

USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM
PROCUREMENT AND SUPPLY MANAGEMENT



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ACRONYMS

3PL	third party logistics	MNCH	maternal, newborn, and child health
ACT	artemisinin-based combination therapy	MOH	Ministry of Health
ADD	agreed delivery date	MOHCC	Ministry of Health and Child Care (Zimbabwe)
ALu or AL	artemether lumefantrine	MoS	months of stock
AMC	average monthly consumption	MSPP	Ministère de la Santé Publique et de la Population (Haiti)
APE	absolute percent error	NHIS	National Health Information System
APTS	Auditable Pharmaceutical Transactions and Services (Ethiopia)	NMCP	National Malaria Control Program
ART	antiretroviral treatment	NSCA	National Supply Chain Assessment
ARTMIS	Automated Requisition Tracking Management Information System	ORS	oral rehydration salts/solution
ARV	antiretroviral	OTIF	on-time, in-full
ASAQ	artesunate/amodiaquine malaria treatment	PCV	pneumococcal conjugate vaccine
ASLM	African Society for Laboratory Medicines	PEPFAR	President's Emergency Plan for AIDS Relief
BI&A	Business Intelligence and Analytics	PFSA	Pharmaceuticals Fund and Supply Agency (Ethiopia)
CAMEG	Centrale d'Achat des Médicaments Essentiels Génériques et des Consommables Médicaux (Burkina Faso)	PhaGDis	Pharmacie de Gros de District (Madagascar)
CHAI	Clinton Health Access Initiative	PMI	U.S. President's Malaria Initiative
COC	combined oral contraceptive	POP	progestin only pill
CPhI	Convention on Pharmaceutical Ingredients	PPMR	Procurement Planning and Monitoring Report
Cu-IUD	copper-bearing intrauterine device	PPMRm	Procurement Planning and Monitoring Report for malaria
DHIS	District Health Information System 2	PRH	population and reproductive health
DMPA-IM	depot-medroxy progesterone – intramuscular	RBM	Roll Back Malaria
EID	early infant diagnosis	RDC	regional distribution center
EDI	electronic data interchange	RDT	rapid diagnostic test
EMLIP	Essential Medicines Logistics Improvement Program (Zambia)	RFQ	request for quotations
EOCP	emergency oral contraceptive pill	RH	reproductive health
EWS	early warning system	RH GTAG	Reproductive Health Global Traceability Advisory Group
FASP	forecasting and supply planning	RHSC	Reproductive Health Supplies Coalition
FP	family planning	RO	requisition order
FFP	firm fixed price	RTK	rapid test kit
FMHACA	Food, Medicine and Health Care Administration and Control Authority (Ethiopia)	RUTF	ready-to-use therapeutic food
FY	fiscal year	SALAMA	Centrale d'Achats de Médicaments Essentiels et de Matériel Médical de Madagascar
GF	Global Fund to Fight AIDS, Tuberculosis and Malaria	SCCU	Supply Chain Coordinating Unit (Lesotho)
GIS	geographic information system	SDP	service delivery point
GPRM	Global Price Reporting Mechanism	SOP	standard operating procedures
GSC	global supply chain	SP	sulfadoxine-pyrimethamine
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome	TA	technical assistance
IDIQ	Indefinite Delivery Indefinite Quantity Contract	TAF	tenofovir alafenamide
IUD	intrauterine device	TB	tuberculosis
LLIN	long lasting insecticide-treated net	TDF	tenofovir disoproxil
LMD	last mile delivery	TLE	tenofovir/lamivudine/efavirenz
LMIS	logistics management information system	UNFPA	United Nations Population Fund
M4All	Medicines for All	USAID	United States Agency for International Development
MAPE	mean absolute percent error	USD	United States dollar
MCH	maternal and child health	VMMC	voluntary medical male circumcision
MCP	Mexico City Policy	VMO/VMI	vendor managed ordering/vendor managed inventory
MgSO ₄	magnesium sulphate	WHO	World Health Organization
		XOOM	eXcellence in Optimized Operations Model
		ZAPS	Zimbabwe Assisted Pull System

Executive Summary

The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project is pleased to present its performance report for the second quarter of fiscal year 2017 (January to March). This report also includes some semi-annual data points, for the period of October 2016 to March 2017.

Overall Project Performance

Objective 1: Global Supply Chain

As the global supply chain (Objective 1) activity continues to increase, driven largely by continued growth under Task Order 1 (TO1). The number of requisition orders in progress under Task Orders 2, 3, and 4 has remained consistent from the first quarter, but the number of orders under TO1 has increased from about 360 at the end of December to more than 600 at the end of March. Across all task orders, the project now has nearly 1,000 requisition orders in progress.

Procurement values have also increased, totaling \$120.8 million for HIV/AIDS, \$47.2 million for malaria, and \$6.1 million for population and reproductive health (PRH) for the second quarter of fiscal year 2017 (FY2017). Maternal and child health also made procurements totaling \$43,266 this quarter. These values have contributed toward a life-of-project procurement total of over \$330 million across all four Task Orders.

In terms of logistics, the project has substantially increased its shipping volume for Task Order 1. This quarter saw 314 customer line items delivered for TO1, nearly doubling last quarter's numbers. Deliveries of customer orders increased for Task Order 2 as well, with 16 line items delivered. Finally, Task Order 4 completed its first shipment this quarter, delivering three line items to the Democratic Republic of Congo.

This quarter, Deliver/Return continued its activities toward automation and optimization of logistics processes. Electronic data interchanges (EDI) with three out of five third party logistics (3PL) providers have now been integrated with the project's logistics management information system (LMIS), enabling more

accurate and timely shipping status updates. The team has also implemented an automated freight bill audit system to streamline review and payment of freight invoices. Finally, Deliver/Return is moving ahead on network optimization, working closely with the Plan and Source teams to prepare for upcoming inventory and distribution transitions.

The Demand Planning team is working with the Systems Strengthening team to monitor country supply plans for accuracy, changes in quantification, and conversion to orders. For Task Order 1, the team is now reviewing the data available for lab products and has begun including these items in global demand forecasts. The Supply Planning team is continuing to monitor inventory in the regional distribution centers (RDCs), where the majority of current stock has been allocated for country orders. The team is particularly focused on stock with reduced shelf life and identifying solutions to prevent waste. Key to this effort is gaining a comprehensive view of shelf life importation requirements by country, which is in progress.

Finally, the MIS team achieved a major development milestone with release 3.0 of the Automated Requisition Tracking Management Information System (ARTMIS), which includes new data visibility and analytics functionality. MIS is now shifting from the development phase to operations and maintenance, focusing on driving full use of the system across all project and USAID users, improving data quality, and incorporating essential changes as needed.

Objective 2: In-country systems strengthening

The Country Programs team underwent a restructuring this quarter to more effectively target technical assistance. This included re-organizing the Systems Strengthening team by technical supply chain area rather than health element area, as well as the introduction of country programs commodity security team, to ensure sustained country-level access to GHSC-PSM-supported health commodities. The restructuring created clear lines of authority for the launch of technical working groups and communities of practice, which will allow for more technical feedback across field offices. In addition, the HQ commodity

security team will be working with field office commodity security points of contact to facilitate enhanced linkages with the Global Supply Chain team in the areas of FASP, lead time, and order management, and to help build internal systems to promote on-time delivery of commodities.

This quarter also saw the launch of country performance review sessions, incorporating personnel from countries, home office country teams, the global supply chain team, GHSC-PSM leadership, the continual improvement team, and the home office monitoring and evaluation (M&E) team. These reviews constitute a key element of GHSC-PSM's continuous improvement strategy, and are a venue for reviewing performance trends for two key performance indicators: *B1. Stockout rate at service delivery points (SDPs)*, and *B2. Percentage of stock status observations in storage sites where commodities are stocked according to plan*. The discussions are an opportunity to bring together teams from across the project to drill down into performance issues on a country-by-country basis, determine root causes, and develop action items which are followed from quarter to quarter. Fourteen countries were reviewed this quarter, and the next performance review meetings are anticipated to take place in May.

In many of GHSC-PSM's field offices, teams are introducing innovative new approaches into the public sector supply chains. In Zimbabwe, project staff seconded to the Ministry of Health have started WhatsApp chat groups to improve communication among MOH staff, including reminders about reporting deadlines. Angola is using a new GIS mapping approach to integrate population and malaria incidence data, to improve quantification and targeted distributions. They are also working on distribution planning, provider training, and infographic materials about injectable artesunate, which is being introduced for the first time for the treatment of complex malaria cases in children under five. GHSC-PSM is supporting the Ghana Health Service to implement 3PL transport services, and in Mozambique, the project is using a new tool and methodology to collect and share health facility stock and consumption data.

This quarter, countries were asked to provide information on GHSC-PSM contributions to national supply chain policies, regulations, strategies or standard operating procedures (SOPs) over the last six months. Data was collected from 14 countries. Eight reported that the country had a national supply chain strategic plan and/or a national pharmaceutical strategic plan, and three countries indicated that the GHSC-PSM project has participated in or will participate in a review process aimed at updating the strategy. Ten countries indicated that some regulations and/or policies exist in the country, and five countries indicated that GHSC-PSM has a role in raising awareness, reviewing and providing feedback, and/or sitting on working groups for existing policy. In the case of Burkina Faso and Pakistan, the project was successful in advocating for new policy. Lastly, seven countries indicated that new SOPs were developed or existing SOPs were updated during this quarter.

Objective 3: Strategic Engagement

Since the beginning of this fiscal year, the Strategic Engagement team has participated in 22 global advocacy events, spanning all task orders and covering a wide range of topics including, but not limited to, introducing the project and identifying areas for collaboration with other global health stakeholders, sharing successes and challenges in supply chain management, sharing approaches to quantifying and forecasting demand, discussing supply chain M&E methods, and sharing advocacy approaches and task order-specific technical expertise. In addition, multiple events were held with current and potential suppliers and manufactures to discuss improvements to current operations and to identify future business partners.

Summary of Key Performance Indicators

Performance across the key indicators for in-country supply chains showed improvement this quarter. Stockout rates at service delivery points were reduced across all four task orders, while the percentage of warehouse inventory observations that were stocked within the minimum and maximum levels increased from 11 to 17 percent this quarter, with a particularly notable increase in

malaria commodities from 8 to 22 percent stocked according to plan. Despite these improvements, the rate of overstocking remains generally high at 39 percent. Reporting rates to national LMIS systems also improved in all health areas, with Task Order 1 achieving the strongest rate of 91 percent. Many countries credited targeted outreach, follow up, and reminders to health facilities for the improvements. The project is reporting for the first time on the semi-annual indicator B11, Percentage of leadership positions in supply chain management that are filled by women. Only five countries covering two task orders have reported so far, while several other countries are planning to report in the next semi-annual period. The results this period show that overall, 20 percent of supply chain management positions were filled by women, including 16 percent for TO1 and 28 percent for TO2.

Also new this quarter, the project is reporting on indicator A14, *average vendor rating score*, for both commodity suppliers and lab service vendors for quality assurance testing under TO2. Vendors in each category were rated on metrics that covered performance in reliability, responsiveness, quality, invoice accuracy, customer service, and compliance. Commodity suppliers scored 91 percent out of 100 overall (for October through December 2016), while lab service vendors scored 73 out of 100 for January through March.

The overall average cycle time – from the date a Requisition Order is entered into ARTMIS until the actual delivery to the consignee – was 171 days per line item, tracking closely with Task Order 1 performance (169 days per line item). Cycle times by fulfillment channel are roughly equivalent regardless of whether a framework contract is in place (165 days with a framework contract and 166 days without), and with warehouse distributions running much longer (211 days) than direct drops (especially for ARVs).

Absolute percent forecast error (APE) had mixed performance this quarter, with improvements in Task Order 1 (error reduced from 39 to 18 percent) offset by poorer performance in Task Order 3, where APE was 109 percent. The team saw over-forecasts in all

product categories, with many planned orders shifted to other quarters. Performance may also be limited by in-country supply planning activities, with two thirds of countries completing TO3 supply plans this quarter, 40 percent of which were shared with the GHSC-PSM headquarters team. Supply plan submissions also dropped for TO1 and TO2 this quarter. The Supply Planning and Systems Strengthening teams will continue to work with field offices to improve tracking and follow-up on supply plans.

This quarter, the Haiti office reported a significant expiration of TO1 stock, totaling \$601,789 and representing 8.2 percent of TO1 inventory in the central warehouse, which follows an expiration of \$336,544 in TO1 stock the previous quarter. These stock included ARVs, lab, and opportunistic infection commodities. The expirations from both quarters came about due to a new Ministry of Health protocol on the use of medicines, which has reduced consumption in health facilities below levels expected in annual forecasts that had driven the large procurements made in the previous year just prior to the transition to GHSC-PSM. The GHSC-PSM team in Haiti is working with the Ministry of Health to try to distribute excess commodities set to expire in fewer than nine months to other non-PEPFAR partners, while updating forecasts to align with the new protocol.

Report Overview

The following report contains an in-depth look at the project's performance indicators for the period. Section A (Year 2017 Key Performance Overview) contains a high-level review of a selected group of essential indicators, synthesized across all task orders. It also includes key comments to explain indicator performance and a list of action items that the relevant global supply chain and country teams have developed in response to the performance data. Section B (Year 2017 Key Performance Overview by Task Order and IDIQ) contains an overview of all indicators, broken out by task order. Section C (Detailed Performance by Indicator) contains a detailed view of performance in each indicator, with disaggregated data, visualizations, narrative analysis, and other comments to aid in interpretation of the data.

Section A. Fiscal Year 2017 Key Performance Overview-IDIQ

Section A: Fiscal Year 2017 Key Performance Overview-IDIQ					
Reporting Period (Quarter) start date	04/01/2016	07/01/2016	10/01/2016	01/01/2017	
Reporting Period (Quarter) end date	06/30/2016	09/30/2016	12/31/2016	03/31/2017	
Summary performance to date	FY 2016 Q3	FY 2016 Q4	FY 2017 Q1	FY 2017 Q2	
Global Supply Chain					
A1. Percentage of shipments delivered on time in full, within the customer-specified delivery window – %		67%	30.7%	7%	
A3. Cycle Time (Average) – # (days per shipment)		101	85.9	174	
A4. Inventory Turns (Average number of times inventory cycles through GHSC-PSM-controlled global facilities) – ratio	Annual				
A5. Total Landed Cost (total cost of all supply chain operations and expenses associated with delivery of one cubic meter of product)– \$	Semi-annual		Semi-annual		
A6. Percent Forecast Error (Absolute Percent Error); and variant Mean Absolute Per-cent Error (MAPE) – %	See Section C for detailed data on this indicator.				
A13. Percentage of batches of product showing non-conformity in a specific time period (Out of specification percentage) – %		0%	0%	0%	
In-Country					
B1. Stockout Rate at SDPs – %		25.9%	20%	16%	
B2. Percentage of stock status observations in storage sites, where commodities are stocked according to plan, by level in supply system – %		20.8%	11%	17%	
B3. Service Delivery Point (SDP) reporting rate to the Logistics Management Information System (LMIS) – %		80%	79%	86%	
B8. Percentage of initially GHSC-PSM-supported supply chain functions carried out by national authorities that are done without external technical assistance – %	Annual				
Cross-Cutting					
C2. Number of people trained – #	TO specific training combined		196	194	416
	Cross cutting trainings			569	1,108
	All trainings (TO specific and Cross cutting)		196	763	1,524
C3. Overall customer satisfaction rating for GHSC-PSM services (disaggregated by customer category) – rating	Annual				

Important: Key performance metrics on this page are intended to provide an overall snapshot of the project's performance. They may conceal nuance between task order performance and must be interpreted in the light of individual task order performance or granular data.

A5 (Total Landed Costs) is not reported at this time. Data sources are being reviewed. Data is not available for the full semi-annual period.

Area	Key comments for performance justification
Global Supply Chain	A1. Low OTIF performance is driven by the high volume of TO1 lab products that have been delivered late. Many factors have contributed to late orders, including long cycle times, vendor delays, and lack of accurate lead time for order planning and setting Agreed Delivery Dates.
	A3. Average cycle times have increased for TO1 and TO2, but decreased for TO3. Long cycles are driven by numerous factors, including long sourcing and contracting processes, verifying registration and waiver requirements, order handoffs between teams, and vendor delays.
	A6. TO1 forecast performance improved this quarter, but fell for TO3 as a result of planned orders shifting to other quarters. The Plan and Systems Strengthening teams are working closely with field offices to ensure supply plans are updated and shared each quarter.
	A8. TO1 shelf life is driven by large quantities of tenofovir/efavirenz/lamivudine (TLE), most of which has already been allocated for customer orders. Shelf life remaining fell for TO2 as stock balances shifted toward short shelf life products, including ACTs transferred from the predecessor project. Lower shelf life for TO3 is driven by large quantities of three-month injectable contraceptives with 54 percent shelf life remaining.
	A10. TO1 and TO3 continue to procure mainly under framework contracts, while TO2 continues to procure under firm fixed price (FFP) subcontracts. IDIQs and/or long-term agreements are in process for HIV lab items, ready to use therapeutic food (RUTF), voluntary medical male circumcision (VMMC) products, essential medicines, and Artemisinin-based Combination Therapies (ACTs) and rapid diagnostic tests (RDTs) for malaria.
A14. Project vendors were rated for the first time this quarter, with commodity suppliers rated for orders made available in FY2016 Q4, and quality assurance (QA) lab vendors rated for performance in FY2017 Q1. For commodity suppliers, on time availability of goods was the biggest challenge. For lab services, invoice pricing was often misaligned with contract prices, due to the costs of method transfers.	
In-Country	B1. The service delivery point (SDP) stockout rate across all countries was 16 percent, ranging from 2 percent for Task Order 4 to 25 percent for Task Order 3. Individual country stockout rates ranged from 0 percent in Namibia (based on limited product information) and 0.7 percent in Haiti to 35 percent in GHSC-PSM-supported SDPs in Pakistan, 31 percent in Ghana and 30 percent in Madagascar. Half of the countries reporting on GHSC-PSM-supported sites had stockout rates of less than 10 percent. Several countries reported data quality challenges, including Angola, Ghana, Ethiopia, Malawi, and Rwanda.
	B2. Seventeen percent of tracer products were stocked within the minimum and maximum levels at storage sites, ranging from 8 percent for Task Order 4 to 27 percent for Task Order 1. On a whole, countries tended to be overstocked (39 percent) more often than other stock statuses. The strongest performing countries were Vietnam (75 percent, based on only four observations), Namibia (75 percent), and Malawi (53 percent), while Burkina Faso, Ethiopia, Cameroon, Ghana, and Pakistan all had less than 15 percent of tracer products stocked according to plan.
	B3. Thirteen of the 15 countries reporting this quarter achieved SDP reporting rates of more than 80 percent to the logistics management information system (LMIS). Overall reporting rates for each Task Order have increased since the previous quarter. The highest achievement was in TO1, with four countries achieving 100 percent reporting (Angola, Cameroon, Guyana, and Zimbabwe).
Cross-cutting	C7. The project reported a few instances of loss occurring along the global supply chain in transit to countries, including instances of small damages (<\$100 each), shipping errors, cold chain errors, and theft. In-country losses included the expiry of \$1,134 worth of TO1 items in Vietnam and \$601,768 worth of TO1 stock in Haiti. The Haiti office is continuing to work with the Ministry of Health to improve coordination and compliance around policy changes related to use of medicines, which has reduced commodity consumption.

Agreed action items from prior quarter (FY 2017 Q1)	Status
<p>Global Supply Chain A6. For male and female condoms and TO3 items, the Plan team is getting better access to country offices and supply plans to better inform annual procurement intentions. ARTMIS reports, now mostly operational, will also allow for cleaner, more useful datasets for analysis.</p>	<p>A6. The Plan team is reaching out to field offices via email to follow up on missing supply plans. ARTMIS reporting features are enhanced since release 3.0. Elimination of manual order tracking and data quality improvement activities are ongoing.</p>
<p>Country Programs B1. Ghana: Target improvements toward the challenges in inventory management and distribution at poor-performing sites.</p>	<p>B1. Ghana: In the area of distribution, GHSC-PSM has initiated last mile distribution in two regions to improve the availability of supplies at SDPs during the last quarter. Inventory management improvements are taking place alongside the development of a National LMIS, which will be in place in 2018. An evaluation workshop is scheduled for June 2017 to highlight the challenges with inventory management at the regional and central levels, and stakeholders at the meeting will propose solutions to improve inventory management outcomes.</p>
<p>Lesotho: Focus on correct completion of bin cards during supportive supervision visits alongside frequent data quality assessments.</p>	<p>Lesotho: Supportive supervision activities are still ongoing at SDPs. District reports indicate positive results after comparing bin cards and physical count, however, the M&E team has not yet conducted routine data quality assessments to check whether the interventions have made a positive change.</p>
<p>Malawi: Continue to work closely with the MOH to develop monthly distribution lists, and to use LMIS data for redistributing overstocks.</p>	<p>Malawi: The project supported the MOH to develop monthly distribution lists which facilitated timely distribution of malaria and PRH commodities to all health facilities. The project further supported the MOH to conduct a commodity gap analysis which was shared with donors for commitment, and also developed a field schedule to facilitate collection of overstocked commodities from some health facilities, in preparation for redistribution. This collection and redistribution exercise will be undertaken in the next quarter.</p>
<p>Pakistan: Expedite provincial procurements for all products in general, and specifically for progestin only pills (POP) and emergency oral contraceptives (EOCP). POP should be procured as per demand by provinces. Requisition and distribution system from central to sub-national level-2 and within districts need to be strengthened in general and specifically for Lady Health Worker (LHW) and Maternal, Newborn, and Child Health (MNCH) programs.</p>	<p>Pakistan: All provinces have placed orders for POP and EOCP and the shipments are in pipeline. Some provinces have already received shipments. Requisitions have been strengthened due to close follow-up and regular review of the data. The MIS team is planning to automate the requisitioning process which will allow for more close monitoring and supervision.</p>
<p>B2. Pakistan: Continue to work closely with Federal and Provincial Governments to expedite the distribution of overstocked products from the central warehouse.</p>	<p>B2. Pakistan: Punjab transportation financing is available for all stakeholders and has resulted in improved distribution. The project is following up with other provinces for distribution financing, however, this is still forthcoming.</p>
<p>B3. Burkina Faso: Advocate for the MOH to consider extending Internet access to all districts to improve timeliness of reporting.</p>	<p>B3. Burkina Faso: Originally, Burkina Faso planned to support the National Health Information System (NHIS) with Internet connection kits (VSAT) to the 35 health districts that did not have Internet, but were told that Global Fund would take this on. Unfortunately, GHSC-PSM Burkina Faso discovered recently that Global Fund could not procure the kits due to high costs. The NHIS directorate is in discussion with Global Fund to find an alternative solution, however, GHSC-PSM will also continue the discussion with the USAID mission until a solution is found.</p>
<p>C7. Haiti: Improve coordination with the Ministry of Health around changes in procedures and protocols to prevent future expiries by ensuring that all products in stock are distributed before a new protocol goes into effect.</p>	<p>C7. Haiti: GHSC-PSM Haiti continues to work with the Ministry of Health to improve the situation by implementing a policy to seek to distribute excess products expected to expire within nine months to other non-PEPFAR partners.</p>
<p>C10. Nigeria: Implement action plan with vendor Roche to gather real time information on equipment functionality, monitor monthly service plans, and conduct an assessment to identify instruments that need to be replaced.</p>	<p>C10. Nigeria: As of Q2, no progress has been made by Roche in this regard.</p>

Proposed action items for next quarter

Global Supply Chain

AI and A3: Finalize country profiles for all field office and non-field-office presence countries for which GHSC-PSM procures and delivers.

AI and A3: Carry out long-term contract “blitz” to establish more long-term agreements, supported by experienced negotiation and contract management resource.

AI and A3: Continue building and piloting automated lead time calculator. TO2 and TO3 tools ready to be piloted. The initial build of TO1 tool is starting.

AI and A3: Review suggested variations to OTIF and cycle time metrics, including clear definitions of key cycle milestones for both new and existing catalog products.

AI and A3: Conduct weekly seminars or other presentations on GSC processes to encourage harmonized understanding of all stages of order management across all teams, including Country Programs.

AI and A3: Roll-out and training for new ARTMIS dashboards and reporting features.

AI and A3: Pilot new, streamlined contracting templates (including negotiation memos, evaluation matrix), and explore re-ordering some steps before final requisition order (RO) approval.

AI, A3, and AI4: Follow up to determine labeling issues that have impacted orders, devise and incorporate requirements (to address labeling issues) into vendor contracts.

Country Programs

B1. Uganda: GHSC-PSM staff will receive training on how SDP data is stored in the databases and how it can be accessed and used for project reporting.

Angola: GHSC-PSM staff will receive training to improve reporting rates and data quality, as the low reporting rates were attributed to difficulties with compiling data in an Excel database.

Pakistan: As performance on this indicator has not significantly improved since last quarter, Pakistan’s action item is again to expedite provincial procurements for all products in general, and specifically POP and EOCP. POP should be procured as per demand by provinces. Requisition and distribution system from central to sub-national level-2 and within districts need to be strengthened in general and specifically for LHW and MNCH Programs.

Ghana: Stockouts should decrease with the distribution of health commodities through the implementation of last mile distributions. There are also ongoing efforts to improve reporting rates and data visibility through the early warning system. PSM will follow up on both items in the following quarter.

Madagascar: Many actions items were identified for the months of April and May, including (1) LLINs being transferred from districts to SDPs, (2) SP being replenished at the district storage facility level, and (3) AS/AQ and RDTs being sent via an emergency order from the central medical store (SALAMA) to district storage facilities. GHSC-PSM will continue to follow up with these actions in the following quarter. Additionally, a decision was made to apply a pull distribution system instead of the push system at the district level. GHSC-PSM will collaborate with the government and other projects to support 113 health districts to prepare and send the requisitions during the months of May and June.

B2. Burkina Faso: GHSC-PSM will follow up with the National Malaria Control Program, the central medical store (CAMEG) and the Global Fund principal recipient to advance shipments to improve the availability of commodities at the central level.

Ethiopia: GHSC-PSM will work closely with the government’s Pharmaceutical Fund and Supply Agency (PFSA) to improve supply planning, procurement, and on-time delivery and work closely with PFSA hubs and regional health bureaus to improve data quality at SDPs and storage sites.

B3. Burkina Faso: GHSC-PSM will advocate for the MOH to install Internet connections in all districts to improve reporting data.

B11. Ghana: Ghana does not have a functional Human Resource Information System (HRIS) that allows for easy accessibility of HRIS data. GHSC-PSM will explore available options to enable reporting on this indicator.

C7. Haiti: GHSC-PSM will improve coordination with the Ministry for all protocol changes to ensure that inventory is exhausted before new norms or standards are implemented.

Section B. Fiscal Year 2017 Key Performance Overview by Task Order

Section B: Fiscal Year 2017 Key Performance Overview by Task Order																				
Performance To Date																				
	TO1 Annual Target	Task Order 1				TO2 Annual Target	Task Order 2				TO3 Annual Target	Task Order 3				TO4 Annual Target	Task Order 4			
		2016 Q3	2016 Q4	2017 Q1	2017 Q2		2016 Q3	2016 Q4	2017 Q1	2017 Q2		2016 Q3	2016 Q4	2017 Q1	2017 Q2		2016 Q3	2016 Q3	2017 Q1	2017 Q2
Global Supply Chain																				
A1	Percentage of shipments (line items) delivered on time in full, within the customer-specified delivery window – % (*Number of line items).	N/A	100%	29%	6%	N/A	100%	0%	13%	N/A	0%	54%	22%	N/A						
			(1)	(138)	(348)		(1)	(2)	(32)		(1)	(13)	(9)							
A2	Percentage of QA processes completed within the total estimated QA lead time– %	N/A				N/A				N/A				N/A						
A3	Cycle Time (Average) – # (days per shipment)	N/A	78	74	171	N/A	78	166	206	N/A	148	200	177	N/A						
A4	Inventory Turns (Average number of times inventory cycles through GH-SC-PSM controlled global facilities) – ratio	N/A	Annual			N/A	Annual			N/A	Annual			N/A	Annual					
A5	Total Landed Cost (per commodity value)– \$	N/A	Semi-Annual		Semi-Annual	N/A	Semi-Annual		Semi-Annual	N/A	Semi-Annual		Semi-Annual	N/A	Semi-Annual		Semi-Annual			
A6	Absolute Percent Error (APE)– %	N/A		39%	18%	N/A	N/A			N/A	14.4%	20%	109%	N/A	N/A					
A7	Percentage of line items imported using a temporary waiver (Temporary Waiver Percentage) – %	N/A				N/A				N/A				N/A						
A8	Average percentage of shelf life remaining for warehoused commodities, weighted by the value of each commodity's stock (Product at Risk Percentage- RDC only) – %	N/A		76%	78%	N/A		72%	66%	N/A		70%	67%	N/A						

A2 (QA process lead time) is not reported at this time. Reason: Indicator was still being finalized at time of reporting.

A5 (Total Landed Costs) is not reported at this time. Data sources are being reviewed. Data is not available for the full semi-annual period.

A7 (Temporary Waiver Percentage) is not reported at this time. Reason: Data sources for the indicator are being reviewed.

A8 (Average percentage of shelf life remaining)- highlighted in red because of change to prior quarter's data. Corrected erroneous manufactured dates used in the calculation for FY 2017 Q1.

Performance To Date																					
Indicator		TO1 Annual Target	Task Order 1				TO2 Annual Target	Task Order 2				TO3 Annual Target	Task Order 3				TO4 Annual Target	Task Order 4			
			2016 Q3	2016 Q4	2017 Q1	2017 Q2		2016 Q3	2016 Q4	2017 Q1	2017 Q2		2016 Q3	2016 Q4	2017 Q1	2017 Q2		2016 Q3	2016 Q4	2017 Q1	2017 Q2
A9	Percentage of qualified suppliers from which USAID procures product (Supplier Concentration) – %	N/A	Semi-Annual		Semi-Annual																
A10	Percentage of product procured using a framework contract, within a specified period (Framework Contract Percentage) – %	N/A		97%	77%	79%	N/A		0%	0%	0%	N/A		87%	98%	99%	N/A			0%	0%
A11	Percentage of catalog products that are ordered frequently (Product order frequency) – %	N/A																			
A12	Percentage price variance between the median unit price paid during the quarter and the median unit price paid over the life of the project – %	N/A																			
A13	Percentage of batches of product showing non-conformity (Out of specification percentage)– %	N/A					N/A	0%	0%	0%	N/A					N/A					
A14	Average Vendor Rating Score – rating	Suppliers	N/A			89%	N/A				96%	N/A				87%	N/A				
		Laboratory QA	N/A					N/A				73%	N/A					N/A			
In-country Performance and Sustainability																					
B1	Stockout Rate at SDPs – %	N/A		8%	10%	8%	N/A		23%	13%	11%	N/A		31%	29%	25%	N/A			14%	2%
B2	Percentage of stock status observations in storage sites, where commodities are stocked according to plan, by level in supply system – %	N/A		21%	30%	27%	N/A		18%	8%	22%	N/A		22%	16%	16%	N/A			8%	8%
B3	Service Delivery Point (SDP) reporting rate to the Logistics Management Information System (LMIS) – %	N/A		84%	87%	91%	N/A		75%	80%	84%	N/A		81%	79%	86%	N/A			74%	85%
B4	Average rating of in-country data confidence at the central, subnational, and SDP levels (data availability, accuracy and timeliness) – rating	N/A	Annual																		

A9 (Supplier Concentration) is not reported at this time. Reason: Finalizing data sources.

A11 (Catalog Order Frequency) is not reported at this time. Reason: Finalizing definition.

A12 (Price variance) is not reported at this time. Reason: Finalizing definition.

Performance To Date																					
Indicator	TO1 Annual Target	Task Order 1				TO2 Annual Target	Task Order 2				TO3 Annual Target	Task Order 3				TO4 Annual Target	Task Order 4				
		2016 Q3	2016 Q4	2017 Q1	2017 Q2		2016 Q3	2016 Q4	2017 Q1	2017 Q2		2016 Q3	2016 Q4	2017 Q1	2017 Q2		2016 Q3	2016 Q4	2017 Q1	2017 Q2	
B5	Percentage of countries conducting annual forecast reviews – %	N/A	Annual				N/A	Annual				N/A	Annual				N/A	Annual			
B6	Percentage of countries conducting quarterly supply plan updates – %	N/A		100%	91%	87%	N/A		78%	70%	47%	N/A		78%	100%	67%	N/A			33%	33%
B7	Percentage of total spent or budgeted on procurement of commodities for public sector services by the government, USG, the Global Fund, or other sources disaggregated by program – \$	N/A	Annual				N/A	Annual				N/A	Annual				N/A	Annual			
B8	Percentage of initially GHSC-PSM-supported supply chain functions carried out by national authorities that are done without external technical assistance – %	N/A	Annual				N/A	Annual				N/A	Annual				N/A	Annual			
B9	Supply Chain Workforce Loss Ratio – ratio	N/A	Annual				N/A	Annual				N/A	Annual				N/A	Annual			
B10	Percentage of countries that have a functional logistics coordination mechanism in place – %	N/A	Annual				N/A	Annual				N/A	Annual				N/A	Annual			
B11	Percentage of leadership positions in supply chain management that are filled by women (in countries where GHSC-PSM is providing technical assistance related to workforce development) – %	N/A	Semi-Annual	16%		N/A	Semi-Annual	28%		N/A	Semi-Annual			N/A	Semi-Annual	NA		Cross cutting positions			
																		Semi-Annual	19%		
B12	Absolute percent consumption error– %	N/A	See Section C for detailed data on this indicator.				N/A	See Section C for detailed data on this indicator.				N/A	See Section C for detailed data on this indicator.				N/A	See Section C for detailed data on this indicator.			
Cross-Cutting																					
C1	Number of innovations (including operations research studies) that were developed, implemented, or introduced and are related to the health commodity market or supply chain best practices – #	N/A			1	N/A				2	N/A					N/A					
																					2
C2	Number of People Trained – #	N/A	133	162	299	N/A	14	33	117	N/A					N/A						
																				569	1,108

Performance To Date																					
Indicator		Task Order 1				Task Order 2				Task Order 3				Task Order 4							
		TO1 Annual Target	2016 Q3	2016 Q4	2017 Q1	2017 Q2	TO2 Annual Target	2016 Q3	2016 Q4	2017 Q1	2017 Q2	TO3 Annual Target	2016 Q3	2016 Q4	2017 Q1	2017 Q2	TO4 Annual Target	2016 Q3	2016 Q4	2017 Q1	2017 Q2
C3	Overall customer satisfaction rating for GHSC-PSM services (disaggregated by customer category) – rating	N/A	Annual				N/A	Annual				N/A	Annual				N/A	Annual			
C4	Percentage ‘complete’ submissions reported to BI&A in the reporting period	N/A					N/A					N/A					N/A				
C5	Percentage of sampled ‘accurate’ submissions reported to BI&A in the reporting period – %	N/A					N/A					N/A					N/A				
C6	Percentage of ‘timely’ submissions reported to BI&A in the reporting period	N/A					N/A					N/A					N/A				
C7	Percentage of product lost due to theft, damage, or expiry, while under GH-SC-PSM control (Product Loss Percentage) – %	N/A	0.03%	1.14%	2.23%	N/A			0.00%	0.06%	N/A	0.01%	0.00%	No loss	N/A				No loss	No loss	
C8	Number of global advocacy engagements in support of improved availability of essential health commodities (Qualitative indicator to be described in quarterly project reports) – #	N/A	Semi-Annual		7	N/A	Semi-Annual		2	N/A	Semi-Annual		4	N/A	Semi-Annual		0	Cross-cutting engagements			
			Semi-Annual				Semi-Annual				Semi-Annual				Semi-Annual		9				
C10	Percentage of GHSC-PSM-procured molecular instruments that remained functional during the reporting period – %	N/A	40%	75%	79%																

C4,5 & 6 (Complete, Accurate and Timely submissions to BI&A) are not reported at this time. Reason: The project is still operationalizing sources and indicator calculations. C9 (Submissions to the global knowledge management platform) is not being reported at this time. Reason: Global knowledge management platform not final.

Section C. Detailed Performance by Indicator

A1. Percentage of shipments delivered on time in full, within the customer-specified delivery window

Measure Definition

Numerator: Number of shipments (line items) delivered on time in full within the specified period.

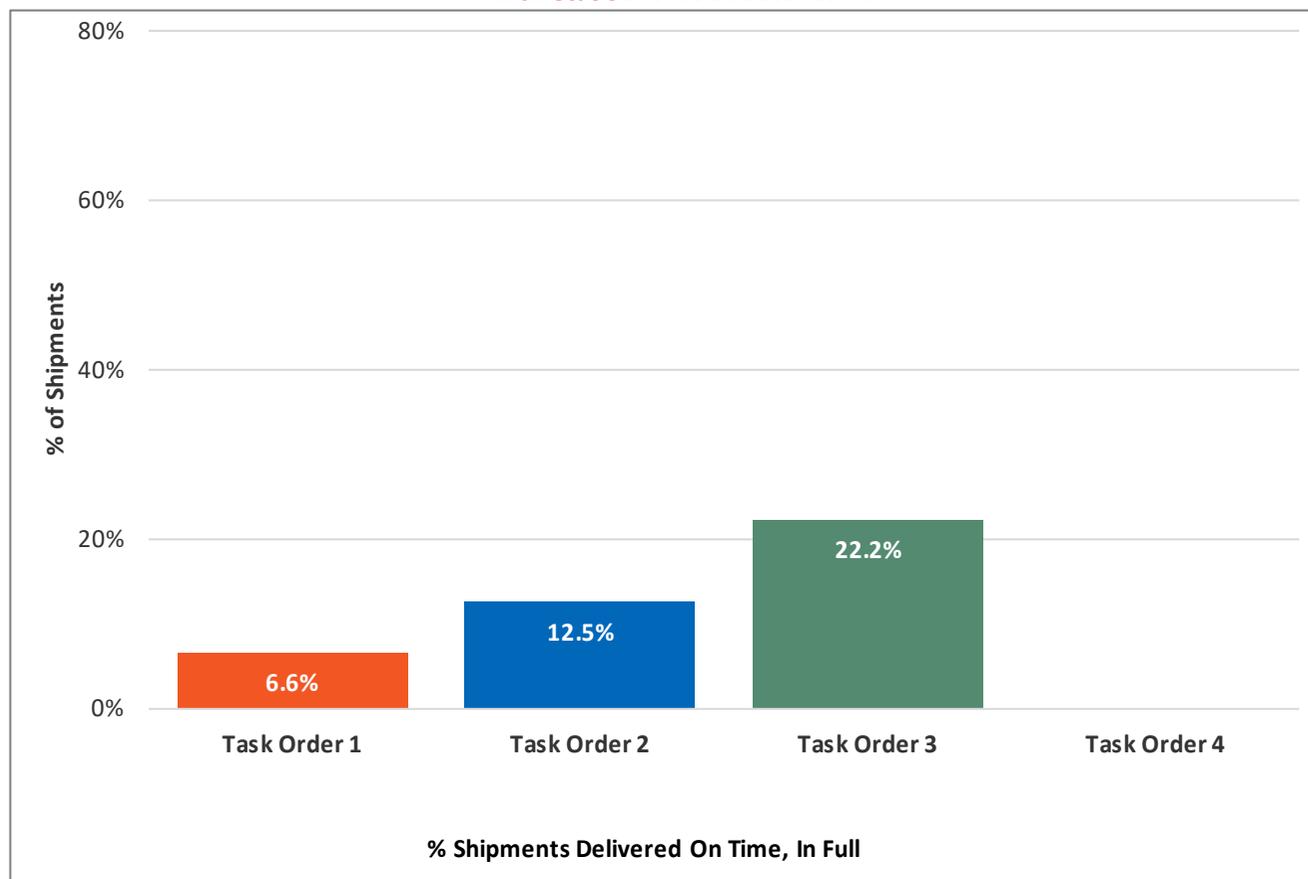
Denominator: Total number of shipments (line items) that arrived within the specified period including variants On Time, Not In Full; Not On Time, In Full; Not On Time, Not In Full.

Minimum delivery window for Jan-Mar 2017: 14 calendar days before and 7 calendar days after the Agreed Delivery Date.

Achievement

Task Order	Annual Target	Achievement	
		FY 2017 Q2	Year to Date
TO1	N/A	6.6% (N:348)	13.0% (N:486)
TO2	N/A	12.5% (N:32)	11.8% (N:34)
TO3	N/A	22.2% (N:9)	40.9% (N:22)
TO4	N/A	N/A	N/A
All TOs	N/A	7.5% (N:389)	14.0% (N:542)

Indicator Performance



Analysis

- ▶ OTIF performance is heavily weighted by the high volume of Task Order 1 lab products, which make up nearly half of all line items delivered across all TOs. Performance in this product category has been low, at only 7 percent on-time and in-full. Over 60 percent of TO1 lab items are delivered more than 30 days after the Agreed Delivery Date.
- ▶ Task Order 3 delivered a small number of line items, but it performed the strongest at 22 percent OTIF. Several of these orders benefited from shorter cycle times for warehouse distributions.
- ▶ About 6 percent of line items were delivered more than 14 days early, and an additional 7 percent of line items were delivered not-in-full.
- ▶ One root cause of low OTIF performance has been the lack of accurate lead times. In some cases, this has resulted in unrealistic Agreed Delivery Dates and late deliveries. The project is actively working on improvements to lead time calculations, which will help customers better plan their orders and enable the Global Supply Chain team to make more accurate delivery commitments.
- ▶ In some instances, delayed inbound restocking orders to the RDCs have resulted in delays to outbound distribution orders, especially ARV orders
- ▶ Interventions aimed at reducing cycle times (see A3 for more detail) should also result in improved OTIF performance.

Other Comments

▶ On-time percentages were calculated according to a -14/+7 calendar day window, per the Technical Direction Memo dated January 5, 2017.

▶ All male and female condom and lubricant orders purchased are reported under Task Order 1.

▶ Total number of line items delivered: TO1: 348; TO2: 32; TO3: 9; TO4: 0. Calculations were made at the line-item level to account for different agreed delivery dates for line items in the same finalized requisition order. In other words, one delivery could include on-time items and not-on-time items.

Next indicator A2 (QA process lead time) is not reported this time. Reason: Indicator was still being finalized at the time of reporting.

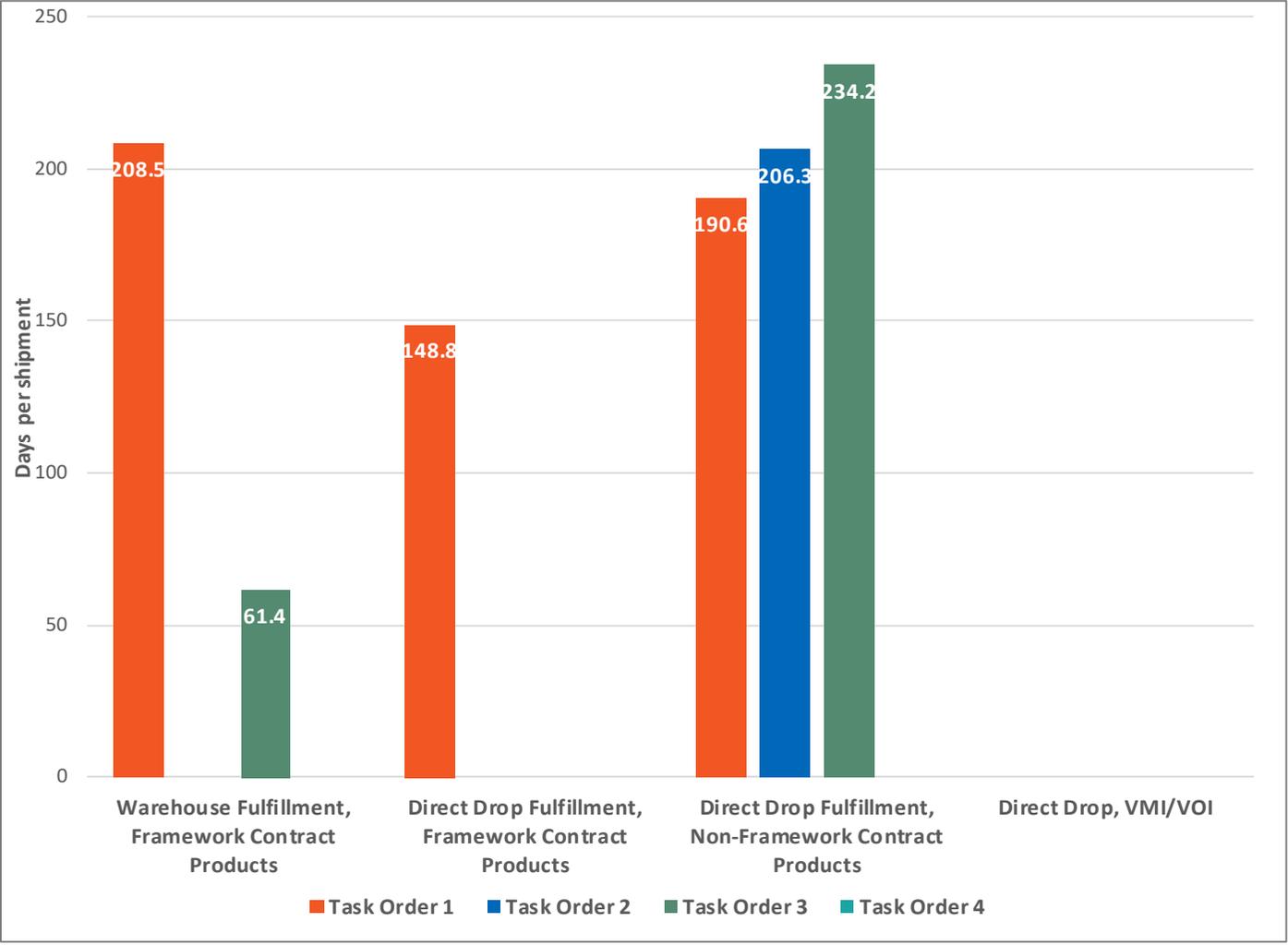
A3. Cycle Time (average)

Measure Definition

Numerator: Sum of lead times for all shipments (line items) within a specified period of time.

Denominator: The count of all shipments (line items) within a specified period of time.

Indicator Performance



Task Order	Annual Target	Achievement	
		FY 2017 Q2	Year to Date
TO1	N/A	171.1	143.5
TO2	N/A	206.3	209.3
TO3	N/A	176.6	190.7
TO4	N/A	N/A	N/A
All TOs	N/A	174.1	149.2

- ▶As the project has moved towards greater use of ARTMIS for order management, we have been able to harmonize the cycle time start date across all Task Orders. All cycles now start when an RO has been submitted to ARTMIS. This has contributed to an increase in the overall cycle time for Task Order 1, which was previously measured using the later, manual milestone of “Signed RO Received” as the start date.
- ▶Within Task Order 2, average cycle time increased by 40 days, while Task Order 3 cycle time decreased by 23 days. TO3 saw much shorter cycle times when fulfilling orders from the RDCs compared to Q1, although this effect was not observed for TO1.
- ▶The project is working to streamline processes which often cause delays in the procurement cycle, such as creating negotiation memos, verifying product registration and waiver requirements, and handing off orders between different stages of the cycle.
- ▶Surge support to order management functions is working to ensure that orders are progressing through the cycle more steadily, with a particular focus on TO1 due to the higher volume of orders.
- ▶Sourcing and Contracts teams are working on long term agreements and IDIQ subcontracts with suppliers of ARVs, HIV lab items, VMMC products, RUTF, malaria rapid diagnostic tests, and ACTs. Experienced negotiators and contract specialists have been brought in to support these efforts.

Other Comments

- ▶All male and Female condom and lubricant orders purchased with HIV funds are reported under Task Order 1.
- ▶Total number of line items delivered (i.e. cycles completed): TO1: 348; TO2: 32; TO3: 9; TO4: 0.
- ▶Cycle time begins when a requisition order has been submitted and ends when line items have been delivered to the consignee. All other supply chain milestones and segments are still being finalized.

Next indicator:

A4 (Inventory Turns) is not reported this time. Reason: An annual indicator.
A5 (Total landed costs) is not reported at this time. Reason: Data sources are still being validated. Data not available for the full indicator period.

A3. Cycle Time (average) - Tracer product

HIV	Warehouse Fulfillment, Framework Contract Products	Direct Drop Fulfillment, Framework Contract Products	Direct Drop Fulfillment, Non-Framework Contract Products	Direct Drop, VMI/VOI	Malaria	Warehouse Fulfillment, Framework Contract Products	Direct Drop Fulfillment, Framework Contract Products	Direct Drop Fulfillment, Non-Framework Contract Products	Direct Drop, VMI/VOI	PRH - Method Level	Warehouse Fulfillment, Framework Contract Products	Direct Drop Fulfillment, Framework Contract Products	Direct Drop Fulfillment, Non-Framework Contract Products	Direct Drop, VMI/VOI
	Task Order 1	208	149	191		Task Order 2			206		Task Order 3	61		234
Food & Wash			64		ACTs			175		Injectable contraceptives				
Adult ARVs	226	169			Rapid Diagnostic Tests			184		Implantable contraceptives				
Pediatric ARVs	170	176			Sulphadoxine-pyrimethamine			188		Combined oral contraceptives	72			
Condoms	49	259			Severe malaria medicines			267		Copper-bearing intrauterine devices	39			
Other Pharma			221		Other pharmaceutical products					Emergency oral contraceptives				
Laboratory		136	157		LLIN			263		Progestin only pills				
HIV RTK					All other non pharmaceutical			202		Calendar-based awareness methods			147	
Other RTK			240							Hormone -releasing intrauterine systems				
Other Non-Pharma		136	201							All other TO3 products			252	
Prefab														
Vehicles & Other Equipment														
VMMC			252											

USAID_C4

A6. Absolute Percent Forecast Error; and variants Mean Absolute Percent Error and Forecast Bias

Measure Definition

Numerator: Absolute value of the differences between the actual quantities desired to be delivered during the period minus the forecasted values.

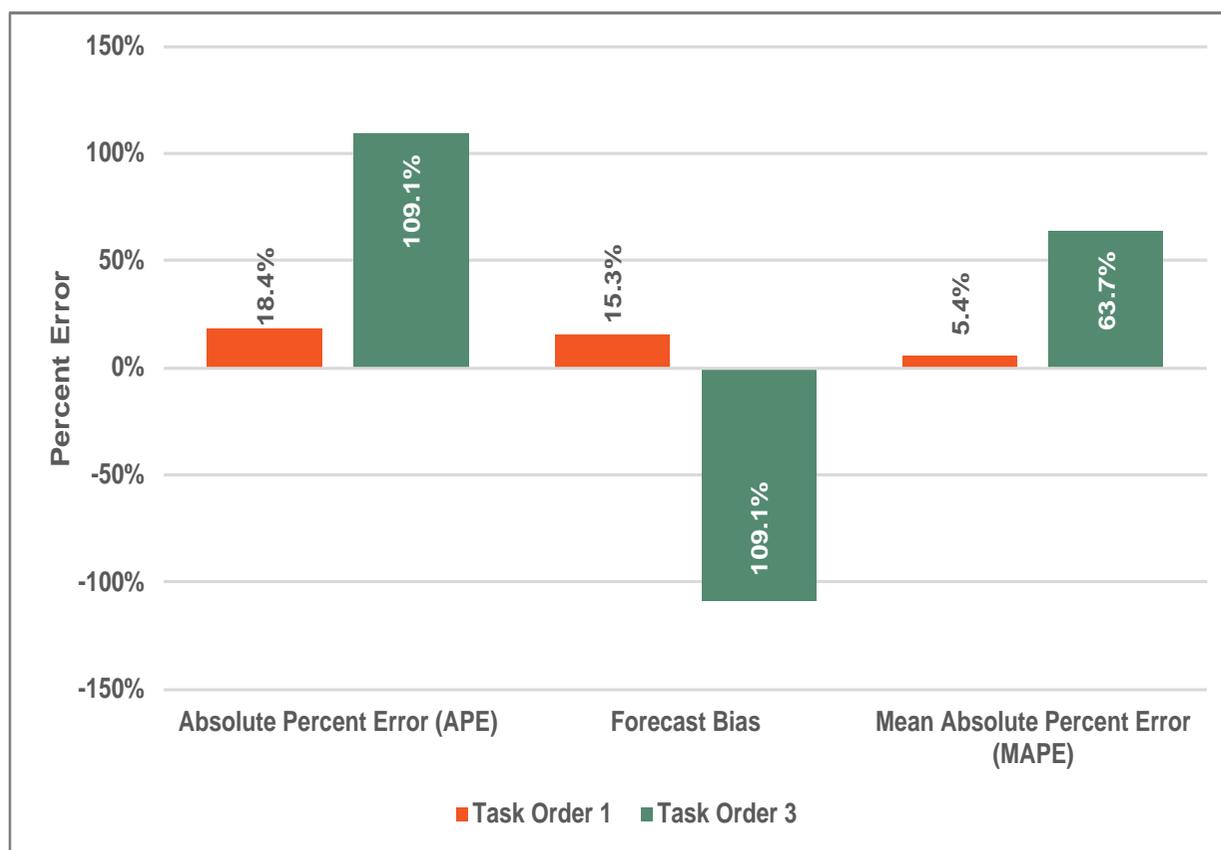
Denominator: Sum of the actual quantities desired to be delivered.

Variants:

► **Mean Absolute Percent Error (MAPE** - average absolute percent error over one fiscal year).

► **Forecast Bias** (Calculated using the actual value of the difference between quantities forecasted and quantities desired to be delivered, rather than the absolute value).

Indicator Performance



Task Order	Target Annual			FY 2017 Q2			Year to Date		
	APE (%)	MAPE (%)	Forecast Bias (%)	APE (%)	MAPE (%)	Forecast Bias (%)	APE (%)	MAPE (%)	Forecast Bias (%)
TO1	N/A	N/A	N/A	18.4%	5.4%	15.8%	5.4%	5.4%	-5.0%
TO2	No Data								
TO3	N/A	N/A	N/A	109.1%	63.7%	-109.1%	63.7%	63.7%	-63.6%
TO4	No Data								
All TOs	N/A	N/A	N/A	22.0%	8.2%	10.4%	8.2%	8.2%	-7.8%

► Variance in adult ARVs for TO1 was driven by changes in the Requested Delivery Dates to several large planned orders for Nigeria, Rwanda, Cote D'Ivoire, and Zimbabwe.

► The overforecast of CD4 reagent was due to Nigeria orders that were requested in FY2016 Q4, earlier than planned.

► Orders of male condoms were larger than forecast due to an unexpected order of 14 million units from Benin. Additionally, orders for some specialty products that are typically spread out over the year were all ordered in a single quarter. A Zimbabwe order of female condoms was also larger than expected.

► Orders of injectable contraceptives have been lower than anticipated, although this is expected to change with several large orders planned for mid-2017.

► Orders for combined oral contraceptives have been low, due to below-average orders for social marketing. An order for Tanzania was also pushed out to Q3.

Other Comments

► Task Order 1 data includes ARVs, condoms (male and female), CD4 reagent and consumables, EID reagents, and viral load reagent. Data is also included for additional lab products, which vary across different countries' supply plans. Supply plans, demand forecasts, and procurement for rapid test kits are not managed by GHSC-PSM.

► At the present time, GHSC-PSM does not create demand forecasts for Task Order 2 or Task Order 4.

► Negative forecast bias indicates fewer products requested compared to the forecast; positive bias indicates more products ordered than forecasted.

Next indicator: A7 (Temporary Waiver Percentage) is not reported at this time. Reason: Data sources for this indicator are being reviewed.

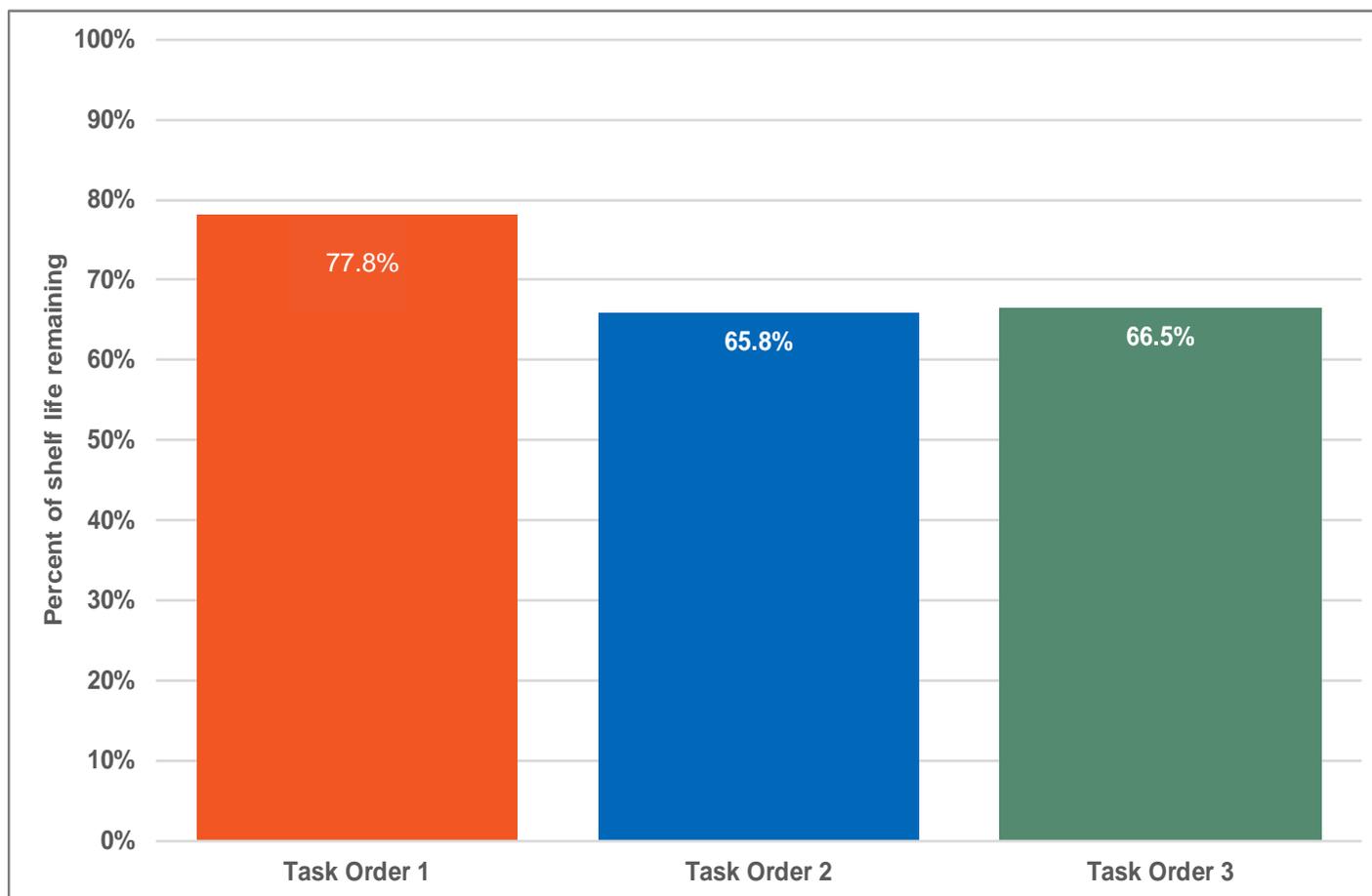
A8. Average percentage of shelf life remaining for warehoused commodities, weighted by the value of each commodity's stock (Product at Risk Percentage)

Measure Definition

Numerator: Percentage of shelf life remaining, weighted by value of commodities, summed across all products and all days in specified time period.

Denominator: Total value of commodities, summed across all products and all days in specified time period.

Indicator Performance



Task Order	Annual Target	Achievement	
		FY 2017 Q2	Year to Date
TO1	N/A	77.8%	77.0%
TO2	N/A	65.8%	68.3%
TO3	N/A	66.5%	68.1%
TO4	N/A	N/A	N/A
All TOs	N/A	73.9%	73.8%

Analysis

- ▶ Remaining shelf life for Task Order 1 is heavily weighted toward the stock of tenofovir/efavirenz/lamivudine (TLE), which makes up nearly three quarters of TO1 inventory and which has a remaining shelf of 78 percent. Overall shelf life for TO1 has improved since customer orders have been shipped and inbound orders have been received. Most TO1 inventory has already been allocated for customer orders.
- ▶ For Task Order 2, distributions of last quarter's stock and new inbound orders of ACTs that shifted relative inventory levels toward artemether/lumefantrine products, some of which were transferred to GHSC-PSM from the predecessor project. As a result, the remaining shelf life has dipped since the previous quarter.
- ▶ For Task Order 3, the item with the lowest shelf life remaining is the 3-month injectable contraceptive, with an average 54 percent remaining. However, due to the longer shelf life of this and other TO3 products, (3 to 7 years), these products are not at risk of expiring.

Other Comments

- ▶ Task Order 1 includes stock at RDCs in Kenya, Ghana, South Africa, and Singapore. Task Order 2 and 3 stock is held in the Netherlands RDC.
- ▶ Total value of commodities for each Task Order is as follows: TO1: \$44,989,277; TO2: \$4,381,875; TO3: \$18,638,551.
- ▶ No inventory is currently managed for TO4.

Next indicator: A9 (Supplier Concentration) is not reported at this time. Reason: Finalizing data sources.

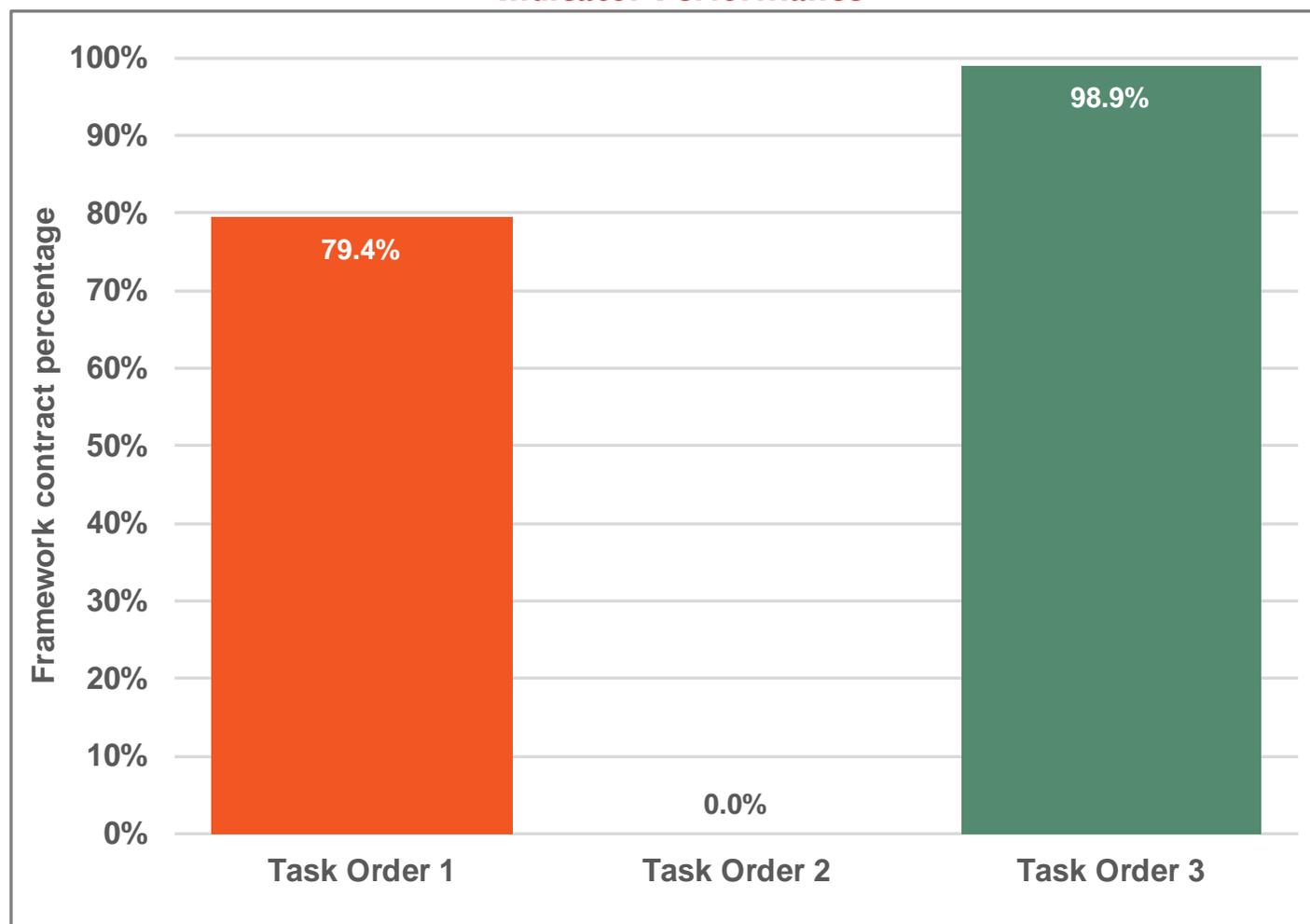
A10. Percentage of product procured using a framework contract, within a specified period (Framework Contract Percentage)

Measure Definition

Numerator: Value of product purchased through framework contracts within a specified time period.

Denominator: Total value of commodities purchased within a specified time period.

Indicator Performance



Task Order	Annual Target	Achievement	
		FY 2017 Q2	Year to Date
TO1	N/A	79.4%	78.8%
TO2	N/A	0.0%	0.0%
TO3	N/A	98.9%	98.7%
TO4	N/A	0.0%	0.0%
All TOs	N/A	58.5%	46.6%

Analysis

► TO1 framework contract purchases increased slightly from the previous quarter, due mainly to the large volume of ARVs (\$91 million) purchased under framework contracts. Most lab procurements were non-framework, but long term agreements with key lab vendor are currently in progress. Other TO1 products, including all ARVs and condoms, were all purchased under framework contracts. The total value of all TO1 purchases executed in the quarter was \$120,796,620.

► TO2 has continued to use firm fixed price subcontracts as its sourcing strategy for all products. IDIQ subcontracts are in process for artemether-lumefantrine and artesunate-amodiaquine fixed-dose combination, and a long-term agreement for rapid diagnostics tests is currently pending quality assurance evaluation. Total value of all TO2 purchases executed in the quarter was \$47,158,162.

► TO3 has maintained a high rate of framework contract procurement. The only non-framework purchases were for fertility awareness-based methods; all other products and purchases were issued under IDIQ subcontracts. The total value of all TO3 purchases executed in the quarter was \$6,107,178.

► TO4 procured an order of zinc sulphate for Mozambique this quarter, using an FFP subcontract. The total value of TO4 purchases executed in the quarter was \$43,266.

Other Comments

Next indicators:

A11 (Catalog Order Frequency) is not reported at this time. Reason: Finalizing definition.

A12 (Price variance) is not reported at this time. Reason: Finalizing definition.

A13. Percentage of batches of product showing non-conformity within a specified time period (Out of Specification Percentage)

Measure Definition

Numerator: Total number of batches of product showing non-conformity within a specific time period.

Denominator: Total number of batches tested within a specified time period.

Task Order	Annual Target	Achievement	
		FY 2017 Q2	Year to Date
TO1	N/A	N/A	N/A
TO2	N/A	0%	0%
TO3	N/A	N/A	N/A
TO4	N/A	N/A	N/A
All TOs	N/A	0%	0%

Analysis

- Zero batches tested for Task Order 2 (208 batches) were found to be out of specification. Testing included a broad spectrum of TO2 products, including ACTs, rapid diagnostics tests, sulphadoxine-pyrimethamine, LLINs, severe malaria medications, and other pharmaceuticals.

Other Comments

Quality control testing for Task Orders 1, 3 and 4 and managed by the Global Health Supply Chain – Quality Assurance project. GHSC-QA reports on this indicator for TO1, TO3, and TO4.

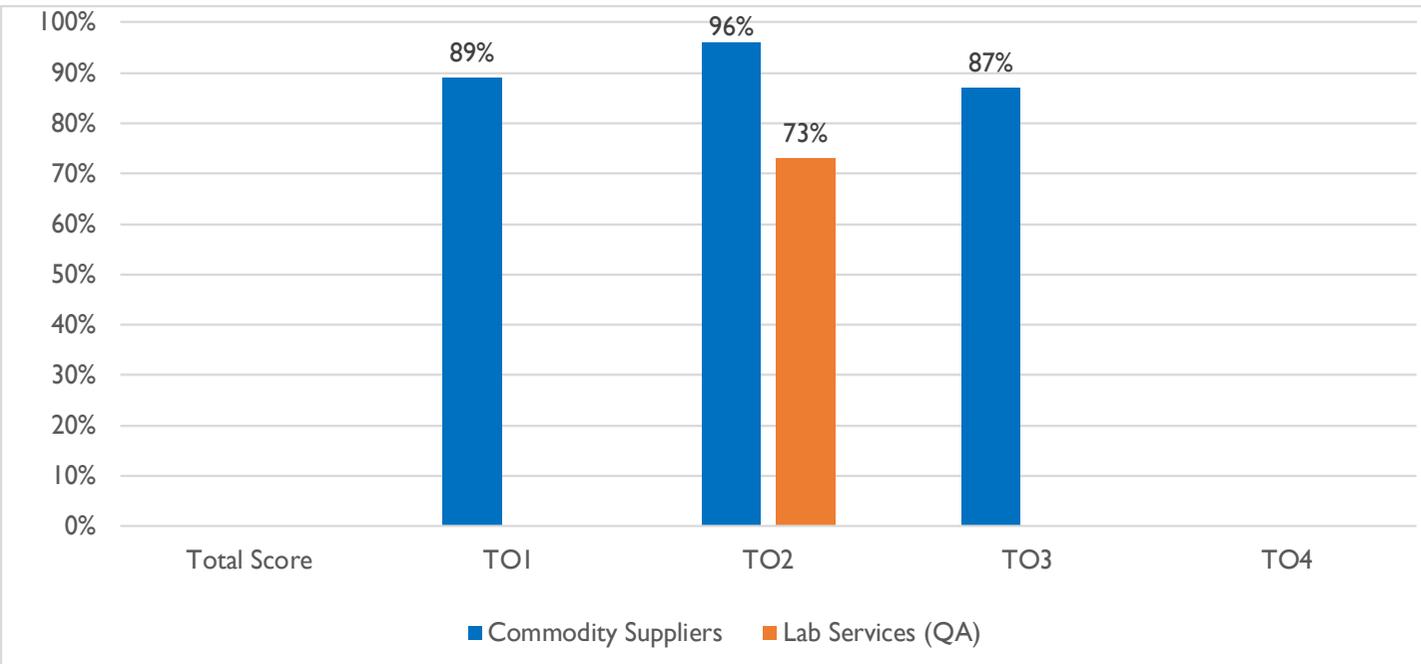
A14. Vendor rating score

Measure Definition

Numerator: Sum of all vendor ratings.

Denominator: Number of vendors from whom GHSC-PSM procured products/commodities, lab testing services, or freight forwarding during the quarter

Indicator Performance



► Lab services suppliers were rated on the following elements with the following average scores: reliability (timeliness of service): 75 percent, responsiveness (prompt response after receipt of test request, and on-time confirmation of receipt of samples): 87 percent, completeness of documents: 98 percent, cost (invoice accuracy): 25 percent, and service (a qualitative measure of adherence to other terms and conditions): 50 percent. Reliability (timeliness of service) is considered the most important criteria, and as such constitutes 42.5 percent of the vendor evaluation. The other elements each constitute 10 percent, 10 percent, 17.5 percent, 15 percent, and 5 percent, respectively.

Task Order	Annual Target	Achievement		
		FY 2017 Q2 comm. suppliers	FY 2017 Q2 Lab QA	Year to Date
TO1	N/A	89%	N/A	N/A
TO2	N/A	96%	73%	N/A
TO3	N/A	87%	N/A	N/A
TO4	N/A	N/A	N/A	N/A
All TOs	N/A			

Analysis

Commodity Suppliers

► TO3 represents only a small number of suppliers, while TO2 only represented a small number of orders during the period.

► Commodity suppliers were rated on the following elements for this reporting period: product quality, order fulfillment, invoice accuracy, and service. The average score for product quality (no batches showing non-conformities), all suppliers scored 100 percent. For order fulfillment (on-time and in-full order availability), the average score was 83 percent, ranging from 78 percent for TO3 to 92 percent for TO1. For invoice accuracy (percent of items invoiced at the purchase order/subcontract price), the average score was 99 percent, with only one TO3 supplier coming in below 100 percent at 88 percent. For service, a qualitative indicator measuring responsiveness, effectiveness of communication, and for lab and vehicles suppliers, whether they offer after sales services or in-country support, the average score was 76 percent, ranging from 65 percent for TO3 to 90 percent for TO2.

► On-time availability of goods was the biggest challenge; however, the scoring of this element needs to be corrected to better align with expectations and the project-wide on-time delivery window.

Laboratory Services (Quality Assurance) Vendors

► Scoring was based on the four lab vendors who rendered services in response to 11 test requests (corresponding to 208 batches) during the January to March 2017 reporting period.

► Three out of four lab vendors scored zero on cost, meaning that their invoice prices were more than 110 percent of the contract price. These findings will prompt updates to lab contracts to accurately reflect testing costs of products that required method transfer.

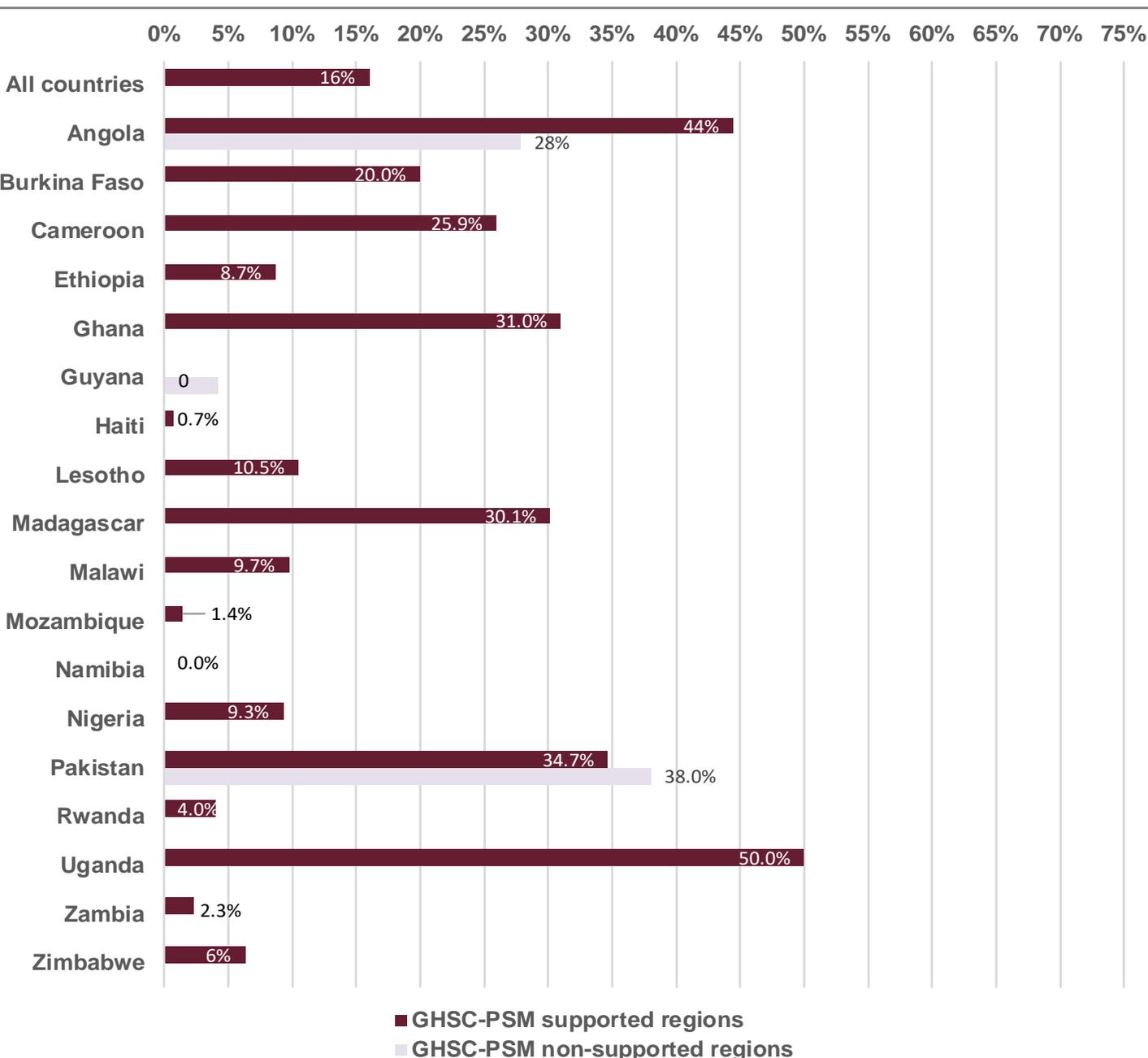
B I. Stockout rate at SDPs

Measure Definition

Numerator: 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).

Denominator: Total number of SDPs that reported/were visited in GHSC-PSM supported countries which offer the tracer product.

Indicator Performance



Task Order	Annual Target	Achievement	
		FY 2017 Q2	Year to Date
TO1	N/A	8%	8%
TO2	N/A	11%	12%
TO3	N/A	25%	26%
TO4	N/A	2%	12%
All TOs	N/A	16%	18%

- ▶ The overall stockout rate was 16 percent, ranging from 2 percent for TO4 (with the fewest sites reporting), to 25 percent for TO3.
- ▶ Stockout rates ranged from 0 percent in Namibia (based on only 37 and 8 products) and 0.7 percent in Haiti (based on 207 sites), to 35 percent in GHSC-PSM-supported sites in Pakistan, 31 percent in Ghana, and 30 percent in Madagascar.
- ▶ Half (9) of the 18 countries reporting on PSM-supported sites had overall stockout rates below 10 percent. Additionally, compared to last quarter, 10 of 14 countries who reported both quarters either reduced their stockout rates (50 percent) or maintained them (22 percent).
- ▶ Several countries cited data quality challenges, including Angola, Ghana, Ethiopia, Malawi, and Rwanda.
- ▶ Haiti's stockout rate, when averaged for all three months of the quarter, increases to 10 percent. Stockouts in ARVs stemmed in part from a stockout at the central level in AZT/3TC/NVP/30/60/50, which may be linked to the large value of TO1 stock which expired this quarter (\$601,768, or more than 8 percent of TO1 stock).
- ▶ Ethiopia's overall stockout rate fell by 42 percent since last quarter, from 14.8 percent to 8.7 percent. The true stockout rate may be even lower though, as a recent GHSC-PSM assessment revealed that many facilities report false stockouts to increase stock receipts. The project will work closely with logistics partners this quarter to improve data quality, including advocating the use of newly standardized reporting formats.
- ▶ Zambia reduced its stockout rate for 3 of 4 task orders since last quarter, while stockouts for TO1 increased by 1 percent due to central TLE stockouts. New streamlined ART guidelines restricted the use of the TLE even though the commodity is set to expire by August. GHSC-PSM has followed up with the MOH and is awaiting direction on their strategy to ensure that this product does not go to waste.
- ▶ Cameroon experienced a 26 percent stockout rate (TO1 only), due to late deliveries from the central warehouse to health facilities in Littoral region, and very high rates of condom stockouts. Patients must pay for condoms, which leads to low demand and limited requisitioning when stockouts occur.

Total number of GHSC PSM supported health facilities reporting per tracer product:

<p>► Angola (TO1-ARV2ndadult-9, TO1-femalecondom-9, TO1-malecondom-9).</p>	<p>► Burkina Faso (TO2-AL6*1-1,214, TO2-AL6*2-1,214, TO2-AL inability-1,214, TO2-AS/AQ100/270mg*3-1,214, TO2-AS/AQ100/270mg*6-1,214, TO2-RDT-1,214 TO2-LLINS-1,214, TO2-SP-1,214).</p>
<p>► Mozambique (TO1-ARV1stadult-1,117, TO1-ARV2ndadult-298, TO1-ARV1stped-906, TO1-EIDreag-5, TO1-EIDconsum-5, TO1-VLreag-8, TO1-VLconsum-8)</p>	<p>► Cameroon (TO1-ARV1stadult-58, TO1-ARV2ndadult-42, TO1-ARV1stped-49, TO1-RTK1st-50, TO1-RTK2nd-52, TO1-malecondom-44, TO1-femalecondom-43, TO1-EIDreag-8, TO1-VIreag-8, TO1-EIDconsum-8, TO1-VLconsum-8).</p>
<p>► Guyana TO1-ARV1stadult-22, TO1-ARV1stped-7, TO1-ARV2ndadult-19).</p>	<p>► Namibia (TO1-ARV1stadult-37, TO1-ARV2ndadult-37, TO1-ARV1stped-37, TO1-RTK1st-23, TO1-RTK2nd-23, TO1-TieBreakerRTK-23, TO1-malecondom-23, TO1-femalecondom-23)</p>
<p>► Haiti (TO1-ARV1stadult-110, TO1-ARV1stped-110, TO1-2ndadult-110, TO1-RTK1st-110, TO1-RTK2nd-110, TO1-EIDreag-2, TO1-EIDconsum-2, TO1-VL-reag-2, TO1-VLconsum-2, TO3-malecondom-207, TO3-Levonorgestrel75mg/rod-207, TO3-implants-207, TO3-COC-207, TO3-injectables-207, TO3-Levonorgestrel/EthinylEstradiol150/30mcg+Fe75mg-207, TO3-DepotMedroxyprog.Acetate150mg-207, TO3-CulUD-207, TO3-fertility awareness-207).</p>	<p>► Uganda (TO1-EIDreag-1, TO1-EIDconsum-1, TO1-VLreag-1, TO1-VLconsum-1).</p>
<p>► Ethiopia (TO1-ARV1stadult-1,136, TO1-ARV2ndadult-127, TO1-ARV1stped-825, TO1-RTK1st-212, TO1-RTK2nd-190, TO1-TieBreakerRTK-84, TO1-malecondom-791, TO1-VIreag-5, TO1-VIconsum-6, TO1-EIDreag-7, TO1-EIDconsum-95, TO2-AL6*1-517, TO2-AL6*2-500, TO2-AL6*3-518, TO2-AL6*4-591, TO2-AL inability-740, TO2-RDT-252, TO3-injectable-1,230, TO3-DepotMedroxyprog.Acetate150mg-1,230, TO3-implants-927, TO3-Etonogestrel68mg/rod-881, TO3-Levonorgestrel75mg/rod-712, TO3-COC-1,120, TO3-Levonorgestrel/EthinylEstradiol150/30mcg+Fe75mg-1,120, TO3-CulUD-832, TO3-Levonorgestrel30mcg35Tablets/Cycle-511, TO3-POP-511, TO3-Levonorgestrel0.75mg-748, TO3-EOC-748, TO4-oxytocin-262, TO4-MgSO4-207, TO4-Inj.gentamicin-60, TO4-ORS+zinc-62, TO4-amoxicillin-110, TO4-chlorhexidine gel-14)</p>	<p>► Ghana (TO1-1stRTK-154, TO1-male condom-161, TO1-ARV1stadult-70, TO1-ARV2ndadult-47, TO1-RTK2nd-96; TO2-AL6*4-148, TO2-AS/AQ25/67.5mg-150, TO2-AS/AQ50/135mg-148, TO2-RDT-169, TO2-SP-162, TO3-COC-160, TO3-implants-152, TO3-injectable-161, TO3-malecondom-161, TO3-DepotMedroxyprog.Acetate150mg-161, TO3-Levonorgestrel75mg/rod-152, TO3-Levonorgestrel/EthinylEstradiol150/30mcg+Fe75mg-160).</p>
<p>► Rwanda (TO1-ARV1stadult-23, TO1-ARV2ndadult-23, TO1-ARV1stped-23, TO1-RTK1st-23, TO1-RTK2nd-23, TO2AL6*1-23, TO2-AL6*2-23, TO2-AL6*3-23, TO2-AL6*4-23, TO2-ALinability-23, TO2-RDT-23, TO3-injectable-23, TO3-DepotMedroxyprog.Acetate150mg-23, TO3-implants-23, TO3-Etonogestrel68mg/rod-23, TO3-Levonorgestrel75mg/rod-23, TO3-COC-23, TO3-Levonorgestrel/EthinylEstradiol150/30mcg+Fe75mg-23, TO3-POP-23, TO3-Levonoggestrel30mcg35tablets/cycle-23, TO3-malecondom-23, TO3-fertility awareness-23, TO3-femalecondom-13, TO3-MgSO4-23, TO3-amoxicillin-15, TO4-Zinc-15, TO4-ORS-15, TO4-Oxytocin-23).</p>	<p>► Nigeria (TO1-ARV1stadult-2,690, TO1-ARV2ndadult-475, TO1-ARV1stped-776, TO1-RTK1st-3,375, TO1-RTK2nd-2,858, TO1-TieBreakerRTK-1,418, TO1-EIDreag-23, TO1-EIDconsum-23, TO1-VLreag-23, TO1-VLconsum-23, TO2AL6*1-3,296, TO2-AL6*2-3,292, TO2-AL6*3-3,278, TO2-AL6*4-3,305, TO2-ALinability-3,367, TO2-AS/AQ25/67.5mg-3,017, TO2-AS/Aq50/135mg-3,024, TO2-AS/AQ100/270mg*3-2,987, TO2-AS/AQ100/270mg*6-2,920, TO2-RDT-3,263, TO2-SP-2,987, TO2-LLINS-1,654, TO3-injectable-1,437, TO3-DepotMedroxyprog.Acetate150mg-1,428, TO3-Norethest.Enanthate1,416, TO3-implants-482, TO3-Etonogestrel68mg/rod-446, TO3-Levonorgestrel75mg/rod-427, TO3-COC-1,408, TO3-Levonorgestrel/EthinylEstradiol150/30mcg28tablets/cycle-1,408, TO3-CulUD-277, TO3-malecondom-1,429, TO3-femalecondom-1,063)</p>
<p>► Lesotho (TO1-TieBreakerRTK-48, TO1-femalecondom-40, TO1-RTK1st-58, TO1-malecondom-48, TO1-ARV1stadult-115, TO1-ARV1stped-104, TO1-ARV2ndadult-111, TO1-RTK2nd-57, TO1-VLreag-1, TO1-EIDreag-1).</p>	<p>► Malawi (TO2-AL6*1-617, TO2-AL6*2-618, TO2-AL6*3-585, TO2-AL6*4-610, TO2-RDT-591, TO2-SP-333, TO3-injectable-540, TO3-DepotMedroxyprog.Acetate150mg-540, TO3-Etonogestrel68mg/rod-456, TO3-Levonorgestrel75mg/rod-454, TO3-COC-520, Levonorgestrel/EthinylEstradiol150/30mcg28tablets/cycle-520, TO3-CulUD-149, TO3-EOC-203, TO3-Levonorgestrel0.75mgtablet-203, TO3-POP-410, TO3-Levonorgestrel30mcg35tablets/cycle-410, TO3-malecondom-536, TO3-femalecondom-292, TO4-Oxytocin-448, TO4-MgSO4-334, TO4-Inj.gentamicin-582, TO4-amoxicillin-237, TO4-Zinc-239, TO4-ORS-335).</p>
<p>► Zambia (TO1-ARV1stadult-344, TO1-ARV2ndadult-344, TO1-ARV1stped-344, TO1-RTK1st-1,679, TO1-RTK2nd-1,679, TO1-EIDreag-11, TO1-VLreag-11, TO2-AL6*1-1,813, TO2-AL6*2-1,813, TO2-AL6*3-1,813, TO2-AL6*4-1,813, TO2-AL inability-1,813, TO2-RDT-1,813, TO2-SP-1,813, TO3-DepotMedroxyprog.Acetate150mg-1,813, TO3-Levonorgestrel75mg/rod-1,813, TO3-COC-1,813, TO3-CulUD-1,813, TO3-POP-1,813, TO3-femalecondoms-1,813, TO3-malecondoms-1,813, TO3-Norethest.Enanthate-1,813, TO3-injectable-1,813, TO3-implants-1,813, TO3-Etonogestrel68mg/rod-1,813, TO3-Levonorgestrel/EthinylEstradiol150/30mcg28tablets/cycle-1,831, TO3-Levonorgestrel30mcg35tablets/cycle-1,813, TO4-oxytocin-1,813, TO4-MgSO4-1,813, TO4-inj.gentamicin-1,813, TO4-amoxicillin-1,813, TO4-zinc-1,813, TO4-ORS-1,813).</p>	<p>► Pakistan (TO3-malecondom-10,788, TO3-Levonorgestrel/EthinylEstradiol150/30mcg+Fe75mg-10,788, TO3-COC-10,788, TO3-DepotMedroxyprog.Acetate150mg-10,788, TO3-injectable-10,788, TO3-CulUD-8,133, TO3-Levonorgestrel30mcg35tablets/cycle-8,133, TO3-POP-8,133, TO3-Levonorgestrel0.75mgtablet-8,133, TOS-EOC-8,133)</p>

Countries reporting out of cycle:

- **Madagascar January 2017** (TO2-AS/AQ25/67.5mg-1,239, TO2-AS/Aq50/135mg-1,308, TO2-AS/AQ100/270mg*3-1,284, TO2-AS/AQ100/270mg*6-1,296, TO2-RDT-1,331, TO2-SP-652, TO2-LLINS-395, TO3-injectable-1,251, TO3-DepotMedroxyprog.Acetate150mg-1,251, TO3-implants-675, TO3-COC-1,178, TO3-Levonorgestrel/EthinylEstradiol150/30mcg+Fe75mg-1,178, TO3-CulUD-265, TO3-POP-685, TO3-Levonorgestrel30mcg30tables/cycle-685, TO3-fertility awareness-258, TO4-Oxytocin-544, TO4-MgSO4-363, TO4-Inj.gentamicin-493, TO4-PCVvaccine-1,261).
- **Madagascar February 2017** (TO2-AS/AQ25/67.5mg-18, TO2-AS/Aq50/135mg-18, TO2-AS/AQ100/270mg*3-18, TO2-AS/AQ100/270mg*6-18, TO2-RDT-18, TO2-SP-18, TO2-LLINS-18, TO3-injectable-18, TO3-DepotMedroxyprog.Acetate150mg-18, TO3-implants-18, TO3-Etonogestrel68mg/rod-18, TO3-COC-18, TO3-Levonorgestrel/EthinylEstradiol150/30mcg+Fe75mg-18, TO3-CulUD-11, TO3-POP-9, TO3-Levonorgestrel30mcg30tables/cycle-9, TO3-fertility awareness-16, TO4-Oxytocin-15, TO4-MgSO4-15, TO4-Inj.gentamicin-15, TO4-PCVvaccine-17).
- **Zimbabwe December 2016** (TO1-ARV1stadult-842, TO1-ARV2ndadult-836, TO1-ARV1stped-810, TO1-RK1st-936, TO1-RTK2nd-936, TO1-TieBreakerRTK-936, TO1-malecondom-986, TO1-femalecondom-984, TO2-AL6*1-901, TO2-AL6*2-896, TO2-AL6*3-896, TO2-AL6*4-920, TO2-AL inability-896, TO2-RDT-803, TO2-SP-668).

B I: Granular Level Analysis

► Burkina Faso faced a 34 percent stockout rate in SP, an ongoing problem due to a stockout at the central level beginning in November. Once the central level stock situation had been resolved, the MOH notified districts in February of the availability of SP at regional warehouses. GHSC-PSM will follow-up with the NMCP to ensure all the districts received the notice.

► Lesotho faced a 16 percent and 18 percent stockout for first and second RTKs, respectively, which it attributed to a lack of inclusion of these commodities in last mile distribution from hospital labs to primary SDPs. To address this challenge, GHSC-PSM is working with the newly formed Supply Chain Coordinating Unit (SCCU) to conduct “step down” training on

► In January, Madagascar faced a 22 percent stock out rate of all antimalarial products (up from 10 percent last quarter), including 50 percent for SP and 55 percent for LLINs. In the case of the SP, the Global Fund-financed stock arrived in-country in April after a long gap in stocking SP, and the distribution contract for that product has not yet been signed. The stockout of LLINs is due to the push system at the commune level, for which GHSC-PSM is providing assistance in its transition to a pull system in 113 health districts. In the case of copper-bearing IUDs, with a 46 percent stockout rate in January, some SDPs are not offering the product due to lack of training. GHSC-PSM will be conducting a mapping of facilities offering IUDs and identifying training needs, for which the government has mobilized funding.

► Mozambique reduced its high stockouts of 20 and 60 percent last quarter for EID consumables and reagents, respectively, to 0 percent for both this quarter, by freeing up Abbott machines used for viral load testing to be used for EID, while awaiting a delayed shipment of Roche products funded by Global Fund.

► Nigeria similarly reduced its stockouts of EID and viral load commodities this quarter

► Similar to last quarter, Pakistan experienced very high stockouts of progestin only pills and emergency contraceptive pills (76 percent and 90 percent, respectively, for supported sites); however, a recent delivery of emergency contraceptives to Sindh Province is likely to reduce those stockouts in the coming quarter. GHSC-PSM is working to strengthen the requisition and distribution system from central to district level, and within districts, specifically for the Lady Health Worker and Maternal, Newborn and Child Health Programs where stockouts were highest.

► In Rwanda, high stockouts of Oral Rehydration Solution (ORS) (67 percent), were due to a prolonged shortage in the country due to delays in procurement, which is funded by the government. ORS has since been procured and is available in the country.

Other Comments

► Rwanda's stockout data comes from a GHSC-PSM survey conducted this quarter which only reached 23 health facilities (out of a planned sample size of 54), 8 of which were district hospitals. By contrast, B3 data for Rwanda were based on the LMIS reporting rate.

► Madagascar's data were drawn from January 2017 due to severely low reporting rates in February. As a result, Madagascar's data have not been included in the overall stockout calculations at the task order or IDIQ level

► Zimbabwe's SDPs report quarterly, and they report to GHSC-PSM with a one quarter lag. As such, the data presented here are from FY2017 Q1 and were not factored in to the overall stockout calculations at the task order or IDIQ level

► Uganda and Angola reported the highest overall stockout rates of 50 percent and 44 percent respectively, but the data was based on reporting from only one lab in Uganda's case and in Angola's case, on all 9 GHSC-PSM-supported sites reporting on only three products. GHSC-PSM in Uganda is working on getting access to the LMIS data and hopes to begin fully report-

BI. Percentage of SDPs with Stockouts of Tracer Products

Countries supported	HIV									Malaria										PRH								MCH																			
	Task Order 1	First line adult ARVs	Second line adult ARVs	First line pediatric ARVs	First RTKs	Second RTKs	Tie-breaker RTKs	Male condoms	Female condoms	Task Order 2	First-line ACTs (AL 6X1)	First-line ACTs (AL 6X2)	First-line ACTs (AL 6X3)	First-line ACTs (AL 6X4)	First-line ACTs (AL inability to treat)	First-line ACTs (AS/AQ 100/270mgx3)	First-line ACTs (AS/AQ 100/270mgx6)	First-line ACTs (AS/AQ 25/67.5mg)	First-line ACTs (AS/AQ 50/135mg)	Rapid diagnostic tests for malaria	Sulphadoxine-pyrimethamine (SP)	LLINs	Task Order 3	Injectable contraceptives	Implantable contraceptives	Combined oral contraceptives	Copper-bearing intrauterine devices	Fertility-based awareness methods	Hormone -releasing intrauterine devices	Male condoms	Emergency oral contraceptives	Female condoms	Progestin only pills	Task Order 4	Oxytocin (10 IU injectable)	MgSO4 (50% injectable)	Injectable gentamicin	ORS+zinc (together)	Chlorhexidine gel	Amoxicillin (125mg or 250mg dispersible tablets)	Zinc (alone)	ORS (alone)	PCV vaccine				
Malawi GHSC-PSM-supported									15%	6%	11%	23%	14%							12%	30%		6%	6%		8%	2%			7%	7%	5%	3%	7%	7%	1%	2%				14%	12%	11%				
Malawi non-GH-SC-PSM-supported																																															
Mozambique GH-SC-PSM-supported	1%	0%	2%	2%																																											
Mozambique non-GH-SC-PSM-supported																																															
Namibia GHSC-PSM-supported	0%	0%	0%	0%	0%	0%	0%	0%																																							
Namibia non-GH-SC-PSM-supported																																															
Nigeria GHSC-PSM-supported	9%	7%	4%	7%	10%	8%	11%	7%	9%	10%	9%	13%	15%	15%	4%	9%	10%	8%	11%	6%	8%	9%	5%	1%	7%	5%	4%			7%	9%																
Nigeria non-GH-SC-PSM-supported																																															
Pakistan GHSC-PSM-supported																								35%	14%		13%	24%			11%	76%		90%													
Pakistan non-GH-SC-PSM-supported																								38%	15%		13%	22%			15%	78%		85%													
Rwanda GHSC-PSM-supported	4%	0%	0%	0%	22%	0%		0%	8%	0%	0%	0%	0%	0%	0%					0%			0.60%	0%	0%	0%	0%	0%	0%	8%	0%	15%	4%	4%					7%	7%	67%						
Rwanda non-GH-SC-PSM-supported																																															
Zambia GHSC-PSM-supported	7%	8%	11%	20%	5%	5%		4%	1%	3%	3%	2%	4%	5%	0%					2%	2%		1%	0%	0.10%	3%	0.20%		4%	1%	0.20%	1%	1%	0.10%	2%			0.40%	1%	1%							
Zambia non-GH-SC-PSM-supported																																															

BI. Percentage of SDPs with Stockouts of Tracer Products

* The population and reproductive health “method level” refers to the percent of facilities stocked out of all products the facility offers within a given method. A stock out at the “product level” refers to the number 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.

	HIV-Lab				PRH - Product Level														
	EID consumables	EID reagents	Viral load consumables	Viral load reagents	Injectable contraceptives	Depot Medroxyprogesterone Acetate 104 mg/0.65 mL	Depot Medroxyprogesterone Acetate 150 mg Vial, SR	Norethisterone enanthate	Implantable contraceptives	Etonogestrel 68 mg/rod, 1 rod Implant	Levonorgestrel 75mg/rod, 2 rod Implant	Combined oral contraceptives	Levonorgestrel/Ethinyl Estradiol 150/30 mcg + Fe 75 mg, 28 Tablets/Cycle	Levonorgestrel/Ethinyl Estradiol 150/30 mcg 28 Tablets/Cycle	Emergency oral contraceptives	Levonorgestrel 0.75 mg Tablet	Levonorgestrel 1.5 mg Tablet	Progestin only pills	Levonorgestrel 30 mcg 35 Tablets/Cycle
Ethiopia GHSC-PSM-supported	14%	14%	33%		4%		4%		5%	12%	8%	5%	5%		6%	6%		14%	14%
Ethiopia non-GHSC-PSM-supported																			
Ghana GHSC-PSM-supported					21%		21%		27%		27%	41%	41%						
Ghana non-GHSC-PSM-supported																			
Guyana GHSC-PSM-supported																			
Guyana non-GHSC-PSM-supported																			
Haiti GHSC-PSM-supported	0%	0%	0%	0%	0%		0%		0.50%		0.50%	0%	0%						
Haiti non-GHSC-PSM-supported																			
Lesotho GHSC-PSM-supported		0%		0%															
Lesotho non-GHSC-PSM-supported																			
Liberia GHSC-PSM-supported																			
Liberia non-GHSC-PSM-supported																			
Madagascar GHSC-PSM-supported																			
Madagascar non-GHSC-PSM-supported																			
Malawi GHSC-PSM-supported					6%		6%			3%	2%	8%		8%	7%	7%		3%	3%
Malawi non-GHSC-PSM-supported																			
Mozambique GHSC-PSM-supported	0%	0%	0%	0%															
Mozambique non-GHSC-PSM-supported																			
Namibia GHSC-PSM-supported																			
Namibia non GHSC-PSM-supported																			
Nigeria GHSC-PSM-supported	0%	0%	0%	4%	1%		4%	4%	7%	14%	8%	5%		5%					
Nigeria non-GHSC-PSM-supported																			
Pakistan GHSC-PSM-supported																			
Pakistan non-GHSC-PSM-supported																			
Rwanda GHSC-PSM-supported					0%		0%		0%	0%	0%	0%	0%					0%	0%
Rwanda non-GHSC-PSM-supported																			
Zambia GHSC-PSM-supported		18%		36%	0%	1%		3%	0.10%	1%	1%	3%		3%				0.20%	0.20%
Zambia non-GHSC-PSM-supported																			

B I. Percentage of SDPs with Stockouts of Condoms (TO1 and TO3)

Country	Country Program	GHSC-PSM support	Task Order	Tracer Product	Number of SDPs reporting	Number of SDPs stocked out	Stockout rate
Angola	Angola	Supported	TO1-HIV/AIDS	HIV-Female condoms	9	1	11%
Cameroon	Cameroon	Supported	TO1-HIV/AIDS	HIV-Female condoms	43	35	81%
Lesotho	Lesotho	Supported	TO1-HIV/AIDS	HIV-Female condoms	40	9	23%
Namibia	Namibia	Supported	TO1-HIV/AIDS	HIV-Female condoms	23	0	0%
Total Performance for TO1 Female Condoms					115	45	40%
Angola	Angola	Supported	TO1-HIV/AIDS	HIV-Male condoms	9	3	33%
Cameroon	Cameroon	Supported	TO1-HIV/AIDS	HIV-Male condoms	44	36	82%
Lesotho	Lesotho	Supported	TO1-HIV/AIDS	HIV-Male condoms	48	2	4%
Namibia	Namibia	Supported	TO1-HIV/AIDS	HIV-Male condoms	23	0	0%
Ethiopia	Ethiopia	Supported	TO1-HIV/AIDS	HIV-Male condoms	791	64	8%
Ghana	Ghana	Supported	TO1-HIV/AIDS	HIV-Male condoms	161	50	31%
Total Performance to TO1 Male Condoms					1,076	155	15%
Total Performance for all TO1 Condoms					1,191	200	17%
Zambia	Zambia	Supported	TO3-PRH	PRH-Female condoms	1813	15	1%
Rwanda	Rwanda	Supported	TO3-PRH	PRH-Female condoms	13	1	8%
Nigeria	Nigeria	Supported	TO3-PRH	PRH-Female condoms	1063	91	9%
Malawi	Malawi	Supported	TO3-PRH	PRH-Female condoms	292	16	5%
Total Performance for TO3 Female Condoms					4,994	138	3%
Pakistan	Pakistan	Supported	TO3-PRH	PRH-Male condoms	10788	1172	11%
Zambia	Zambia	Supported	TO3-PRH	PRH-Male condoms	1813	67	4%
Rwanda	Rwanda	Supported	TO3-PRH	PRH-Male condoms	23	0	0%
Nigeria	Nigeria	Supported	TO3-PRH	PRH-Male condoms	1429	100	7%
Haiti	Haiti	Supported	TO3-PRH	PRH-Male condoms	207	1	0%
Malawi	Malawi	Supported	TO3-PRH	PRH-Male condoms	536	40	7%
Total Performance to TO3 Male Condoms					16,609	1,447	9%
Total Performance for all TO3 Condoms					21,603	1,585	7%
Total performance for all condoms					22,794	1,785	8%

B2. Percentage of stock status observations in storage sites, where commodities are stocked according to plan, by level in supply system (Tracer Products)

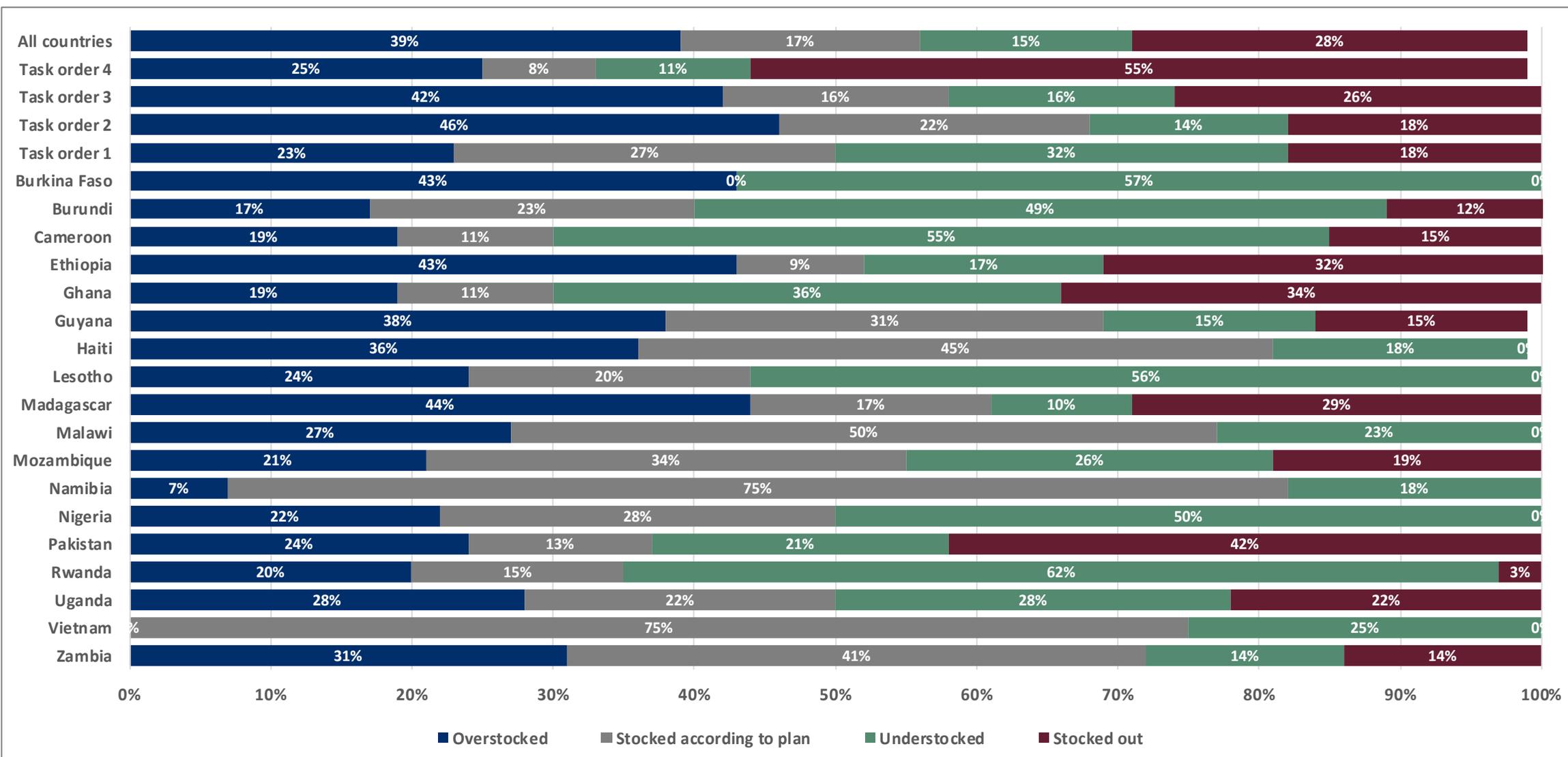
Measure Definition				Achievement					
				Task Order	Annual Target	FY 2017 Q2	Year to Date		
Numerator: Number of stock status observations for a tracer commodity that are within the designated minimum and maximum quantities at storage sites.				TO1	N/A	27%	28%		
Denominator: Total number of stock status observations for a tracer commodity at storage sites.				TO2	N/A	22%	15%		
				TO3	N/A	16%	14%		
				TO4	N/A	8%	8%		
				All TOs*	N/A	17%	14%		
TO 1 and TO 2 products	Central	Sub-National 1	Sub-National 2	TO 3 and TO 4 products	Central	Sub-National 1	Sub-National 2	<p>► 17 percent of tracer products were stocked within the minimum and maximum levels at storage sites this quarter, ranging from 8 percent for TO4 to 27 percent for TO1.</p> <p>► At the central level, “tie-breaker” RTKs (100 percent), female condoms (63 percent) and SP (55 percent) were the most likely to be stocked according to plan. ARVs not stocked according to plan at the central level are more likely to be overstocked (40 percent) than understocked (22 percent) or stocked out (2 percent), while at the subnational level, they are more likely to be understocked (35 percent) rather than overstocked (20 percent) or stocked out (7 percent) (data note shown in table).</p> <p>► The products most likely to be understocked included 1st and 2nd HIV RTKs and ALs 6X1, 6X2, and 6X3, and AS/AQ 50/135mg. All of these products were understocked between 30-36 percent of the time (data not shown in table).</p> <p>► Haiti was 100% understocked for both 1st and 2nd RTKs (data not shown in table) due to the implementation of multi-month scripting and because more product was consumed than forecasted. Nigeria and Namibia were both 100 percent understocked for 1st RTKs, due to limited PEPFAR budgets in Nigeria and limited data availability from regional depots in Namibia.</p> <p>► Nigeria and Burkina Faso both had 100 percent of their first line ACTs understocked (data not shown in table). Nigeria indicated that malaria products were stocked out due to shipment delays and because actual consumption exceeded the forecasted consumption, which is guided by the available budget. Burkina Faso noted that AS/AQ was overstocked while AL was understocked due to a switch from AS/AQ to AL for treating patients.</p>	
HIV	Task Order 1	34%	26%		Task Order 3	20%	18%		15%
	First-line adult ARVs	41%	34%		Injectables	36%	23%		20%
	Second-line adult ARVs	27%	32%		Implantables	29%	17%		16%
	First-line pediatric ARVs	42%	49%		COCs	7%	20%		16%
	First RTKs	29%	19%		Cu-IUCD	0%	16%		12%
	Second RTKs	12%	32%		Fertility-based awareness methods	0%	25%		9%
	“Tie-breaker” RTKs	100%	7%		Hormone-releasing intrauterine devices				
	Male condoms	13%	8%		Male condoms	29%	20%		15%
	Female condoms	63%	6%		EmOCs	18%	10%		1%
	CD4 consumables				Female condoms	8%	11%		
	CD4 reagents				Progestin only pills	21%	20%		11%
	EID consumables	0%	0%						
	EID reagents	0%	0%						
	Viral load consumables	0%	0%						
	Viral load reagents	40%	0%						
	Task Order 2	23%	20%	22%	Task Order 4	11%	21%		7%
Malaria	ACTs (AL 6X1)	43%	18%	11%	Oxytocin (10 IU inj.)	14%	23%		8%
	ACTs (AL 6X2)	29%	4%	45%	MgSO4 (50% inj.)	29%	22%		6%
	ACTs (AL 6X3)	8%	15%	6%	Inj. gentamycin	33%	29%		11%
	ACTs (AL 6X4)	31%	22%	12%	ORS+Zinc		0%		
	ACTs (AS/AQ 100/270mgx3)	0%	25%		Chlorhexidine gel	0%	4%		
	ACTs (AS/AQ 100/270mgx6)	25%	20%		Amoxicillin (125mg) dispersible tablets	0%	20%		
	ACTs (AS/AQ 25/67.5mg)	0%	16%		Zinc (alone)	0%	20%		
	ACTs (AS/AQ 50/135mg)	0%	22%		ORS (alone)	0%	41%		
	SP	55%	34%	12%	PCV (alone)			6%	
	LLINs	22%	0%	13%					

B2. Percentage of stock status observations in storage sites, where commodities are stocked according to plan, by level in supply system (Tracer Products)

	Central	Sub-National 1	Sub-National 2	Analysis	
PRH - Product Level	Injectable contraceptives			<p>► The product least likely to be stocked according to plan was Levonorgestrel 0.75mg Tablets (5 percent stocked according to plan). Uganda and Zambia had 100 percent of this product overstocked. Zambia noted that TO3 products were overstocked because the MOH is increasing its sensitization and health promotion campaigns to adolescents to promote the use of contraceptives. Therefore demand is expected to increase in the near future.</p> <p>► Both Depot Medroxyprogesterone Acetate 104 mg/0.65 mL and Norethisterone enanthate were stocked according to plan 100 percent of the time, however each product had only 1 observation, both reported from Zambia.</p> <p>► Malawi had 60 percent of TO3 tracer products stocked according plan, while Haiti had 66 percent of the same products overstocked and Rwanda had 60 percent of its products understocked. Rwanda noted that products often fall outside of the desired levels because the Medical Procurement and Production Division and the district pharmacies do not always respect the distribution calendars.</p>	
	Depot Medroxyprogesterone Acetate 104 mg/0.65 mL	100%			
	Depot Medroxyprogesterone Acetate 150 mg Vial, SR	7%	23%		19%
	Norethisterone enanthate	100%			
	Implantable contraceptives				
	Etonogestrel 68 mg/rod, 1 rod Im-	44%	9%		
	Levonorgestrel 75mg/rod, 2 rod Implant	18%	19%		
	Combined oral contraceptives				
	Levonorgestrel/Ethinyl Estradiol 150/30 mcg + Fe 75 mg, 28 Tablets/Cycle	11%	20%		16%
	Emergency oral contraceptives				
	Levonorgestrel 0.75 mg Tablet	27%	10%		1%
	Levonorgestrel 1.5 mg Tablet				
	Progestin only pills				
	Levonorgestrel 30 mcg 35 Tablets/Cycle	21%	20%		11%

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B2. Percentage of stock status observations in storage sites, where commodities are stocked according to plan, by level in supply system (Tracer Products)



B2: Country-level Analysis: Performance; Trend in performance; Discussion of disaggregation trends and performance

► This quarter saw an improvement in products stocked according to plan at 17 percent (up from 11 percent last quarter), however, countries still tended to be overstocked (39 percent) more often than other stock statuses.

► Vietnam again had one of the highest stocked according to plan percentages (75), however this is based on only 4 observations. Namibia also reported 75 percent of their product stocked according to plan, an increase from 27 percent in the previous quarter. Haiti, Malawi and Zambia all had products stocked according to plan between 40 and 50 percent of the time, while Burkina Faso (0 percent), Ethiopia (9 percent), Cameroon (11 percent), Ghana (11 percent), and Pakistan (13 percent) had less than 15 percent of their product stocked according to plan. Burkina Faso noted a switch in ACT treatment, leaving AS/AQ overstocked and AL understocked, while SP and LLINs were overstocked due to a large shipments in late 2016/early 2017 and the products have just begun being distributed. Ethiopia had only 4 percent stocked according to plan for TO4 and noted that levels were less desirable at the central level (8 percent) than at the SDP level (24 percent), indicating that central levels hubs are sending most of their commodities to SDPs and retaining only a limited quantity. Cameroon noted that poor performance for this indicator at the regional warehouses is because data was collected when stock levels had dropped due to active distribution to the health facilities, whereas Ghana noted that the lack of data visibility between all levels of the supply chain makes inventory planning difficult. In Pakistan, provinces experienced understock for different products due to the absence of transportation support from provincial governments.

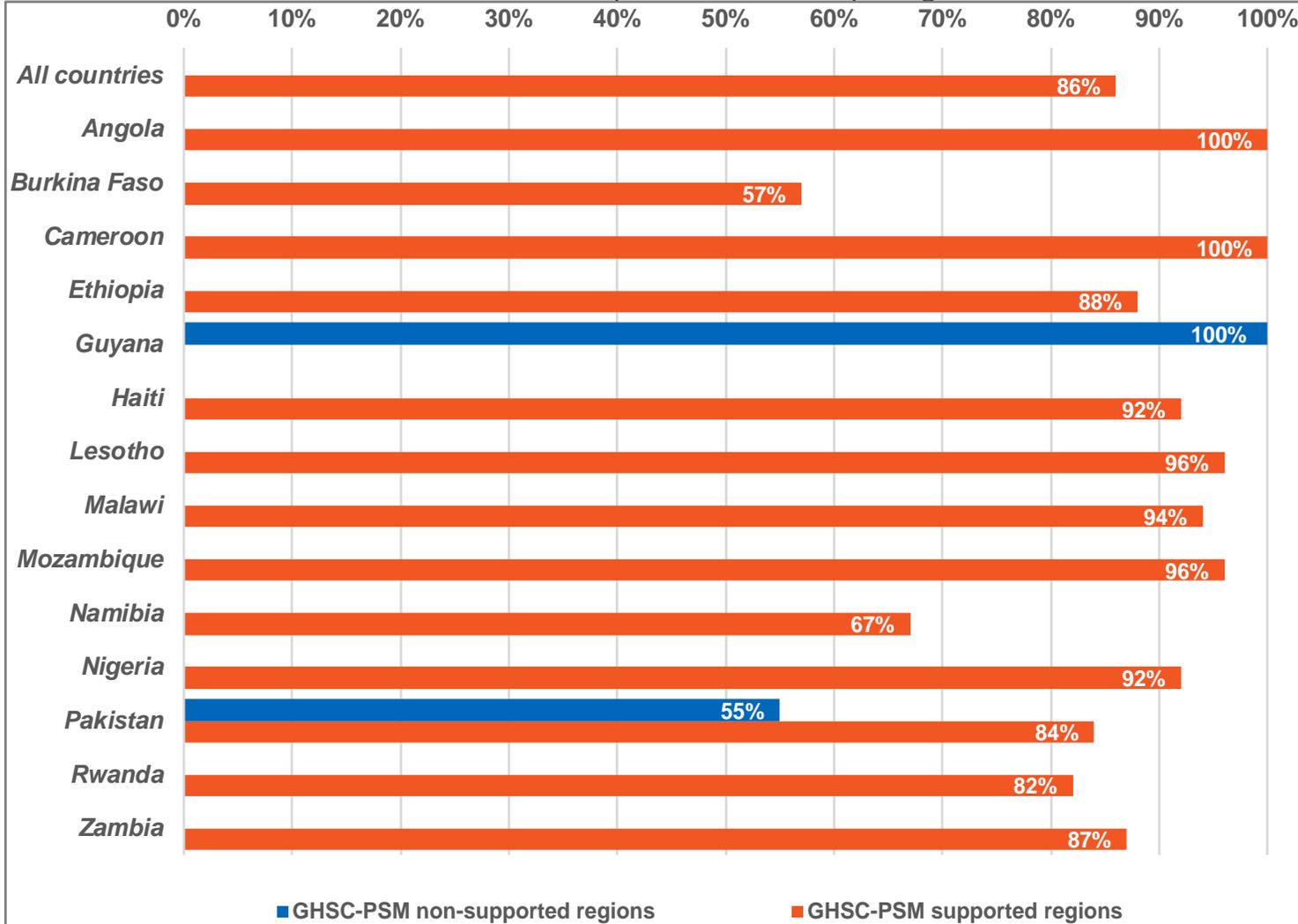
Total number of stock status observations: Burkina Faso (TO2-7); Burundi (TO1-112, TO2-671); Cameroon (TO1-84); Ethiopia (TO1-209, TO2-88, TO3-123, TO4-95); Ghana (TO1-154, TO2-220, TO3-198); Guyana (TO1-13); Haiti (TO1-5, TO3-6); Lesotho (TO1-25); Madagascar (TO2-6,844, TO3-3,294, TO4-3,617); Malawi (TO2-22, TO3-18, TO4-12); Mozambique (TO1-180, TO2-219, TO3-288, TO4-252); Namibia (TO1-28); Nigeria (TO1-10, TO2-8); Pakistan (TO3-1, 199); Rwanda (TO1-45, TO2-45, TO3-81, TO4-44); Uganda (TO1-18, TO2-18, TO3-18); Vietnam (TO1-4); Zambia (TO1-9, TO2-6, TO3-8, TO4-6).

B3. Service Delivery Point (SDP) reporting rate to the Logistics Management Information System (LMIS)

Measure Definition

Numerator: Number of SDPs that submitted the required LMIS report(s) or order form(s) during the previous reporting period.

Denominator: The total number of SDPs in country which should be reporting.



Task Order	Annual Target	Achievement	
		FY 2017 Q2	Year to Date
TO1	N/A	91%	89%
TO2	N/A	84%	79%
TO3	N/A	86%	81%
TO4	N/A	85%	73%
All TOs	N/A	86%	81%

Analysis

- Overall reporting rates for each Task Order have increased since the previous quarter. The highest achievement was in TO1, with four countries achieving 100 percent reporting (Angola, Cameroon, Guyana, and Zimbabwe).
- Ethiopia improved its reporting rate from 75 percent to 88 percent after targeted outreach to SDPs that had not been submitting timely reports. Cameroon also achieved a high rate due to support and reminders to health facilities.
- Burkina Faso noted that Internet connectivity challenges are the main impediment to reporting and is advocating Internet connection improvements to the MOH.
- Guyana noted a significant improvement since last quarter (13 to 100 percent for TO1), due to the enforcement of reporting deadlines and the data collection method (Logistics Management Unit calls ARV sites via phone and transcribes their data.).
- Namibia saw a drop in reporting due to a change in the template SDPs are required to upload to the LMIS. To prevent this in the future, a template has been created to help sites convert to the new format.

Other Comments

Total number of SDPs in GHSC-PSM-supported regions expected to report:

Angola (TO1-9), Burkina (TO2-2,123), Cameroon (TO1-58), Ethiopia (TO1-1,548, TO2-1,548, TO3-1,548, TO4-1,548) Haiti (TO1-150, TO3-222) Lesotho (TO1-121), Malawi (TO2-673, TO3-673, TO4-673) Mozambique (TO1-1,268) Namibia (TO1-51), Nigeria (TO1-3,922, TO2-3,694, TO3-1,589) Pakistan (TO3-12,854 supported, 1,281 non-supported) Rwanda (TO1-565, TO2-565, TO3-565, TO4-565) Zambia (TO1-1,923, TO2-2,093, TO3-2,093, TO4-2,093).

B3. Service Delivery Point (SDP) reporting rate to the Logistics Management Information System (LMIS)

Countries Supported	HIV	Malaria	PRH	MCH	Countries Supported	HIV	Malaria	PRH	MCH	Countries Supported	HIV	Malaria	PRH	MCH
	Task Order 1	Task Order 2	Task Order 3	Task Order 4		Task Order 1	Task Order 2	Task Order 3	Task Order 4		Task Order 1	Task Order 2	Task Order 3	Task Order 4
Angola GHSC-PSM-supported regions	100%				Haiti GHSC-PSM-supported regions	89%		93%		Nigeria GHSC-PSM-supported regions	92%	92%	94%	
Angola non-GH-SC-PSM-supported regions					Haiti non-GHSC-PSM-supported regions					Nigeria non-GH-SC-PSM-supported regions				
Burkina Faso GH-SC-PSM-supported regions		57%			Lesotho GHSC-PSM-supported regions	96%				Pakistan GHSC-PSM-supported regions			84%	
Burkina Faso non-GH-SC-PSM-supported regions					Lesotho non-GH-SC-PSM-supported regions					Pakistan non-GH-SC-PSM-supported regions			55%	
Cameroon GH-SC-PSM-supported regions	100%				Malawi GHSC-PSM-supported regions		94%	94%	94%	Rwanda GHSC-PSM-supported regions	95%	90%	79%	62%
Cameroon non-GH-SC-PSM-supported regions					Mozambique GHSC-PSM-supported regions	96%				Rwanda non-GH-SC-PSM-supported regions				
Ethiopia GHSC-PSM-supported regions	88%	88%	88%	88%	Mozambique non-GH-SC-PSM-supported regions					Zambia GHSC-PSM-supported regions	92%	87%	87%	87%
Ethiopia non-GH-SC-PSM-supported regions					Namibia GHSC-PSM-supported regions	67%				Zambia non-GH-SC-PSM-supported regions				
Guyana GHSC-PSM-supported regions					Namibia non-GH-SC-PSM-supported regions									
Guyana non-GH-SC-PSM-supported regions	100%													

Out of Cycle Countries

	Task Order 1	Task Order 2	Task Order 3	Task Order 4
Madagascar GHSC-PSM-supported regions (Jan 2017)		52%	48%	48%
Madagascar non-GHSC-PSM-supported regions				
Zimbabwe GHSC-PSM-supported regions	100%	97%		
Zimbabwe non-GHSC-PSM-supported regions				

Next indicator:

B4 (In-country data confidence) is not reported this time. Reason: Annual indicator.

B5 (Annual Forecast Reviews) is not reported this time. Reason: Annual indicator.

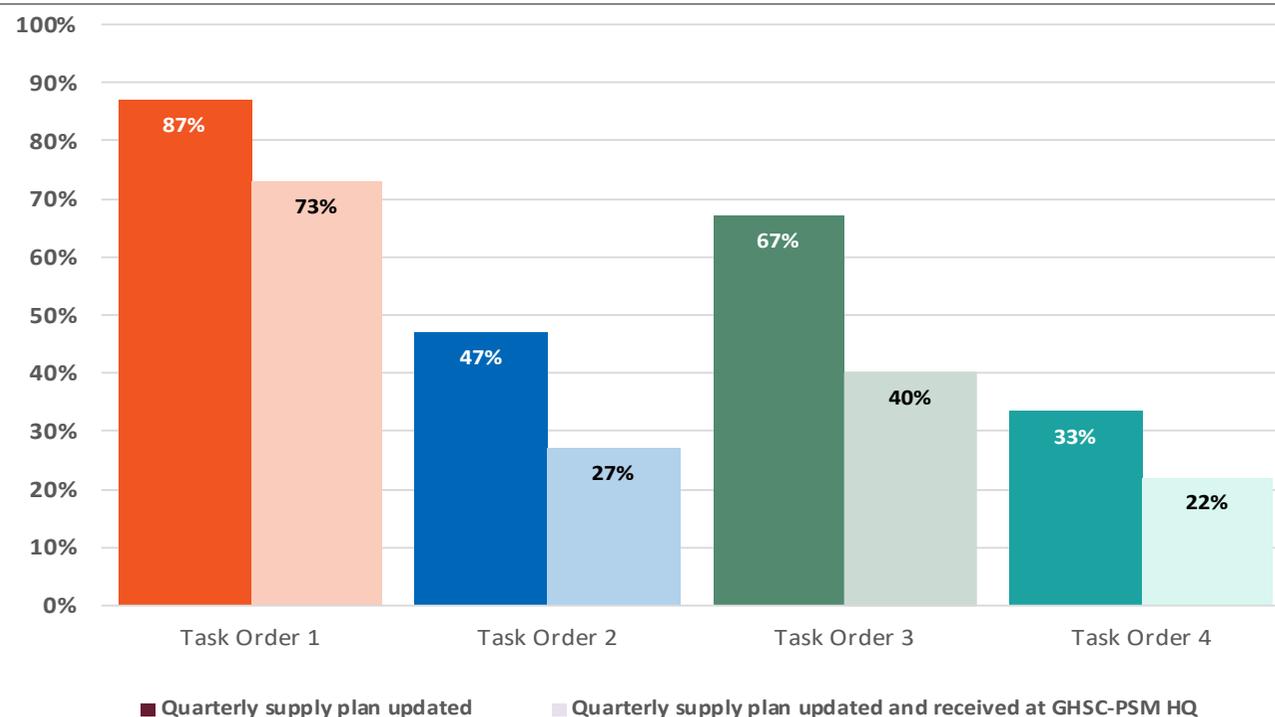
B6. Percentage of countries conducting quarterly supply plan updates.

Measure Definition

Numerator: Number of all GHSC-PSM-supported countries that conducted supply plan updates in each quarter.

Denominator: Total number of GHSC-PSM-supported countries.

Indicator Performance



Task Order	Annual Target	Achievement	
		FY 2017 Q2	Year to Date
TO1	N/A	87%	88%
TO2	N/A	47%	62%
TO3	N/A	67%	100%
TO4	N/A	33%	35%
All TOs	N/A	61%	69%

Analysis

- In quarter 2, 61 percent of required supply plans were developed or updated, ranging from 87 percent for TO1 to 33 percent for TO4. In addition, 43 percent of supply plans were submitted to HQ.
- For TO1, all countries except Angola and Lesotho completed new or updated supply plans, and while Cameroon and Guyana both updated their document, they were not submitted to HQ.
- For TO4, only Malawi, Mozambique, and Rwanda updated or created supply plans, and of those three, Malawi did not submit to HQ.
- Overall, 69 percent of the required supply plans required in both quarters 1 and 2 were submitted, with TO1 having the most submitted (88 percent) and TO4 having the least submitted (35 percent).

Other Comments

► (TO1: 13/15 created, 11/15 submitted to HQ) (TO2: 7/15 created, 4/15 submitted to HQ) (TO3: 10/15 created, 6/15 submitted to HQ) (TO4: 3/9 created, 2/9 submitted to HQ).

Next indicators:

B7 (Percentage of total spent or budgeted on procurement of commodities by government, USG, the Global fund, or other is not reported at this time. Reason: Annual indicator.

B8 (Percentage of initially GHSC-PSM supported supply chain functions carried out by national authorities that done without external technical assistance) is not reported at this time. Reason: Annual indicator.

B9 (Supply chain workforce loss ratio) is not reported at this time. Reason: Annual indicator.

B10 (Functionality of logistic coordination mechanism) is not reported at this time. Reason: Annual indicator.

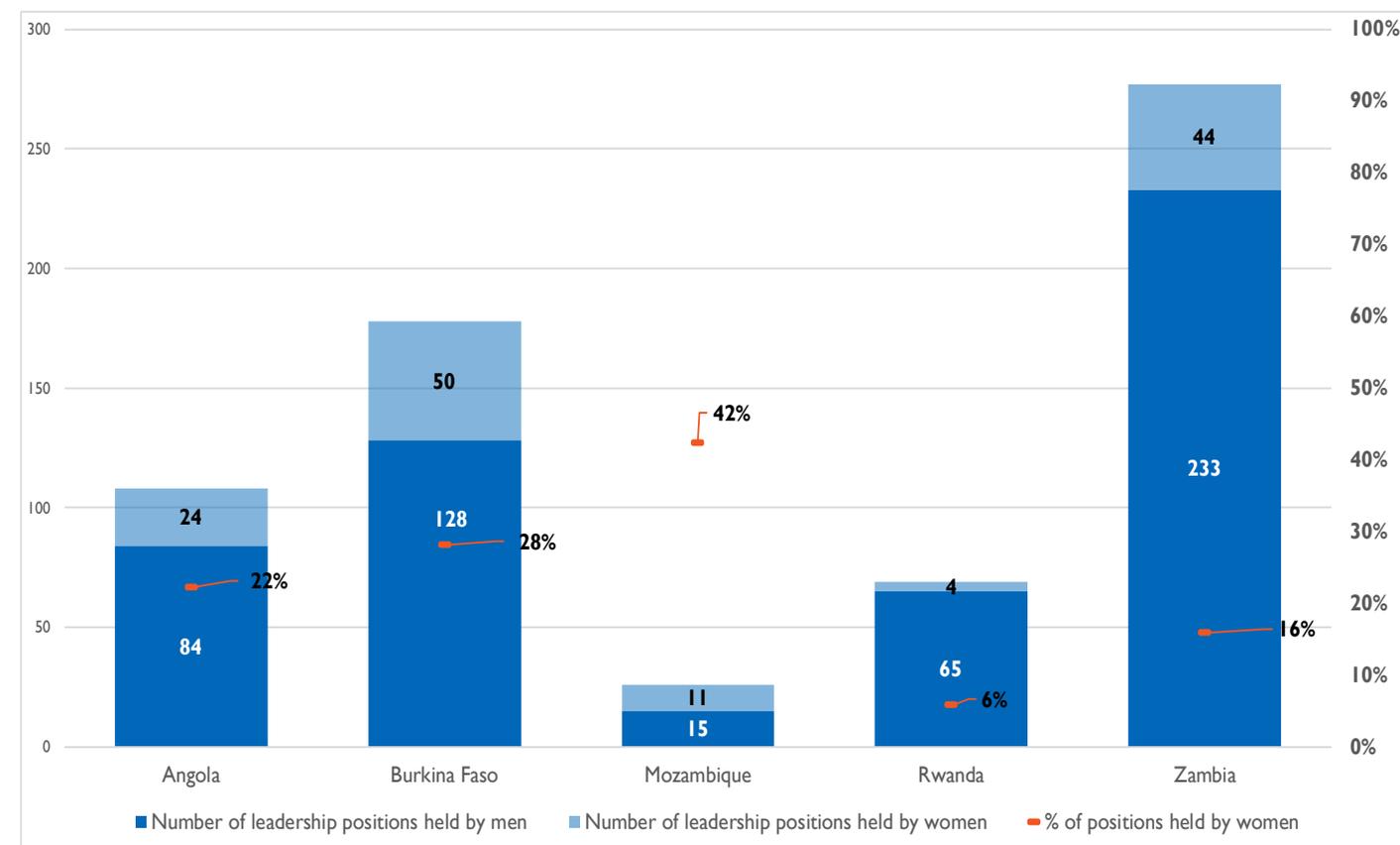
BI I. Percent of leadership positions in supply chain management that are filled by women.

Measure Definition

Numerator: Number of leadership positions in supply chain management that were filled by women in a specified time period where GHSC-PSM is providing technical assistance related to workforce development.

Denominator: Total number of leadership positions filled in a specified time period, where GHSC-PSM is

Indicator Performance



Task Order	Annual Target	FY 2017 SI	Year to Date
TO1	N/A	16%	16%
TO2	N/A	28%	28%
TO3	N/A		
TO4	N/A		
Cross cutting	N/A	19%	19%
All TOs	N/A	20%	20%
Analysis			

► Only five countries reported on this indicator for quarters 1 and 2 of FY17. Ethiopia and Nigeria both indicated they would provide data in the next quarter, and Ethiopia noted that they are in the process of recruiting STTA to develop a strategy and assess the baseline for intervention.

► TO2 had the highest percentage of leadership positions filled by women during the six month period (28 percent), followed by TO1 (16 percent). No leadership positions were filled by women in TO3 or TO4 specifically, however 19 percent of crosscutting leadership positions were filled by women.

► Mozambique had the highest percentage of women in leadership positions (42 percent), while Rwanda had the lowest (6 percent).

B12. Absolute Percent Consumption Error

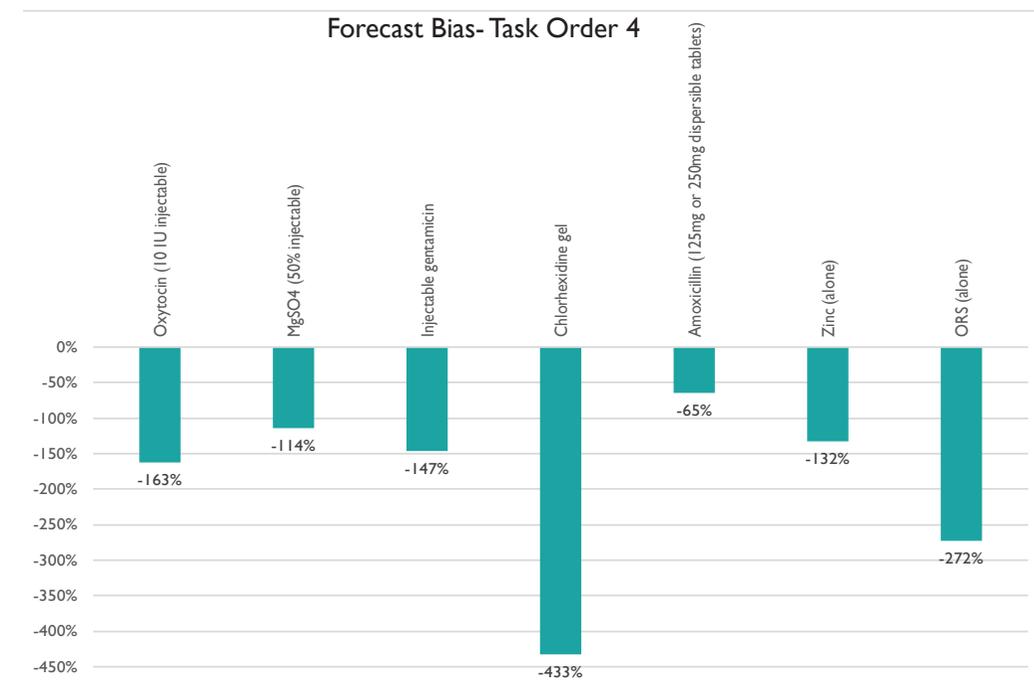
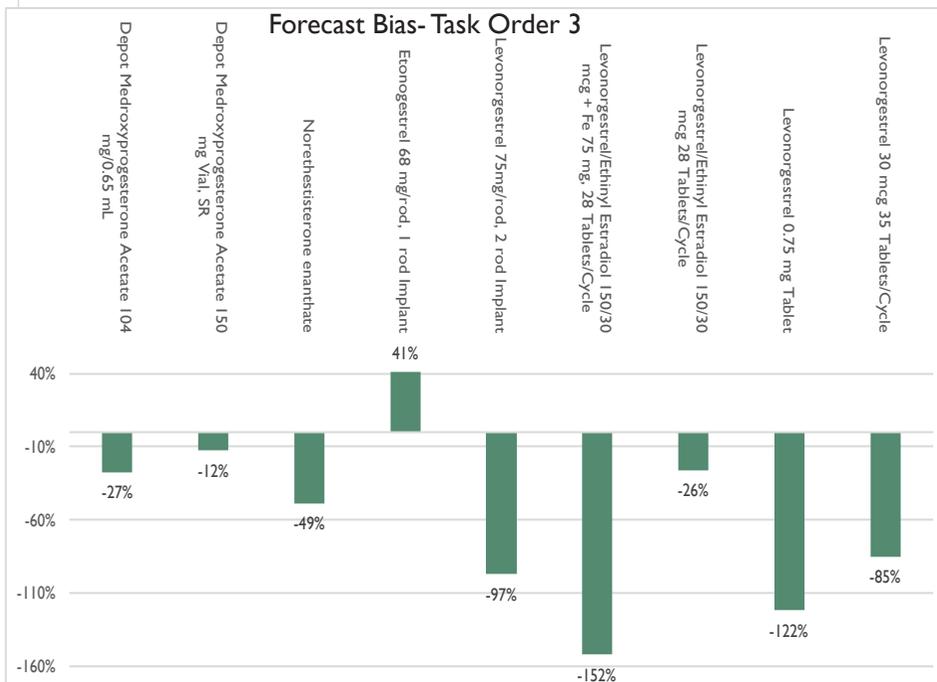
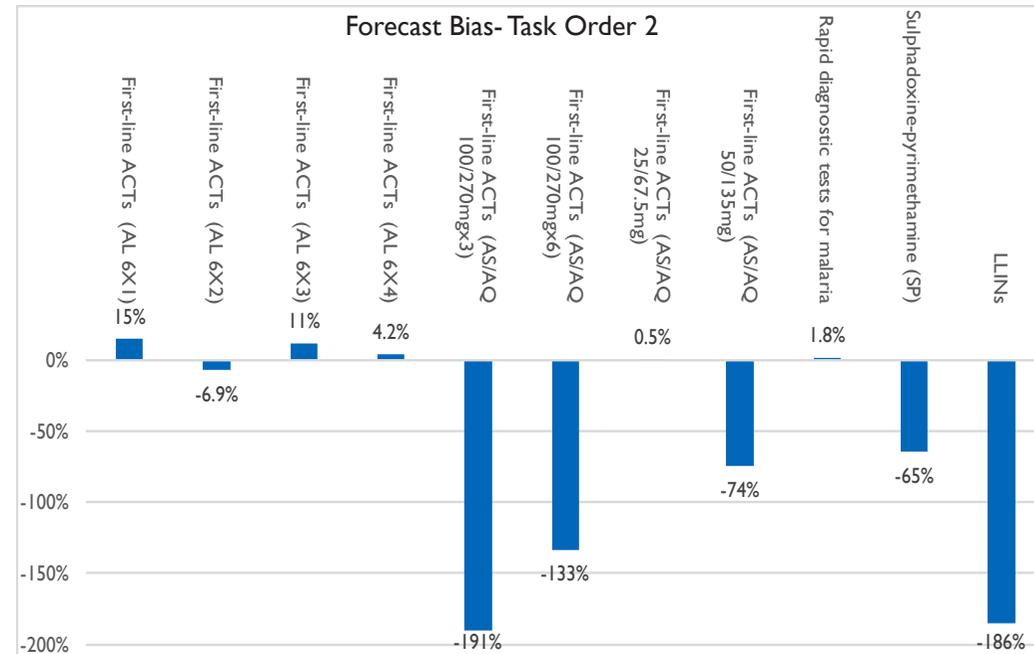
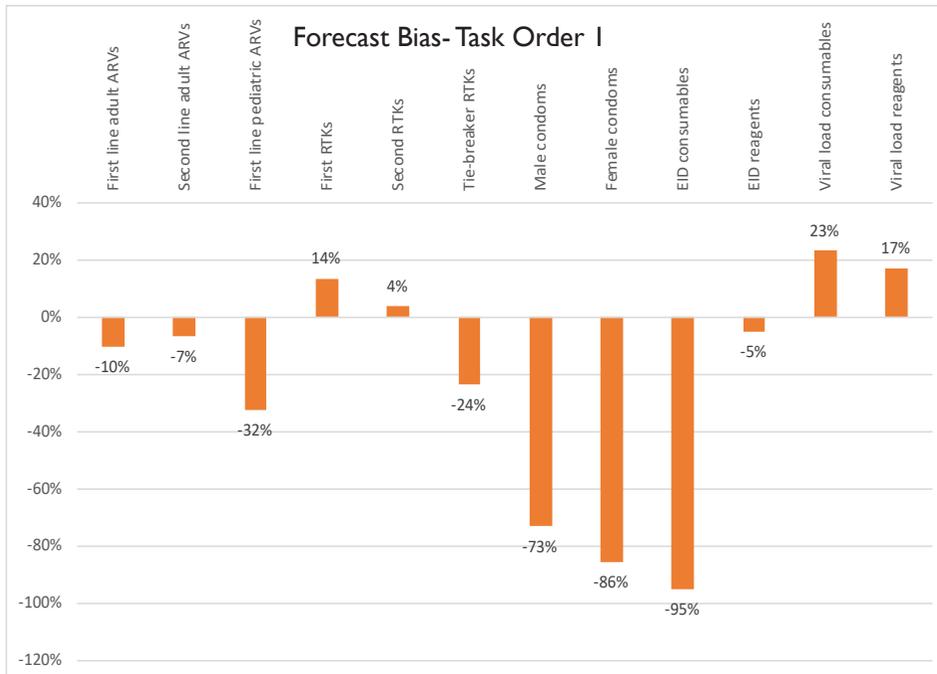
Measure Definition

Numerator: Value of the differences between the actual quantities consumed or issued to SDPs during the period minus the forecasted values.

Denominator: Sum of the actual quantities desired to be delivered.

Variants:

Forecast Bias (Calculated using the actual value of the difference between quantities forecasted and quantities consumed at or issued to the SDPs).



B I 2. Absolute Percent Error- Granular Level Analysis

- ▶ Angola pushed out RTKs that were about to expire from the central level; therefore forecasting was done based on availability but not necessarily consumption needs. The overstock of RKTs is being addressed through the coordination of a rapid test campaign throughout the month of May.
- ▶ In addition, health facilities in Angola had requested a higher amount of stock than needed (for multiple products) in previous reporting periods, resulting in lower orders. Because issues data is used as a proxy for consumption, the reduction in issues produced forecast variance. To address this, PSM technical advisors are working in the supported SDPs to improve the quality of requisition form data based on real needs-based forecasting.
- ▶ In Burkina Faso, the recent roll out of free health care led to higher than expected consumption of some malaria commodities, including AL 6x1 and 6x2, and rapid diagnostic tests. However, there was a significant overforecast for SP.
- ▶ In Ethiopia, consumption of malaria products was lower than the forecast. Malaria incidence was not as high as expected, which resulted in overforecasting compared to actual consumption.
- ▶ In Guyana, forecast bias for adult first line and second line ARVs increased slightly from the previous quarter, due to national targets for service scale-up not being met, and due to data quality concerns. GHSC-PSM will continue to mentor the Logistics Management Unit to improve data quality and increase the use of current data for forecasting and supply planning decisions.
- ▶ In Haiti, the first-line pediatric ARV AZT/3TC/NVP 300/150/200mg showed some forecast bias, due to the fact that two of the drugs, AZT/3TC and NVP, are also used separately and may be harder to forecast. The same is true for other ARV regimens. The pediatric ARV also faced a stockout at the central level, affecting consumption.
- ▶ Also in Haiti, consumption of first RTKs was greater than forecasted due to the adoption of new testing protocol for “test and treat.” However, consumption of second RTKs was less than forecasted.
- ▶ Nepal does not conduct quarterly forecast data, so the forecast is based on the FY2016 annual forecast alongside issues data. MAPEs ranged from 39 percent for injectable contraceptives to 920 percent for chlorhexidine gel. The causes for the discrepancies can be tied back to the earthquake of 2015, and the halting of procurements due to the trade blockade from India. In addition, several commodities are forecasted by more than one division, possibly resulting in overlap and over-forecasting. The blockade has since been lifted, and GHSC-PSM is planning to bring on board a forecasting and quantification specialist to support the Logistics Management Division which has requested assistance to improve their methodology.
- ▶ Forecast bias was relatively low in Nigeria, Pakistan, Zambia, and Zimbabwe.

CI. Number of innovations that were developed, implemented, or introduced and are related to health commodity market or supply chain best practices.

Measure Definition

An innovation reference to new technologies, new products, new approaches and/or operational research studies developed, implemented or introduced during the period of reporting.

Task Order	Annual Target	FY 2017 Q2	Year to Date
TO1	N/A	1	1
TO2	N/A	2	2
TO3	N/A		
TO4	N/A		
Cross cutting	N/A	2	2
All TOs	N/A	5	5

Description of innovation

Country	Type of innovation	Brief Description
TO1		
Zimbabwe	New approach	The Zimbabwe team, through staff seconded to the Ministry of Health, has started using a Whatsapp chat group on smartphones to improve communication amongst MOH staff, enabling the sharing of work related information, including reporting deadlines.
TO2		
Angola	New approach	GIS mapping is being used to integrate population and malaria incidence data to estimate the number of cases per geographic area or malaria hotspot. This information is then used to optimize delivery routes for medications and commodities. The GHSC-PSM office in Angola is working with the Systems Strengthening team on this effort and will soon establish a quantification working group, which will include the ministry to ensure understanding and ownership of the new tool.
Angola	New approach	For the first time in Angola, GHSC-PSM has started using artesunate injectable in the PPMRm for the treatment of complex cases of malaria for children under five. GHSC-PSM is working with partners to develop an effective distribution plan including ensuring distribution to high priority hotspots, as well as providing training and infographic materials on how to administer the drug. PSM is also continuing to monitor the stock data of this product.
Cross-cutting		
Ghana	New approach	GHSC-PSM is supporting the Ghana Health Service to implement the last mile distribution of health commodities from regional warehouses to SDPs by introducing the concept of 3PL transport service providers. These providers partner with the regional warehouses and distribute commodities to facilities via scheduled deliveries along an optimized distribution route. This marks a distinct change in the health commodities delivery system, where previously there were multiple direct pick-up points for SDPs to access products. An open, competitive process was adopted to select the best 3PL transportation providers in the regions implementing the program.
Mozambique	New approach	Mozambique reported the use of a new methodology and tool for their rapid response system that collects stock and consumption data at the health facility level and uses the data to automatically calculate months of stock (MoS) based on the average monthly consumption. This tool allows district health offices to visualize the stock status of all SDPs or 39 products, including three ARVs, one TB product, one antimalarial and four HIV rapid test kits. The quick access to stock status information empowers district health offices to do weekly stock controls and can assist in rapid decision making. For example, in a stock out situation, the district official may direct an SDP to request a loan from a nearby SDP that has stock above the maximum limit or may instruct the SDP to send an emergency requisition to be supplied by the district. This tool also allows the district level to analyze the evolution of the stock status in each SDP over time and make decisions on how to maintain a fully functional supply chain.

C2. Number of People Trained by supply chain functional area and sex.

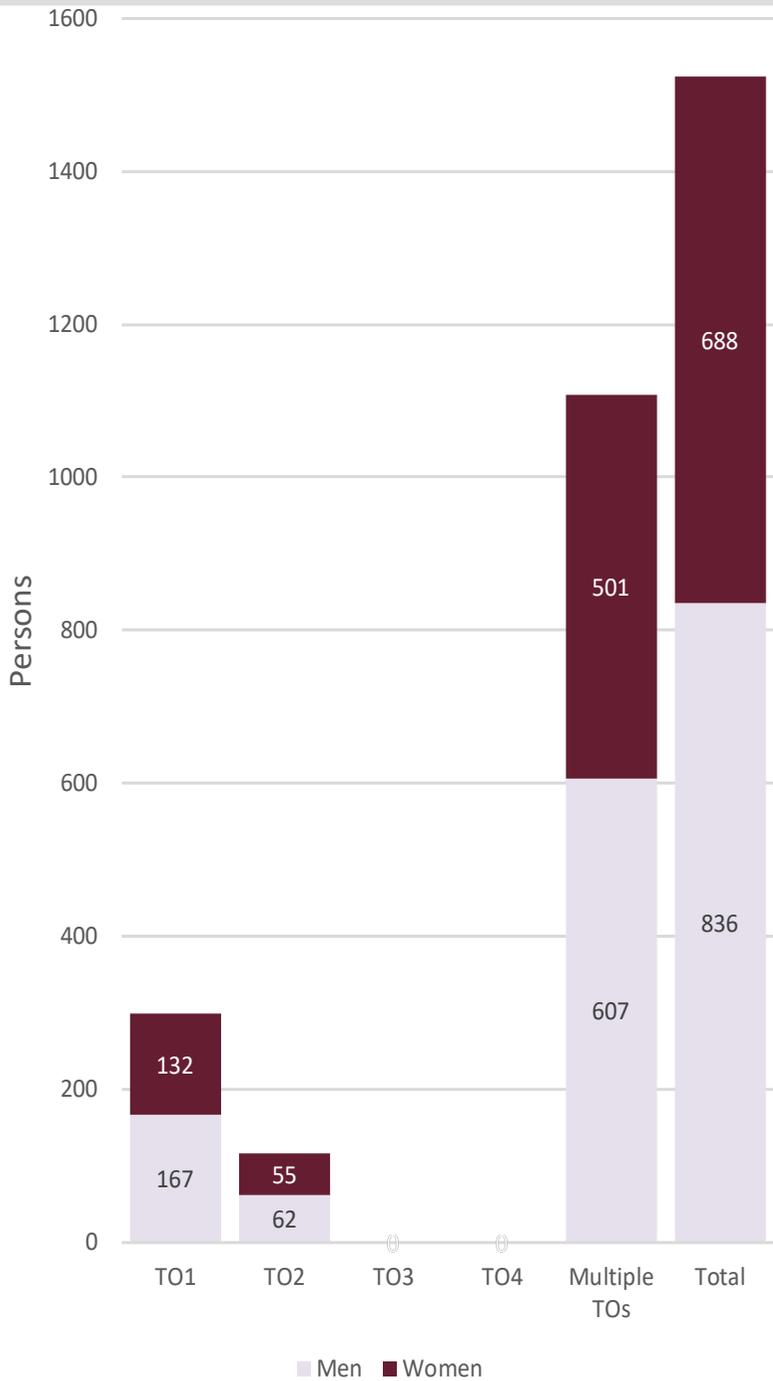
Measure Definition

Number of people trained. “People trained” refers to any type of participant, student, or learner in a training event, regardless of its duration. People trained may refer to the different categories of participants (e.g., physicians, nurses, social workers).

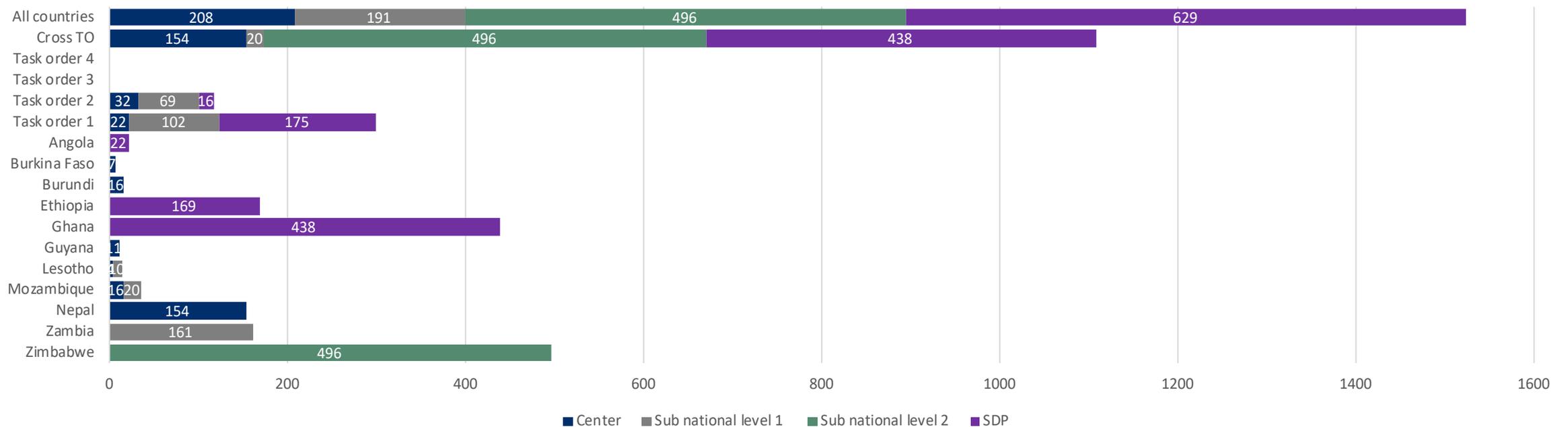
Indicator Performance

Task Order	Annual Target	FY 2017 Q2	Year to Date
TO1	N/A	299	460
TO2	N/A	117	150
TO3	N/A		
TO4	N/A		
Cross cutting	N/A	1,108	1,677
All TOs	N/A	1,524	2,287

Functional category	Central				Product	Sub-National			
	Central	Sub-National 1	Sub-National 2	SDP		Central	Sub-National 1	Sub-National 2	SDP
HIV	Strategy and Planning			169	PRH				
	Forecasting and Supply Planning	18							
	Procurement								
	Quality Assurance								
	Warehousing and Inventory Management	4	10	6					
	Transportation and Distribution								
	MIS		92						
	Governance and Financing								
	Human Resources and Capacity Development								
Monitoring and Evaluation									
Malaria	Strategy and Planning				MCH				
	Forecasting and Supply Planning	25							
	Procurement								
	Quality Assurance								
	Warehousing and Inventory Management			16					
	Transportation and Distribution								
	MIS	7	69						
	Governance and Financing								
	Human Resources and Capacity Development								
Monitoring and Evaluation									
Cross cutting	Strategy and Planning	15							
	Forecasting and Supply Planning	76							
	Procurement								
	Quality Assurance								
	Warehousing and Inventory Management		20	496					
	Transportation and Distribution					438			
	MIS								
	Governance and Financing								
	Human Resources and Capacity Development	63							
Monitoring and Evaluation									



C2. Number of People Trained by Task Order, Supply Chain Level and Country.



Other Comments

- ▶Angola: Held on-the-job technical training in supply forecasting, stock management, monthly inventory, reporting and data quality, NSCA tools and supervision.
- ▶Burkina Faso: Conducted a training on the DHIS2 for the National Malaria Control Program logistics staff.
- ▶Burundi: No information provided.
- ▶Ethiopia: Hospital staff were trained in implementing the Auditable Pharmaceutical Transactions and Services (APTS) package at 10 health facilities, the first time in APTS implementation history to reach 10 facilities per month.
- ▶Ghana: Ghana trained 438 individuals to support the implementation of last mile distribution of health commodities in the Eastern and Northern regions. The training covered the logistics principles underpinning the logistics management division, the ordering, requisition and reporting processes, and the distribution schedules for the SDPs.
- ▶Guyana: Trained pharmacy logistics officers and the LMU manager on supply planning.
- ▶Lesotho: Conducted a logistics workshop for Supply Chain Coordinating Unit teams at both central and district levels.
- ▶Mozambique: Trained individuals in warehousing and inventory management as well as forecast and supply planning.
- ▶Nepal: Trained individuals in forecasting and supply planning as well as human resource capacity.
- ▶Zambia: Trained 161 individuals, almost half women, in HIV testing and Essential Medicines Logistics Improvement Programme (EMLIP) and ARV logistics systems.
- ▶Zimbabwe: Trained a total of 496 MOH staff across the county in support of the Zimbabwe Informed Push System national rollout.

Next indicators:

C3 (Customer Satisfaction rating) is not reported at this time. Reason: Annual Indicator.

C4,5 & 6 (Complete, Accurate and Timely submissions to BI&A) are not reported at this time. Reason: Operationalizing sources and indicator calculations.

C7. Percentage of product lost due to theft, damage, expiry, or other causes, while under GHSC-PSM control (Product Loss Percentage)

Measure Definition

Numerator: Total value of product lost due to theft, damage, expiry, or other causes during the quarter.

Denominator: (for losses in transit) Total value of product delivered during the quarter.
 (for losses in storage) Average inventory balance (in USD) during the quarter

Task Order	Annual Target	FY 2017 Q2	Year to Date
TO1	N/A	2.23%	1.74%
TO2	N/A	0.063%	0.03%
TO3	N/A	0%	0.0022%
TO4	N/A	N/A	N/A
All TOs*	N/A	2.10%	1.57%

		Storage loss (%)	Storage loss (\$)	Transit loss (%)	Transit loss (\$)		Storage loss (%)	Storage loss (\$)	Transit loss (%)	Transit loss (\$)	
HIV	Damage			0.78%	\$210,000	PRH					
	Expiry	6.25%	\$602,902								
	Theft										
	Other			0.006%	\$1,555.20						
Malaria	Damage			0.008%	\$184.44	MCH					
	Expiry										
	Theft			0.056%	\$1,339.68						
	Other										

► The project reported a few instances of loss occurring along the global supply chain, in transit to countries, including:

- Three instances of small damages (<\$100 each) to TO2 products going to Senegal, Democratic Republic of Congo, and the Netherlands RDC;
- A shipment of metronidazole for Haiti that was missing several cartons (worth \$1,555.20) upon arrival at the central warehouse, deemed to be an error as products were transferred between airlines;
- Damage to cold chain items in Haiti due to improper storage and poor communication upon arrival at port (\$36,000), to be reimbursed by the vendor
- Loss of \$1,339.68 of ACTs from a customs warehouse in Angola while awaiting clearance by a local transporter, determined to be a theft. The loss has been reimbursed by the transporter.
- Damage to viral load reagents in Nigeria (\$174,000), which was improperly shipped to a port without a facility for handling frozen shipments.
- Total value of product delivered for Task Order 1 was \$26,803,618. Total value of product delivered for Task Order 2 was \$2,401,043.90.

► In-country losses included the expiry of \$1,134 worth of TO1 items in Vietnam (0.05% of total stock), and \$601,768 worth of TO1 stock in Haiti (8.27% of total stock). The Haiti office is continuing to work with the Ministry of Health to improve coordination and compliance around policy changes related to stock management.

Next indicator:

C9 (Submissions to the global knowledge management platform) is not being reported at this time. Reason: Global knowledge management platform not final.

C8. Number of global advocacy engagements in support of improved availability of essential health commodities by task order.

Measure Definition	Task Order	Annual Target	FY 2017 Q2	Year to Date
Number of global advocacy engagements. This measures the number of engagements of any kind at the global level that involve improved availability of essential health commodities.	TO1	N/A	7	7
	TO2	N/A	2	2
	TO3	N/A	4	4
	TO4	N/A	0	0
	Cross cutting	N/A	9	9
	All TOs	N/A	22	22

Description of Advocacy engagement

Name of Engagement	Brief Description
Task Order 1- HIV	
Hosting of Hosts ARV and Diagnostics Forecasting Working Group	The Antiretroviral and Diagnostics Forecasting Working Group is an annual meeting led by the World Health Organization to prepare for key supplier discussions in March when the working group will share forecast data for ARVs, HIV rapid test kits, and commodities for viral load, CD4, and early infant diagnosis.
Participation in African Society for Laboratory Medicines Conference, Dec. 3-8, 2016	The ASLM conference provided a venue to introduce the program and project to this key audience of people working within laboratory systems in sub-Saharan Africa and to deliver the messages that GHSC-PSM is a vital contributor to scaling up viral load testing to meet global 90-90-90 goals. GHSC-PSM is the owner of ForLab and LabEQIP, two essential tools for scaling up viral load testing.
Collaboration with project SOAR	Project SOAR uses the best available science, research expertise, and state-of-the-art methodologies to generate critical evidence to improve HIV prevention, care, and treatment policies and programs around the world.
Participation in ForLab Technical Working Group	No data available.
Participation in ARV Procurement Working Group	No data available.
Attendance at Large ARV Buyers and Sellers Forum 2016 in Geneva, Switzerland	The meeting was co-hosted by the Global Fund and USAID, and representatives from donor organizations, ARV manufacturers and governments attended. The meeting covered the following sessions: (1) Approaches to developing an initial version of the consolidated demand forecast for ARVs and the future outlook; (2) Demand management: main challenges and what are the actions needed from the big buyers; (3) Value for money: longer term collaboration and right behaviors to incentivize and unlock medium-term value objectives, beyond pure price; (4) Supplier performance evaluation: potential performance indicators, relevance and implications for suppliers and patients; (5) Supply and demand opportunities and challenges; and (6) "A Way forward": discussing next steps and potential actions and changes for stakeholders involved.
Participation in USAID VMMC Technical Working Group	No data available

Task Order 2- Malaria

Participation in Roll Back Malaria - Malaria in Pregnancy Working Group	The working group provided the Roll Back Malaria Partnership with strategic advice on best practices to accelerate Malaria in Pregnancy programming in both control and elimination settings. GHSC-PSM participates in quarterly conference calls and represents the voice of the supply chain.
Meeting with Clinton Health Access Initiative (CHAI)	Met to share understanding of CHAI and GHSC-PSM's approaches to quantify and forecast demand for malaria treatments and diagnostics in various countries, and to ensure that the work that CHAI is doing is complementary to the work that Chemonics has done/will do in this space.

Next indicator:

C9 (Submissions to the global knowledge management platform) is not being reported at this time. Reason: Global knowledge management platform not final.

C8. Number of global advocacy engagements in support of improved availability of essential health commodities by task order.

Description of Advocacy engagement

Name of Engagement	Brief Description
Task Order 3- PRH	
Participation in Ouagadougou Partnership Meeting, Dec. 12-14, 2016.	GHSC-PSM Introduced the project to representatives from the nine Ouagadougou Partnership countries including MOH and NGO, OP donors, and other stakeholders. GHSC-PSM also renewed its commitment to administering the Procurement Planning and Monitoring Report (PPMR) to help countries best manage their contraceptive stock and avoid stockouts.
Introductory meetings with Population Action International, Feb. 22, 2017	GHSC-PSM relayed relevant information regarding the organization of the supply chain, including what kind of data exists and where information will be made available to the public.
Collaboration with Advance Family Planning	The leadership met to discuss the advocacy activities taking place around FP2020, the Advocacy Collaborative, new WHO guidance on intermuscular depot medroxyprogesterone acetate, and planning for the second London Summit. There was also substantial discussion on how the community is mobilizing in response to the MCP and UNFPA funding. The partners and friends meeting was a lunch round-table with members of the Coordinated Supply Planning Group and country advocates to discuss the funding gap analysis work of the group.
Participation in Reproductive Health Global Traceability Advisory Group (RH GTAG)	GHSC-PSM Conducted supplier interviews with Cipla, Ipca, Macleods, Merk Mylan, and Pfizer on current GSI compliant identification and labeling capabilities to support supplier and product selection for the pilot being led by the Food, Medicine and
Cross-cutting	
Contribution to the WHO Global Price Reporting Mechanism	Task Order 1 and 2 The Global Price Reporting Mechanism is a database recording international transactions of HIV, tuberculosis and malaria commodities purchased by national programs in low- and middle-income countries.
Administering the Procurement Planning and Monitoring Reports for malaria and reproductive health and planning the launch of a PPMR for HIV Technical Working Group.	Task Order 1, 2 and 3 The Procurement Planning and Monitoring Report (PPMR) describes stock status of health commodities on a country-by-country basis. It is an essential mechanism for countries and donors to monitor stock status, improve data visibility, strengthen in-country coordination, and address critical stock imbalances in countries all over the world.
Exploration of manufacturing innovations	Task Order 1, 2,3 and 4 Representatives from USAID, GHSC-PSM, and the Bill and Melinda Gates Foundation-funded Medicine for All (M4All) met to discuss potential collaboration around fostering new and more cost effective processes for producing anti-malaria and antiretroviral (ARV) drugs. M4All's mission is to transform pharmaceutical manufacturing to reduce medication cost and improve patient access.
Forecasting and Supply Planning Workshop with Interagency Supply Chain Group	Task Order 1, 2,3 and 4 This was an initial meeting to introduce the PSM approach to the forecasting and supply planning tools and to invite ongoing engagement as we develop them.
Market intelligence gathering	Task Order 1, 2,3 and 4 This group completed in-depth investigations on production economics from starting materials on an initial set of ARVs (including Dolutegravir and Tenofovir Disoproxil (TDF) and Tenofovir Alafenamide (TAF)) as well as a detailed product breakdown on production of Rapid Diagnostic Tests, both for HIV and Malaria, and a strategy for market health improvement was initiated..
Supplier Summit	Task Order 1, 2,3 and 4 The project hosted more than 240 commodity suppliers, GHSC staff, and partners for a three-day Supplier Summit in Dubai. A range of topics was presented to provide suppliers with a thorough understanding of how to do business with the program.
Attendance at Convention on Pharmaceutical Ingredients (CPhI) Worldwide in Barcelona, Oct. 2016.	Task Order 1, 2,3 and 4 GHSC-PSM held a meeting with current manufacturers to seek out potential future suppliers of active pharmaceutical ingredients and finished dosage formulations. The purpose of these meeting is to build strategic relationships with upper management and get informed updates on market strategies and innovations -- all of which will inform PSM's sourcing strategies across Commodity Councils.
Attendance at GSI Global Healthcare Conference in Shanghai, Oct. 2016.	Task Order 1, 2,3 and 4 The Global GSI Healthcare Conference is a conference for healthcare leaders from private industry and government agencies to present the progress of worldwide efforts to implement GSI standards that improve patient safety, supply chain security and efficiency. PSM participated to discuss the implications of implementing GSI standards for PSM suppliers of commodities.
Participation in Reproductive Health Supplies Coalition	Task Order 3 and 4 Participated in an introductory meeting, the annual meeting chaired by both the Systems Strengthening Working Group and Maternal Health Supplies Caucus, and regular meetings of the Maternal Health Supplies Caucus. The meetings introduced audiences to GHSC-PSM and how the project supports FP2020 and RHSC goals.

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

Measure Definition

Numerator: Total number of molecular instruments that remained functional for the entire reporting period.

Denominator: Total number of molecular instruments.

Bubble Size: Estimated or approved FY2017 TA budget

Achievement

Target

FY 2017 Q1 Year to Date

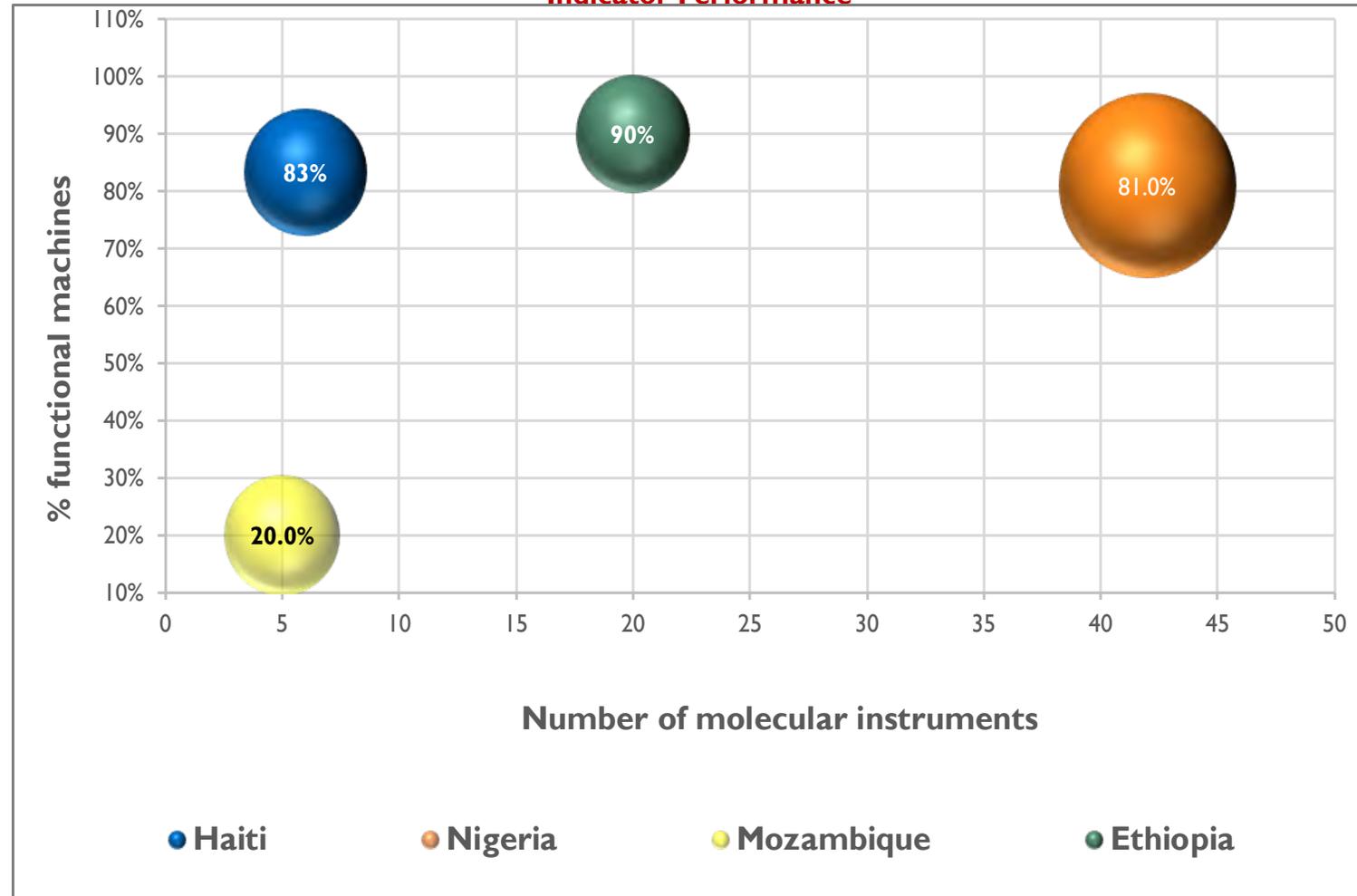
TO I

N/A

79%

78%

Indicator Performance



Analysis

► Ethiopia reported that 18 out of 20 molecular instruments remained functional throughout the reporting period. The remaining two have not yet been installed. Plans for installing the instruments will be finalized with the viral load/EID scale-up technical working group.

► Haiti reported 5 out of 6 instruments remained functional. The one breakdown was reported and has been repaired.

► Mozambique reported only 1 out of 5 instruments remaining functional for the entire quarter. The project has followed up with Abbot and other stakeholders regarding a batch issue, and Abbot training was conducted in March. GHSC-PSM and the MOH laboratory department are ensuring refreshers on instrument breakdown procedures.

► In Nigeria, 34 out of 42 instruments remained functional. The project is actively working with Roche on several items identified last quarter, including a connectivity project to gather real-time data on equipment functionality, monthly maintenance planning, and end-of-life assessments for some equipment.

Other Comments

Next indicators:

DI-DI0: (Global malaria indicators) will not be reported at this time. Reason: annual indicators.

USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM
Procurement and Supply Management

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