and pediatric ARVs was 3 percent, within Ethiopia's target of 5 percent. For malaria products, stockout rates again fluctuated among the four presentations of AL, likely due to the discouraged practice of using AL 6X4 in place of other AL combinations and ordering insufficient quantities of the others. However, the "inability to treat" rate held steady at 4 percent. For TO3, while the method-level stockout rate for implantable contraceptives has inched up in the last two quarters, it remains within the target of 5 percent. All other methods had reduced stockout rates this quarter.

TO1 and TO3 reporting rates increased slightly from 89 to 91 percent and from 88 to 90 percent, respectively, while the TO2 rate decreased from 89 to 82 percent. GHSC-PSM in Ethiopia also tracks SDP reporting rates disaggregated by region; this quarter the rates for the different regions ranged from 58 to 100 percent. Timeliness of reporting across sites improved from 75 to 80 percent. The project works with PFSA to target assistance to lower-performing regions. Some of the reasons for late or no submissions include inadequate support from administrative units and/or low commitment to produce the report. TO4 reporting rates remain the lowest, at 77 percent this quarter, with regional TO4 rates ranging from 47 to 96 percent. As MNCH commodities are distributed based on an allocation plan, incentives for reporting are diminished.





Warehouse stock status and product losses

B2. Stocked according to plan

 • Stocked out
 • Understocked
 • Stocked according to plan
 • Overstocked

 100%
 21%
 49%

 80%
 44%
 14%

 60%
 11%
 49%

 40%
 11%
 5%

 20%
 28%
 24%

 20%
 11%
 20%

 11%
 20%
 11%

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

ТО	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
TO1	Global	Transit	Damage	Food and WASH	\$3,933	\$2,745,393	0.14%

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Ethiopia	\sim	All	\sim	All	\sim	All	\checkmark

Indicator Analysis

	•
C7	Ninety-six cartons of ready-to-use therapeutic food (RUTF) arrived damaged at the central warehouse. The full amount of the loss was reimbursed by the supplier.
В2	Across warehouse levels, TO1 stockouts increased from 9 percent to 17 percent of observations, while stocking according to plan fell slightly from 16 percent to 11 percent. At the central level, there were no stockouts but rather mostly overstocks (58 percent). At the regional level, however, 18 percent of observations were stocked out of HIV commodities. TO2 stockouts and understocks increased slightly this quarter, from 14 percent to 20 percent and 37 percent to 44 percent, respectively. This was more pronounced at the regional level, where stockouts and understocks increased from 15 percent to 21 percent and from 33 percent to 41 percent, respectively. For TO3, observations stocked according to plan increased from 12 percent to 15 percent, while understocking fell from 34 percent to 24 percent.

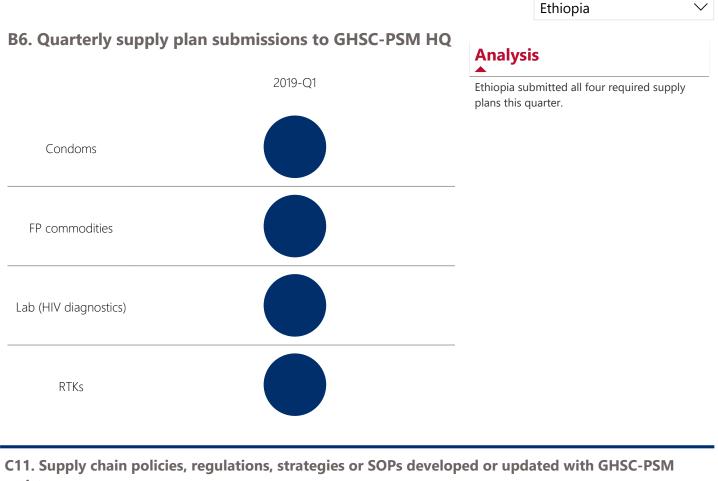
Supply plans, innovations, and strategic activities

1



C1. Innovations implemented this quarter

		•	
Task Order	Type of innovation	Description	
TO2-Malaria	New approaches	LLIN Distribution Tracking System: To improve data management of national long-lasting insecticide-treated net (LLIN) distribution, GHSC-PSM has developed a new web-based database in which LLIN distribution is monitored by tracking the data down to the household level. Previously, the data were managed using an Excel database in which information from distribution sites was recorded and reported through email.	-
		Prior to launching the new database, a qualitative study with a case study design was conducted to compare the previous and proposed new data management systems. A total of 10 purposively selected key informants who had used both the old and new systems during distribution campaigns were interviewed using a semi-structured interview guide. The data were analyzed manually, using a thematic analysis technique, and findings were presented based on the resulting themes. The study found that the new data management system helped users to better track progress of LLIN distributions at various levels and to use the information for evidence-based decision making.	-



assistance

Details

GHSC-PSM supported PFSA to develop pharmaceutical quantification training materials. The training will help forecasting experts at PSA central office and branches to practice more advanced techniques of using available data to do better pharmaceutical forecasting. The training will capacitate PSA staff on data usage, analysis, and interpretation skills via different techniques, models, and data characteristics. The first drafts of both the training manual and the trainers' guide were finalized. The materials were compiled and shared and will be finalized in a workshop to be organized in the coming months.

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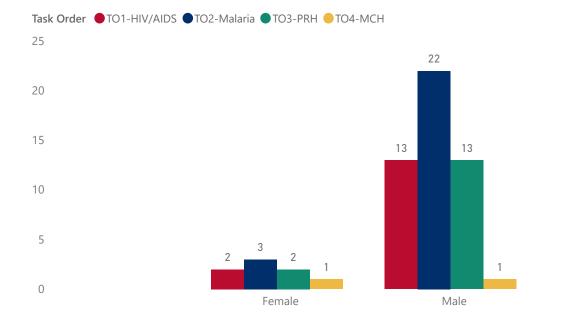
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Country

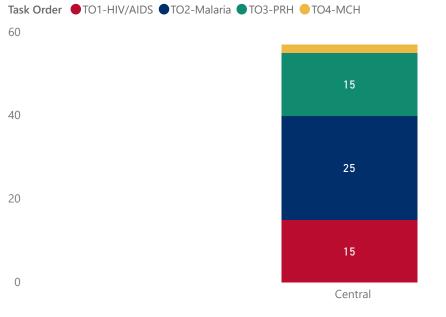
Training for supply chain partners

Country	\sim	Task Order	\checkmark	Supply Chain Level	\sim	Туре	\sim
Ethiopia	\sim	All	\sim	All	\sim	All	\sim

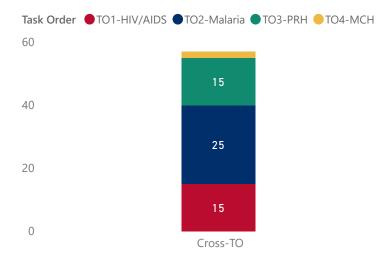
C2. Number of people trained by sex



C2. Number of people trained by supply chain level

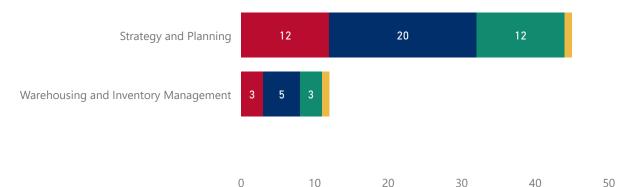


C2. Number of people trained by funding source and type



C2. Number of people trained by technical area



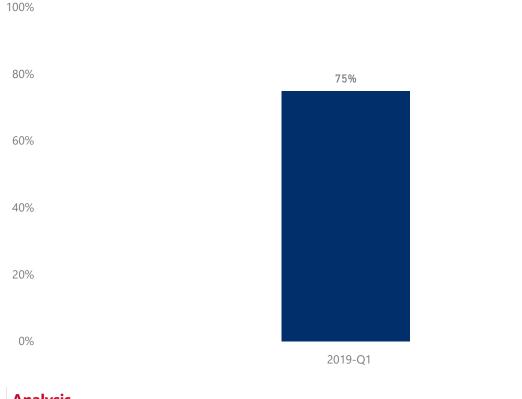


Analysis

GHSC-PSM in Ethiopia provided training in the strategy and planning thematic area to 54 PFSA staff. This included trainings in two specific areas: 1) leadership training for 42 directors and managers from the central PFSA (37 male and 5 female) to build the capacity of top-level managers and directors of PFSA, and 2) GPS training for 12 PFSA central staff (9 male and 3 female).

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period



Analysis

Out of the 20 molecular instruments supported by the project, 15 remained functional throughout the quarter, representing a slight decrease from 80 percent to 75 percent since last quarter. This is due to machine failures at Tigray and Hawassa regional labs. In Jimma, the laboratory remained under renovation for all 90 days, as it was last quarter. Accordingly, the service was interrupted for a total of 125 working days. The molecular instrument at Metu Karl hospital started operation in FY19 Q1.

Country	\sim
Ethiopia	\sim

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,

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.

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Complete Results and Denominators

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

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	6.5%	4,269
1st line adult ARV	1.7%	1,089
2nd line adult ARV	12.8%	195
Pediatric ARV	2.5%	926
First RTK	23.4%	218
Second RTK	19.0%	189
Tie-breaker RTK	16.0%	25
Viral load reagent	0.0%	19
Viral load consumable	16.0%	25
EID reagent	10.5%	19
EID consumable	5.6%	266
Male condoms (HIV)	4.5%	663
RUTF	10.9%	635
TO2-Malaria	10.2%	2,279
AL 6x1	17.1%	415
AL 6x2	10.6%	453
AL 6x3	11.8%	323
AL 6x4	5.7%	733
mRDT	9.3%	355
TO3-PRH	5.3%	6,476
Combined oral contraceptive with iron	5.0%	905
3-month injectable	2.3%	985
1-rod implant	10.0%	852
2-rod implant	5.0%	696
Emergency contraceptive, 2 tablets	8.1%	825
Progestin only pills	5.9%	740
Copper-bearing IUD	2.1%	810
Male condoms (FP)	4.5%	663
Total	6.7%	12,361

B1. Composite stockout rates

Task Order ▲	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	3.9%	804
TO3-PRH		
Combined oral methods	5.0%	905
Injectable contraceptives	2.3%	985
Implantable contraceptives	4.2%	937
Emergency oral contraceptives	8.1%	825
Progestin-only methods	5.9%	740

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%	1,239
TO2-Malaria	82%	1,045
TO3-PRH	90%	1,166
TO4-MCH	77%	1,166

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	4%	33%	58%	4%	24
TO1-HIV/AIDS		58%	42%		12
TO2-Malaria			100%		5
TO3-PRH	13%	25%	50%	13%	8
Subnational level 1	14%	39%	30%	17%	340
TO1-HIV/AIDS	12%	43%	27%	18%	136
TO2-Malaria	15%	22%	41%	21%	85
TO3-PRH	15%	51%	23%	11%	136
Total	14%	39%	32%	16%	364

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.

Country

FY Quarter

Ethiopia 🗸 🗸

2019-Q1 🗸 🗸

C2. Number of people trained Task Order Female Male Total TO1-HIV/AIDS 2 13 15 3 25 TO2-Malaria 22 TO3-PRH 2 13 15 1 2 1 TO4-MCH 8 49 57 Total

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B6. Quarterly supply plan updates

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

C10. HIV molecular instrument functionality

# GHSC-PSM-	% of instruments that functional
supported instruments	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

Country M&E Indicator Performance



FY2019 Quarter 1

October - December 2018



Ghana



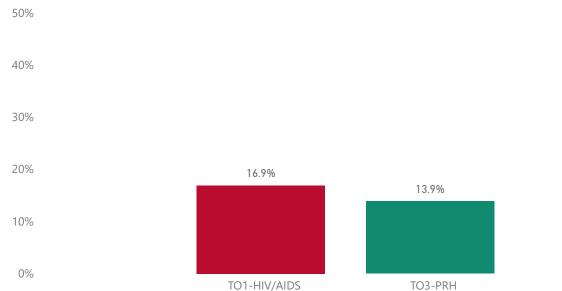


Service Delivery Point Stockouts and Reporting Rates

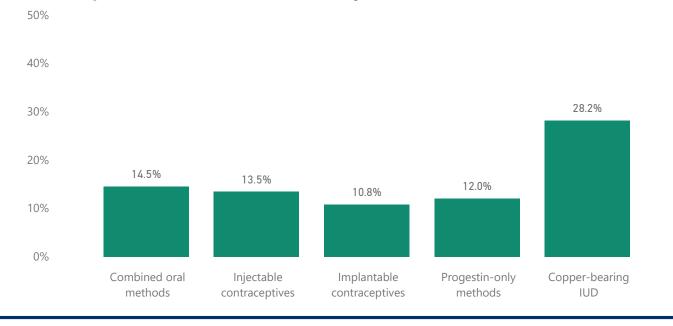
Country	\sim	Task Order	\sim	Tracer Product	\sim
Ghana	\sim	All	\sim	All	\sim

In GHSC-PSM-supported regions





B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3)



B3. LMIS reporting rate

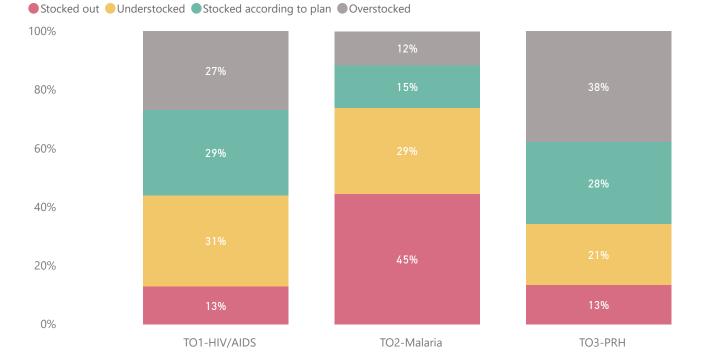
100%	4
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60%	d
0070	
400/	
40%	
20%	

Analysis

This is the first quarter GHSC-PSM in Ghana is reporting on this indicator, using data from the HIV LMIS report for TO1 products and DHIMS2 for TO3 products. In switching to the new sources, Ghana can report on first-line pediatric ARVs, female condoms, and progestin-only pills for the first time, as these systems report on more products than the Early Warning System (EWS), which was previously used as the data source. The EWS is no longer being used due to low reporting rates. The HIV LMIS report and DHIMS2 will be used to report facility-level stock status data until the Ghana Integrated Logistics Managements Information System (GhiLMIS) is operational, which is expected to be in FY19. Malaria products were not included this quarter because they are not captured in the HIV LMIS report or DHIMS2; data for the program area will be captured through the EUV, which takes place biannually.

Warehouse stock status and product losses

B2. Stocked according to plan



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

		1					
TC	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Country	\sim	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Ghana	\checkmark	All	\sim	All	\sim	All	\sim

Indicator Analysis

B2	The overall SAP rate increased slightly, from 17 percent in FY18 Q4 to 23 percent this quarter (FY19 Q1).
C7	No losses to report this quarter.

Supply plans, innovations, and strategic activities

Task Order

B6. Quarterly supply plan submissions to GHSC-PSM HQ **Total Innovations** Type of innovation # of innovations Analysis implemented \mathbf{T} 2019-Q1 MNCH was the only supply plan that this quarter GHSC-PSM in Ghana did not submit, as they do not do quantification for MNCH **C1.** Innovations implemented this quarter ARVs commodities. Type of Description innovation Condoms There were no innovations to report this quarter. FP commodities MCH commodities Malaria commodities RTKs C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM assistance Details None to report this quarter

Country

Ghana

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Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

100% 80% 60% 40% 20% 0% Analysis \mathbf{T}

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

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.

Ghana

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Country

Complete Results and Denominators

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

Task Order ▲	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	16.9%	4,574
1st line adult ARV	7.6%	370
2nd line adult ARV	35.4%	370
Pediatric ARV	39.5%	370
First RTK	2.5%	325
Second RTK	4.2%	310
Male condoms (HIV)	14.7%	2,162
Female condoms (HIV)	19.3%	667
TO3-PRH	13.9%	14,735
Combined oral contraceptive with iron	14.5%	2,452
3-month injectable	13.5%	4,355
2-rod implant	10.8%	3,144
Progestin only pills	12.0%	1,444
Copper-bearing IUD	28.2%	511
Male condoms (FP)	14.7%	2,162
Female condoms (FP)	19.3%	667
Total	14.4%	16,480

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO3-PRH		
Combined oral methods	14.5%	2,452
Injectable contraceptives	13.5%	4,355
Implantable contraceptives	10.8%	3,144
Progestin-only methods	12.0%	1,444

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
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B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	25%	35%	10%	31%	72
TO1-HIV/AIDS	48%	33%	10%	10%	21
TO2-Malaria	10%	13%	17%	60%	30
TO3-PRH	19%	74%	0%	7%	27
Subnational level 1	23%	23%	29%	24%	720
TO1-HIV/AIDS	27%	26%	33%	13%	210
TO2-Malaria	15%	11%	31%	43%	300
TO3-PRH	29%	34%	23%	14%	270
Total	23%	24%	28%	25%	792

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.

Country

Ghana

 \checkmark

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FY Quarter

2019-Q1 🗸 🗸



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
MCH commodities	1	0
RTKs	1	1

C10. HIV molecular instrument functionality

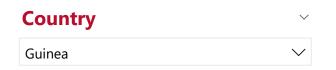
# GHSC-PSM-	% of instruments that functional
supported instruments	for the entire period

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

Country M&E Indicator Performance









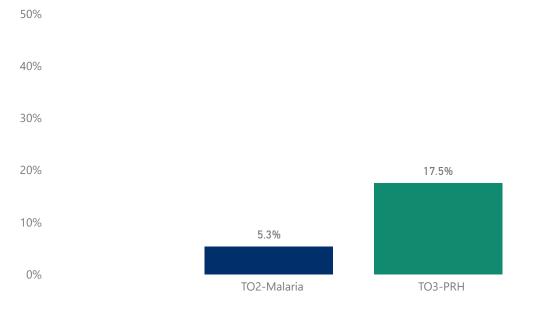
FY2019 Quarter 1 October - December 2018

Service Delivery Point Stockouts and Reporting Rates

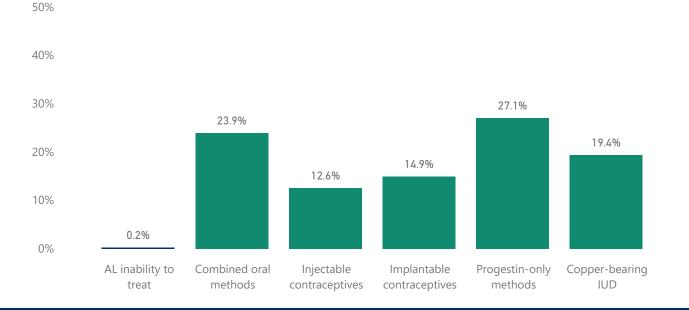
Country	\sim	Task Order	\sim	Tracer Product	\checkmark
Guinea	\sim	All	\sim	All	\sim

In GHSC-PSM-supported regions

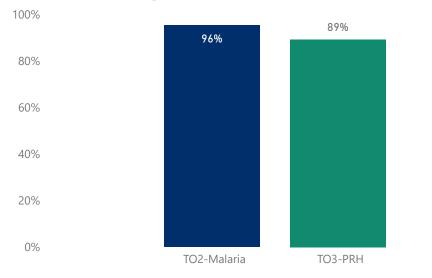




B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3)



B3. LMIS reporting rate



Analysis

Guinea largely maintained its high SDP reporting rates to the LMIS through regular follow up by phone, supervision visits in F2019 Quarter 1, and the eLMIS review meeting coordinated by the Logistics Management Unit.

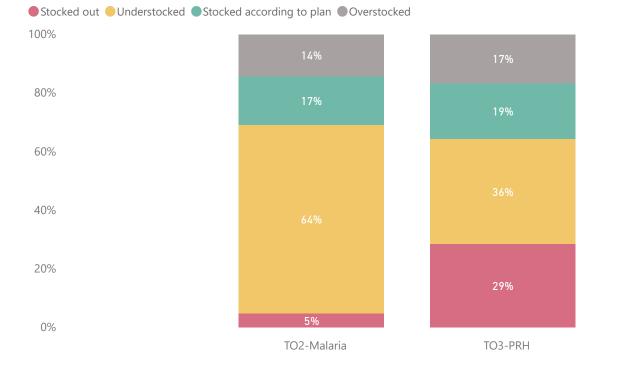
Guinea's overall stockout rate was 11 percent, with a large decrease in TO2 stockouts from 14 percent to 5 percent. The "inability to treat" rate improved from 2 percent to 0.2 percent. The distribution of antimalarials occurred on schedule in October 2018, and the central level was well stocked this quarter. The strong performance also stems from good coordination among the Pharmacie Centrale de Guinée (PCG), the National Malaria Control Program, district focal points, and GHSC-PSM regional technical advisors who closely coordinated the timely analysis and submission of orders by health facilities to regional warehouses for resupply. Closer follow-up and support from GHSC-PSM regional technical advisors to PCG regional warehouses in preparing orders, and planning and implementing distribution plans according to agreed upon timelines also contributed.

TO3 stockouts increased slightly from 17 percent to 18 percent, despite a family planning campaign during the quarter followed by routine quarterly distribution. Combined oral contraceptives and progestin-only pills were the two items with higher stockout rates (24 and 27 percent, respectively). The stockouts of the two most commonly used methods can be explained by their lower availability at the central level which led to rationalization of resupply. Under the request of the MoH, GHSC-PSM has placed emergency orders of the two methods to avert any potential stockouts. In collaboration with UNFPA, Guinea introduced a new contraceptive this quarter, Sayana Press, which should help increase availability of injectables.

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Warehouse stock status and product losses

B2. Stocked according to plan



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

	ТО	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
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Country	\checkmark	Task Order	\checkmark	Supply Chain Level	\sim	Tracer Product	\checkmark
Guinea	\sim	All	\sim	All	\checkmark	All	\checkmark

Indicator Analysis

B2

Stocking of malaria products improved from 86 percent understocked and 0 percent stocked according to plan, to 50 percent understocked and 33 percent stocked according to plan. The project also started reporting data at the regional level this quarter, where understocks were noticeably more pronounced (67 percent of observations across the six regions) than at the central level. Adherence to the minimum and maximum stock policy is still very low at PCG. Starting in FY2019, PCG is regularly re-supplying the regional warehouses in anticipation of the distribution cycles. GHSC-PSM is providing support to PCG to ensure that the re-supply is informed by the minimum and maximum calculations so that regional warehouses can maintain adequate stocks.

Supply plans, innovations, and strategic activities

То	tal Innovatio	ons	Type of i	nnovatior	n # of ini	novations
	implement	ted				
	this qua	rter				

C1. Innovations implemented this quarter

Task Order	Type of	Description
	innovation	

There were no innovations to report this quarter.

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Analysis

Guinea

Guinea has no supply plan submission requirements for this indicator.

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

Details

The project helped to develop a procedures manual for drug registration for the National Directorate of Pharmacy and Medicines, which is currently being validated. The project also supported development of an eLMIS user's guide, which has been finalized and validated.

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Complete Results and Denominators

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

Task Order	Stockout rate	# SDP stock observations
TO2-Malaria	5.3%	2,581
AL 6x1	5.6%	432
AL 6x2	5.1%	433
AL 6x3	5.3%	433
AL 6x4	9.4%	427
mRDT	3.0%	432
SP	3.8%	424
TO3-PRH	17.5%	2,224
Combined oral contraceptive with iron	23.9%	355
3-month injectable	12.6%	405
2-rod implant	14.9%	395
Progestin only pills	27.1%	299
Copper-bearing IUD	19.4%	366
Male condoms (FP)	10.6%	404
Total	11.0%	4,805

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		·
AL inability to treat	0.2%	433
TO3-PRH		
Combined oral methods	23.9%	355
Injectable contraceptives	12.6%	405
Implantable contraceptives	14.9%	395
Progestin-only methods	27.1%	299

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	96%	453
TO3-PRH	89%	453

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	25%	17%	50%	8%	12
TO2-Malaria	33%	17%	50%	0%	6
TO3-PRH	17%	17%	50%	17%	6
Subnational level 1	17%	15%	50%	18%	72
TO2-Malaria	14%	14%	67%	6%	36
TO3-PRH	19%	17%	33%	31%	36
Total	18%	15%	50%	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.

Country

 \checkmark

FY Quarter

Guinea 🗸 🗸

2019-Q1 🗸 🗸

C2. Number of people trained Task Order **Total**

B6. Quarterly supply plan updates

Product Group	# of supply	# submitted
	plans required	

C10. HIV molecular instrument functionality

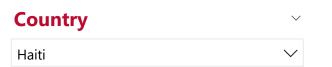
# GHSC-PSM-	% of instruments that functional
supported instruments	for the entire period

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

Country M&E Indicator Performance









FY2019 Quarter 1

October - December 2018

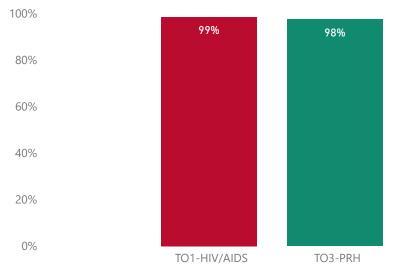
Service Delivery Point Stockouts and Reporting Rates

Country	\checkmark	Task Order	\checkmark	Tracer Product	\sim	
Haiti	\sim	All	\sim	All	\sim	

B1. Stockout rate at service delivery points B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3) 50% 50% 40% 40% 30% 30% 20% 20% 10% 10% 0.5% 0.5% 0.0% 0.0% 0% 0.2% 0.3% 0% Copper-bearing IUD Combined oral methods Iniectable Implantable TO1-HIV/AIDS TO3-PRH contraceptives contraceptives

B3. LMIS reporting rate

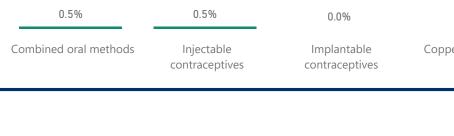
In GHSC-PSM-supported regions



Analysis

Haiti continues to maintain a very low stockout rate; across the two task orders the rate was 0.3 percent this guarter. The 0.2 percent stockout rate for TO1 consisted of one single facility stocked out of male condoms and one single facility stocked out of the second-line adult ARV tracer product. In the case of TO3, the 0.3 percent stockout rate consisted of four instances of a facility being stocked out of a product, including the one site stocked out of male condoms noted above. The project will address causes behind these specific instances of stockouts, for example a new patient not being registered in GHSC-PSM's system, and an increase in consumption from a mobile clinic activity not known to the project. Among the activities contributing to Haiti's strong performance include an "incentives for better performance" strategy that recognizes high performing facility stock managers and site managers, and the new "Système de Gestion des Données de Consommation et Calcul" (SYGDOCC calculation tool and system) developed by GHSC-PSM Haiti that ensures timely receipt of consumption data from facilities and helps strengthen inventory management and reporting.

The SDP reporting rate in Haiti remained strong this guarter, at 99 percent and 98 percent for TO1 and TO3, respectively.



Warehouse stock status and product losses

B2. Stocked according to plan

Stocked out Ouderstocked Stocked according to plan Overstocked
 Stocked out Ouderstocked Stocked according to plan Overstocked
 80%
 42%
 58%
 60%
 17%
 58%
 60%
 17%
 58%
 33%
 33%
 60%
 701-HIV/AIDS
 TO3-PRH

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

ТО	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
TO1	Central	Storage	Damage	Laboratory	\$37	\$7,279,756	0.00%
TO1	Central	Storage	Expiry	HIV commodities	\$18,887	\$13,570,182	0.14%

Country	\sim	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Haiti	\sim	All	\sim	All	\sim	All	\sim

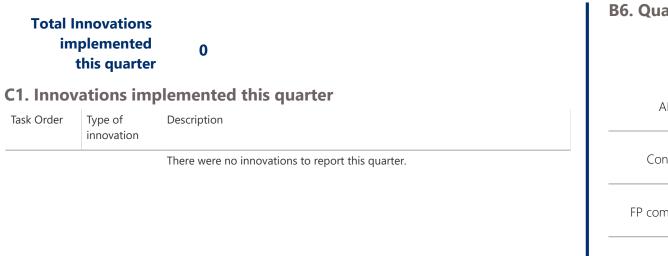
Indicator Analysis

B2

▼
The stock status for TO1 products at Haiti's central warehouse improved since last quarter, with
an increase in stocking according to plan from 6 percent to 17 percent, and no stockouts.
However, 42 percent of observations were understocked. First-line adult ARVs were understocked
due to the transition from TDF/3TC/EFV 300/300/600 mg to Dolutegravir; the former product is
still the most used and therefore it remains the tracer product this reporting period. Second-line
adult ARVs were slightly overstocked, as the forecast that 15 percent of patients would be on
second-line treatment did not come to pass. Pediatric ARVs were overstocked, as consumption of
the current most-used product (Zidovudine/Lamivudine/Nevirapine 60/30/50 mg) was down with
the transition to Dolutegravir. Second-line RTKs were understocked due to the effort to distribute
stock that was nearing its expiration date. A new order arrived late in the quarter and was not
included in this data.
TO3 products tended to be overstocked this quarter (58 percent). This was due to declining

consumption of combined oral contraceptives, injectables, implants, and IUDs.

Supply plans, innovations, and strategic activities



B6. Quarterly supply plan submissions to GHSC-PSM HQ **Analysis** 2019-01 ARVs plans. Condoms FP commodities Lab (HIV diagnostics) MCH commodities RTKs

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

Details

National supply chain strategic plan: SNADI's 2018-2022 operational plan was formally approved by the Minister of Health in November 2018. The first meeting of the SNADI Technical Committee to ensure the optimal implementation of the plan according to quality standards and procedures took place in December 2018. The implementation of the transition plan is underway and support to MSPP continues.

Haiti submitted five out of its six required supply plans this quarter. Consumption data for MNCH are not yet collected and analyzed for all of Haiti's 10 departments; therefore, the project is not yet ready to submit these supply plans.

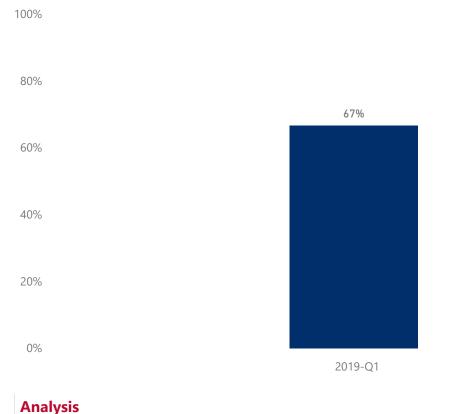
Country

Haiti

 \checkmark

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period



The percentage of molecular instruments that remained functional for the duration of the guarter in Haiti dropped from 100 to 67 percent. Two out of the six molecular instruments on which Haiti reports experienced outages this quarter, leading to the drop in the indicator. The first one was down for two days due to user error. The second one was down for eight days, as machine pressure was adversely affected by the tube replacement during annual preventive maintenance.

Country \sim Haiti \sim

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

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

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	0.2%	879
1st line adult ARV	0.0%	136
2nd line adult ARV	0.7%	136
Pediatric ARV	0.0%	136
First RTK	0.0%	136
Second RTK	0.0%	136
Male condoms (HIV)	0.5%	199
TO3-PRH	0.3%	1,194
Combined oral contraceptive with iron	0.5%	199
3-month injectable	0.5%	199
2-rod implant	0.0%	199
Copper-bearing IUD	0.0%	199
Calendar-based awareness methods	0.5%	199
Male condoms (FP)	0.5%	199
Total	0.3%	1,874

B1. Composite stockout rates

Task Order ▲	Stockout rate	# of SDPs that reported
TO3-PRH		
Combined oral methods	0.5%	199
Injectable contraceptives	0.5%	199
Implantable contraceptives	0.0%	199

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	99%	150
TO3-PRH	98%	218

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	23%	55%	23%		22
TO1-HIV/AIDS	17%	42%	42%		12
TO3-PRH	33%	58%	8%		12
Total	23%	55%	23%		22

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.

Country

FY Quarter

Haiti

2019-Q1 🗸 🗸

C2. Number of people trained Task Order **Total**

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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

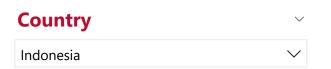
# GHSC-PSM-	% of instruments that functional
supported instruments	for the entire period
6	67%

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

Country M&E Indicator Performance





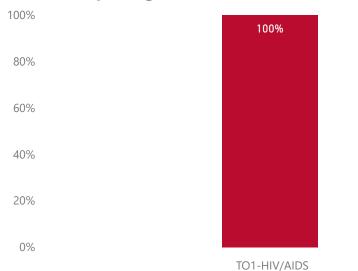




FY2019 Quarter 1 October - December 2018

Country \sim Task Order Tracer Product \sim \sim **Service Delivery Point Stockouts and Reporting Rates** All All \sim \sim Indonesia \checkmark In GHSC-PSM-supported regions **B1. Stockout rate at service delivery points B1.** Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3) 50% 50% 40% 40% 30% 30% 20% 20% 10% 10% 3.3% 0% TO1-HIV/AIDS 0%

B3. LMIS reporting rate



Analysis

The 12 JSD sites currently being reported on had a perfect reporting rate to the LMIS.

The overall stockout rate decreased slightly, from 5 percent in FY18 Q4 to 3 percent this quarter. There were no stockouts of ARV commodities. One SDP (of twelve) was stocked out of first-line RTKs and one SDP (of twelve) was stocked out of the tie-breaker RTK.

130

Warehouse stock status and product losses

B2. Stocked according to plan Stocked out Understocked Stocked according to plan Overstocked 100% 43% 43% 43% 43% 43% 20% 20% 20% 20% 24% TO1-HIV/AIDS

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

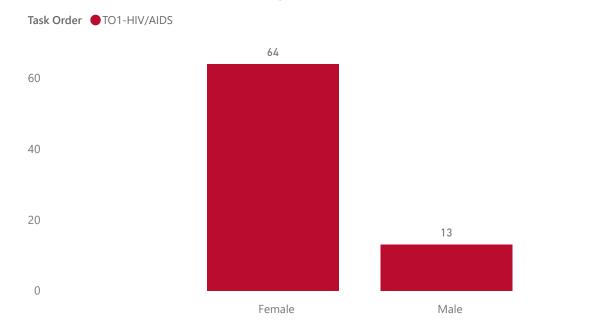
ТО	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
----	-------	--------------	--------------	--------------	------------	------------------	--------

Country	\sim	Task Order	\sim	Supply Chain Level	\checkmark	Tracer Product	\sim
Indonesia	\checkmark	All	\sim	All	\checkmark	All	\checkmark
In	dicator	Analysis					
B2		The overall stocker products saw a de		ding to plan rate decreased n this rate.	by 24 pe	ercent from last quarter, a	s all ARV

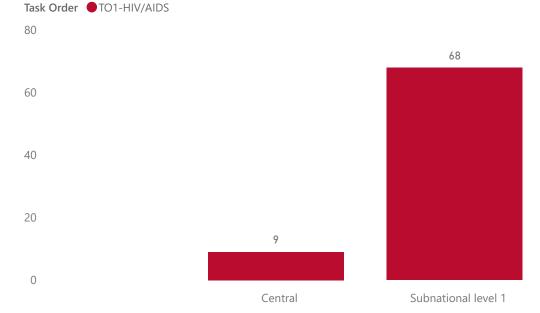
Training for supply chain partners

Country	\sim	Task Order	\sim	Supply Chain Level	\sim	Туре	\sim
Indonesia	\sim	All	\sim	All	\sim	All	\checkmark

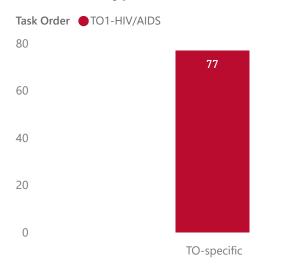
C2. Number of people trained by sex



C2. Number of people trained by supply chain level

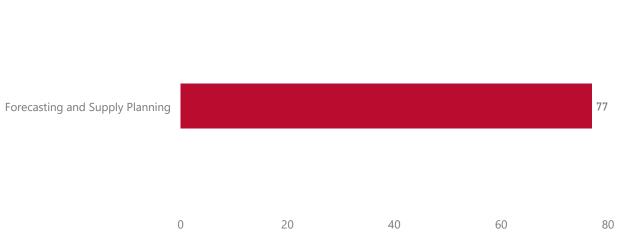


C2. Number of people trained by funding source and type



C2. Number of people trained by technical area





Analysis T

GHSC-PSM in Indonesia conducted one training on ARV and non-ARV forecasting for staff from the central and provincial levels.

132

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

100%			
80%			
60%			
40%			
20%			
0%			
Ana ▼	lysis		

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

Country

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Indonesia

racer 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, Alere Determine, Triline Intec, Oncoprobe, and Vikia
Second RTK	IntecSD Bioline, Fokus, Alere Determine, Triline Intec, Oncoprobe, and Vikia
Tie-breaker RTK	SD Bioline, Fokus, Alere Determine, Triline Intec, Oncoprobe, and Vikia
Viral load reagent	Abbott
Viral load consumable	Abbott
EID reagent	Abbott

Complete Results and Denominators

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

Task Order	Stockout Rate	# SDP stock observations
TO1-HIV/AIDS	3.3%	60
1st line adult ARV	0.0%	12
2nd line adult ARV	0.0%	7
Pediatric ARV	0.0%	5
First RTK	8.3%	12
Second RTK	0.0%	12
Tie-breaker RTK	8.3%	12
Total	3.3%	60

B1. Composite stockout rates

	Sto	ockout Rate	# of SDP	's that repo	orted
ee "Indicator Details"	for B01 at the end o	f this annex for	more detail abo	out compo	site stockout
B3. SDP reporting ra	ate to LMIS (GHSC-	PSM-supporte	ed regions)		
Task Order	Rep	porting rate	Total # of	SDPs requi	red to report
A					
TO1-HIV/AIDS		100%		12	
TO1-HIV/AIDS		100%		12	
TO1-HIV/AIDS		100%		12	
TO1-HIV/AIDS		100%		12	
TO1-HIV/AIDS		100%		12	
	ag to plan at storag			12	
32. Stocked accordir		e sites			T - 1
	Stocked according	e sites	Understocked	Stocked	Total Stock Observation
32. Stocked accordir Supply Chain Level	Stocked according to plan	e sites Overstocked		Stocked out	Observation
32. Stocked accordir Supply Chain Level ▲ Central	Stocked according to plan 33%	e sites Overstocked 50%	17%	Stocked out 0%	Observation 6
32. Stocked accordir Supply Chain Level Central TO1-HIV/AIDS	Stocked according to plan 33% 33%	e sites Overstocked 50%	17% 17%	Stocked out 0%	Observation 6
32. Stocked accordir Supply Chain Level ▲ Central TO1-HIV/AIDS Subnational level 1	Stocked according to plan 33%	e sites Overstocked 50%	17%	Stocked out 0%	Observation 6
32. Stocked accordir Supply Chain Level Central TO1-HIV/AIDS	Stocked according to plan 33% 33% 17%	e sites Overstocked 50% 33%	17% 17% 50%	Stocked out 0% 0%	Observation 6 6 6
32. Stocked accordir Supply Chain Level ▲ Central TO1-HIV/AIDS Subnational level 1 TO1-HIV/AIDS	Stocked according to plan 33% 33% 17%	e sites Overstocked 50% 33% 33%	17% 17% 50% 50%	Stocked out 0% 0% 0%	Observation 6 6 6 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.

CountryYFY QuarterIndonesiaY2019-Q1

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C2. Number of people trained					
Task Order Female Male Total					
TO1-HIV/AIDS	64	13	77		
Total 64 13 77					

B6. Quarterly supply plan updates

	Product Group	# of supply plans required	# submitted
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C10. HIV molecular instrument functionality

# GHSC-PSM-	% of instruments that functional
supported instruments	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

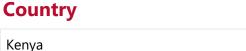
Country M&E Indicator Performance





FY2019 Quarter 1 October - December 2018

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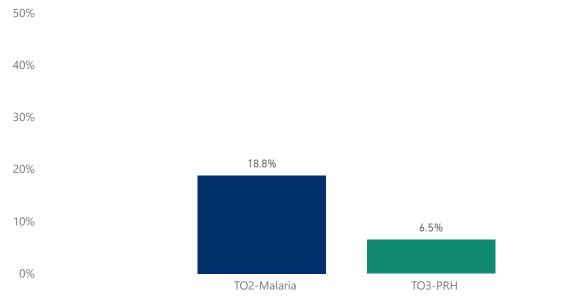


Service Delivery Point Stockouts and Reporting Rates

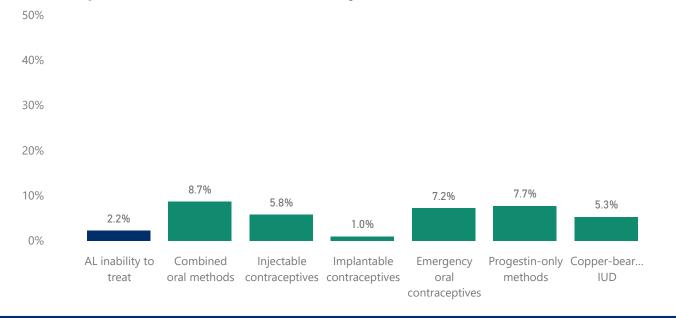
Country	\checkmark	Task Order	\checkmark	Tracer Product	\checkmark
Kenya	\sim	All	\sim	All	\sim

In GHSC-PSM-supported regions

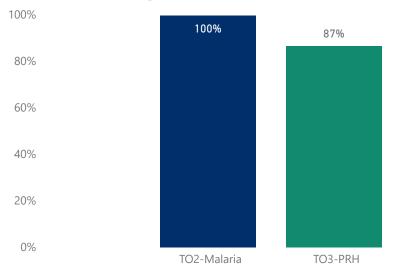




B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3)



B3. LMIS reporting rate



Analysis

Beginning FY2019, GHSC-PSM is pleased to include M&E data for Afya Ugavi in the project-wide report. Afya Ugavi is GHSC-PSM's health systems strengthening activity in Kenya, managed through a dedicated task order (TO5).

In Afya Ugavi's supported counties, stockout rates for all seven family planning tracer products declined from August to November 2018. Project staff have been regularly reviewing commodity data and following up with facilities. Health records officers have also noted and addressed gaps such as inaccurate and incomplete reporting. Stockout rates for malaria commodities were generally much higher, although inability to treat with AL was only 2 percent. The project is working to help rationalize health facility orders at the county and sub-county levels, and to expedite pending shipments.

The LMIS reporting rates for malaria was close to 100 percent (99.7). For family planning, the rate was lower, at 87 percent. This was due to a number of blank submissions, which were considered non-reporting. Holiday leave among facility staff members is also likely to have contributed. The project performed on-the-job training in facilities which were noticed to have data challenges and will continue to do so on a case by case basis while working through supervisors of the facility staff.

Warehouse stock status and product losses

B2. Stocked according to plan

 • Stocked out • Understocked • Stocked according to plan • Overstocked

 100%
 21%

 80%
 8%

 60%
 33%
 5%

 40%
 50%
 21%

 20%
 22%
 21%

 0%
 11%
 21%

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

ТС) Level	Site of Loss Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Country	\sim	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Kenya	\checkmark	All	\sim	All	\checkmark	All	\sim

Indicator	Analysis
B2	Many family planning items were understocked or stocked out at the central level, including DMPA-IM, implants, emergency oral contraceptives, copper IUDs, and male condoms. Afya Ugavi is supporting the MOH to expedite shipments where possible. Malaria products were mostly in adequate supply, with two thirds of product observations either stocked according to plan or overstocked.
C7	GHSC-PSM does not have custody of any products in country and therefore does not report on product losses.

Supply plans, innovations, and strategic activities

Task Order



Country

Kenya

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Analysis

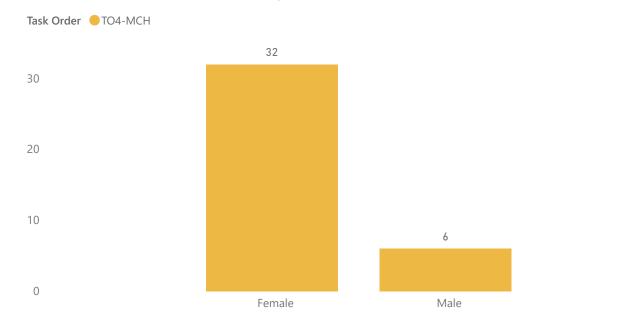
Kenya provided partial supply information for malaria and is continuing to work on a full supply plan submission. A supply plan for family planning was not submitted.

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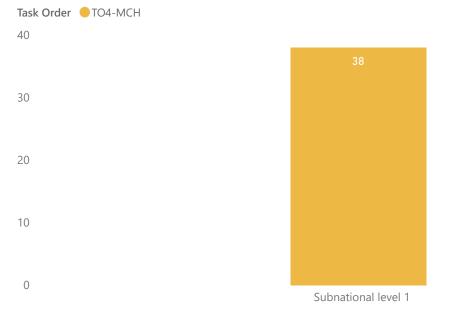
Training for supply chain partners

Country		Task Order		Supply Chain Level		Туре	
Kenya	\checkmark	All	\sim	All	\checkmark	All	\checkmark

C2. Number of people trained by sex



C2. Number of people trained by supply chain level



C2. Number of people trained by funding source and type



C2. Number of people trained by technical area



0

Analysis

Under the MNCAH program, Afya Ugavi provided technical and logistical support in the orientation of 38 health commodity managers from Samburu (20) and Turkana (19) counties. The team also trained two Afya Timiza officers (one from each county) on basic concepts of quantification. The Turkana quantification rationalized a large order of Essential Medicines and Medical Supplies (EMMS), while the Samburu county exercise analyzed annual budget needs for pharmaceuticals, non-pharmaceuticals, and laboratory commodities against the current allocations.

10 20 30

40

38

139

Complete Results and Denominators

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

Task Order ▲	Stockout rate	# SDP stock observations
TO2-Malaria	18.8%	6,942
AL 6x1	43.8%	1,157
AL 6x2	33.6%	1,157
AL 6x3	9.1%	1,157
AL 6x4	8.5%	1,157
mRDT	11.5%	1,157
SP	6.4%	1,157
TO3-PRH	6.5%	1,656
Combined oral contraceptive with iron	8.7%	207
3-month injectable	5.8%	207
1-rod implant	5.8%	207
2-rod implant	3.9%	207
Emergency contraceptive, 2 tablets	7.2%	207
Progestin only pills	7.7%	207
Copper-bearing IUD	5.3%	207
Male condoms (FP)	7.7%	207
Total	16.4%	8,598

B1. Composite stockout rates

Stockout rate	# of SDPs that reported
2.2%	1,157
8.7%	207
5.8%	207
1.0%	207
7.2%	207
7.7%	207
	2.2% 8.7% 5.8% 1.0% 7.2%

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%	1,167
TO3-PRH	87%	239

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	19%	26%	38%	17%	42
TO2-Malaria	33%	33%	22%	11%	18
TO3-PRH	8%	21%	50%	21%	24
Total	19%	26%	38%	17%	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.

Country

Kenya

FY Quarter

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2019-Q1 🗸 🗸

C2. Number of people trained

Task Order	Female	Male	Total
TO4-MCH	32	6	38
Total	32	6	38

B6. Quarterly supply plan updates

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

C10. HIV molecular instrument functionality

# GHSC-PSM-	% of instruments that functional
supported instruments	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

Country M&E Indicator Performance

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FY2019 Quarter 1 October - December 2018

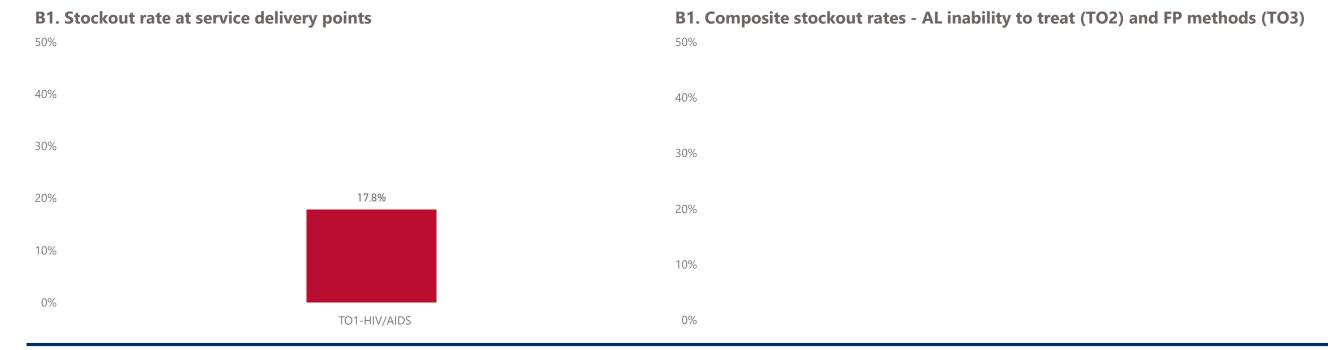


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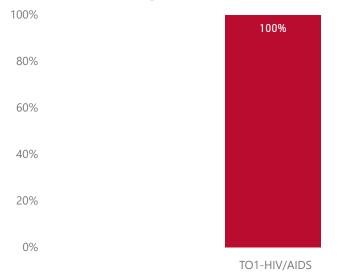
Service Delivery Point Stockouts and Reporting Rates

Country	\checkmark	Task Order	\sim	Tracer Product	\sim
Lesotho	\checkmark	All	\sim	All	\checkmark

In GHSC-PSM-supported regions



B3. LMIS reporting rate



Analysis

This quarter, GHSC-PSM in Lesotho started reporting for all 10 districts, which increased the number of SDPs reporting for most products to 93 percent, a 40 percent increase. Previously, five districts were being reported on. Overall, the stockout rate increased by 8 percent from last quarter, which is primarily driven by RTKs. The stockout rate for first, second, and tie-breaker RTKs increased by 10 percent, 31 percent, and 24 percent, respectively, due to expiries.

With GHSC-PSM in Lesotho reporting on all 10 districts for the first time this quarter, the number of SDPs required to report increased by 38 percent from last quarter. There was a perfect reporting rate for those SDPs.

Warehouse stock status and product losses

TO1-HIV/AIDS

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

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

Country ~	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Lesotho 🗸	All	\sim	All	\sim	All	\sim

Indicator Analysis

The use

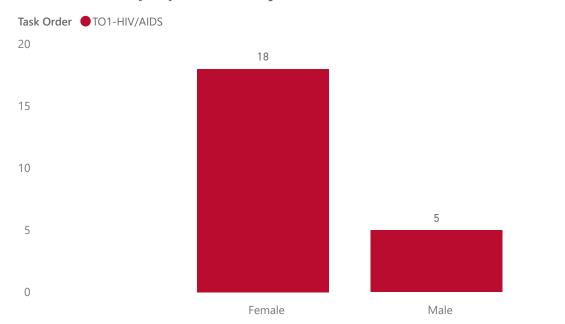
B2

The overall stocked according to plan (SAP) rate decreased 21 percent from last quarter. Most used first-line ARVs and tie-breaker RTKs saw the biggest decrease in their SAP rates. All observations for most used first-line ARVs went from SAP last quarter to understocked this quarter. For tie-breaker RTKs, only one of the three observations were SAP this quarter, whereas last quarter all observations were SAP.

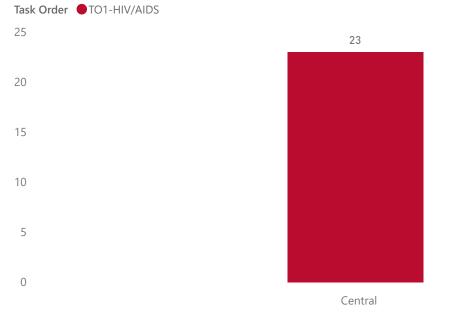
Training for supply chain partners

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Туре	\sim
Lesotho	\sim	All	\sim	All	\sim	All	\checkmark

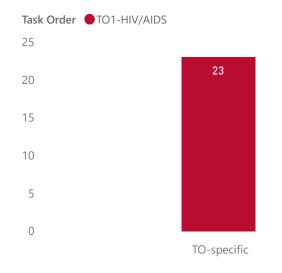
C2. Number of people trained by sex



C2. Number of people trained by supply chain level



C2. Number of people trained by funding source and type

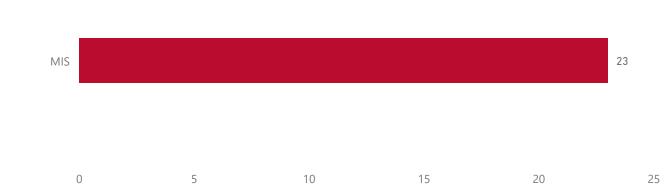


C2. Number of people trained by technical area



Analysis

GHSC-PSM in Lesotho conducted an informed push training for 23 heads of departments within the Ministry of Health.



Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

Anal	lysis				
0%					
20%					
40%					
60%					
80%					
100%					

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

Country

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Lesotho

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

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

Task Order	Stockout Rate	# SDP stock observations
TO1-HIV/AIDS	17.8%	1,481
1st line adult ARV	1.0%	199
2nd line adult ARV	4.2%	191
Pediatric ARV	2.4%	169
First RTK	11.7%	180
Second RTK	34.3%	175
Tie-breaker RTK	29.4%	170
Viral load reagent	25.0%	4
EID reagent	0.0%	1
Male condoms (HIV)	4.3%	116
Female condoms (HIV)	7.3%	109
RUTF	62.9%	167
Total	17.8%	1,481

B1. Composite stockout rates

Task Order	Stockout Rate	# of SDPs that reported
	,	
See "Indicator Details" for B01 a	at the end of this annex for m	nore detail about composite stockouts
B3. SDP reporting rate to LN	IIS (GHSC-PSM-supported	regions)
Task Order	Reporting rate	Total # of SDPs required to report

B2. Stocked according to plan at storage sites

TO1-HIV/AIDS

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	27%	36%	27%	9%	33
TO1-HIV/AIDS	27%	36%	27%	9%	33
Total	27%	36%	27%	9%	33

100%

200

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.

Country \sim Lesotho \sim

FY Quarter \sim 2019-Q1

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C2. Number of people trained

Task Order	Female	Male	Total			
TO1-HIV/AIDS	18	5	23			
Total	18	5	23			

B6. Quarterly supply plan updates

Product Group		# submitted
	plans required	

C10. HIV molecular instrument functionality

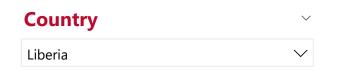
# GHSC-PSM-	% of instruments that functional
supported instruments	for the entire period

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

Country M&E Indicator Performance









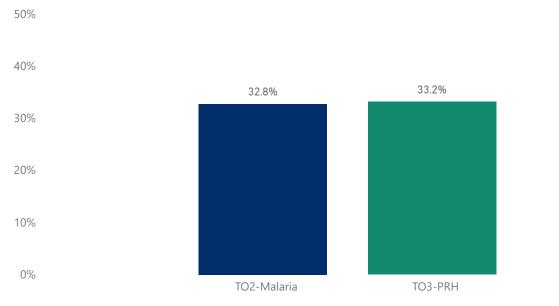
FY2019 Quarter 1 October - December 2018

Service Delivery Point Stockouts and Reporting Rates

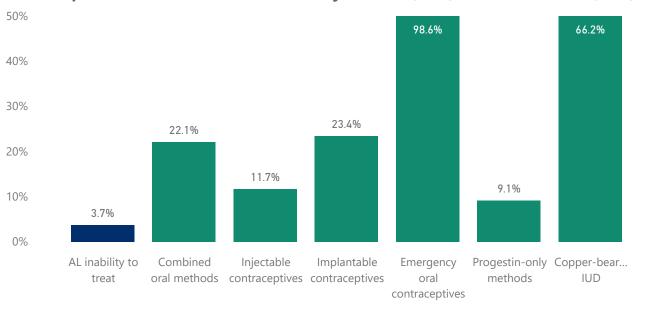
In GHSC-PSM-supported regions

Country	\checkmark	Task Order	\sim	Tracer Product	\sim
Liberia	\sim	All	\sim	All	\sim

B1. Stockout rate at service delivery points



B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3)



B3. LMIS reporting rate

100%			
80%			
60%			
40%			

Analysis

Liberia conducted an end user verification survey in FY2019 Q1. The results showed stockout rates above 30 percent for both malaria and family planning products. However, most health facilities had at least one presentation of AL available, yeilding a lower inability to treat figure of only 3.7 percent. On the family planning side, stockouts of emergency oral contraceptives were widespread. Stockouts of other contraceptives were also elevated, though not as common.

20%

Warehouse stock status and product losses

B2. Stocked according to plan

 • Stocked out • Understocked • Stocked according to plan • Overstocked

 10%
 12%
 22%

 80%
 52%
 67%

 60%
 52%
 67%

 20%
 33%
 11%

 0%
 TO2-Malaria
 TO3-PRH

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

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

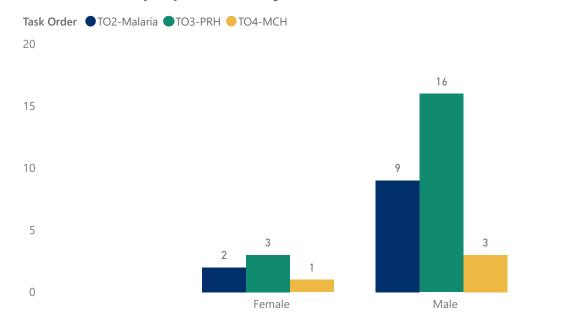
Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\checkmark
Liberia	\sim	All	\sim	All	\sim	All	\sim

IndicatorAnalysisB2Stocking within min/max level improved slightly for malaria commodities this quarter, although
most observations were still understocked. Stockouts of ACTs were all resolved by the end of the
quarter. SP remains stocked out at the central level, but a GHSC-PSM shipment is planned to
arrive in Q2. Family planning products were also generally understocked, and copper intrauterine
devices were stocked out. Copper IUDs are scheduled to arrive in Q2, and deliveries of oral
contraceptives, 1-month injectables, and male condoms are planned for Q2 and Q3.C7No product losses to report this quarter.

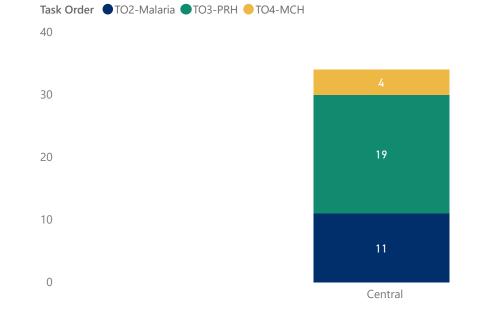
Training for supply chain partners

Country		Task Order		Supply Chain Level		Туре	
Liberia	\wedge	All	\sim	All	\sim	All	\sim

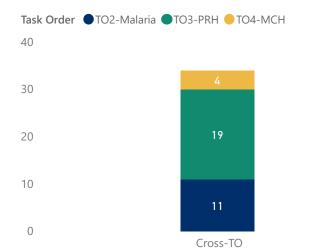
C2. Number of people trained by sex



C2. Number of people trained by supply chain level



C2. Number of people trained by funding source and type

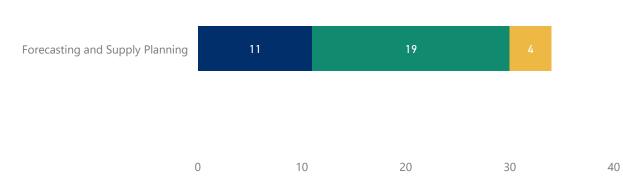


C2. Number of people trained by technical area



Analysis

GHSC-PSM facilited a training on forecast and quantification for commodities at the central level.



Complete Results and Denominators

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

Task Order	Stockout rate	# SDP stock observations	
TO2-Malaria	32.8%	891	
AL 6x1	21.0%	81	
AL 6x2	21.0%	81	
AL 6x3	33.3%	81	
AL 6x4	40.7%	81	
AS/AQ 100/270mgx3	43.2%	81	
AS/AQ 100/270mgx6	16.0%	81	
AS/AQ 25/67.5mg	66.7%	81	
AS/AQ 50/135mg	45.7%	81	
mRDT	17.3%	81	
SP	33.3%	81	
LLINs	22.2%	81	
TO3-PRH	33.2%	684	
Combined oral contraceptive with iron	22.1%	77	
3-month injectable	11.7%	77	
2-rod implant	23.4%	77	
Emergency contraceptive, 2 tablets	98.6%	73	
Progestin only pills	9.1%	77	
Copper-bearing IUD	66.2%	74	
Calendar-based awareness methods	26.3%	76	
Male condoms (FP)	11.7%	77	
Female condoms (FP)	34.2%	76	
Total	33.0%	1,575	

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	3.7%	81
TO3-PRH		
Combined oral methods	22.1%	77
Injectable contraceptives	11.7%	77
Implantable contraceptives	23.4%	77
Emergency oral contraceptives	98.6%	73
Progestin-only methods	9.1%	77

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	according Overstocked L		Stocked out	Total Stock Observations
Central	17%	2%	58%	23%	60
TO2-Malaria	12%	3%	52%	33%	33
TO3-PRH	22%		67%	11%	27
Total	17%	2%	58%	23%	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.

Country

Liberia

TO4-MCH

Total

✓ FY Quarter

3

28

 \checkmark

2019-Q1 🗸

4

34

C2. Number of people trainedTask OrderFemaleMaleTotalTO2-Malaria2911TO3-PRH31619

1

6

B6. Quarterly supply plan updates

Product Group # of supply plans required	# submitted
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C10. HIV molecular instrument functionality

# GHSC-PSM-	% of instruments that functional
supported instruments	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

Country M&E Indicator Performance

-





FY2019 Quarter 1 October - December 2018

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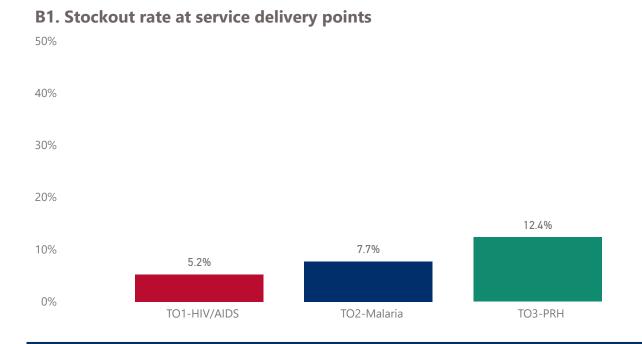


Malawi

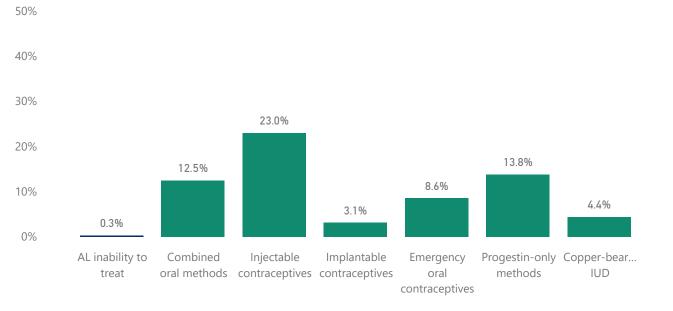
Service Delivery Point Stockouts and Reporting Rates

Country	\sim	Task Order	\sim	Tracer Product	\checkmark
Malawi	\sim	All	\sim	All	\sim

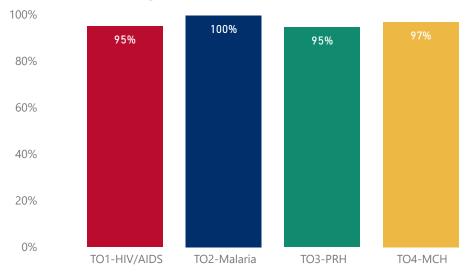
In GHSC-PSM-supported regions



B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3)



B3. LMIS reporting rate



Analysis

Overall stockout rates for HIV products are at 5.2 percent, with first-line adult and pediatric ARVs and second-line RTKs performing strongly. Rates were slightly higher for second-line ARVs (6 percent) and second-line RTKs (9 percent). Malaria stockout rates increased from the previous quarter but still remain below higher rates from earlier in 2018. Inability to treat with AL has remained close to 0 percent. On the family planning side, constricted global supply of DMPA-IM continues to be a challenge for stock levels at health facilities. A November distribution supplied seven districts but did not have a broad impact on stockouts. The MOH and other implementing partners have ordered nearly 1 million vials of a generic alternative to help alleviate the shortage.

Reporting rates to OpenLMIS continue to be high across all health program areas.

Warehouse stock status and product losses

B2. Stocked according to plan

Stocked out Overstocked Stocked according to plan Overstocked 100% 22% 80% 60% 100% 43% 40% 20% 0% TO1-HIV/AIDS TO2-Malaria TO3-PRH

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

1	Ю	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Malawi	\checkmark	All	\sim	All	\sim	All	\sim

Indicator Analysis No product losses to report this quarter.

C7

B2

Family planning and malaria stock levels was mixed, although there has been adequate supply for both programs in more than two thirds of observations. Stocks of AL were rebalanced after a previous procurement strategy led to an excess of 6x2 and understocks of other presentations. DMPA-IM was stocked out at the central level due to the global shortage, but 2-rod implants are now in good supply. Oral contraceptives and condoms are all in adequate supply, as are all HIV tracer products.

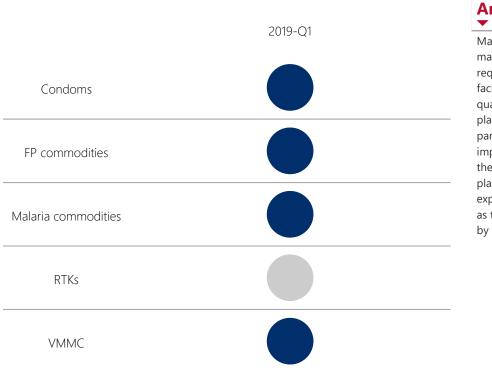
Supply plans, innovations, and strategic activities

2

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description	Condoms
approaches forecasting and supply planning in disjointedly across the different p poor pipeline visibility, and, conse	Strengthening national forecasting and supply planning (FASP). Health commodity forecasting and supply planning in Malawi has for a long time been conducted disjointedly across the different programs. This has resulted in lack of coordination,	FP commodit	
		poor pipeline visibility, and, consequently, gaps in commodity availability. The GHSC- PSM project in Malawi, with support from USAID, embarked on initiatives supporting the Ministry of Health (MOH) to establish a fully functional national forecasting and supply planning (FASP) team to enhance FASP for various health commodities (malaria,	Malaria commo
		family planning, laboratory, HIV, essential medicines, and nutrition). Following the MOH's institutionalization of the FASP teams in early 2018, GHSC-PSM trained 18 members (MOH staff) of the national FASP team in the use of FASP software tools (Quantimed and PipeLine) in October 2018. The training has facilitated standardization	
		and integration of best practices into the quantification process in Malawi. As such, the trained staff will use the skills gained to more effectively forecast health commodity needs and generate national commodity supply and procurement plans for 2019 and beyond. This is expected to enhance visibility into commodity management and contribute to efforts of strengthening commodity security across the different programs.	VMMC
TO1- HIV/AIDS	New approaches	The project facilitated the first ever quantification for VMMC kits, essential medicines and supplies. USAID, through the President's Emergency Plan for AIDS Relief (PEPFAR),	C11. Supply of assistance
		is supporting voluntary medical male circumcision (VMMC) procedures in Malawi through several projects (USAID, CDC and DOD funded), as part of efforts to support the Government of Malawi (GoM) in preventing the spread of HIV. However, a national	Details
		quantification for VMMC medicines and supplies had never been conducted in Malawi. As such, information on the stock levels and consumption of VMMC commodities has historically been limited and not standardized, leading to occasional low stock levels	
		and stockouts of essential items such as VMMC kits and essential medicines. Given this context and to improve commodity security of VMMC commodities, GHSC-PSM, with	
		support from PEPFAR, trained stakeholders and implementing partners on FASP tools	Analysis was based Supported PSI to p
		and methodology for VMMC medicines and supplies for the first time in Malawi. To complement the FASP training, implementing partners were also trained in inventory management and LMIS reporting. This is expected to improve the VMMC supply chain management and procurement of commodities.	Supported forecas

B6. Quarterly supply plan submissions to GHSC-PSM HQ



chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM

era still a major challenge in terms of availability, the project supported various stakeholder meetings (through the alth Commodity Security (RHCS) TWG) to advocate to MOH for the endorsement of Triclofem as an alternative for Depo ult, the Ministry of Health (MOH) approved Triclofem as an alternative for Depo Provera.

ported MOH to conduct a funding gap analysis for use in engaging donors for contraceptive commodity procurement. ed on committed shipments and committed funding.

place orders for Social Marketing commodities in December 2018 with funding from USAID

ast review for USAID-funded Social Marketing to facilitate planning of orders for 2019

Country

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Malawi

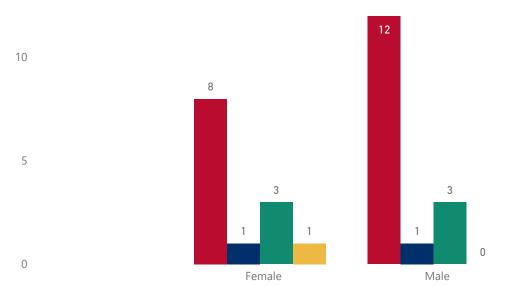
Analysis

Malawi submitted family planning, malaria and condom supply plans as required this quarter. The project facilitated the first ever national guantification, forecast, and supply planning for VMMC in Malawi, with the participation of all PEPFAR implementing partners, the mission, and the Ministry of Health. 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.

Training for supply chain partners

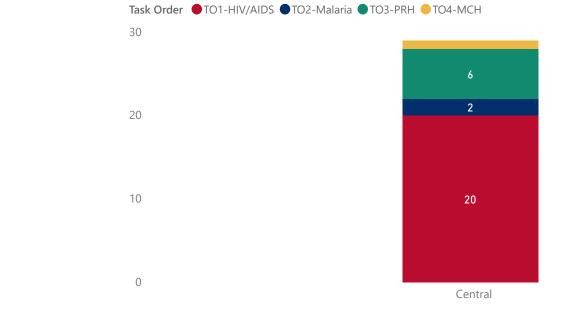
Country	\checkmark	Task Order	\checkmark	Supply Chain Level	\sim	Туре	\sim
Malawi	\sim	All	\sim	All	\checkmark	All	\checkmark

C2. Number of people trained by sex

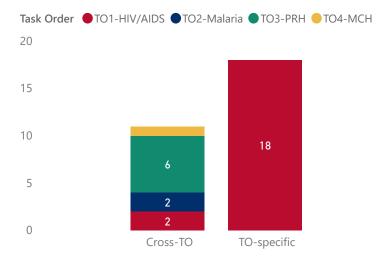


Task Order TO1-HIV/AIDS TO2-Malaria TO3-PRH TO4-MCH



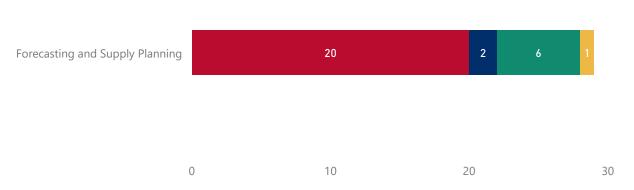


C2. Number of people trained by funding source and type



C2. Number of people trained by technical area





Analysis

GHSC-PSM trained 29 partner staff in forecasting and supply planning this quarter. Eighteen of the participants focused on forecasting for HIV products, while the remainder were trained to enhance forecasting across malaria, family planning, lab, HIV, essential medicines, and nutrition/health areas.

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

80%					
60%					
40%					
20%					
0%					
Ana	lysis				

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

Country

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Malawi

HIV Tracer Prod	
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

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

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	5.2%	3,910
1st line adult ARV	0.2%	600
2nd line adult ARV	6.0%	469
Pediatric ARV	2.5%	596
First RTK	4.2%	621
Second RTK	9.6%	616
Male condoms (HIV)	6.0%	619
Female condoms (HIV)	9.8%	389
TO2-Malaria	7.7%	4,489
AL 6x1	11.5%	654
AL 6x2	5.6%	660
AL 6x3	2.7%	657
AL 6x4	4.4%	663
mRDT	3.2%	663
SP	7.3%	645
LLINs	21.8%	547
TO3-PRH	12.4%	4,110
Combined oral contraceptive with iron	12.5%	569
3-month injectable	23.0%	587
1-rod implant	16.6%	530
2-rod implant	8.6%	502
Emergency contraceptive, 2 tablets	8.6%	292
Progestin only pills	13.8%	463
Copper-bearing IUD	4.4%	159
Male condoms (FP)	6.0%	619
Female condoms (FP)	9.8%	389
Total	8.5%	11,501

B1. Composite stockout rates

Task Order ▲	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	0.3%	655
TO3-PRH		
Combined oral methods	12.5%	569
Injectable contraceptives	23.0%	587
Implantable contraceptives	3.1%	481
Emergency oral contraceptives	8.6%	292
Progestin-only methods	13.8%	463

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	95%	685
TO2-Malaria	100%	685
TO3-PRH	95%	685
TO4-MCH	97%	685

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	57%	19%	14%	10%	42
TO1-HIV/AIDS	100%				14
TO2-Malaria	43%	29%	14%	14%	14
TO3-PRH	44%	22%	22%	11%	18
Total	57%	19 %	14%	10%	42

Country

Malawi

FY Quarter

2019-Q1 🗸

C2. Number of people trained Task Order Female Male Total TO1-HIV/AIDS 8 12 20 1 2 TO2-Malaria 1 TO3-PRH 3 3 6 1 0 TO4-MCH 1 13 16 29 Total

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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-	% of instruments that functional
supported instruments	for the entire period

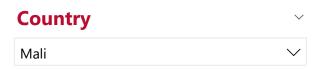
B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

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

Country M&E Indicator Performance





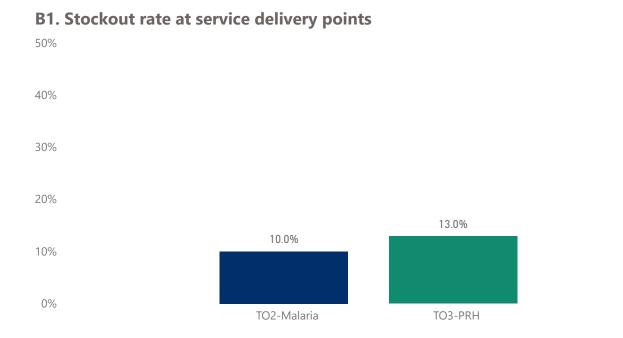




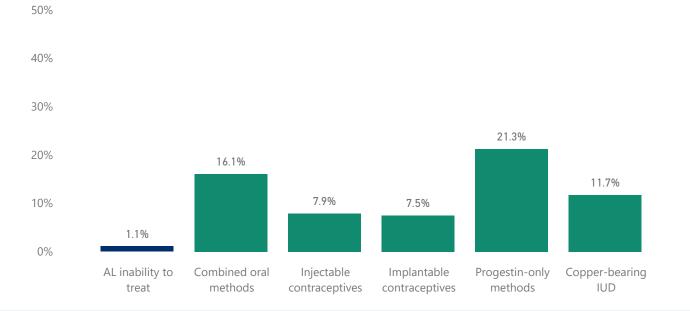
Service Delivery Point Stockouts and Reporting Rates

Country	\checkmark	Task Order	\sim	Tracer Product	\sim
Mali	\sim	All	\sim	All	\sim

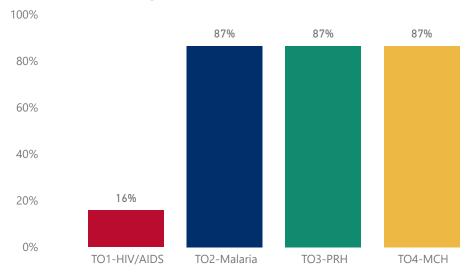
In GHSC-PSM-supported regions



B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3)



B3. LMIS reporting rate



Analysis

SDP reporting rates for TO2, TO3, and TO4 dropped from 95 percent to 87 percent this quarter. The decline is due to challenges stemming from the ongoing scaleup of LMIS (OSPSANTE) and HMIS (DHIS2) interoperability. Despite trainings in the new system usage, some challenges remain, ranging from issues with the system parameters and functionalities, to challenges with administering the system. Both the GHSC-PSM and the MEASURE projects have identified a number of corrective measures that are being implemented.

Stockouts in Mali declined from 15 percent and 18 percent in the previous quarter to 10 percent and 13 percent this quarter for TO2 and TO3, respectively. The combined stockout rate was 13 percent. Performance improvement may be attributable in part to the full implementation of all distribution plans prepared by the National Malaria Control Program and submitted to the Pharmacie Populaire de Mali (PPM, central medical stores), with GHSC-PSM support. This helped to move antimalarial products to the regional level to help address facility stockouts. Through the use of the country's LMIS, OSPSANTE, the central medical store is now able to monitor stock levels weekly, while regions and districts can monitor monthly to enable redistribution of stock to prevent stockouts. The reporting rate for TO1 remains very low, and the project therefore is not yet reporting stockout rates.

Warehouse stock status and product losses

B2. Stocked according to plan

Stocked out

 Understocked
 Stocked according to plan
 Overstocked

 Stocked out

 Understocked
 Stocked according to plan
 Overstocked
 Overstocked

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

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

Country ~	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Mali 🗸 🗸	All	\sim	All	\sim	All	\sim

Indicator Analysis

B2

Stock levels for TO2 shifted from less understocking (50 percent to 28 percent) to greater levels of overstocking (0 percent to 28 percent). In the case of TO3 products, there was a large reduction of stocked according to plan (25 percent to 13 percent), and an increase in understocking and stockouts. The transition to a prefabricated (warehouse in a box) storage solution is expected to improve storage conditions at the central warehouse. The project is supporting a delegation of supply chain personnel to visit the Kenya Medical Supplies Authority (KEMSA) to learn about best practices for high volume storage. Central level data are not currently available for HIV commodities.

Complete Results and Denominators

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

Task Order	Stockout rate	# SDP stock observations
TO2-Malaria	10.0%	6,158
AL 6x1	7.1%	921
AL 6x2	12.1%	892
AL 6x3	23.4%	719
AL 6x4	10.4%	896
mRDT	4.9%	935
SP	4.4%	923
LLINs	11.1%	872
TO3-PRH	13.0%	6,354
Combined oral contraceptive with iron	16.1%	831
3-month injectable	7.9%	884
2-rod implant	7.5%	867
Progestin only pills	21.3%	685
Copper-bearing IUD	11.7%	802
Calendar-based awareness methods	13.7%	753
Male condoms (FP)	9.8%	844
Female condoms (FP)	18.6%	688
Total	11.5%	12,512

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	1.1%	968
TO3-PRH		
Combined oral methods	16.1%	831
Injectable contraceptives	7.9%	884
Implantable contraceptives	7.5%	867
Progestin-only methods	21.3%	685

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	16%	151
TO2-Malaria	87%	1,227
TO3-PRH	87%	1,227
TO4-MCH	87%	1,227

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	19%	29%	29%	24%	42
TO2-Malaria	28%	28%	28%	17%	18
TO3-PRH	13%	29%	29%	29%	24
Total	19%	29 %	29%	24%	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.

Country

Mali

FY Quarter

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2019-Q1 🗸 🗸

C2. Number of people trained Task Order **Total**

Total

B6. Quarterly supply plan updates

Product Group	# of supply	# submitted
	plans required	

C10. HIV molecular instrument functionality

# GHSC-PSM-	% of instruments that functional
supported instruments	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

Country M&E Indicator Performance







Country

Mozambique

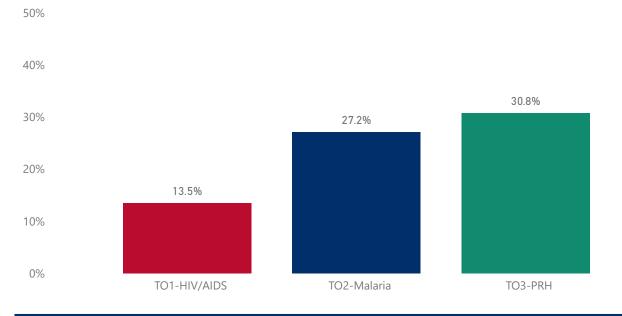
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Service Delivery Point Stockouts and Reporting Rates

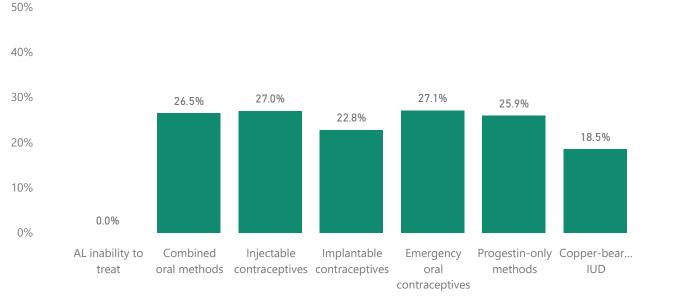
In GHSC-PSM-supported regions



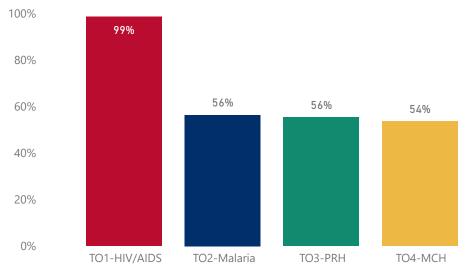
B1. Stockout rate at service delivery points



B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3)



B3. LMIS reporting rate



Analysis

Overall, the stockout rate increased by 3 percent, with each task order also seeing a slight increase. For TO2, the increase in demand and difficulty reaching health facilities during the rainy season resulted in a decreased availability of antimalaria drugs.

While the SDP reporting rate to LMIS for HIV commodities slightly increased from 98 percent to 99 percent this quarter compared to the previous quarter, the reporting rates for the other task orders decreased by 15 percent or more from last quarter. With the expansion of SIGLUS, new facilities are being required to report each quarter; however, just over half of the facilities required to report did so in a timely manner (within one month after deadline). The others reported more then one month after the deadline.

Warehouse stock status and product losses

B2. Stocked according to plan

• Stocked out • Understocked • Stocked according to plan • Overstocked

10%

12%

80%

40%

60%

40%

20%

45%

39%

5%

0%

TO1-HIV/AIDS

TO2-Malaria

TO3-PRH

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

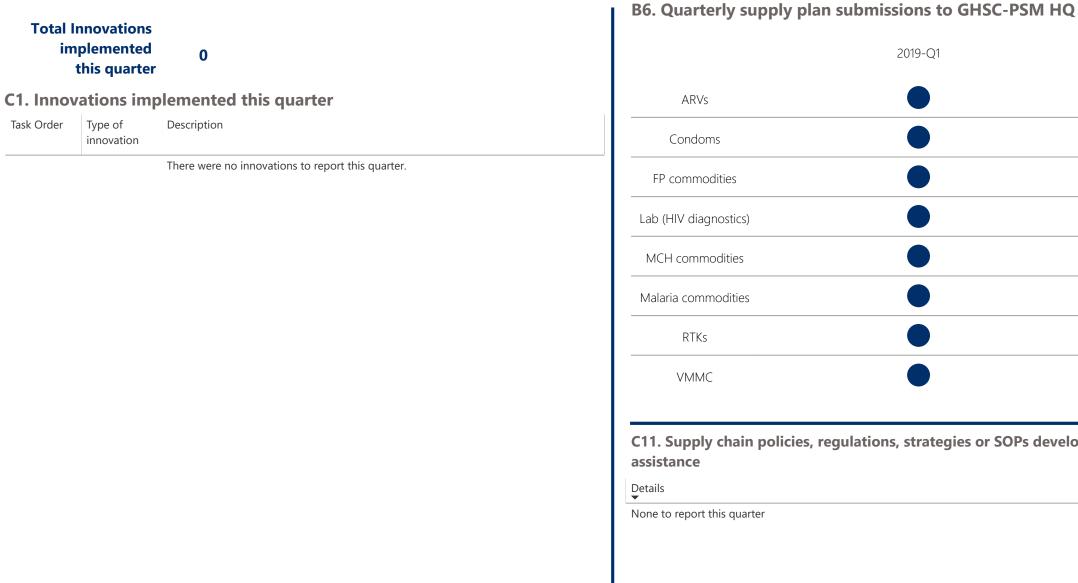
		1					
TO	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
			71	, , , , , , , , , , , , , , , , , , ,			

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\checkmark
Mozambique	\sim	All	\sim	All	\sim	All	\sim

Indicator	Analysis
B2	The overall stocked according to plan (SAP) rate decreased by 3 percent from last quarter. This is primarily linked to the SAP decrease of 14 percent for HIV commodities. While all TO1 tracer products saw a decrease in SAP, second-line ARVs decreased the most with 47 percent (58 percent in FY18 Q4 to 11 percent in FY19 Q1). The country is transitioning from Lopinavir/Ritonavir (200/50mg) to Atazanavir/Ritonavir (300/100mg), which led to a depletion of stock for Lopinavir.
C7	No losses to report this quarter.

Supply plans, innovations, and strategic activities

Task Order



Country

Mozambique

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Analysis \mathbf{T}

Mozambique submitted all required supply plans this quarter.

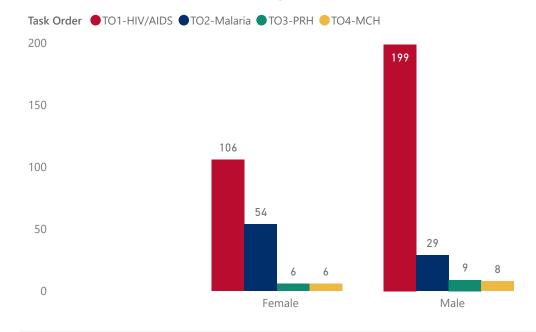
C11. Supply chain policies, regulations, strategies or SOPs developed or updated with GHSC-PSM

2019-Q1

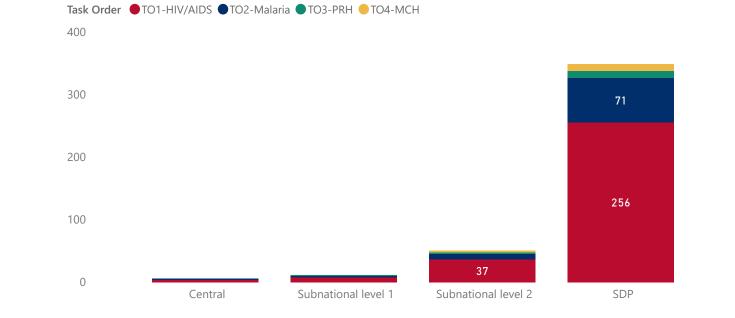
Training for supply chain partners

Country	\sim	Task Order	\checkmark	Supply Chain Level	\sim	Туре	\sim
Mozambique	\sim	All	\sim	All	\sim	All	\sim

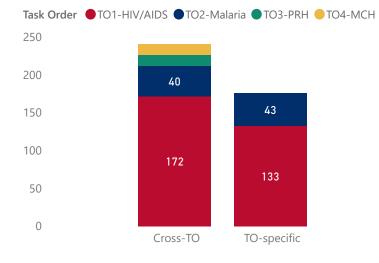
C2. Number of people trained by sex



C2. Number of people trained by supply chain level



C2. Number of people trained by funding source and type



C2. Number of people trained by technical area



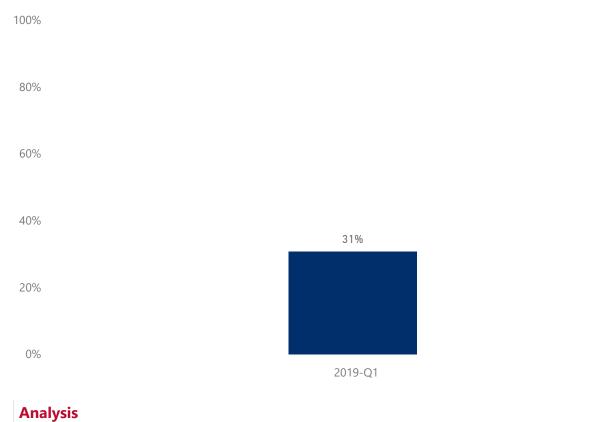


Analysis

GHSC-PSM in Mozambique provided or supported training for 417 people this quarter, 84 percent of whom were being trained at the SDP level.

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period



The percent of molecular instruments

The percent of molecular instruments that remained functional this quarter decreased by 11 percent. Of the 26 molecular instruments, 18 had a service disruption, with the disruptions lasting from 3 to 33 days.

Country

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Mozambique 🗸 🗸

racer 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

tracer item.

Complete Results and Denominators

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

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	13.5%	5,139
1st line adult ARV	0.4%	1,426
2nd line adult ARV	2.8%	569
Pediatric ARV	2.2%	1,147
First RTK	28.5%	674
Second RTK	34.7%	594
Viral load reagent	0.0%	26
EID reagent	0.0%	8
Male condoms (HIV)	30.3%	512
Female condoms (HIV)	51.9%	183
TO2-Malaria	27.2%	3,720
AL 6x1	31.3%	601
AL 6x2	25.6%	589
AL 6x3	35.1%	572
AL 6x4	33.2%	594
mRDT	15.7%	648
SP	24.4%	509
LLINs	22.7%	207
TO3-PRH	30.8%	3,013
Combined oral contraceptive	26.5%	490
1-month injectable	60.5%	162
3-month injectable	34.0%	497
2-rod implant	22.8%	285
Emergency contraceptive, 2 tablets	27.1%	166
Progestin only pills	25.9%	513
Copper-bearing IUD	18.5%	205
Male condoms (FP)	30.3%	512
Female condoms (FP)	51.9%	183
Total	21.3%	11,177

B1. Composite stockout rates

Task Order ▲	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	0.0%	601
TO3-PRH		
Combined oral methods	26.5%	490
Injectable contraceptives	27.0%	659
Implantable contraceptives	22.8%	285
Emergency oral contraceptives	27.1%	166
Progestin-only methods	25.9%	513

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	99%	1,503
TO2-Malaria	56%	648
TO3-PRH	56%	659
TO4-MCH	54%	681

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	22%	41%	35%	2%	63
TO1-HIV/AIDS	14%	19%	67%	0%	21
TO2-Malaria	19%	67%	10%	5%	21
TO3-PRH	26%	33%	41%	0%	27
Subnational level 1	36%	22%	39%	4%	693
TO1-HIV/AIDS	42%	11%	43%	4%	231
TO2-Malaria	38%	19%	42%	2%	231
TO3-PRH	28%	32%	35%	6%	297
Total	35%	23%	38%	4%	756

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.

Country

✓ FY Quarter

durter

Mozambique 🗸 🗸

2019-Q1 🗸 🗸

C2. Number of people trained Task Order Female Male Total TO1-HIV/AIDS 106 199 305 54 TO2-Malaria 29 83 TO3-PRH 6 9 15 6 8 14 TO4-MCH 172 245 417 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
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
26	31%

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

Country M&E Indicator Performance



FY2019 Quarter 1 October - December 2018

Country

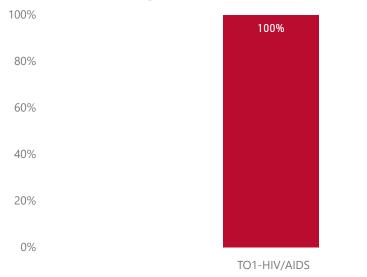
Namibia

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Country Task Order Tracer Product \sim \sim **Service Delivery Point Stockouts and Reporting Rates** All All Namibia \checkmark \checkmark \checkmark In GHSC-PSM-supported regions **B1. Stockout rate at service delivery points B1.** Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3) 50% 50% 40% 40% 30% 30% 20% 20% 10% 5.4% 10% 0% TO1-HIV/AIDS 0%

B3. LMIS reporting rate



Analysis

Across GHSC-PSM's 15 supported sites, the LMIS reporting rate is 100 percent. With non-supported sites factored in, the rate dips to 77 percent. This was partly due to system downtime of the web-based eLMIS dashboard during the report upload period in December. The issue has since been resolved and the reporting rate increased through early January.

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Namibia maintained a 0 percent stockout rate of most tracer products in GHSC-PSM-supported regions. Five sites reported stockouts of second-line adult ARVs. Stockouts of second-line adult ARVs and pediatric ARVs also occurred in non-supported regions. Second-line ARV stockouts were due the lengthy RFQ procurement process required of CMS 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 this product and 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.

Several tracer products transitions have taken place: first-line adult ARV transitioned from TEE600 to TLE400; first-line RTK from SureCheck to Colloidal Gold Device; second-line RTK from Determine to Uni-Gold; and tie-breaker RTK from STAT-PAK to SureCheck.

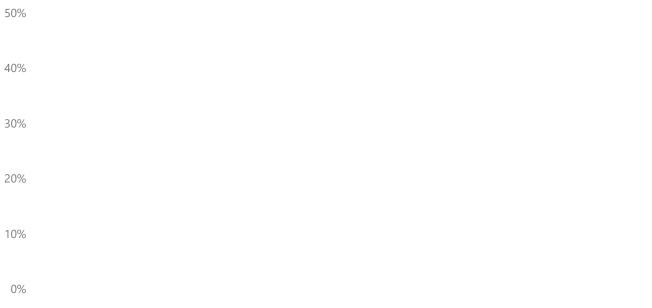
Service Delivery Point Stockouts and Reporting Rates

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

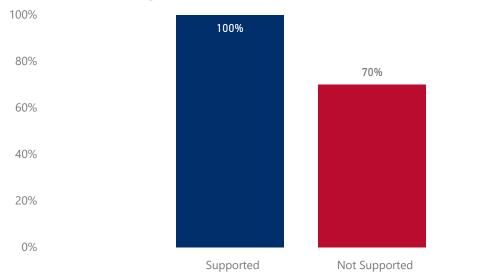
(Country	\checkmark	Task Order	\sim	Tracer Product	\sim
	Namibia	\sim	All	\sim	All	\sim

B1. Stockout rate at service delivery points 50% 40% 30% 20% 10% 5.4% 4.3% 0% Supported Not Supported

B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3)



B3. LMIS reporting rate



Analysis

Several tracer products transitions have taken place: first-line adult ARV transitioned from TEE600 to TLE400; first-line RTK from SureCheck to Colloidal Gold Device; second-line RTK from Determine to Uni-Gold; and tie-breaker RTK from STAT-PAK to SureCheck. Namibia maintained a 0 percent stockout rate of most tracer products in GHSC-PSM-supported regions. Five sites reported stockouts

of second-line adult ARVs. Stockouts of second-line adult ARVs and pediatric ARVs also occurred in non-supported regions. Every regions second-line ARV stockouts were due the lengthy RFQ procurement process required of CMS 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 this product and 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.

Across GHSC-PSM's 15 supported sites, the LMIS reporting rate is 100 percent. With non-supported sites factored in, the rate dips to 77 percent. This was partly due to system downtime of the web-based eLMIS dashboard during the report upload period in December. The issue has since been resolved and the reporting rate increased through early January.

Warehouse stock status and product losses

Stocked out Ouderstocked Stocked according to plan Overstocked
 8%
 8%
 29%
 60%
 40%
 44%
 20%
 19%
 TD1-HIV/AIDS

B2. Stocked according to plan

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

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

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Namibia	\sim	All	\sim	All	\sim	All	\sim

Indicator	Analysis
B2	The overall stocked according to plan rate rose to 29 percent this quarter, from only 13 percent last quarter. The lack of framework contracts to ensure a stable supply of ARVs continues to contribute to the high percentage of understocked and stocked out observations. The government ARV tender closed in September 2018 and is currently undergoing final evaluation by the Central Procurement Board. GHSC-PSM meanwhile continues to provide supply planning support to MOHSS and is working with the CMS to prepare supply plans for the awarded suppliers once the tender process is finalized. GHSC-PSM is also processing an order for seven pediatric ARVs that MOHSS requested due to difficulties in sourcing the products.
C7	GHSC-PSM does not have custody of any products in the country and therefore does not report on product losses.

Supply plans, innovations, and strategic activities

Total Innovations	New products
implemented	1
this quarter	

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description
TO1- HIV/AIDS	New products	GHSC-PSM assisted the Central Medical Stores (CMS) to successfully engage the HIV Program under the Directorate of Special Program and to promote the adoption of a more cost-effective HIV rapid testing algorithm. The new algorithm includes introducing Colloidal Gold Device as a new product and is estimated to save the Government of Namibia up to 75% of current HIV screening test costs annually. GHSC- PSM further quantified requirements for procurement of the new testing kits and prepared an operational job aid for health facilities. The job aid will help guide stock management during the transition from using the Sure Check HIV test to Colloidal Gold Device as the preferred HIV screening test starting in October 2018.

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Country

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Namibia

Analysis \mathbf{T}

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

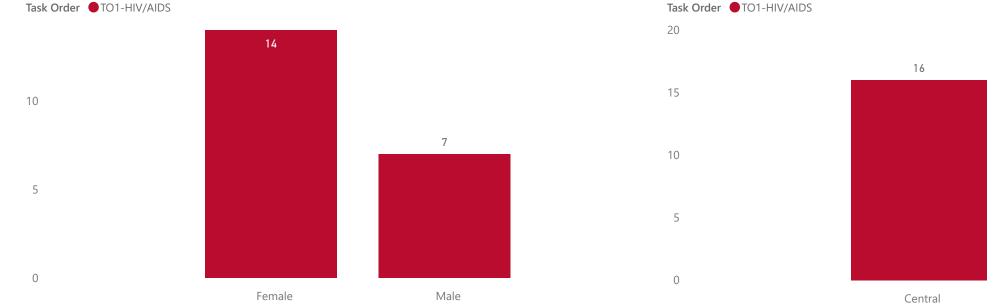
Details

None to report this quarter

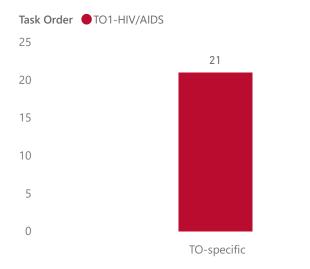
Training for supply chain partners

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Туре	\sim
Namibia	\sim	All	\sim	All	\sim	All	\sim

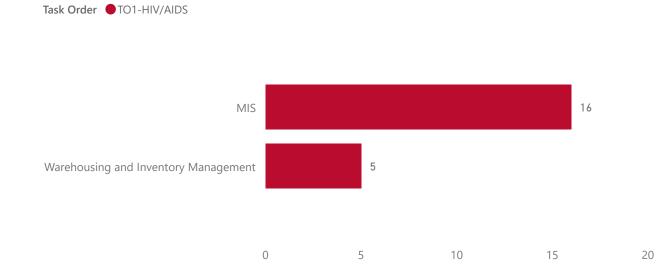
C2. Number of people trained by sex



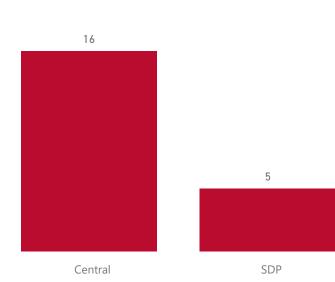
C2. Number of people trained by funding source and type



C2. Number of people trained by technical area



C2. Number of people trained by supply chain level



Analysis

A total of 21 people received MIS and inventory management-related trainings. The training on the web-based eLMIS dashboard has equipped CMS staff with skills to navigate the different reports that facilitate their functional roles of forecasting, supply planning, procurement, inventory management, and distribution of pharmaceuticals. Training on EDT data synchronization between remote sites and parent sites has also decreased the necessity of transporting of paper-based reports from clinics to district hospitals.

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

	Anal	ysis				
	0%					
	20%					
	40%					
	60%					
	80%					
1	00%					

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

Country

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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

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

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	5.4%	92
1st line adult ARV	0.0%	14
2nd line adult ARV	35.7%	14
Pediatric 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%	4
Female condoms (HIV)	0.0%	4
Total	5.4%	92

B1. Composite stockout rates

Task Order ▲		Stockout rate		Ps that rep	
ee "Indicator Details"	for B01 at the end	l of this annex for	more detail abo	out compo	osite stockouts.
				out compo	osite stockouts.
B3. SDP reporting r	ate to LMIS (GHS	C-PSM-supporte	ed regions)		
	ate to LMIS (GHS		ed regions)		ired to report
B3. SDP reporting r	ate to LMIS (GHS	C-PSM-supporte	ed regions)		
B3. SDP reporting r Task Order	ate to LMIS (GHS	C-PSM-supporte Reporting rate	ed regions)	SDPs requi	
▲	ate to LMIS (GHS	C-PSM-supporte Reporting rate	ed regions)	SDPs requi	
B3. SDP reporting r Task Order	ate to LMIS (GHS	C-PSM-supporte Reporting rate	ed regions)	SDPs requi	
B3. SDP reporting r Task Order TO1-HIV/AIDS	ate to LMIS (GHS	C-PSM-supporte Reporting rate 100%	ed regions)	SDPs requi	
B3. SDP reporting r Task Order	ate to LMIS (GHS	C-PSM-supporte Reporting rate 100% age sites	ed regions)	SDPs requi	

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	13%	19%	44%	25%	16
TO1-HIV/AIDS	13%	19%	44%	25%	16
Subnational level 1	38%	3%	44%	16%	32
TO1-HIV/AIDS	38%	3%	44%	16%	32
Total	29%	8%	44%	19%	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.

Country

FY Quarter \sim

Namibia 🗸 🗸

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2019-Q1 V

Task Order	Female	Male	Total
TO1-HIV/AIDS	14	7	21
Total	14	7	21
		lator	
36. Quarterly su Product Group	#	lates of supply lans required	# submitted

C10. HIV molecular instrument functionality

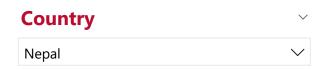
# GHSC-PSM-	% of instruments that functional
supported instruments	for the entire period

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

Country M&E Indicator Performance







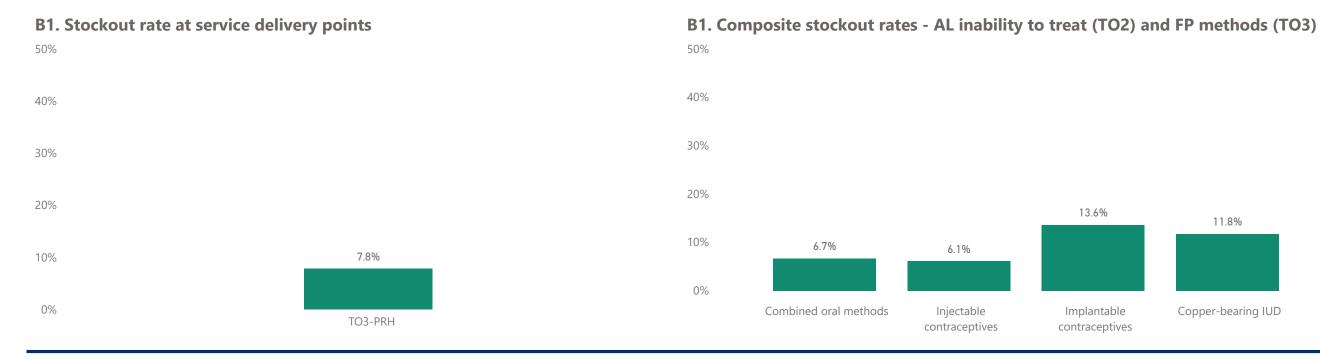


FY2019 Quarter 1 October - December 2018

Service Delivery Point Stockouts and Reporting Rates

Country	\checkmark	Task Order	\sim	Tracer Product	\checkmark
Nepal	\sim	All	\sim	All	\sim

In GHSC-PSM-supported regions



22	IMIS	reporting	rate
DJ .	LIVIIJ	reporting	late

0%

100%			
80%			
60%			
40%			
20%			

0%

TO3-PRH

0%

TO4-MCH

Analysis

The stockout data submitted in FY19 Q1 covers the period April 15 to July 15, 2018. Of five FP commodities, stockouts remain largely in line with last quarter. Depo shows lower stockouts whereas implants show higher stockouts. Compared to past reporting, the denominator for commodities like implants and IUCD has become smaller due to use of the flagging function in eLMIS, which considers a health facility as non-reported if there are no data, if zero is recorded across all the columns with no transaction, or if a dash is marked across all the columns. The GHSC-PSM's field support officers (FSOs) stationed at the central and provincial medical stores continue to follow up with their respective district stores to avoid stockouts.

The effect of Federalism in Nepal and added layer in LMIS reporting has been a challenge. No reports were received within the 30-day window period. The current reporting rate stands at 37 percent after the 30-day deadline but is zero according to the IDIQ definition. Several efforts are being undertaken by M&E to not only increase the reporting rate but also to get the LMIS reports on time.

Warehouse stock status and product losses

B2. Stocked according to plan Stocked out Overstocked Stocked according to plan Overstocked 100% 80% 60% 40% 20% 0% TO3-PRH

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

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

Count	ry ~	Task Order	\checkmark	Supply Chain Le	vel 🗸	Tracer Product	\sim
Nepal	\checkmark	All	\checkmark	All	\sim	All	\checkmark
	Indicator	Analysis					
	B2	level, no commo were stocked ou percent from 90 observations. GH	dities wer t. Underst percent tv ISC-PSM I	e stocked out of 5 hea ocked levels continue wo quarters ago, thou nas started sharing the	alth commodit to decrease fr gh the gains a e eLMIS dashb	15 to July 15, 2018. At the ies. At sub-national 1, o rom last quarter, down to re mostly in overstocker oard with the Managem	nly IUCDs o 60 d nent Division

	observations. GHSC-PSM has started sharing the eLMIS dashboard with the Management Division
	concerned authorities. The dashboard shows the stock status of FP commodities of eLMIS sites
	for five FP commodities. Since October 15, supply chain pharmacists have been deployed to 15
	district stores. The pharmacists will help in monitoring the stock status at their respective stores as well.
C7	No losses to report this quarter.

Supply plans, innovations, and strategic activities



Country

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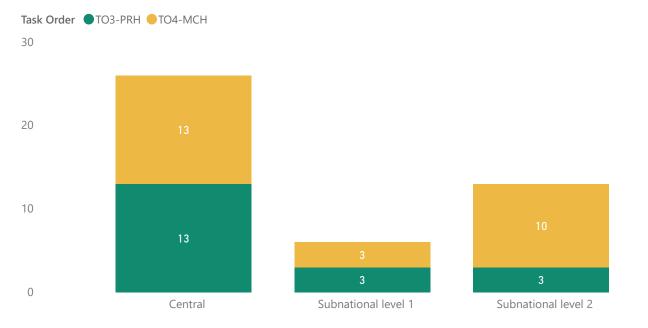
Training for supply chain partners

Country		Task Order		Supply Chain Level		Туре	
Nepal	\sim	All	\sim	All	\checkmark	All	\sim

C2. Number of people trained by sex



C2. Number of people trained by supply chain level

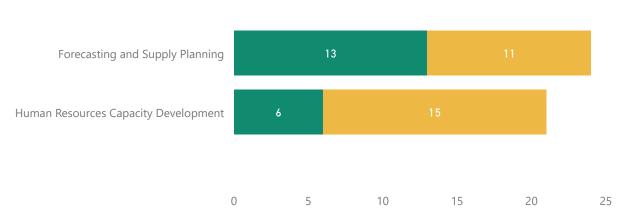


C2. Number of people trained by funding source and type



C2. Number of people trained by technical area

Task Order TO3-PRH TO4-MCH



Analysis

A total of 45 participants participated in two health system strengthening trainings: The Finalization of Forecasting and Quantification workshop (24 participants) and the Pharmacist Orientation Program (21 participants).

Complete Results and Denominators

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

Task Order ▲	Stockout rate	# SDP stock observations
TO3-PRH	7.8%	7,825
Combined oral contraceptive with iron	6.7%	2,100
3-month injectable	6.1%	2,108
2-rod implant	13.6%	906
Copper-bearing IUD	11.8%	594
Male condoms (FP)	7.1%	2,117
Total	7.8%	7,825

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO3-PRH		
Combined oral methods	6.7%	2,100
Injectable contraceptives	6.1%	2,108
Implantable contraceptives	13.6%	906

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	0%	4,140
TO4-MCH	0%	4,140

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	20%	80%			5
TO3-PRH	20%	80%			5
Subnational level 1	5%	30%	60 %	5%	20
TO3-PRH	5%	30%	60%	5%	20
Subnational level 2	17%	35%	31%	18%	359
TO3-PRH	17%	35%	31%	18%	359
Total	17%	35%	32%	17%	384

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.

Country

FY Quarter

Nepal

Multiple select... \checkmark

C2. Number of people trained Task Order Female Male Total TO3-PRH 2 17 19 8 TO4-MCH 18 26 10 35 45 Total

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B6. Quarterly supply plan updates

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

C10. HIV molecular instrument functionality

# GHSC-PSM-	% of instruments that functional
supported instruments	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

Country M&E Indicator Performance





Country

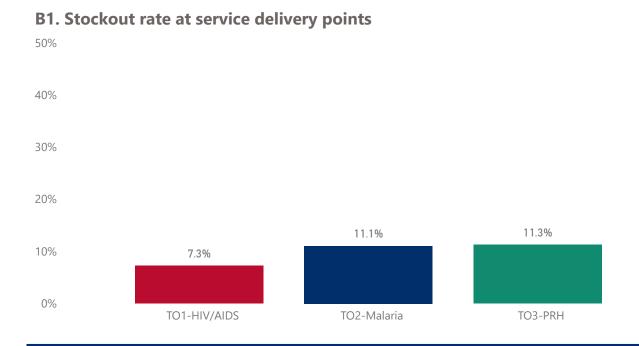
Nigeria

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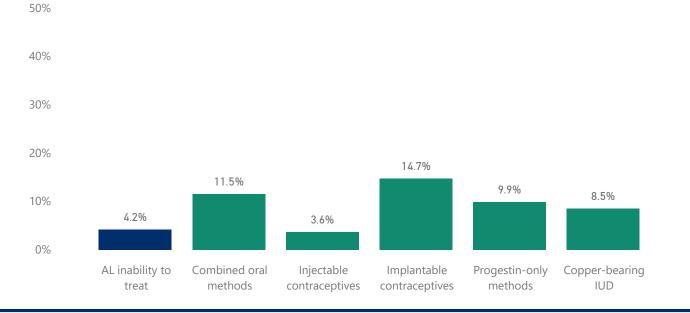
Service Delivery Point Stockouts and Reporting Rates

Country	\sim	Task Order	\sim	Tracer Product	\checkmark
Nigeria	\sim	All	\sim	All	\sim

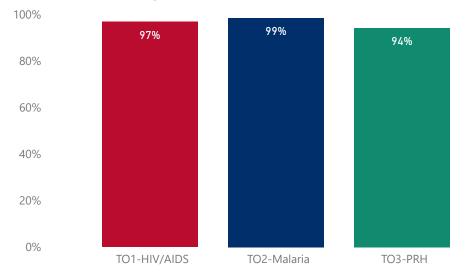
In GHSC-PSM-supported regions



B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3)



B3. LMIS reporting rate



Analysis

For TO1, stockout rates for ARVs for both adults and pediatrics was low (4 percent and 5 percent, respectively). Stockout rates of RTKs were as follows: first-line RTK - Determine at 4 percent, second-line RTK – Unigold at 11 percent, and tie-breaker – Stat Pak at 7 percent. Unigold had inconsistent availability which led to limited quantities of the product for distribution. Targeted testing will enhance optimal utilization of limited kits, while timely availability of international shipments of RTKs especially Unigold, and the implementation of post-market validation will ensure adequate quantities are available for distribution to health facilities during LMD. For TO2, AS/AQ saw a higher stockout rate than AL. Currently, there is a low utilization of AA. However, sustained education on the proper way to administer AA will improve acceptance of using the commodity and thus reduce the pressure on AL stock levels. For TO3, stockout rates were within the acceptable range for most FP categories except long-acting reversible contraceptives (LARC). An increase in LARC stockout rates is attributable to increase demand due to implementing partners in Nigeria conducting several training and outreach programs on the use of LARCs.

SDP reporting rates continued to be high in Q1 FY19 across all task orders in Nigeria. TO1: The reporting rate for the HIV program, at 97 percent, was above the target in the quarter, reflecting the sustained relationship with state stakeholders. For TO2, the reporting rate was also high at 99 percent. This is because secondary and tertiary facilities that have been trained entered their reports directly on the NHLMIS platform, while untrained facilities' reports were collected by local government area (LGA) officers in the PEPFAR-supported states who then transmit to state LMCUs for data entry on the NHLMIS platform. Additionally, there have been targeted cluster review meetings (CRM) with health facility personnel, use of local government officials such as LGA M&E officers and malaria focal persons at the LGA level to visit facilities, and review of reports and collection of data from facilities. For TO3, the reporting rate for family planning program was 94 percent.

Warehouse stock status and product losses

B2. Stocked according to plan

 • Stocked out
 • Understocked
 • Stocked according to plan
 • Overstocked

 100%
 40%
 40%

 60%
 20%
 20%

 10%
 40%
 40%

 10%
 20%
 40%

 10%
 10
 10

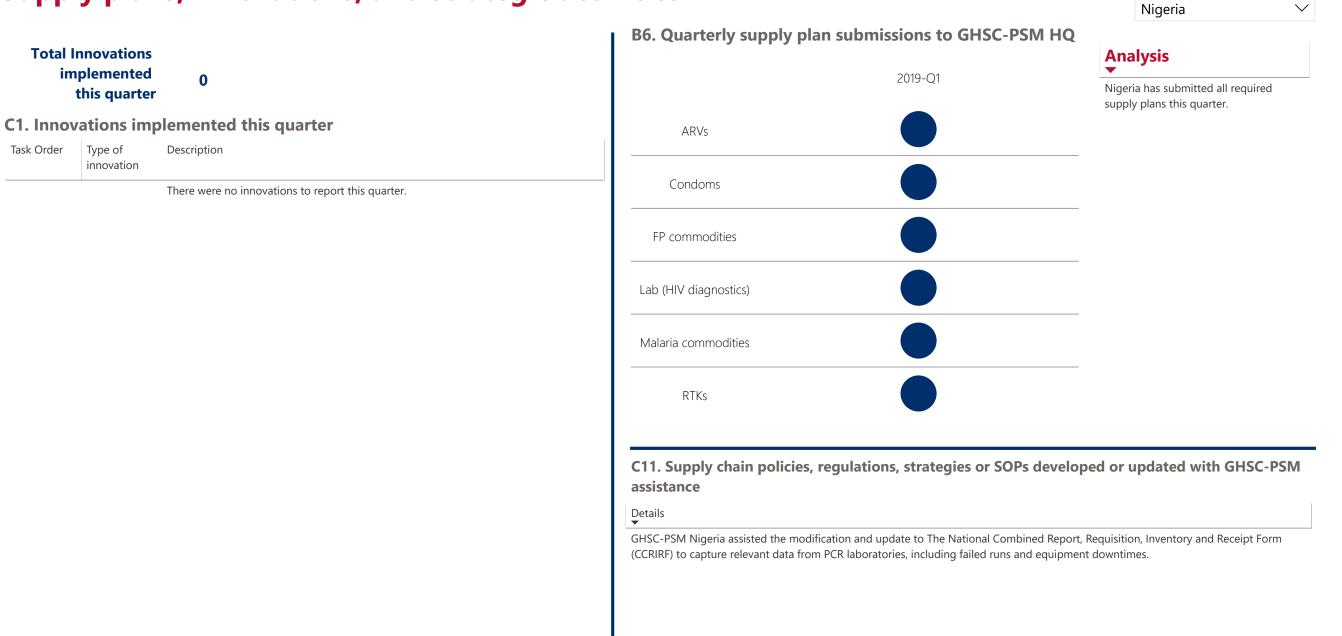
C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

ТО	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
TO1	Central	Storage	Expiry	HIV commodities	\$42,924	\$45,415,484	0.09%
TO1	Global	Transit	Damage	ARVs	\$67,637	\$35,574,828	0.19%
TO1	Global	Transit	Other	ARVs	\$9,935	\$35,574,828	0.03%
TO1	Subnational Level 1	Transit	Other	ARVs	\$18	\$19,942,070	0.00%
TO2	Global	Transit	Damage	LLINs	\$725	\$15,336,948	0.00%

Country	\checkmark	Task Order	\checkmark	Supply Chain Level	\sim	Tracer Product	\checkmark
Nigeria	\sim	All	\sim	All	\sim	All	\sim

Indicator	Analysis
С7	Nigeria had several losses this quarter, including several damaged shipments. The largest loss wa to five cartons of Dolutegravir/Lamivudine/Tenofovir DF 50/300/300 mg Tablet, 30 Tablets, which were delivered wet. Another loss, also for ARVs, was due to a short shipment from the supplier. For TO2, approximately 340 bales of LLINs were damaged due to the shipment being exposed to water, costing approximately \$725. For most losses, a reimbursement or fulfillment plan was put in place to address needed replacements.
B2	For TO1 first-line RTKs, Determine was stocked according to plan while for second-line RTKs, Unigold was understocked. The consumption of both Determine and Unigold exceeded the projected forecasts. However, the distribution of these commodities is now target-driven and thus should mitigate the risk of stockouts. Furthermore, inventory received between November and December 2018 is projected to improve inventory levels for RTKs to 10 months of stock (as o December 2018). For TO2, malaria first-line ACTs (AL 6x1, AL 6x3, and AL 6x4) were all understocked, while AS/AQs were all overstocked. As noted for B1, the sharp decline in consumption of ACT AAs has continued.

Supply plans, innovations, and strategic activities



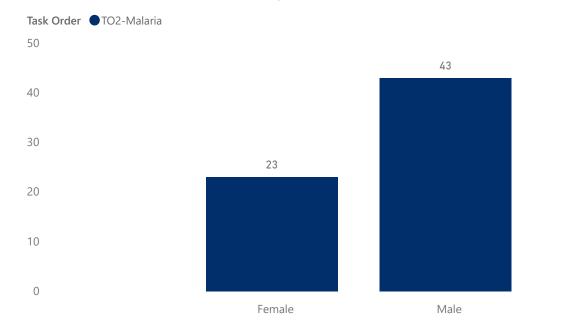
Country

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Training for supply chain partners

Country	\sim	Task Order	\checkmark	Supply Chain Level	\sim	Туре	\sim
Nigeria	\sim	All	\sim	All	\checkmark	All	\checkmark

C2. Number of people trained by sex



C2. Number of people trained by supply chain level

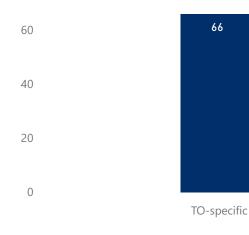
Task Order TO2-Malaria



C2. Number of people trained by funding source and type

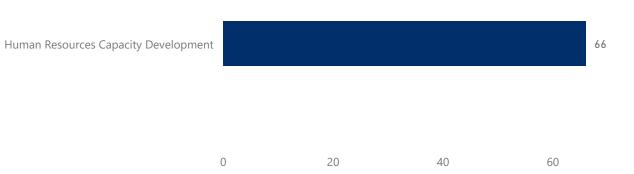
66

Task Order TO2-Malaria



C2. Number of people trained by technical area





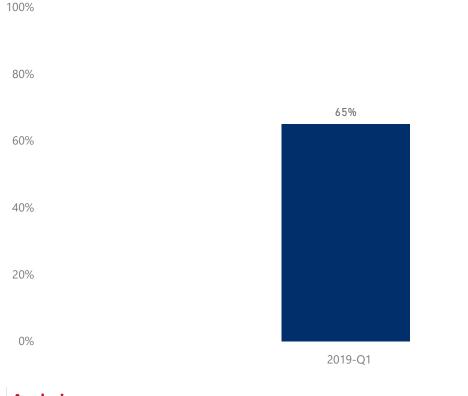
Analysis

A total of 66 RBM managers and state logistics officers were trained across the 11 PMI states in Nigeria. The training enabled them to create supply chain performance improvement plans based on weaknesses identified from logistics management information system (LMIS) and EUV surveys. Participants' capacity to develop and roll out supply chain performance improvement plans was strengthened as a result of their participation during the hands-on interactive sessions and practice exercises on how to review and use logistics data to regularly make decisions, perform stock status analysis, pipeline monitoring, distribution planning, and identifying needs for supportive supervision/onthe-job training.

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Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period



Analysis

A total of 14 of the 40 machines recorded downtime in FY29 Q1. Most of this was caused by hardware error, and two of them were caused by the robotic head jamming. Overall, Q1 FY19 had an average of 12.8 lost days for the 14 machines; however, the equipment vendor responded quickly to emergency repairs requests, and all the equipment was fixed and operational in a relatively short period of time. Two sites with erratic electricity, which can lead to hardware problems, continue to be at a higher risk of downtime. The GHSC-PSM lab team will continue to engage with the equipment vendors as well as the focal laboratory personnel at the facilities to ensure timely responses to equipment failure alerts.

Country

Nigeria	\sim
INIGENA	•

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 200/50mg 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

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

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	7.3%	15,336
1st line adult ARV	4.3%	2,456
2nd line adult ARV	6.1%	660
Pediatric ARV	5.2%	916
First RTK	4.4%	3,010
Second RTK	10.9%	2,387
Tie-breaker RTK	7.1%	1,550
Viral load reagent	4.5%	22
Viral load consumable	9.1%	22
EID reagent	9.1%	22
EID consumable	9.1%	22
Male condoms (HIV)	12.8%	1,691
Female condoms (HIV)	7.7%	2,578
TO2-Malaria	11.1%	27,495
AL 6x1	8.3%	3,223
AL 6x2	11.6%	3,351
AL 6x3	18.1%	3,105
AL 6x4	10.9%	3,401
AS/AQ 100/270mgx3	5.2%	1,560
AS/AQ 100/270mgx6	6.9%	1,623
AS/AQ 25/67.5mg	4.7%	2,079
AS/AQ 50/135mg	6.1%	1,571
mRDT	12.1%	3,359
SP	8.5%	3,075
LLINs	34.6%	1,148
TO3-PRH	11.3%	17,045
Combined oral contraceptive	11.5%	2,254
2-month injectable	8.7%	2,621
3-month injectable	10.2%	2,610
1-rod implant	17.9%	1,286
2-rod implant	23.3%	1,071
Progestin only pills	9.9%	2,196
Copper-bearing IUD	8.5%	738
Male condoms (FP)	7.7%	2,578
Female condoms (FP)	12.8%	1,691
Total	10.2%	55,607

B1. Composite stockout rates

Task Order ▲	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	4.2%	3,467
TO3-PRH		
Combined oral methods	11.5%	2,254
Injectable contraceptives	3.6%	2,688
Implantable contraceptives	14.7%	1,400
Progestin-only methods	9.9%	2,196

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%	3,171
TO2-Malaria	99%	3,641
TO3-PRH	94%	2,938

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	40%	20%	40%		20
TO1-HIV/AIDS	60%		40%		10
TO2-Malaria	20%	40%	40%		10
Total	40%	20%	40%		20

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.

Country

Nigeria

FY Quarter

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2019-Q1 🗸 🗸

C2. Number of people trained

Task Order	Female	Male	Total
TO2-Malaria	23	43	66
Total	23	43	66

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-	% of instruments that functional
supported instruments	for the entire period
40	65%

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

Country M&E Indicator Performance







FY2019 Quarter 1 October - December 2018

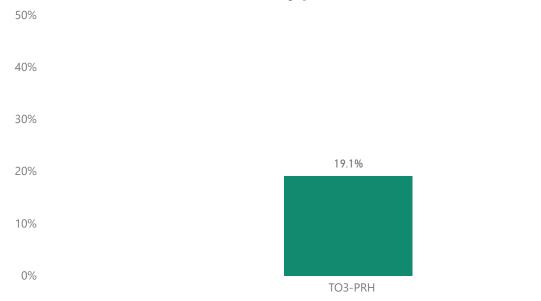


Service Delivery Point Stockouts and Reporting Rates

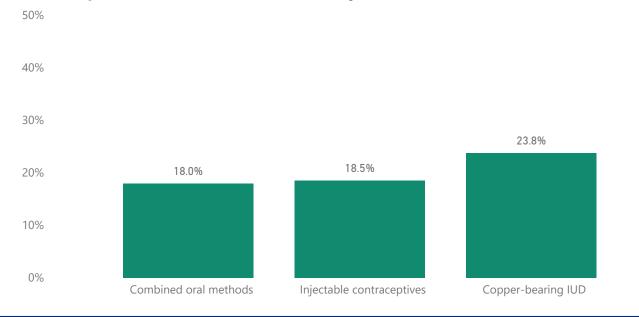
Country	\sim	Task Order	\checkmark	Tracer Product	\checkmark
Pakistan	\checkmark	All	\sim	All	\sim

In GHSC-PSM-supported regions

B1. Stockout rate at service delivery points

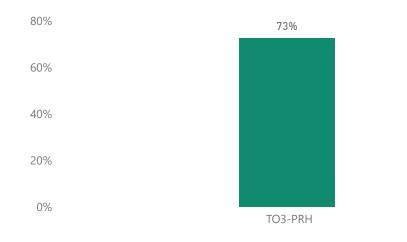


B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3)



B3. LMIS reporting rate





Analysis

In this reporting period, the overall stockout rate of FP commodities remained unchanged. The stockout rate at SDPs in supported provinces for FP contraceptives (3 Month Injection, COC, Condom, and Copper-T-380 A) remained at 19 percent in FY19 Q1. KP: Overall stockouts in KP have decreased from 10 percent previously to 9 percent. Punjab: Stockouts in Punjab increased slightly from 20 percent to 23 percent, with all products showing a slight increase in stockouts. Sindh: In Sindh, improvement was observed in the stockout rate, which has declined from 17 percent to 12 percent in the reporting quarter, due to project efforts to avert stockouts. Overall, stockouts for almost all products have reduced considerably. Balochistan: The overall stockout rate increased to 25 percent, as compared to 21 percent previously. Copper-T-380A stockouts increased significantly, from 34 percent to 48 percent. This is due to a lack of stock availability of Copper-T380A at the provincial level in Balochistan.

Out of 10,964 supported SDPs of Punjab, KP, Balochistan, and Sindh provinces, 7,976 SDPs reported into LMIS during the reporting quarter. The reporting rate (supported SDPs) for FY19 Q1 is 73 percent and includes nearly 100 percent reporting by SDPs of PWD Punjab, KP, and Sindh provinces. Compared to last quarter, the reporting rate for supported SDPs remained at 73 percent (vs. 72 percent the previous quarter). The reporting rate for KP and Sindh remained close to 100 percent (100 percent and 98 percent, respectively). Reporting rates increased for Punjab from 64 percent to 68 percent, and for Balochistan from 76 percent to 80 percent.

Warehouse stock status and product losses

Stocked out Understocked Stocked according to plan Overstocked
 10%
 19%
 19%
 20%
 20%
 41%
 0%
 TO3-PRH

B2. Stocked according to plan

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

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

Country	\sim	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Pakistan	\checkmark	All	\sim	All	\sim	All	\sim

Indicator Analysis

B2

Pakistan has no central stores for FP stock. Sub-national 1: The overall stocked according to plan
for supported sites of KP, Punjab, Balochistan and Sindh has increased to 25 percent this
reporting quarter, a 6 percent improvement since the previous quarter. More specifically, stocked
according to plan for condoms improved from 25 percent to 75 percent, and COC improved from
0 percent to 25 percent. However, Copper-T 380 and 3-month injection remained at 0 percent .
Sub-National Level 2: The overall stocked according to plan rates for supported sites of KP,
Punjab, Balochistan, and Sindh was 19 percent during the reporting quarter, an improvement
from 16 percent in the previous quarter. Stocked according to plan rates have improved in Punjab
from 14 percent to 19 percent, Sindh from 17 percent to 19 percent, and in Balochistan from 15
percent to 26 percent. However, rates in KP decreased from 20 percent to 16 percent.

Supply plans, innovations, and strategic activities

New technologies 2

C1. Innovations implemented this quarter

Task Order	Type of innovation	Description
TO3-PRH	New technologies	Configuration Management system A Configuration Management system has been introduced for Alerts/Notifications. For each supply chain node, stock levels and products differ depending on their geographical area and vertical program. Sending standard notifications to all end users is less beneficial. To enable power users of the system, configuration management has been provided where users can configure rules based on specific requirements of facilities, including but not limited to province, district and product.
TO3-PRH	New technologies	Warehouse Management Module To make LMIS more robust with added controls to ensure quality data, a Warehouse Management module has been implemented for PWD Punjab. Pre-WMS implementation, district stores stock issuance recorded manually. With WMS, stock received by health facilities stock is aggregated and becomes stock issuance for the district. This enabled the auto data correction for data issuance from district store to health facilities. The same module can be implemented in other provinces after formal government approval.

B6. Quarterly supply plan submissions to GHSC-PSM HQ

Country

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Pakistan

Analysis \mathbf{T}

Pakistan does not report on this indicator.

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

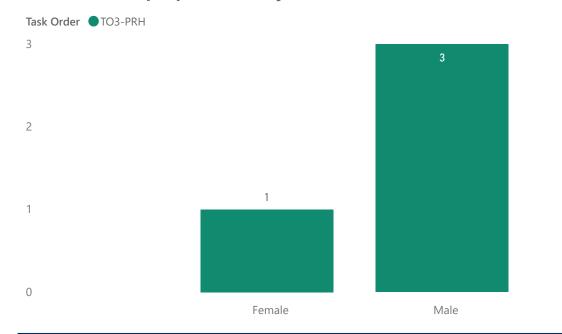
Details

None to report this quarter

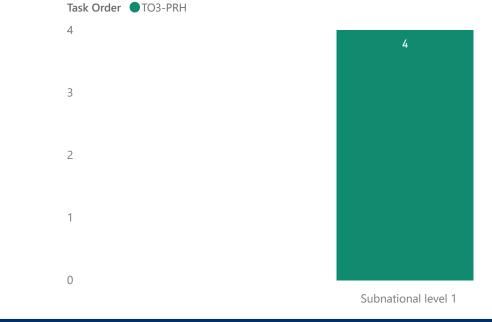
Training for supply chain partners

Country	\sim	Task Order	\sim	Supply Chain Level	\sim	Туре	\sim
Pakistan	\sim	All	\sim	All	\sim	All	\checkmark

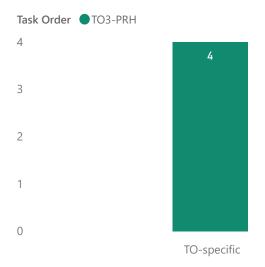
C2. Number of people trained by sex



C2. Number of people trained by supply chain level



C2. Number of people trained by funding source and type



C2. Number of people trained by technical area





Analysis

In November 2018, the University of Health Sciences (UHS), Lahore, launched its second Public Health SCM Short Certificate Course, with technical support provided by GHSC-PSM. Twenty participants were trained, four of whom were from Punjab DOH and Punjab Population Welfare Department (PWD) and sponsored by GHSC-PSM. This course will enhance the skill set and build competencies of the workforce, a significant asset given the growing demands of the public health supply chain domain. The launch of the second SCM short certificate course by UHS will subsequently go a long way toward improving future public health supply chain practices and in establishing UHS as an SCM center of excellence in the region.

Complete Results and Denominators

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

Task Order	Stockout rate	# SDP stock observations
TO3-PRH	19.1%	31,904
Combined oral contraceptive with iron	18.0%	7,976
3-month injectable	18.5%	7,976
Copper-bearing IUD	23.8%	7,976
Male condoms (FP)	16.3%	7,976
Total	19.1%	31,904

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO3-PRH		
Combined oral methods	18.0%	7,976
Injectable contraceptives	18.5%	7,976

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	73%	10,964

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Subnational level 1	25%	50%	0%	25%	16
TO3-PRH	25%	50%	0%	25%	16
Subnational level 2	19%	19%	21%	41%	1,103
TO3-PRH	19%	19%	21%	41%	1,103
Total	19%	19%	20%	41%	1,119

Country

FY Quarter

Pakistan 🗸 🗸

2019-Q1 🗸 🗸

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C2. Number of people trained Task Order Female Male **Total** TO3-PRH 1 3 4 **Total 1 3 4**

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B6. Quarterly supply plan updates

Product Group	# of supply	# submitted
	plans required	

C10. HIV molecular instrument functionality

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

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.

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

Country M&E Indicator Performance





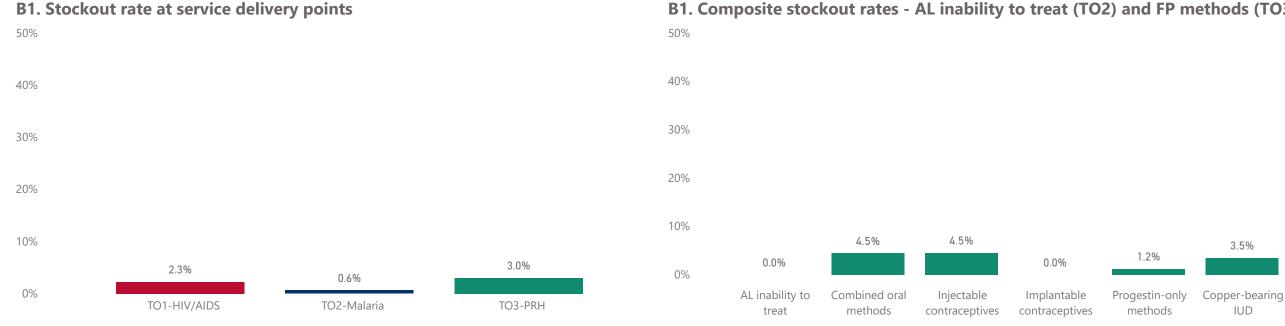




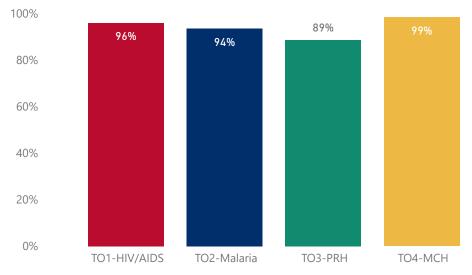
Service Delivery Point Stockouts and Reporting Rates

Country	\checkmark	Task Order	\checkmark	Tracer Product	\checkmark
Rwanda	\sim	All	\sim	All	\sim

In GHSC-PSM-supported regions



B3. LMIS reporting rate



Analysis

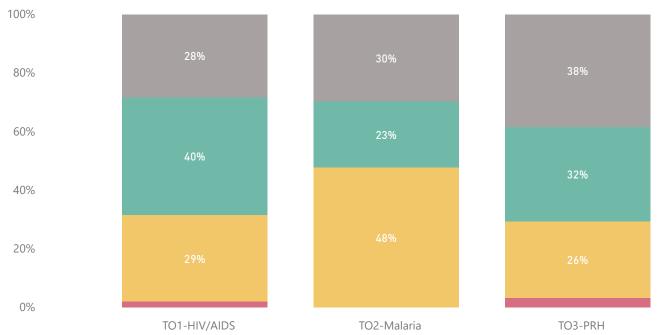
During FY19 Q1 in Rwanda, the average stockout rate at SDPs was 2 percent (TO1 was 2 percent, TO2 was 1 percent, and TO3 was 3 percent). Several products, such as ACTs 6x2 and malaria RDTs (TO2), Jadelle, and female condoms (TO3) saw stockout rates drop since Q4 FY18. The stockout rate for Implanon at SDPs increased from 3 percent to 7 percent this quarter, mainly due to the global shortage for Implanon coupled with a massive family planning awareness campaign in October 2018, which increased demand/consumption of long-term family planning methods.

SDP reporting rates continued to be high in Q1 FY19 across all task orders, which was encouraging as most SDP activities, including LMIS reporting, often slows down due to the holiday season.

Warehouse stock status and product losses

B2. Stocked according to plan

Stocked out Ounderstocked Stocked according to plan Overstocked



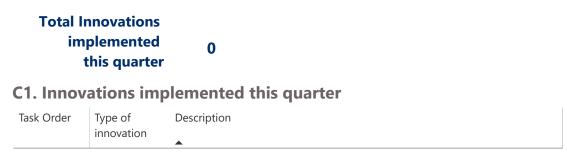
C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in GHSC-PSM custody

ТО	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
TO1	Global	Transit	Damage	ARVs	\$6	\$4,195,060	0.00%
TO1	Global	Transit	Damage	VMMC	\$4	\$737,558	0.00%

Country	\checkmark	Task Order	\checkmark	Supply Chain Level	\sim	Tracer Product	\sim
Rwanda	\sim	All	\sim	All	\sim	All	\sim

Indicator	Analysis
C7	The two small losses are reported this quarter as follows: 1) one VMMC kit was found open/damaged during MPPD's physical verification upon receipt of the shipment in Rwanda in August of 2018; and 2) two cartons of ARVs were received compressed, and when the contents were reviewed, two boxes of ARVs were deemed unusable.
B2	For TO1, at the central level, the most used first-line ARV, TDF/LAM/EFV, was understocked because it is being phased out as the country transitions to a TLD regimen. However, the product was stocked according to plan at the SDP level. Pediatric ARVs and first-line RTKs were understocked at the central level and stocked according to plan at lower levels of the supply chain due to a push distribution by the MPPD to prepare for its annual inventory in January 2019, when no products are distributed. Second-line RTKs were overstocked in Q1 FY19 due to GHSC-PSM and MPPD's success in delivering shipments on time to address a stockout in the past. For TO3, IUDs were understocked at MPPD due to an increase in demand/consumption of long-term contraceptive methods, resulting from a family planning awareness campaign conducted in October 2018.

Supply plans, innovations, and strategic activities



There were no innovations to report this quarter.

B6. Quarterly supply plan submissions to GHSC-PSM HQ Analysis 2019-01 ARVs Condoms FP commodities Lab (HIV diagnostics) MCH commodities Malaria commodities RTKs

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

Details

Rwanda FDA operations manual: Together with the Ministry of Health and Rwandan FDA staff, GHSC-PSM conducted a review of the manual with a focus on specific operations of Rwanda FDA.

Rwanda FDA Human resource manual: In collaboration with the Ministry of Health (Human Resources Department) and Rwandan FDA, GHSC-PSM conducted a review of the manual. The project consulted documents from other institutions like Rwanda Utilities Regulatory Authority (RURA) and Rwanda Revenue Authority (RRA) to ensure that the manual will be in line with Government of Rwanda guidance, while respecting the specificity of the Rwanda FDA vision, mission, and objectives.

Rwanda FDA Board of Directors manual: GHSC-PSM supported the development of the Rwanda FDA Board of Directors manual, which will enter into force once approved by the chairman of the Board and the supervisory ministry.

During a workshop, teams from the MOH, WHO, Rwandan FDA and GHSC-PSM conducted a review of two regulations. The first concerns the standards of premises hosting different pharmaceutical products, and the second concerns licensing of manufacturing, wholesale, and pharmacy retail of pharaceutical products. GHSC-PSM has been guided by WHO regulations and guidelines.

Country

Rwanda

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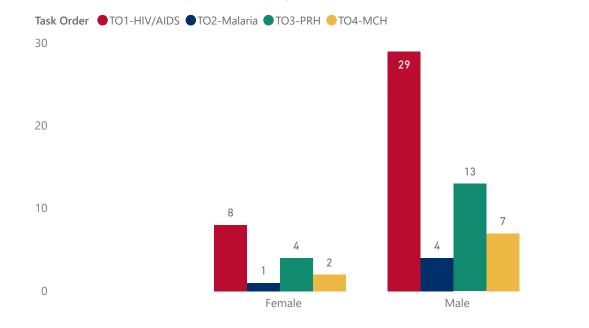
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Rwanda has submitted all required supply plans this quarter. GHSC-PSM Rwanda supported the Ministry of Health and the Coordinated Procurement & Distribution System (CPDS) committees to carry out quarterly supply plan reviews.

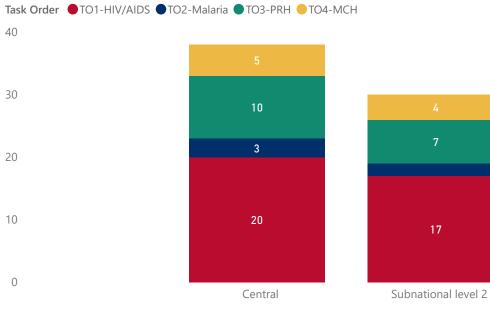
Training for supply chain partners

Country	\sim	Task Order	\sim	Supply Chain Level	\sim	Туре	\sim
Rwanda	\sim	All	\sim	All	\sim	All	\sim

C2. Number of people trained by sex

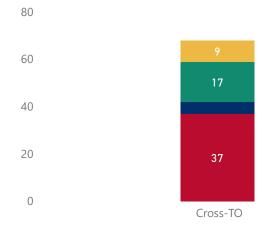


C2. Number of people trained by supply chain level



C2. Number of people trained by funding source and type

Task Order TO1-HIV/AIDS TO2-Malaria TO3-PRH TO4-MCH



C2. Number of people trained by technical area



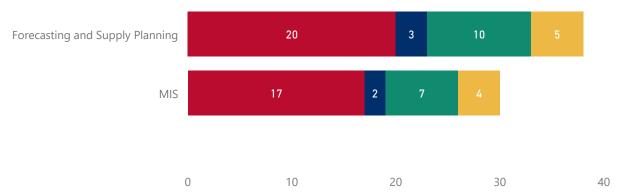
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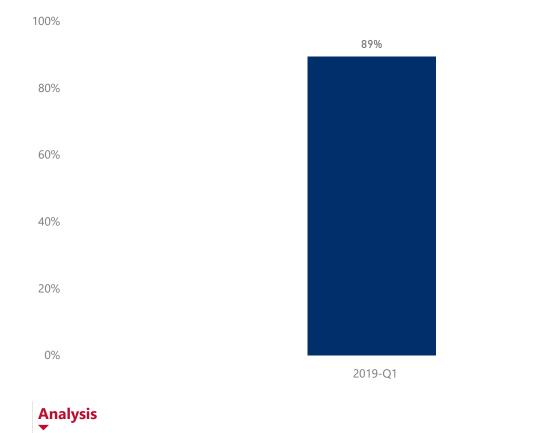


Analysis

In Q1 FY19, 68 individuals were trained in forecasting and supply planning of health commodities (38) and in using the eLMIS (30). Of these, 53 were males and 15 were females.

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period



This quarter, GHSC-PSM in Rwanda saw a decrease in functional molecular instruments due to a machine having a problem with a tube handler and the thermocycler; however a maintenance company has since fixed the tube handler and replaced the thermocycler, and the machine is currently up and running with no issues.

Produ	ıcts
	Exact Product Name
)\/	Tanafavir/Lamivudina/Efaviranz 200/200/600 mg

HIV Tracer

Tracer Product

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.

Country ~

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Rwanda

Complete Results and Denominators

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

Task Order	Stockout rate	# SDP stock observations	
TO1-HIV/AIDS	2.3%	3,178	
1st line adult ARV	1.1%	536	
2nd line adult ARV	2.0%	511	
Pediatric ARV	3.8%	477	
First RTK	2.5%	529	
Second RTK	2.8%	389	
Viral load reagent	0.0%	9	
Viral load consumable	0.0%	9	
EID reagent	0.0%	6	
EID consumable	0.0%	6	
Male condoms (HIV)	2.6%	533	
Female condoms (HIV)	0.0%	173	
TO2-Malaria	0.6%	2,476	
AL 6x1	1.0%	512	
AL 6x2	0.8%	511	
AL 6x3	0.7%	457	
AL 6x4	0.7%	537	
mRDT	0.0%	459	
TO3-PRH	3.0%	3,349	
Combined oral contraceptive with iron	4.5%	448	
3-month injectable	4.5%	446	
1-rod implant	7.4%	337	
2-rod implant	1.2%	433	
Progestin only pills	1.2%	409	
Copper-bearing IUD	3.5%	318	
Calendar-based awareness methods	0.0%	308	
Male condoms (FP)	2.9%	477	
Female condoms (FP)	0.0%	173	
Total	2.1%	9,003	

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	0.0%	504
TO3-PRH		
Combined oral methods	4.5%	448
Injectable contraceptives	4.5%	446
Implantable contraceptives	0.0%	385
Progestin-only methods	1.2%	409

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	96%	586
TO2-Malaria	94%	586
TO3-PRH	89%	586
TO4-MCH	99%	566

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	48%	13%	39%		23
TO1-HIV/AIDS	36%	9%	55%		11
TO2-Malaria	80%		20%		5
TO3-PRH	56%	22%	22%		9
Subnational level 1	32%	34%	33%	2%	600
TO1-HIV/AIDS	40%	29%	28%	2%	240
TO2-Malaria	21%	31%	49%	0%	150
TO3-PRH	31%	39%	26%	3%	270
Total	33%	33%	33%	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.

Country

Rwanda

FY Quarter

 \checkmark

2019-Q1 🗸 🗸

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C2. Number of people trained Task Order Female Male Total 37 TO1-HIV/AIDS 8 29 4 5 TO2-Malaria 1 TO3-PRH 4 13 17 2 7 TO4-MCH 9 15 53 68 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
MCH commodities	1	1
RTKs	1	1

C10. HIV molecular instrument functionality

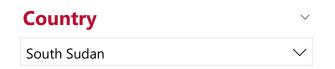
# GHSC-PSM- supported instruments	% of instruments that functional for the entire period
19	89%

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

Country M&E Indicator Performance





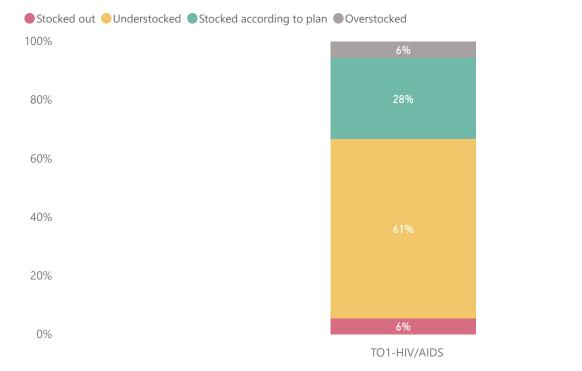




FY2019 Quarter 1 October - December 2018

Warehouse stock status and product losses

B2. Stocked according to plan



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

ТО	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
TO1	Global	Transit	Damage	Adult ARV	\$2,004	\$112,356	1.78%

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
South Sudan	\sim	All	\sim	All	\sim	All	\sim

Indicator	Analysis
C7	Two boxes of Efavirenz 600 mg + Lamivudine/Zidovudine 150/300 mg combo pack tablets and one carton of 30 + 60 tablets were damaged by rain water while stored at the airport warehous Spedag, for almost one month. The order was delivered in July 2018.
B2	The stocked according to plan (SAP) rate decreased by 22 percent from last quarter. This is because male condoms were SAP last quarter (FY18Q4) but were understocked this quarter.

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

ź	20%		
2	40%		
6	60%		
8	80%		
10	100%		

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

Country

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South Sudan \sim

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

2019-Q1 South Sudan \checkmark \sim B1. Stockout rate at service delivery points (GHSC-PSM-supported regions) B1. Composite stockout rates Task Order Stockout Rate # SDP stock observations Task Order # of SDPs that reported Stockout Rate C2. Number of people trained Total Task Order Total Total See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts. B6. Quarterly supply plan updates B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions) **Product Group** # of supply # submitted plans required Task Order Reporting rate Total # of SDPs required to report B2. Stocked according to plan at storage sites Supply Chain Level Stocked according Overstocked Understocked Stocked Total Stock to plan out Observations Central 28% 6% 61% 6% 18 C10. HIV molecular instrument functionality 28% 6% 61% 6% TO1-HIV/AIDS 18 # GHSC-PSM-% of instruments that functional 28% 6% 61% 6% 18 Total supported instruments for the entire period For complete results on innovations (C1), strategy, policy, and B1 and B2 denominator note: For countries that report male and female condoms under both regulation activities (C11), and product losses (C7a and C7b), B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that please see the specific pages for those indicators. reported) for all tracer products, minus one set of observations for condoms.

Country

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FY Quarter

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

Country M&E Indicator Performance









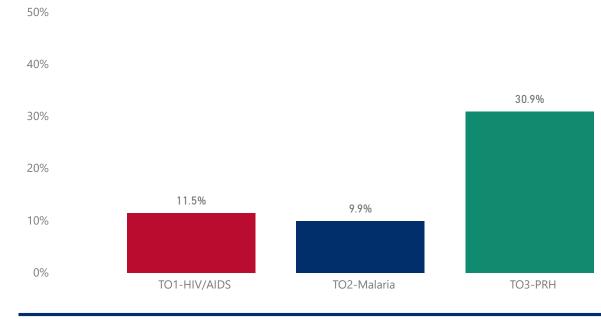
FY2019 Quarter 1 October - December 2018

Service Delivery Point Stockouts and Reporting Rates

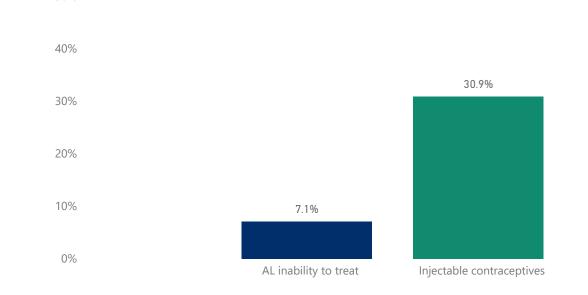
Country	\sim	Task Order	\sim	Tracer Product	\checkmark
Uganda	\sim	All	\sim	All	\sim

In GHSC-PSM-supported regions

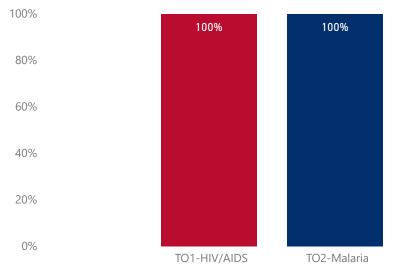
B1. Stockout rate at service delivery points



B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3)



B3. LMIS reporting rate



Analysis

50%

Stockout rates for T01 commodities have reduced by 7 percent for T01 commodities, from 19 percent in FY18 Q4 to 12 percent in FY19 Q1. The reduction can be been mainly attributed to improvements in this measure for RUTF, HIV-Tie breaker RTK, and first-line adult ARV. For T02, stockout rates have increased slightly, from 8 percent to 10 percent. This may be attributed to the general increase in the number of patients seen as well as changes as in issuance of certain ACTs first compared to those that had been overstocked at the SDP level. However, the central level has a 9.8 month supply, suggesting that inadequate quality of orders may have led to more stockouts. For T03, stockout rates for Depo reduced from 34 percent in FY18 Q4 to 31 percent in FY19 Q4. After the change in warehousing from UHMG to JMS, distribution of FP products to SDPs was resumed during the quarter, and this led to reduced stockout rates

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 98.6 percent. 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 increased from 98 percent in FY18 Q4 to 99 percent in FY19 Q1. There has been constant follow-up of the sites to ensure that they report. JMS continued to support the facilities while encouraging them to submit reports even when they had enough stock. Nationally, data on reporting rates for TO3 is not yet reported centrally because the country is still in the process of centrally collating the data after streamlining the ordering/reporting of FP commodities by SDPs.

Warehouse stock status and product losses

B2. Stocked according to plan



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

ТО	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
TO1	Central	Storage	Expiry	Laboratory	\$1,158	\$40,916	2.83%

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Uganda	\sim	All	\sim	All	\sim	All	\sim

Indicator Analysis

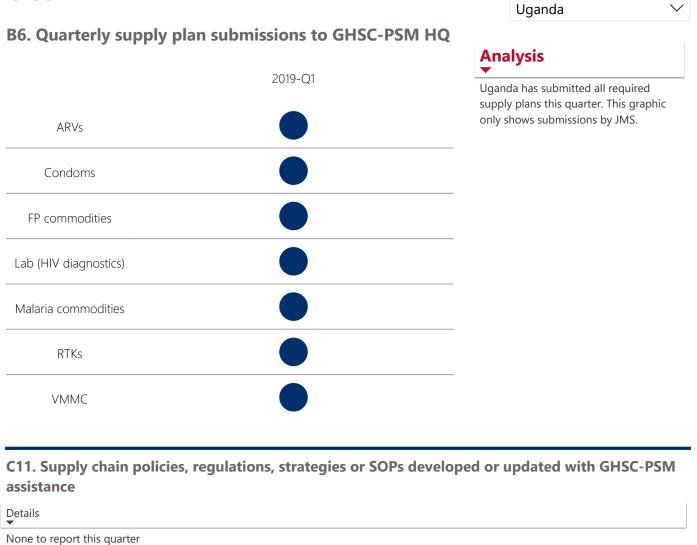
В2	Overall, commodities stocked according to plan increased from 30 percent from the previous quarter to 34 percent in the last quarter. Also, 40 percent of commodities are overstocked but not at risk of expiry, so commodities are available and individuals are not going without treatment. Specifically: TO1 commodities stocked according to plan increased from 56 percent in FY18 Q1 to 57 percent in FY19 Q1. TO2 commodities stocked according to plan increased from 6 percent in FY18 Q4 to 17 percent in FY19 Q1. This is a great improvement; although 78 percent of TO2 commodities were overstocked, they were not at risk of expiry. TO3 commodities stocked according to plan in FY18 Q4. Distribution of FP commodities resumed after that responsibility was transferred from UHMG to JMS. Also, ordering/reporting has been streamlined and SDPs order/report directly to JMS.
C7	GHSC-PSM registered an expiry of three Partec - CD4 Easy Count 100 tests, valued at \$1,158 (2.83%) on a \$40,916 shipment. Generally, demand has decreased for CD4 commodities following scale-up of viral load commodities. Also, CD4 machines have varying consumption patterns and the Partec Easy Count platform is registering lower demand as more focus is now on the point of care CD4 technologies, PIMA and BD Presto.

Supply plans, innovations, and strategic activities



C1. Innovations implemented this quarter

Task Order	Type of innovation	Description
TO1- HIV/AIDS	New products	Introduction of Dolutegravir (DTG)-containing regimens. Use of DTG for first-line ART, i.e., TDF/3TC/DTG Eligible groups • Preferred first-line regimen for adult men and adolescent boys • Adult women and adolescent girls on effective contraception • Adult women and adolescent girls not of child-bearing potential •Alternative regimen for children 3-10yrs as ABC/3TC/DTG Use of DTG for second-line ART Adult 2L Regimens – New, i.e., AZT/3TC/DTG and TDF/3TC/DTG



Country

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

	0%		
40	0%		
60	0%		
80	0%		
100	0%		

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

Country ~

Uganda

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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

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

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	11.5%	934
1st line adult ARV	2.8%	143
2nd line adult ARV	10.5%	76
Pediatric ARV	11.7%	60
First RTK	6.4%	219
Second RTK	10.3%	213
Tie-breaker RTK	23.8%	189
Viral load reagent	0.0%	1
EID reagent	0.0%	1
RUTF	21.9%	32
TO2-Malaria	9.9%	675
AL inability to treat	7.1%	239
mRDT	10.2%	236
SP	13.0%	200
TO3-PRH	30.9%	181
3-month injectable	30.9%	181
Total	12.8%	1,790

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	7.1%	239
TO3-PRH		
Injectable contraceptives	30.9%	181

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%	218
TO2-Malaria	100%	657

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	37%	41%	20%	3%	79
TO1-HIV/AIDS	57%	22%	19%	3%	37
TO2-Malaria	17%	78%	6%		18
TO3-PRH	30%	33%	30%	7%	30
Total	37%	41%	20%	3%	79

Uganda 🗸 🗸 🗸

Country

2019-Q1 🗸

FY Quarter

C2. Number of people trained Task Order **Total**

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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-	% of instruments that functional
supported instruments	for the entire period

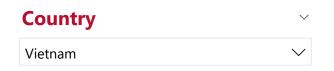
B1 and B2 denominator note: For countries that report male and female condoms under both B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that reported) for all tracer products, minus one set of observations for condoms.

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

Country M&E Indicator Performance









FY2019 Quarter 1 October - December 2018

Warehouse stock status and product losses

B2. Stocked according to plan Stocked out Overstocked Stocked according to plan Overstocked 100% 80% 67% 60% 40% 20% 0%

TO1-HIV/AIDS

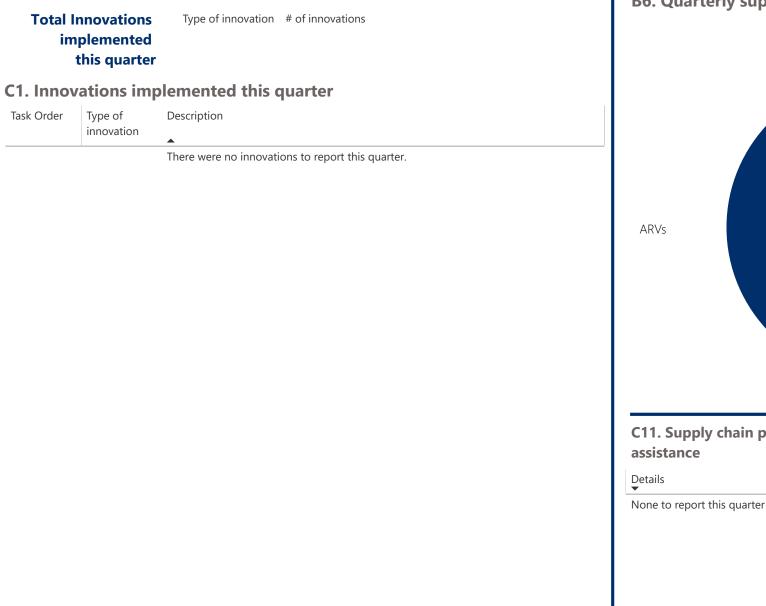
C7a. and C7b. Product loss due to expiry, damage, theft, and other causes while in **GHSC-PSM custody**

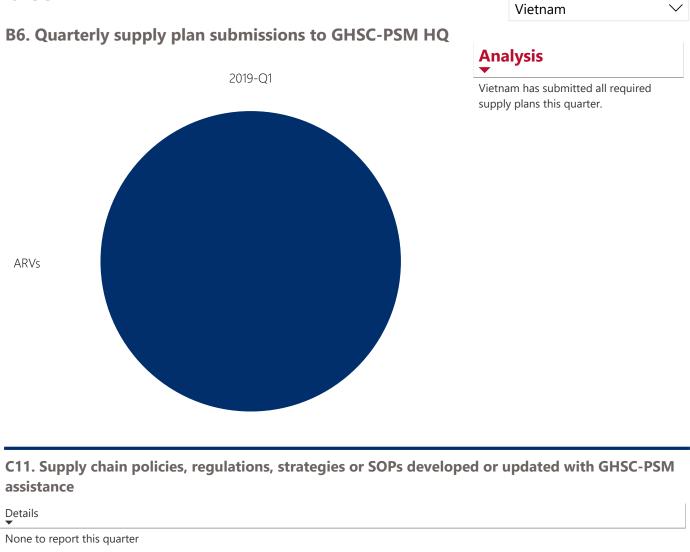
ТО	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
			<i></i>	51			

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\checkmark
Vietnam	\checkmark	All	\sim	All	\sim	All	\sim

Indicator Analysis C7 Vietnam no longer reports on this indicator. Central stock levels are monitored very closely at the CPC1 warehouse. The most used first-line B2 ARV had one understock observation this quarter because of an unanticipated packaging issue discovered upon arrival of the shipment. The external packaging change was clarified with the vendor, and the issue solved. Stock levels should return to normal range shortly. The most used second-line ARV had one understock observation because of a shipment arriving late. This too will be rectified once the shipment arrives.

Supply plans, innovations, and strategic activities





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Country

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

	Anal	ysis			
	0%				
	20%				
	40%				
	60%				
	80%				
1	100%				

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

Country

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Vietnam

HIV Tracer Prod	ucts
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

2019-Q1 \checkmark Vietnam \sim B1. Stockout rate at service delivery points (GHSC-PSM-supported regions) B1. Composite stockout rates Task Order Stockout Rate # SDP stock observations Task Order Stockout Rate # of SDPs that reported C2. Number of people trained Total Task Order Total Total See "Indicator Details" for B01 at the end of this annex for more detail about composite stockouts. B6. Quarterly supply plan updates B3. SDP reporting rate to LMIS (GHSC-PSM-supported regions) **Product Group** # of supply # submitted plans required Task Order Reporting rate Total # of SDPs required to report ARVs 1 B2. Stocked according to plan at storage sites Supply Chain Level Stocked according Overstocked Understocked Stocked Total Stock to plan out Observations Central 67% 33% 6 C10. HIV molecular instrument functionality 67% 33% 6 TO1-HIV/AIDS % of instruments that functional # GHSC-PSM-67% 33% 6 Total supported instruments for the entire period For complete results on innovations (C1), strategy, policy, and B1 and B2 denominator note: For countries that report male and female condoms under both regulation activities (C11), and product losses (C7a and C7b), B1 and B2, total stock observations will be equal to the sum of all observations (i.e. SDPs that please see the specific pages for those indicators. reported) for all tracer products, minus one set of observations for condoms.

Country

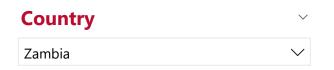
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FY Quarter

GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

Country M&E Indicator Performance









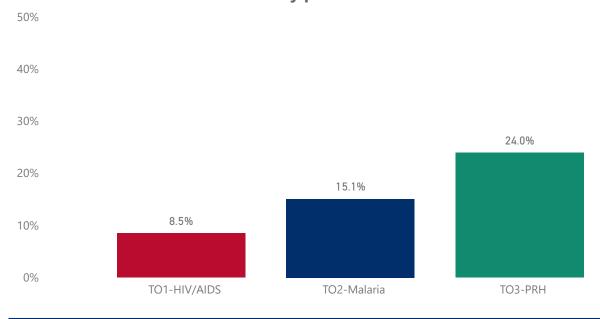
FY2019 Quarter 1 October - December 2018

Service Delivery Point Stockouts and Reporting Rates

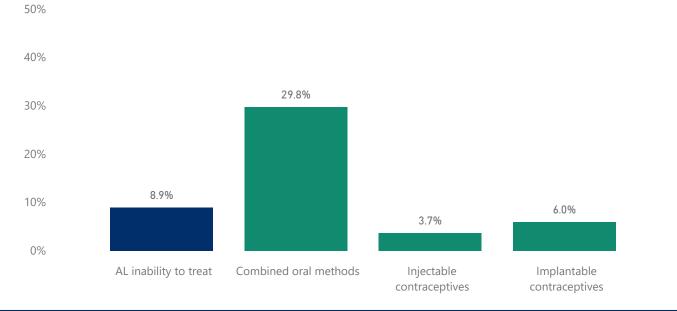
Service Delivery	Point Stockouts	апа кер
In GHSC-PSM-supported regions		

Country		Task Order		Tracer Product	
Zambia	\wedge	All	\sim	All	\sim

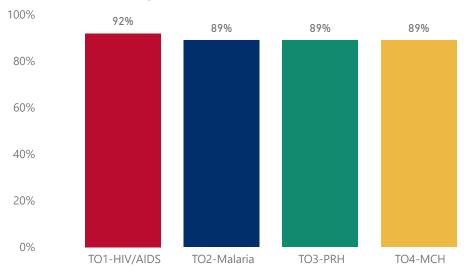
B1. Stockout rate at service delivery points



B1. Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3)



B3. LMIS reporting rate



Analysis

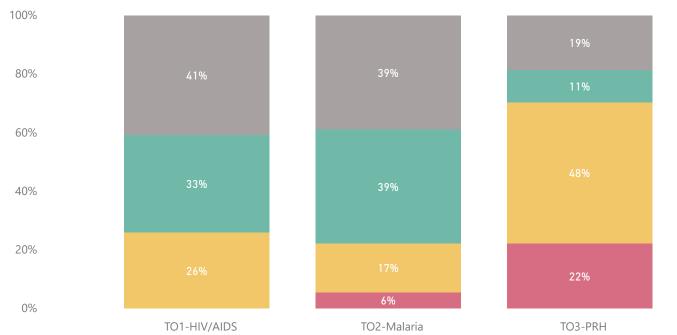
Overall, Zambia's stockout rates decreased notably in the last quarter. However; among HIV commodities, TLE registered a high stockout rate of 25 percent, as this product is being phased out in favor of TLD, though it remains the most-used first-line adult ARV. Male condoms had high stockouts (16 percent) despite being overstocked at the central level, potentially due to system glitches which caused a low eLMIS reporting rate. Female condoms continue to face high stockouts (21 percent) due to low demand. The reduction in TO2 stockouts came as the project made a push to ensure that first-line malaria drugs are available, while supporting MSL's distribution ahead of the December stock count. However, MOH district authorities withheld long shelf-life pack sizes, causing stockouts of malaria commodities among some pack sizes. The central stockout of SP contributed to its 36 percent SDP stockout rate; GHSC-PSM does not procure this product for Zambia. At 24 percent, TO3 stockout rates have decreased for two quarters, though remain higher than the target. All products but DepoProvera, Norethisterone Enanthate, and Copper IUDs were centrally available. Stockouts of Norethisterone (38 percent) were related to low demand, as many sites in several large provinces have not ordered it. Despite availability at the central medical store, high stockouts of one- and two-rod implants (29 and 33 percent, respectively) may be due to a lack of trained staff, especially in health posts in Western province. SDPs without properly trained providers tend to not order the product. The MOH is working with partners to train more staff in implant insertion. DepoProvera stockouts (10 percent) may be due to central stockouts and to the late delivery by MSL in Eastern and Northern provinces. Combined oral stockouts (30 percent) may be due to non-supply by MSL mostly in Western province, where some sites had transport challenges in collecting commodities from DHOs as MOH restricted facility imprest accounts.

Zambia continues to achieve high SDP reporting rates (92 percent for TO1 and 89 percent for TO2 and TO3) against its target of 75 percent. GHSC-PSM provides remote technical assistance to SDP staff in logistics management and adherence to reporting timelines.

Warehouse stock status and product losses

B2. Stocked according to plan

Stocked out Overstocked Stocked according to plan Overstocked



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

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

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Zambia	\sim	All	\sim	All	\sim	All	\checkmark

Indicator Analysis

B2

▼ Vilayois
Zambia continued its pattern of no stockouts of HIV commodities at the central medical store (MSL), while stocking according to plan (33 percent) has decreased for the last three quarters. TO1 commodities overall were most likely to be overstocked (41 percent of observations) this quarter. For those products that were overstocked (pediatric ARVs, second-line RTKs, and viral load reagents), none of them are currently in danger of expiring. First-line RTKs were understocked due to the distribution of three months of stock in November in preparation for the December stock count and World AIDS Day activities. TO2 products were equally likely to be overstocked as they were to be stocked according to plan (39 percent each), while SP was the only malaria product to face stockouts this quarter (33 percent). However, the MOH has secured funding for the procurement of SP and expects 500,000 bottles of 1,000 tablets by the end of January 2019. Overstocks of AL 6x1 and 6X2 are not
expected to lead to expiries. TO3 commodities faced increased understocks (48 percent) and stockouts (22 percent) this quarter. Norethisterone Enanthate (stocked out), as noted, has low demand, although three months of stock had been issued to facilities last March. Copper IUDs were stocked out at the central level in two of three observations due to high issues in February and March 2018 based on their monthly forecast. The facilities, however, are currently overstocked. There is no current funding commitment for this product. Combined oral contraceptives are centrally stocked below minimum due to a delayed GHSC-PSM shipment which was expected in August 2018 and is now expected by mid-February 2019.

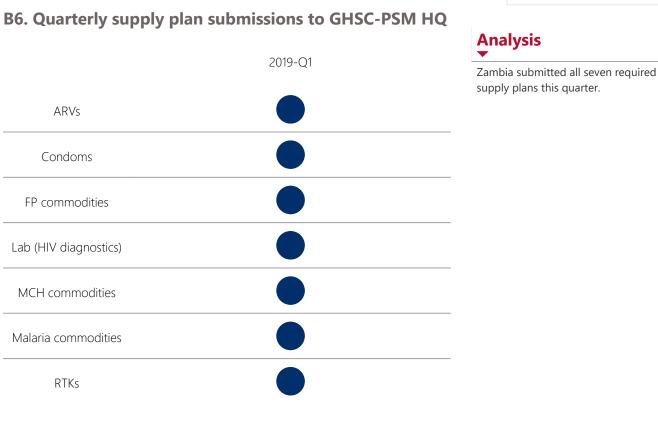
Supply plans, innovations, and strategic activities

Total Innovations New approaches implemented this quarter

1

C1. Innovations implemented this quarter

Task Order	Type of	Description
	innovation	▲
Crosscutting	New approaches	GHSC-PSM Zambia has worked to strengthen and expand the pre-service training program for nurses and midwives beyond the traditional in-service training program to make it more relevant and responsive to the needs of the health care system, most notably adding a Supply Chain Management component. This quarter, the project
		worked with the General Nursing Council of Zambia (GNCZ) to conduct supportive supervision visits to selected training institutions following the introduction of the
		revised curricula. The purpose of the visits was to observe how the content in SCM was being delivered by the trained 178 tutors in several training institutions. The findings
		from the monitoring visits indicated that the institutions visited were implementing the SCM program, and furthermore they all were teaching SCM to the third-year students. GHSC-PSM supported the GNCZ in formulating Supply Chain Management
		examination questions, which were administered to students in the leadership and management course for the first time in Zambia in December 2018. The SCM component is expected to further increase nurses' and midwives' skills in commodity management, thereby contributing to increased commodity availability at the facility level as the students obtain employment in the public sector. It is anticipated that
		many students will be examined in SCM in the next upcoming examination sessions, which will build on the body of knowledge in sustainable capacity building approaches.



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

Details

GHSC-PSM spearheaded the drafting and finalization of the National Health Sector Supply Chain Strategy and Implementation Plan 2018-2021 with a focus on ensuring equitable access to medicines and medical supplies for the Zambian population. The plan prioritizes 22 interventions across four functional groups which include: forecasting, procurement and rational use, storage and distribution, strategic data, and finance and resources. To facilitate this process, the project engaged over 70 stakeholders and held over 200 one-toone interactions to solicit inputs and feedback to enrich the development of the strategy. GHSC-PSM further co-drafted the strategy with the MOH, Medical Stores Limited (MSL), Zambia Medicines Regulatory Authority (ZAMRA) and other key stakeholders supporting the public health sector supply chain. The project also supported a validation meeting for over 60 stakeholders to gather inputs into the strategy, which was then presented to the MOH senior management team. A draft document has since been printed and circulated to the MOH Directors for final feedback before officially being signed-off by the Minister of Health and Permanent Secretary.

Country

Zambia

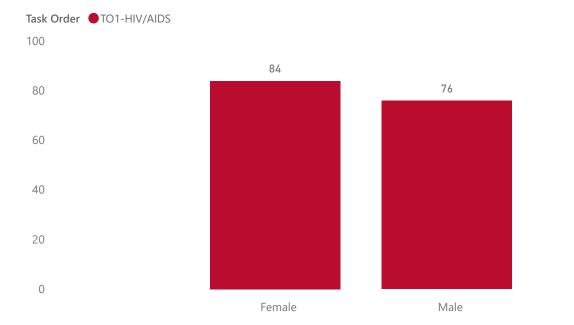
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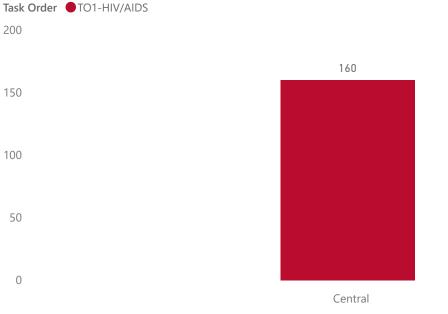
Training for supply chain partners

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Туре	\sim
Zambia	\sim	All	\sim	All	\sim	All	\sim

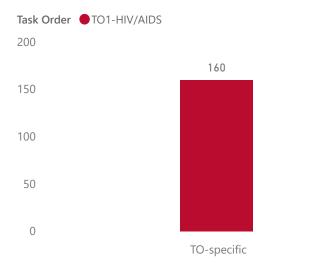
C2. Number of people trained by sex



C2. Number of people trained by supply chain level

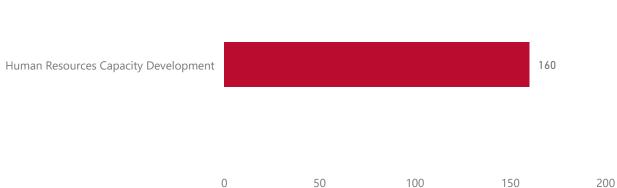


C2. Number of people trained by funding source and type



C2. Number of people trained by technical area





Analysis

During this quarter, the project trained 160 students (84 female, 76 male) from Evelyn Hone College of Applied Sciences in ARV logistics systems. No inservice training was conducted this quarter. All of Zambia's trainings are part of an integrated supply chain package and therefore have been classified as "human resources capacity development."

Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

	0% Analys ▼	is			
	20%				
	40%				
	60%				
	80%				
1	00%				

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

Country

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Zambia

Fracer 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				

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

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

Task Order	Stockout rate	# SDP stock observations
TO1-HIV/AIDS	8.5%	6,779
1st line adult ARV	25.2%	416
2nd line adult ARV	5.4%	464
Pediatric ARV	6.9%	420
First RTK	4.3%	1,910
Second RTK	2.4%	1,856
Viral load reagent	0.0%	4
EID reagent	0.0%	3
Male condoms (HIV)	15.8%	1,249
Female condoms (HIV)	20.8%	457
TO2-Malaria	15.1%	9,565
AL 6x1	9.9%	1,698
AL 6x2	15.3%	1,654
AL 6x3	11.7%	1,664
AL 6x4	15.3%	1,668
mRDT	5.1%	1,516
SP	36.3%	1,365
TO3-PRH	24.0%	6,388
Combined oral contraceptive with iron	29.8%	1,549
2-month injectable	37.9%	741
3-month injectable	9.6%	1,192
1-rod implant	28.5%	242
2-rod implant	32.7%	958
Male condoms (FP)	15.8%	1,249
Female condoms (FP)	20.8%	457
Total	15.5%	21,026

B1. Composite stockout rates

Task Order	Stockout rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	8.9%	1,748
TO3-PRH		
Combined oral methods	29.8%	1,549
Injectable contraceptives	3.7%	1,354
Implantable contraceptives	6.0%	1,036

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	92%	2,149
TO2-Malaria	89%	2,209
TO3-PRH	89%	2,209
TO4-MCH	89%	2,209

B2. Stocked according to plan at storage sites

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	26%	33%	30%	11%	66
TO1-HIV/AIDS	33%	41%	26%		27
TO2-Malaria	39%	39%	17%	6%	18
TO3-PRH	11%	19%	48%	22%	27
Total	26%	33%	30%	11%	66

Country

Zambia

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FY Quarter

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2019-Q1 🗸 🗸

C2. Number of people trained

Task Order	Female	Male	Total
TO1-HIV/AIDS	84	76	160
Total	84	76	160

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-	% of instruments that functional
supported instruments	for the entire period

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.

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

Country M&E Indicator Performance







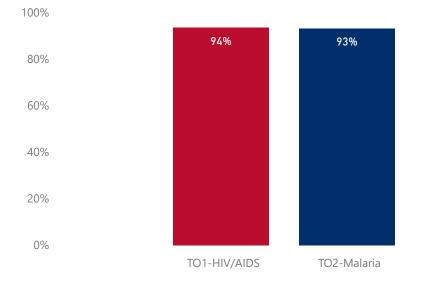
FY2019 Quarter 1 October - December 2018



Zimbabwe

Country Task Order Tracer Product \sim \sim Service Delivery Point Stockouts and Reporting Rates All All Zimbabwe \checkmark \sim \checkmark In GHSC-PSM-supported regions **B1.** Composite stockout rates - AL inability to treat (TO2) and FP methods (TO3) **B1. Stockout rate at service delivery points** 50% 50% 40% 40% 30% 30% 20% 20% 10.3% 8.3% 10% 10% 0.8% 0% 0% TO1-HIV/AIDS TO2-Malaria AL inability to treat

B3. LMIS reporting rate



Analysis

All ACTs recorded significant drops in stockout rates. Consumption has decreased due to the off-peak period. Emergency shipments that GHSC-PSM had for ACTs were received in October, in time for deliveries to facilities. In general the reduction in stockout rates was anticipated, as Natpharm has managed to deliver commodities within schedule.

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Reporting rates (within 30 days of the deadline) rose this guarter, from the mid-70s to low 90s. Timely reporting (within one week of the deadline) also rose dramatically, from 39 percent to 86 percent. Improvement is partly due to GHSC-PSM efforts in highlighting consequences of late deliveries to the committee that includes Natpharm, Global Fund, UNICEF and MOHCC, among others. In 2018, Natpharm improved adherence to commodity delivery schedules.

Zimbabwe saw a reduction in stockout rates in 14 out of 17 tracer commodities. One notable success is the achievement of a 0 percent stockout rate for adult firstline ARVs. Other improvements included first-line RTKs, second-line RTKs, and male condoms. There was no rationing of male condoms this quarter, which helped improve the rate. Stockout rates of the HIV tie-breaker did increase significantly, however, from 23.6 percent to 33 percent. This was due to the very low stock levels at the central level.

Warehouse stock status and product losses

B2. Stocked according to plan

 • Stocked out • Understocked • Stocked according to plan • Overstocked

 10%

 80%

 80%

 60%

 20%

 60%

 20%

 60%

 20%

 60%

 70%

 70%

 70%

 701-HIV/AIDS

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

ТО	Level	Site of Loss	Type of Loss	Product Type	Loss Value	Loss Denominator	Loss %
			71	· · · · · //· ·			

Country	\checkmark	Task Order	\sim	Supply Chain Level	\sim	Tracer Product	\sim
Zimbabwe	\sim	All	\sim	All	\sim	All	\sim

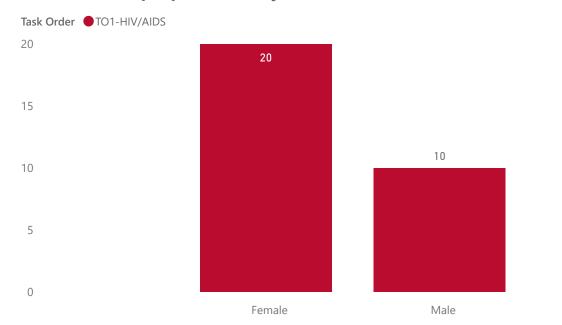
Indicator Analysis

C7	No product losses to report this quarter.
Β2	Central level stock data are as of December 5, 2018. End of year balances were not available due to Natpharm's annual stock take and ERP upgrade. Zimbabwe continues to report no central level stockouts of tracer products, but was understocked for some items. For understocked HIV products (first-line adult ARVs, pediatric ARVs, tie-breaker RTKs), shipments have already been received or are scheduled to arrive in Q2. Two malaria products (mRDTs and AL 6x2) are understocked due to unfunded shipments. As always, the team is regularly assessing pipeline risks and advising on use of the new Early Warning System software. Pipeline software is updated at least once every month.

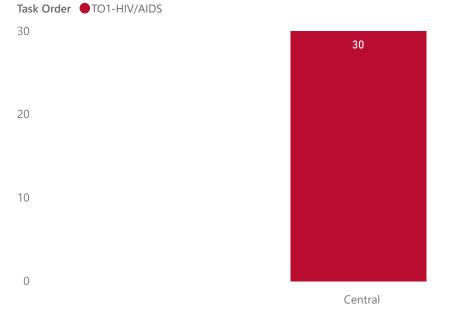
Training for supply chain partners

Country	\sim	Task Order	\sim	Supply Chain Level	\sim	Туре	\sim
Zimbabwe	\sim	All	\sim	All	\sim	All	\checkmark

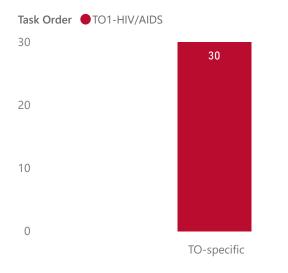
C2. Number of people trained by sex



C2. Number of people trained by supply chain level



C2. Number of people trained by funding source and type

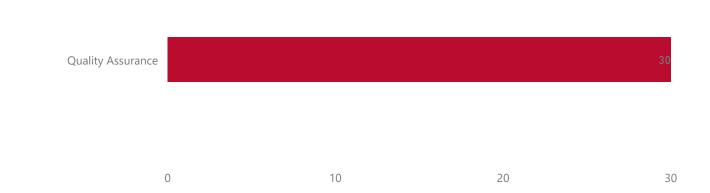


C2. Number of people trained by technical area



Analysis

A total of 10 male and 20 female PEPFAR clinical partner employees were trained in supply chain logistics and the in-country distribution system.



Molecular Instruments and HIV Tracer Products

C10. Percentage of GHSC-PSM-supported molecular instruments that remained functional during the reporting period

0%	llysis		
20%			
40%			
60%			
80%			
100%			

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

Country

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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

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

Task Order	Stockout Rate	# SDP stock observations	
TO1-HIV/AIDS	8.3%	13,019	
1st line adult ARV	0.0%	1,481	
2nd line adult ARV	8.7%	1,420	
Pediatric ARV	14.0%	1,408	
First RTK	1.4%	1,723	
Second RTK	5.3%	1,723	
Tie-breaker RTK	32.6%	1,723	
Viral load reagent	0.0%	8	
EID reagent	0.0%	3	
Male condoms (HIV)	1.4%	1,772	
Female condoms (HIV)	3.2%	1,758	
TO2-Malaria	10.3%	8,976	
AL 6x1	7.4%	1,640	
AL 6x2	16.8%	1,622	
AL 6x3	12.6%	1,641	
AL 6x4	5.9%	1,671	
mRDT	2.6%	1,661	
SP	24.3%	741	
Total	9.1%	21,995	

B1. Composite stockout rates

Task Order	Stockout Rate	# of SDPs that reported
TO2-Malaria		
AL inability to treat	0.8%	1,677
	,	
ee "Indicator Details" for B01	at the end of this annex for n	nore detail about composite stockou
ee "Indicator Details" for B01	at the end of this annex for n	nore detail about composite stockou
B3. SDP reporting rate to LI	MIS (GHSC-PSM-supported	l regions)
iee "Indicator Details" for B01 B3. SDP reporting rate to LI Task Order		

B2. Stocked according to plan at storage sites

TO2-Malaria

Supply Chain Level	Stocked according to plan	Overstocked	Understocked	Stocked out	Total Stock Observations
Central	19%	38%	44%	0%	16
TO1-HIV/AIDS	20%	30%	50%	0%	10
TO2-Malaria	17%	50%	33%	0%	6
Total	19%	38%	44%	0%	16

93%

1,705

Zimbabwe \sim

Country

FY Quarter 2019-Q1 \checkmark

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C2. Number of people trained Task Order Female Male Total TO1-HIV/AIDS 20 10 30 Total 20 10 30

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B6. Quarterly supply plan updates

Product Gro	up	# of supply plans required ▼	# submitted
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C10. HIV molecular instrument functionality

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

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.

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 <u>GHSC-PSM IDIQ M&E Plan</u> 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.

Indicator Details

Check out the <u>GHSC-PSM IDIQ M&E Plan</u> 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	