USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM
Procurement and Supply Management

IDIQ Project Monitoring and Evaluation Plan

Submitted March 9, 2022

USAID FROM THE AMERICAN PEOPLE

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

USAID FROM THE AMERICAN PEOPLE CDC

U.S. President's Malaria Initiative

The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project is funded under USAID Contract No. AID-OAA-I-15-0004. GHSC-PSM connects technical solutions and proven commercial processes to promote efficient and cost-effective health supply chains worldwide. Our goal is to ensure uninterrupted supplies of health commodities to save lives and create a healthier future for all. The project purchases and delivers health commodities, offers comprehensive technical assistance to strengthen national supply chain systems, and provides global supply chain leadership.

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

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Updates to the GHSC-PSM IDIQ Monitoring and Evaluation Plan

Submitted March 9, 2022

The following updates and changes have been added to the GHSC-PSM IDIQ Monitoring and Evaluation plan. Changes are reflected in the Performance Indicator Reference Sheets (PIRS) for each indicator. No further changes have been made to the M&E Plan. All changes will be implemented for FY2022 reporting, unless otherwise specified.

Targets

Updated quarterly and annual performance indicator targets for FY2022 and FY2023 have been updated in Annex C. Unless otherwise specified in the annex, targets for quarterly indicators have been set for each quarter's performance, as well as an annual target for the full year's performance. Annual performance will be determined by calculating the indicator result over the full year period (i.e., not an average of each quarter's performance). Annual performance will be calculated using all available data at the time of annual reporting, which may include updates and corrections to the datasets that were used to calculate performance in earlier quarters.

A2. On-time completion rate for QA processes

Data Quality Section updated – A note was added to the "Reliability" portion of the Data Quality section to note that the standard lead time for two product groups (artesunate injectable and SPAQ) have been updated. The standard lead times were extended for both product groups following changes to the operating environment due to COVID-19, changes to GHSC-PSM's allocation strategies and demands on QA labs, and a review of standard practices.

Acronyms

ACT	artemisinin-based combination therapy
ADD	agreed delivery date
ADS	Automated Directives System
AL	artemether-lumefantrine
APE	absolute percent error
ARTMIS	Automated Requisition Tracking Management Information System
ARV	antiretroviral
AS/AQ	artesunate/amodiaquine
CLEAR	Communications, Learning, Evidence, and Analytics for Results
CMEP	Country Monitoring and Evaluation Plan
CMS	central medical store
CoC	Certificate of Conformance
CoP	Community of Practice
CPR	country performance review
CS	contraceptive security
CSP	coordinated supply planning
DO	distribution order
EDD	estimated delivery date
EID	early infant diagnosis
ELT	estimated lead time
EUV	end-user verification
FASP	forecasting and supply planning
FP	family planning
FP/RH	family planning and reproductive health
FMIS	financial management information system
FY	fiscal year
GAD	goods availability date
GHSC-PSM	Global Health Supply Chain-Procurement and Supply Management
GHSC-QA	Global Health Supply Chain-Quality Assurance
HIV/AIDS	human immunodeficiency virus/acquired immune deficiency syndrome
HRIS	Human resource information system
IDIQ	Indefinite delivery/indefinite quantity
IG	Inspector General
IR	Intermediate result
ITN	Insecticide-treated net
IUD	Intrauterine device
LLIN	long-lasting insecticide-treated net
LMIS	logistics management information systems
M&E	monitoring and evaluation
MAPE	mean absolute percent error
MCH	maternal and child health
MIS	management information system
MNCH	maternal, newborn, and child health

NA	not applicable
NGO	nongovernmental organization
NSCA	National Supply Chain Assessment
OOS	out of specification
ORS	oral rehydration salts
OTD	on-time delivery
OTIF	on time, in full
PCMD	Preventing Child and Maternal Deaths
PEPFAR	President's Emergency Plan for AIDS Relief
PMI	U.S. President's Malaria Initiative
PMP	performance management plan
PO	purchase order
POD	proof of delivery
PPMR	Procurement Planning and Monitoring Report
PPMRm	Procurement Planning and Monitoring Report for Malaria
PRH	population and reproductive health
QA	quality assurance
QMS	Quality Management System
RDC	regional distribution center
RDT	rapid diagnostic test
RFx	request for x
RH	reproductive health
RO	requisition order
RTK	rapid test kit
SCC	Supply Chain Council
SCOR	Supply Chain Operations Reference
SDP	service delivery point
SKU	stock-keeping unit
SOP	standard operating procedure
SP	sulfadoxine/pyrimethamine
SP/AQ	sulfadoxine-pyrimethamine + amodiaquine
SRA	Stringent Drug Regulatory Authority
TBD	to be determined
TO	task order
TWG	technical working group
USAID	United States Agency for International Development
USD	United States dollars
VMMC	voluntary medical male circumcision
WMS	warehouse management system

Introduction

This document presents the monitoring and evaluation (M&E) plan designed for the USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) (GHSC-PSM) project. The purpose of GHSC-PSM is to ensure uninterrupted supplies of health commodities in support of U.S. government-funded public health initiatives around the world. The project provides direct procurement and supply chain management support to the President's Emergency Plan for AIDS Relief (PEPFAR), the U.S. President's Malaria Initiative (PMI), and USAID's family planning and reproductive health program. It also contributes toward USAID's goal to End Preventable Child and Maternal Deaths and to address new and emerging issues related to child survival and maternal health. To support U.S. government-funded global health activities, GHSC-PSM manages a wide array of health commodity procurement services and provides related systems-strengthening technical assistance encompassing all elements of a comprehensive supply chain.

The principles of data quality and visibility, evidence-based decision-making, and continuous learning and improvement are at the core of the GHSC-PSM project. Led by the M&E team and guided by the M&E plan, we strive to provide necessary, relevant, and high-quality data to our own project staff and leaders, USAID and stakeholders across the U.S. government, and our partners in the global public health community. This project represents a significant, collaborative investment in information tools and expertise, and as such it has a unique opportunity to transform data into the insights that will drive supply chain advances in countries across the world.

This M&E plan is presented in six sections:

- Section 1 describes the project's design and theory of change, as illustrated by the results framework.
- Section 2 specifies the indicators that GHSC-PSM uses to gather evidence to illustrate progress toward the project's objectives, as well as the assumptions underpinning the selection of those indicators.
- Section 3 includes our evaluation approach.
- Section 4 details our approach to learning and continual improvement.
- Section 5 provides background on management of the project's data.
- Section 6 lays out the monitoring and evaluation roles and responsibilities across the project.

Finally, the plan includes three annexes: Annex A lists specific products and product groups that GHSC-PSM will track to represent supply chain performance, and Annex B contains Indicator Reference Sheets for all performance and context indicators that the project will collect and report. Annex C shows tables of performance indicator targets and past performance.

Section 1: Results Framework

GHSC-PSM's goals and project logic are illustrated below in our results framework on the next page.

Exhibit 1: GHSC-PSM Results Framework

Global Goals, Initiatives and Partnerships		
Post-2015 Development Agenda Commission on Life Saving Commodities	Roll Back Malaria A Promise Renewed Improved Maternal Health	Family Planning 2030 Women Deliver Reduced Child Mortality

↑

U.S. Government Initiatives and Strategies		
USAID Global Health Strategic Framework	U.S. President's Emergency Plan for AIDS Relief U.S. President's Malaria Initiative	End Preventable Child and Maternal Deaths and address new and emerging issues related to child survival and maternal health as relevant (such as Zika).

↑

GHSC-PSM Goal: Ensured uninterrupted supply of health commodities to prevent suffering, save lives, and create a brighter future for families across the globe

↑ ↑ ↑

Objective 1: Improved availability of health commodities (global procurement and logistics)	Objective 2: Strengthened in-country supply chain systems	Objective 3: Effective global collaboration to improve long term availability of health commodities
Intermediate Result (IR) 1.1. Enhanced global health commodity procurement	IR 2.1. Improved strategic planning and implementation related to supply chain management and commodity security	IR 3.1. Improved strategic engagement with global partners to ensure appropriate strategic coordination
IR 1.2. Strengthened global logistic processes associated with the storage and delivery of any health commodity to any point in donor-supported countries	IR 2.2. Improved in-country logistics, including effective and efficient delivery of health commodities to service sites	IR 3.2. Global market dynamics research and innovations conducted, shared and implemented
IR 1.3. Ensured adherence to quality assurance requirements	IR 2.3. Increased capacity building efforts by implementing strategies to transfer of skills, knowledge, and technology for improved and sustained performance	IR 3.3. Improved awareness and advocacy to improve availability of essential health commodities
IR 1.4. Improved data visibility	IR 2.4. Strengthened enabling environments to improve supply chain performance	IR 3.4. Improved coordination and collaboration between TOs within the IDIQ and with other USAID supply chain funded activities

High-level project design

Global and U.S. Government Goals

The GHSC-PSM project is a significant component of the U.S. government's commitment to achieving the health goals of the global community as well as its own programs and initiatives.

The project contributes to USAID's three strategic global health priorities[1]:

- Preventing child and maternal deaths (PCMD)
- Controlling the HIV/AIDS epidemic
- Combating infectious diseases

GHSC-PSM also contributes to the results of a host of other U.S. government-backed initiatives, including:

- U.S. President's Malaria Initiative (PMI)
  A program designed to work with supported countries and partners to further reduce malaria deaths and substantially decrease malaria morbidity, towards the long-term goal of elimination

- President's Emergency Plan for AIDS Relief (PEPFAR/Emergency Plan)
  A program supporting HIV/AIDS efforts in more than 50 countries, ensuring access to services by all populations, including the most vulnerable and at-risk groups

- Roll Back Malaria Partnership
  A partnership that contributes to the vision of a world free from the burden of malaria, and the specific goals for reducing malaria mortality rates and eliminating malaria in countries

- A Promise Renewed
  A global pledge to end preventable child and maternal deaths

- Family Planning 2020 (FP2030)
  A global movement that seeks a future where women and girls everywhere have the freedom and ability to lead healthy lives, make their own informed decisions about using contraception and having children, and participate as equals in society and its development.

- UN Commission on Life-Saving Commodities for Women and Children
  A program to strengthen commodity markets and national delivery systems

- UN Sustainable Development goal 3
  A program to ensure healthy lives and promote well-being for all at all ages

The project goal — *ensuring an uninterrupted supply of health commodities* — is expected to be achieved by fulfilling three distinct objectives:

- **Objective 1**: Improved availability of health commodities
- **Objective 2**: Strengthened in-country supply chain systems

[1] https://www.usaid.gov/what-we-do/global-health (accessed 12/26/2017)

- **Objective 3**: Effective global collaboration to improve long-term availability of health commodities

Each result area is necessary, but not in itself sufficient to ensure that GHSC-PSM's activities lead to lasting positive change. The project is expected not only to deliver the right commodities to countries, but also to strengthen the existing systems that enable them to be distributed efficiently to the appropriate service delivery points to ensure long-term availability of essential commodities to end-users.

When a national health system is functioning properly, procurement is informed by population needs, and the distribution of essential health products and the delivery of services are patient-centered. Sufficient resources (human and other) must be in place to sustain this strategy and maintain results.

Task Orders

GHSC-PSM brings multiple U.S. government-funded commodity supply chains and systems strengthening programs together under one integrated mechanism for the first time. To ensure the ability to appropriately structure activities, allocate resources, manage finances, and assess the results of each area separately, the health areas within the project's mandate are distributed into individual task orders (TOs) as follows:[2]

- TO1: HIV/AIDS
- TO2: Malaria
- TO3: Family planning and reproductive health (FP/RH)
- TO4: Maternal and child health (MCH) and Zika

The task order structure enlists the health area leadership and expertise needed to address the unique challenges of each supply chain, while leveraging opportunities for streamlined efforts and focusing on a set of shared objectives.

Objective 1: Improved availability of health commodities (global procurement and logistics)

To achieve this objective across the countries and programs participating in the project, GHSC-PSM works toward four intermediate results, described below. In general, most work conducted by the Global Supply Chain team and Management Information System (MIS) teams at GHSC-PSM headquarters falls under Objective 1. Additional headquarters teams, such as Task Order Directors, Commodity Security, Market Dynamics, Forecasting and Supply Planning, and Monitoring and Evaluation, have responsibilities that cut across objectives, including Objective 1.

- Intermediate Result 1.1: Enhanced global health commodity procurement

The project supports strategic sourcing, selection, procurement and subcontractor management, risk management, supply and demand forecasting, and continuous improvement of quality-assured commodities.

- Intermediate Result 1.2: Strengthened global logistics processes associated with the storage and delivery of any health commodity to any point in donor-supported countries

[2] The project includes a fifth task order for health systems strengthening activities in Kenya, overseen by the USAID/Kenya mission. It has a distinct results framework and separate monitoring and evaluation plan.

The project deploys technical expertise to strengthen all logistics processes associated with the storage and delivery of any health commodity to any point in donor-supported countries.

- Intermediate Result 1.3: Ensured adherence to quality assurance requirements[2]

The project ensures adherence to USAID's quality assurance (QA) requirements and application of consistent QA and quality control processes to manage product recalls, and build in-house QA capacity of key stakeholders throughout the supply chain.[3]

- Intermediate Result 1.4: Improved data visibility

The project provides USAID and partner countries the capacity to use data to effectively manage the global supply chain from end to end in real time.

Indicator Mapping to IRs

GHSC-PSM will use the following indicators to measure its achievement of these intermediate results. Additional details about these indicators can be found in Section 2 and Annex B.

Exhibit 2. Indicator Mapping to Objective 1 Intermediate Results

Objective 1: Improved availability of health commodities (global procurement and logistics)	
Intermediate Result	**Indicators**
Intermediate Result 1.1 Enhanced global health commodity procurement	A1a. On-time, in-full delivery (OTIF) A1b. On time delivery (OTD) A2. On-time completion rate for QA processes A3. Cycle time (average) A6a. Absolute percent supply plan error A6b. Absolute percent forecast error A7. Temporary waiver percentage A10. Framework contract percentage A14. Average vendor rating score A15. QA investigation report submission A16. Percentage of backlogged line items
Intermediate Result 1.2 Strengthened global logistic processes associated with the storage and delivery of any health commodity to any point in donor- supported countries	A1a. OTIF A1b. OTD A3. Cycle time (average) A4. Inventory turns A5. Total landed cost A6a. Absolute percent supply plan error A6b. Absolute percent forecast error A7. Temporary waiver percentage A8. Average percentage of shelf life remaining A16. Percentage of backlogged line items C7a. Product loss due to expiry C7b. Product loss due to theft, damage, and other causes C11. Supply chain policies, regulations, strategies, or standard operating procedures (SOPs) developed or updated with GHSC-PSM assistance.

[3]Note that this Intermediate Result applies only to Task Order 2. QA activities for other task orders are carried out under the GHSC- QA project.

Objective 1: Improved availability of health commodities (global procurement and logistics)	
Intermediate Result	**Indicators**
Intermediate Result 1.3 Ensured adherence to quality assurance requirements	A2. On-time completion rate for QA processes A13. Out-of-specification percentage A14. Average vendor rating score (QA lab vendors) A15. QA investigation report submission
Intermediate Result 1.4 Improved data visibility	

Objective 2: Strengthened in-country supply chain systems

Systems strengthening activities are conducted on the ground in countries where the USAID mission has bought into the GHSC-PSM mechanism. In these countries, the project conducts activities of varying scope, ranging from limited short-term technical assistance with counterpart governments, to ongoing, in-depth technical assistance and support, provided through field offices with long-term staff. In a few instances, GHSC-PSM is also responsible for operating in-country supply chains, including product storage and last-mile delivery to service delivery points. The scale and scope of GHSC-PSM's activities are determined by host-country governments and USAID missions, in consultation with project technical experts. Objective 2 activities are driven by field-based staff, with support and technical advice from headquarters-based health systems strengthening experts, task order directors, and project management units.

To achieve this objective across the countries and programs participating in the project, GHSC-PSM works toward four intermediate results:

- Intermediate Result 2.1: Improved strategic planning and implementation related to supply chain management and commodity security

GHSC-PSM will provide TA to ensure that countries have a strategic plan for their supply chain which aligns all actors around a desired future state and includes activities that are prioritized, actionable, and inclusive of technical, governance, and financing best practices.

- Intermediate Result 2.2: Improved in-country logistics, including effective and efficient delivery of health commodities to service sites

The project provides technical assistance in health commodity quantification and forecasting, supply planning, procurement, warehousing, inventory management, distribution and transportation, healthcare waste management, quality assurance, product selection, identification of barriers to importation, loss prevention, recalls, supply chain design, data collection, and construction.

- Intermediate Result 2.3: Increased capacity building efforts by implementing strategies to transfer of skills, knowledge, and technology for improved and sustained performance

The project provides TA focused on building the capacity of local supply chain experts and installing the necessary technology (e.g., warehouse management system, logistics management information system (LMIS)) for a lasting supply chain system within the countries where we work. Sustainable human resources development that contributes to positive health outcomes requires a holistic approach to improve the systems, processes, and performance factors affecting an organization and its workforce, with a focus on professionalization.

- Intermediate Result 2.4: Strengthened enabling environments to improve supply chain performance

The project advocates for change through collaborating with key stakeholders to formulate and implement new and better policies, to allocate resources effectively, to engage and coordinate multi-sector efforts to improve health supply chains, and to compile and present the data necessary for sound decision-making.

Indicator Mapping to IRs

GHSC-PSM will use the following indicators to measure its achievement of these intermediate results. Additional details about these indicators can be found in Section 2 and Annex B.

Exhibit 3. Indicator Mapping to Objective 2 Intermediate Results

Objective 2: Strengthened in-country supply chain systems	
Intermediate Result	**Indicators**
Intermediate Result 2.1 Improved strategic planning and implementation related to supply chain management and commodity security	B5. Percentage of required annual forecasts conducted B6. Percentage of required supply plans submitted to GHSC-PSM B7. Percentage of total spent or budgeted on procurement of commodities for public sector services, by funding source B10. Percentage of GHSC-PSM-supported countries that have a functional logistics coordination mechanism in place B11. Percentage of leadership positions in supply chain management that are held by women B12. Absolute percent consumption forecast error
Intermediate Result 2.2 Improved in-country logistics, including effective and efficient delivery of health commodities to service sites	B1. Stockout rate at service delivery points B2. Stocked according to plan at storage sites B3. Service delivery point reporting rate to LMIS B4. Average rating of in-country data confidence B12. Absolute percent consumption forecast error C10. Percentage of GHSC-PSM-procured or supported molecular instruments that remained functional
Intermediate Result 2.3 Increased capacity building efforts by implementing strategies to transfer of skills, knowledge, and technology for improved and sustained performance	B8. Percentage of targeted supply chain activities in which the host country entity has achieved technical independence with GHSC-PSM technical assistance C2. Number of people trained C10. Percentage of GHSC-PSM-procured or supported molecular instruments that remained functional
Intermediate Result 2.4 Strengthened enabling environments to improve supply chain performance	B7. Percentage of total spent or budgeted on procurement of commodities for public sector services, by funding source B8. Percentage of targeted supply chain activities in which the host country entity has achieved technical independence with GHSC-PSM technical assistance B9. Supply chain technical staff turnover rate B10. Percentage of GHSC-PSM-supported countries that have a functional logistics coordination mechanism in place

Objective 3: Effective global collaboration to improve long-term availability of health commodities

To achieve this objective, GHSC-PSM engages relevant global partners to ensure strategic coordination, appropriate and adequate use of market intelligence information; generate awareness of the project's supply chain efforts and successes; and create suitable global environments for the project's core activities to thrive.

To achieve this objective across the countries and programs participating in the project, GHSC-PSM works toward four intermediate results:

- Intermediate Result 3.1: Improved strategic engagement with global partners to ensure appropriate strategic coordination

The project engages with relevant global partners to ensure appropriate strategic coordination, participates in key global health supply chain meetings, and shares lessons learned and best practices.

- Intermediate Result 3.2: Global market dynamics research and innovations conducted, shared, and implemented

The project collects, analyzes, and reports market intelligence information and data for the U.S. government and partners for making strategic decisions.

- Intermediate Result 3.3: Improved awareness and advocacy to improve availability of essential health commodities

The project supports awareness-raising efforts with partners who have global or regional reach in health supply chain management, with the goals of making commodity security part of development agendas, strengthening programs, and helping to mobilize new and additional resources for commodity security.

- Intermediate Result 3.4: Improved coordination and collaboration between TOs within the IDIQ and with other USAID supply chain–funded activities

The project advocates for change through collaboration with key stakeholders to formulate and implement new and better policies, to allocate resources effectively, to engage and coordinate multi-sector efforts to improve health supply chains, and to compile and present the data necessary for sound decision-making.

Indicator Mapping to IRs

GHSC-PSM will use the following indicators to measure its achievement of these intermediate results. Additional details about these indicators can be found in Section 2 and Annex B.

Exhibit 4. Indicator Mapping to Objective 3 Intermediate Results

Objective 3: Effective global collaboration to improve long-term availability of health commodities	
Intermediate Result	**Indicators**
Intermediate Result 3.1 Improved strategic engagement with global partners to ensure appropriate strategic coordination	C8. Number of global advocacy engagements in support of improved availability of essential health commodities
Intermediate Result 3.2 Global market dynamics research and innovations conducted, shared and implemented	C1. Number of innovations that were developed, implemented or introduced, and are related to the health commodity market or supply chain best practices
Intermediate Result 3.3 Improved awareness and advocacy to improve availability of essential health commodities	C8. Number of global advocacy engagements in support of improved availability of essential health commodities
Intermediate Result 3.4 Improved coordination and collaboration between TOs within the IDIQ and with other USAID supply chain funded activities	

Section 2. Indicators

Indicator types

GHSC-PSM uses two types of indicators for M&E: performance indicators and context indicators:

- **Performance indicators** measure the outputs and outcomes of project activities as they relate to its results framework. They measure the results that are considered to be within the project's manageable control, where there is a logical and reasonable assumption that GHSC-PSM activities have a direct impact on the performance of the metric. This includes most of the indicators related to the global supply chain (Objective 1) and many crosscutting indicators related to strategic engagement and project outputs.
- **Context indicators** monitor factors outside the control of USAID and GHSC-PSM that are still related to the achievement of project objectives, especially those related to the public health commodity supply chain systems that GHSC-PSM and its partners are working to strengthen (Objective 2). They guide strategic direction for stakeholders (including GHSC-PSM field offices, ministries of health, donors, nongovernmental organizations, and others) working to improve supply chain performance. GHSC-PSM will routinely monitor these indicators to identify areas where systems strengthening is needed and to assess the effectiveness of system strengthening approaches. With the collective contribution of GHSC-PSM and other key stakeholders, we expect to see improvements in these indicators over time. GHSC-PSM compiles context indicator data for all countries in which the project maintains a field office, regardless of the extent of the project's engagement in the country. Therefore, the results in a given country, for a specific point in time, are not solely a consequence of GHSC-PSM's activities, but rather, are reflective of the many stakeholders and elements that influence in-country supply chain performance.

Indicators in this M&E plan are organized into three broad categories:

- Global supply chain indicators
- In-country systems strengthening indicators
- Crosscutting indicators

Each category is discussed in detail below. Within each category, context indicators have been identified with an asterisk (*).

Global supply chain indicators

Supply Chain Operations Reference (SCOR) Model

In selecting indicators to monitor the intermediate results achieved in the Global Supply Chain, the project turned to a recognized industry standard: The Supply Chain Council's Supply Chain Operations Reference model. The Supply Chain Council (SCC) is a global trade association of practitioner companies. SCC developed the SCOR model as a reference for evaluating and comparing activities and performance across many varied types of supply chains. In their words, "the SCOR-model captures SCC's consensus view of supply chain management. It provides a unique framework that links business process, metrics, best practices, and technology into a unified

structure to support communication among supply chain partners and to improve the effectiveness of supply chain management and related supply chain improvement activities."[4]

GHSC-PSM's Global Supply Chain business model is designed in a Plan, Source, Deliver/Return process workflow, which aligns closely with several of the primary management process of the SCOR model. The project has selected and adapted a basket of SCOR metrics that directly reflect these processes and relate to our strategy of delivery of service excellence at the lowest cost.

Each SCOR metric is linked to one of five essential supply chain attributes: reliability, responsiveness, agility, cost, and asset management efficiency. These attributes are listed and defined in the table below. The table also notes the indicator(s) that GHSC-PSM is using to monitor each attribute, and how those project indicators map back to SCOR's standardized metrics.

Exhibit 5. Application of SCOR Key Performance Indicators to GHSC-PSM

Attribute	Definition	SCOR indicators	GHSC-PSM indicators
Reliability	Supply chain performance in delivering the correct product to the correct place and customer at the correct time, in the correct condition and packaging, with the correct quantity and documentation.	Percent of orders delivered in full Delivery Performance to Customer commit date Forecast accuracy	A1a. OTIF delivery A1b. OTD A6a. Absolute percent supply plan error A6b. Absolute percent forecast error
Responsiveness	The speed at which a supply chain provides products to the customer.	Order fulfillment cycle time	A3. Cycle time (average)
Agility	The ability of the supply chain to respond to external influences or market changes.	Overall value at risk	A8. Average percentage of shelf life remaining
Cost	The costs associated with operating the supply chain.	Total cost to serve	A5. Total landed cost
Asset Management Efficiency	The effectiveness of an organization in managing assets to support demand satisfaction. This includes the management of all assets: fixed and working capital.	Inventory days of supply	A4. Inventory turns

Project Indicator

While SCOR serves as a useful starting point for monitoring global supply chain performance, GHSC-PSM has also developed additional indicators to monitor the full breadth of project intermediate results and the unique aspects of supply chain operations in the global development context. Below is a complete list of the project's Global Supply Chain indicators:

- A1a. On-time, in-full delivery: Percentage of line items delivered on time and in full, within the minimum delivery window

[4] Supply Chain Operations Reference Model, Revision 11.0, i.1.

- A1b. On-time delivery: Percentage of line items delivered on time, within the minimum delivery window
- A2. Percentage of QA processes completed within the total estimated QA lead time (on-time completion rate for QA processes)
- A3. Cycle time (average)
- A4. Inventory turns (average number of time inventory cycles through (GHSC-PSM-controlled global facilities)
- A5. Total landed cost (total cost of all supply chain operations and expenses associated with delivery of one unit of product)
- A6a. Absolute percent supply plan error, with variants annual absolute percent error and supply plan bias
- A6b. Absolute percent forecast error, with variants annual absolute percent error and forecast bias
- A7. Percentage of line items imported using a temporary registration waiver
- A8. Average percentage of shelf life remaining for warehoused commodities, weighted by the value of each commodity's stock (product at risk percentage)
- A10. Percentage of product procured using a framework contract (Framework contract percentage)
- A13. Percentage of batches of product showing nonconformity (out-of-specification percentage)
- A14. Average vendor rating score
- A15. Percentage of quality assurance investigation reports submitted within 30 calendar days of outcome determination (QA Investigation report submission)
- A16. Percentage of backlogged line items

Due to the size and complexity of the GHSC-PSM project, each indicator is captured and reported at the level of disaggregation needed for technical teams and USAID to gain insights and manage performance. While specific disaggregation elements will vary by indicator, most global supply chain indictors will report the following disaggregations:

- **Task order:** Data will be disaggregated by task order to enable task order teams and USAID bureaus and initiatives to drill down into the specifics of their program.
- **Tracer product category:** All commodities that GHSC-PSM procures are classified into a tracer product category, which enables project stakeholders to see and analyze performance and trends across different product groups. A list of tracer product categories is included in Annex A.

Additional disaggregation elements may include: sourcing channel, transportation mode, financial cost category, destination country, health element code, vendor type, and many others. Specific disaggregation elements for each indicator are listed in the Performance and Context Indicator Reference Sheets in Annex B. Often, additional disaggregation elements are available for analysis in GHSC-PSM data collection systems and may be reported where they provide useful insight, or at USAID's request.

Data Sources and Collection Methods

The project relies on the following sources and systems for global supply chain indicator data:

Automated Requisition Tracking Management Information System (ARTMIS)

ARTMIS is the core technology at the heart of GHSC-PSM's global supply chain operations and data visibility. It is a smart supply chain MIS that automates and captures data at every step along the chain, from demand planning and sourcing to order management, logistics, warehouse management, financial management, and supply chain optimization. It integrates three best-in-breed solutions: IBM's e-Commerce Suite, Kuehne + Nagel's Logistics Management Information System (K+N LMIS), Ivalua's sourcing and contacts platform, and Chemonics' enterprise resource planning system (Microsoft Dynamics 365). ARTMIS gathers data in near real time with a high degree of accuracy, which users can then access though a robust set of reports and dashboards. The systems within ARTMIS are the project's main source of data for most global supply chain indicators related to order processing and delivery, procurement, inventory management, and costs (A1a, A1b, A3, A4, A5, components of A6a, A6b, A7, A8, A10, A14, and A16).

Country supply plans

In countries where USAID and/or other U.S. government agencies provide funding for health commodities, forecasting and procurement, specialists develop supply plans to schedule out the countries' order and delivery needs, in line with their forecasted demand, current and projected stock levels, and commodity budgets. Country supply plans help predict product demand over the next several quarters, and as such they are a critical data source for supply planning, inventory management, and strategic sourcing activities. They are also used in calculating the project's supply plan and forecast error indicators (A6a and A6b).

Quality assurance database (TO2 only)

Quality assurance (QA) activities for TO2, including product sampling, testing and quality assurance incident investigations, are managed within the GHSC-PSM project consortium. Records such as Certificates of Conformance, incident investigation reports, and QA vendor subcontracts are managed by the GHSC-PSM TO2 QA team. Data related to product quality, testing outcomes, process lead times, and QA vendor performance is tracked using Excel databases. These records are the sources for indicators A2, A13, A14 (QA lab vendors only), and A15.

Similar QA activities for products procured under TOs 1, 3, and 4 are conducted by the GHSC-Quality Assurance contract. Quality-related data and indicators for these task orders are managed and reported by GHSC-QA.

Vendor scorecards

Three groups of global supply chain vendors are evaluated on their performance at least quarterly through scorecards: commodity vendors, quality assurance laboratory vendors (TO 2), and freight forwarder (third-party logistics) vendors. These scorecards are managed by the Supplier Relationship Team, Quality Assurance Team, and Deliver/Return team, respectively. Vendors are assessed on their adherence to contractual requirements that affect GHSC-PSM's ability to perform its own key functions. These assessment criteria, largely drawn from SCOR metrics, include, among others, on-time provision of commodities or services, invoice accuracy, quality assurance, and customer service. Data are drawn from ARTMIS, financial documents, and in the case of customer service, qualitative assessments by relevant Global Supply Chain personnel. Results from the vendor scorecards are used both for indicator reporting (see indicator A14. Average vendor rating score), enabling the project to track overall trends in vendor performance and their linkages to GHSC-PSM's performance, and as one component in the comprehensive, ongoing vendor management strategies employed by each team.

In-country systems strengthening indicators

GHSC-PSM will use the following indicators for regular monitoring of country-level systems strengthening contexts and programs. Indicator reference sheets have been developed for each indicator and are provided in Annex B. In consultation with USAID, these indicators have been standardized across the four TO health elements, to reduce field office reporting burden and ensure harmonization of definitions and data collection processes.

Most of the systems strengthening indicators in this M&E plan are context indicators. As noted at the beginning of this section, USAID and GHSC-PSM assume that the results of these indicators reflect the contributions and influence of numerous stakeholders, extending beyond the project's immediate control. Context indicators are indicated with an asterisk (*) below.

The in-country indicator set is composed of two sub sections: in-country supply chain operations and sustainability.

In-country supply chain operations indicators

Indicators in this category measure the outcomes of routine supply chain operations. While the performance on many of these indicators may not be immediately attributable to GHSC-PSM's activities in the short term, all are related to the project's long-term goal of ensuring an uninterrupted supply of health commodities in country public health systems. GHSC-PSM's core in-country supply chain operations indicators include:

- B1. Stockout rate at service delivery points (SDPs)
- B2. Percentage of stock status observations in storage sites where commodities are stocked according to plan, by level in the supply system
- B3. Service delivery point (SDP) reporting rate to the logistics management information system (LMIS)
- B4. Average rating of in-country data confidence at the central, subnational, and SDP levels*
- B5. Percentage of required annual forecasts conducted
- B6. Percentage of required supply plans submitted to GHSC-PSM during the quarter
- B12. Absolute percent consumption forecast error, with forecast bias variant*

Sustainability indicators

Sustainability is achieved when host-country partners and beneficiaries are empowered to take ownership of all aspects of their public-sector supply chains, including financing and maintaining results beyond the life of the USAID project. Sustainability is a fundamental principle within USAID. Elements of sustainability include but are not limited to:

- Health service characteristics, such as maintained improvements in quality, accessibility, and equity of use;
- Institutional and workforce capacity, such as maintained improvements in performance levels to achieve and sustain results or the increasing effectiveness of institutions to manage, implement, and evaluate activities;
- Financing and price, such as ensuring that activities or services are gradually tied to sustainable financing models or increasing cost effectiveness;

- Capacity of recipient communities, such as increased participation of targeted populations in activity design, implementation, and evaluation, or increased community ownership of public health;
- Socio-cultural conditions enabling the work of these agencies, such as strengthening enabling social and cultural environments required for sustaining project results; and
- Diversified and sustainable health services funding provided by local partners.

GHSC-PSM has developed the following indicators to monitor the sustainability of supply chains in project-supported countries:

- B7. Percentage of total spent or budgeted on procurement of commodities for public sector services by the local government, U.S. government, the Global Fund, or other sources[5]
- B8. Percentage of targeted supply chain activities in which the host country entity has achieved technical independence with GHSC-PSM technical assistance
- B9. Supply Chain Technical Staff Turnover Rate*
- B10. Percentage of GHSC-PSM-supported countries that have a functional logistics coordination mechanism in place*
- B11. Percentage of leadership positions in supply chain management that are held by women (in countries where GHSC-PSM is providing technical assistance related to workforce development)*

Data sources and collection methods

The project relies on the following sources and systems for in-country systems strengthening indicator data:

Routine LMIS

For routine data related to stock availability, last-mile delivery, product consumption, and reporting rates, GHSC-PSM will leverage existing in-country warehouse and LMISs. Typically, service delivery points report stock level and consumption data in to an LMIS routinely, using either paper forms or electronic software. This data flows up the supply system to higher levels, where it is used to forecast demand, plan procurements, schedule deliveries, and make strategic decisions for the supply chain. Warehouse management software is often integrated with health facility reports, or operated in parallel, to track inbound orders, issues, last-mile delivery, shelf life, and other inventory data.

While these systems are the foundational data sources for all supply chain stakeholders, automation, coverage, and data quality within these systems vary greatly among countries and health areas. In some cases, routine LMIS data may be nonexistent or insufficient to report on GHSC-PSM systems strengthening indicators. In some instances, field offices may substitute surveys or other methods for collecting the required data, and in other instances, countries without a functional LMIS or other reliable data source may not be able to report on the related indicators.

GHSC-PSM data collection tools and standard operating procedures

For indicator data that is not collected as a matter of routine supply chain operations, the project has developed a set of tools and standard operating procedures to guide data collection in country. Data sources include financial documents, project work plans, training attendance records, meeting minutes, SDP stock or bin cards, human resources information systems, etc. Collection methods

[5] Context indicator

include document reviews, site visits, surveys, key informant interviews, etc. Sources and methods for each indicator are noted at a high level in the Indicator Reference Sheets (Annex B) and in more detail in the project's Standard Operating Procedures for In-Country Non-Routine M&E Indicators manual.

Crosscutting indicators

When the project is working across multiple objectives to achieve meaningful supply chain results, we have developed crosscutting indicators to measure our progress in these areas. Key areas of crosscutting involvement include innovation and research, capacity building, global advocacy and strategic engagement, policy, and the spaces where global and local procurement and logistics intersect. The project's crosscutting indicators are as follows:

- 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
- C2. Number of people trained
- C7a. Percentage of product lost due to expiry while under GHSC-PSM control
- C7b. Percentage of product lost due to theft, damage, or other causes, while under GHSC-PSM control
- C8. Number of global advocacy engagements in support of improved availability of essential health commodities
- C10. Percentage of GHSC-PSM-procured or supported molecular instruments that remained functional during the reporting period
- C11. Supply chain policies, regulations, strategies, or SOPs developed or updated with GHSC-PSM assistance

Data sources and collection methods

Data for crosscutting indicators flows from a variety of sources, reflecting the nonstandard and intersecting nature of the metrics themselves. Indicators collected from in-country activities and logistics systems, such as innovations implemented, people trained, product loss (in-country), and molecular instrument functionality, are uploaded to DevResults from the field offices. Product loss while in storage at RDCs or while in transit to countries is collected through the Continual Improvement Incident Tracker. Qualitative descriptions of other innovations, global advocacy engagements, and supply chain policies and strategies are collected in narrative form from experts and leaders across the project.

U.S. President's Malaria Initiative indicators

The following standard indicators are also included for annual PMI reporting. These indicators will have no baselines or targets in GHSC-PSM IDIQ reporting.

- Number of artemisinin-based combination therapy (ACT) treatments purchased with U.S. government funds
- Number of malaria rapid diagnostic tests (RDTs) purchased with U.S. government funds
- Number of insecticide -treated nets (ITNs) purchased with U.S. government funds.
- Number of sulfadoxine-pyrimethamine (SP) treatments purchased with U.S. government funds

- Number of sulfadoxine-pyrimethamine + amodiaquine (SP/AQ) co-blisters purchased with U.S. government funds
- Number of ACTs purchased in any fiscal year with U.S. government funds that were delivered this reported fiscal year into a country's supply chain for distribution
- Number of RDTs purchased in any fiscal year with U.S. government funds that were delivered this reported fiscal year into a country's supply chain for distribution
- Number of ITNs purchased in any fiscal year with U.S. government funds that were delivered this reported fiscal year into a country's supply chain for distribution
- Number of SP treatments purchased in any fiscal year with U.S. government funds that were delivered this reported fiscal year into a country's supply chain for distribution
- Number of SP/AQ co-blisters purchased in any fiscal year with U.S. government funds that were delivered this reported fiscal year into a country's supply chain for distribution

Guidelines for field office reporting on IDIQ M&E indicators

As a rule, GHSC-PSM reports on all in-country systems strengthening indicators and a selection of crosscutting indicators in all countries where the project has a field office and is providing technical assistance. The GHSC-PSM headquarters M&E team will support each field office to develop its own Country Monitoring and Evaluation Plan (CMEP), which will guide data collection, reporting, and use in the field office. CMEPs will include standard Indicator Reference Sheets for GHSC-PSM IDIQ indicators to ensure consistent definitions and reporting across countries. Given the unique situation of each country that buys into the GHSC-PSM central initiative, reporting on some in-country and crosscutting indicators will be dependent on the type of technical assistance provided, the maturity of data collection systems, and data availability.

Field offices must collect and report data related to all health areas that correspond with the task orders operating in their country. (For example, a field office funded through TOs 1 and 3 must report on HIV/AIDS and family planning results, but is not required to report results for malaria or maternal and child health). Data for most indicators must be disaggregated by task order, unless otherwise specified in the Indicator Reference Sheets in Annex B.

For stock-related indicators (i.e., B1. Stockout rate at SDPs, B2. Percent of stock status observations in storage sites that are stocked according to plan, and B12. Mean absolute percent consumption forecast error), field offices report data for all tracer products required under those task orders that fund technical assistance in their country (see Annex A for a list of in-country tracer products). Exceptions based on data availability, product use in-country, or other factors are specified in CMEPs.

As new field offices open in additional countries over the life of the project, we expect to begin reporting on in-country and crosscutting indicators two quarters after commencement of GHSC-PSM operations in country. Data for each new country will be added to GHSC-PSM quarterly and semiannual performance reports as they meet this timeline.

In cases where minimal technical assistance funding is provided and/or no field office exists, GHSC-PSM, USAID/Washington, and the USAID mission will review each case and reach agreement on which country performance monitoring indicators will be required, if any. In some cases, a field office supported by the GHSC-PSM project may receive minimal funding to report on indicators from a program element (HIV/AIDS, malaria, population and reproductive health (PRH), or MCH) from which it does not otherwise receive technical assistance funding. For example, a country office for

which all in-country technical assistance is HIV-funded, could receive a small PRH-funded budget to report on FP commodities, without conducting additional technical assistance for FP.

Baselines and targets

GHSC-PSM indicators do not align exactly with indicators in the predecessor projects' performance management plans (PMPs), in terms of nomenclature and definition, so GHSC-PSM will not use those projects' indicator performance results as our baselines. Instead, and as agreed with USAID, the project's first full year of performance (FY 2017) will serve as the baseline for global supply chain indicators. For country-level indicators, each field office establishes baselines using sources that may include assessments that measure results before the start of GHSC-PSM, first-quarter, semiannual, or first-year performance, depending on the indicator and the availability of data in each country. To the extent possible, baselines are measured and presented using the same level(s) of disaggregation at which the indicator is normally reported.

Establishing baseline results enables the project to track progress against initial or pre-project performance, with the accompanying analysis providing context by which to interpret later results. Baselines will also serve as an important source of evidence to address specific internal and external evaluation questions.

As agreed to with USAID, the project established targets for performance indicators once a full year of data was collected. The headquarters M&E team then led an exercise to set targets for global supply chain performance indicators for FY2018, against which progress will be evaluated at the end of the fiscal year. This was accomplished through a consultative process with relevant functional teams and USAID, considering past performance as well as aspirations for future performance given the programmatic context and assumptions. Targets for subsequent years and life-of-project will be set following the same process.

For country performance indicators, field offices have been encouraged to set targets for their own country programs through consultations with project technical staff and leadership, USAID missions, and/or government counterparts. Progress on these indicators, including B1, B2, B3, B5, and C10, will be monitored against the country-level targets; no aggregated project- or task order-level targets will be set. Country and/or project targets are not required for context indicators, or where USAID has indicated that a target is not necessary (such as C2. Number of people trained). See Annex C for target requirements for each indicator.

Reporting requirements and schedule

GHSC-PSM has agreed with USAID on the following IDIQ reporting requirements related to monitoring and evaluation, to be submitted on an FY cycle.

Exhibit 6. M&E Reporting Requirements

Reporting requirement	Description	Due date
Quarterly Performance Report	Data-focused report, including outcomes and analysis of all quarterly performance and context indicators specified in this M&E plan. Indicator data may be supplemented with limited narrative to provide further context, analysis, and actions taken to achieve continual improvement.	Last day of the month following the end of Q1 and Q3 (January 31 and July 31)
Semiannual Performance Report	Data-focused report, including outcomes and analysis of all quarterly, semiannual, and/or annual	Last day of the month following the end of

Reporting requirement	Description	Due date
	performance and context indicators specified in this M&E plan. Indicator data may be supplemented with additional narrative to provide further context, analysis, and actions taken to achieve continual improvement. GHSC-PSM may use the semiannual report as an opportunity for deeper discussion and reflection on project activities and outcomes achieved in the six-month reporting period as well as the annual period for Q4 reports.	Q2 and Q4 (April 30 and October 31)

M&E data and narratives for each of the four task orders will be submitted in a single report each quarter and/or semiannual period. Data and analysis will be disaggregated and specified for each task order where possible and appropriate.

In countries or regions where GHSC-PSM has a field office, USAID missions may have additional country-specific M&E reporting requirements. GHSC-PSM field offices will compile and submit these requirements, according to the specifications and schedule agreed to with the USAID activity manager.

The GHSC-PSM headquarters M&E team may also support developing additional M&E reports and deliverables, such as assessments, surveys, evaluation reports, operational research undertakings, and the project's final report. Contents and submission deadlines for these reports will be agreed upon with USAID/Washington case by case, with the exception of the project's final report. In accordance with contractual requirements, the final report is required to be submitted to USAID 30 days before the end of the contract completion date.

Other reporting systems and project data sources

GHSC-PSM also manages several reporting mechanisms for country supply chain data, including the following:

- Procurement Planning and Monitoring Report (PPMR). The PPMR is a database and report of contraceptive stock and shipment statuses at the country level. Countries submit data on a monthly basis. GHSC-PSM compiles the data into a monthly report for the Coordinated Assistance for Reproductive Health Supplies group, a partnership of global reproductive health stakeholders.
- Procurement Planning and Monitoring Report for malaria (PPMRm). The PPMRm is a similar database and report of central-level stock status for malaria commodities at the country level. Countries report quarterly, and the data is used by PMI to identify and address supply challenges and modify orders as needed.
- End-User Verification (EUV) surveys. These surveys are conducted in PMI countries to assess the availability of malaria commodities at health facilities, as well as provide a snapshot of how malaria is being diagnosed and treated. Some countries will elect to include MCH or other health element commodities in the EUV surveys.
- The Contraceptive Security (CS) Indicators survey. This survey is conducted every other year in about 50 countries and managed by the GHSC-PSM home office, with both quantitative and qualitative data coming primarily from in-country key informant interviews and document reviews. The survey aims to capture a country's level of contraceptive security, looking at a variety of factors, including political context and commitment, financial capital, partner coordination, capacity, client demand and utilization, commodity availability,

pharmaceutical quality, and private sector contributions. The survey enables program managers, advocates, and decision-makers in countries and the global health community to monitor progress toward contraceptive security, inform program planning, and advocate for improved policies and resources.

- National Supply Chain Assessment (NSCA). This is a comprehensive quantitative process that includes a set of tools to measure supply chain performance and capability. The Ministry of Health, USAID, or other partners may conduct an NSCA to assess the status of a country's supply chain for informing strategic planning, monitoring supply chain status, and guiding investment areas.

Section 3: Evaluation

GHSC-PSM is committed to using evaluation to ensure accountability, enhance quality, inform strategy, and guide the development of new and revised activities. This commitment is fundamental to our strategy and routinely operationalized through project management units, country teams, and additional support drawn from units across GHSC-PSM.

This evaluation plan will support GHSC-PSM and USAID (Washington and missions) to follow the conventions set out in Automated Directives System (ADS) Chapter 201 (Program Cycle Operational Policy) and the USAID Evaluation Policy. These policy documents set out clear guidelines that require missions to conduct "at least one evaluation of each large activity it implements." These evaluations will usually be designed by USAID and implemented by an external evaluation provider. Given the size of GHSC-PSM in some countries (relative to other activities), we expect that certain individual USAID country missions may opt to conduct evaluations. Also, missions are required to evaluate pilot activities, i.e., "those involving untested hypotheses or demonstrating new approaches that are anticipated to be expanded in scale or scope."

Missions are expected to identify high-priority activities that could be evaluated, along with evaluation questions for each. GHSC-PSM will work in coordination with missions that designate the activity for country strategy- or development objective (DO)-level evaluation to ensure a rigorous and valuable product.

At the global level, GHSC-PSM will be prepared to participate in both midterm and final evaluations.

The headquarters M&E team will work with country teams to prepare for all external and internal evaluations in a strategic manner, based on best practices. For internal evaluations, this includes identifying an evaluation purpose, a limited number of evaluation questions, and a plan for dissemination and use. Evaluation questions and timeframes will be reviewed and modified as GHSC-PSM matures. For external evaluations, the project will support the same processes to the extent possible, within a framework of collaboration agreed to with the mission.

At headquarters, GHSC-PSM will work with external evaluators to ensure that questions are reasonable and can be answered by the data available, while maintaining rigor, innovation, and best practices.

Illustrative Evaluation Objectives

- Relevance
    - Are the specific activities and outputs of the program consistent with the overall GHSC-PSM goal and objectives?
    - Are the GHSC-PSM Country objectives in line with Ministry of Health objectives?
- Effectiveness
    - To what extent were the stated objectives achieved?
    - What were the major factors influencing the extent of achievement of the objectives?
- Efficiency
    - Were activities cost-efficient?
    - Were objectives achieved on time?
    - Was the project implemented in the most efficient way, compared to potential alternatives?
- Impact

    - What has happened as a result of the GHSC-PSM project?
    - What real difference has the activity made to the beneficiaries?
    - How many people have been affected?

- Sustainability
    - To what extent are the benefits of the project likely to continue after donor funding ceases?
    - What major factors may influence the achievement or nonachievement of sustainability of the program or project?

Whether the periodic evaluations are conducted internally or externally, they are intended to complement the conclusions drawn from routine data analysis and identify areas of opportunity for increased efficiency. Since this routine data will be key evidence in establishing progress towards this project's expected results, the mechanisms for data collection, analysis, and storage (as described elsewhere in this document) are fundamental to the success of the evaluations.

Section 4: Learning

Our M&E team works closely with both internal (project) and external stakeholders to ensure that "monitoring and evaluation" is transferred into "learning". GHSC-PSM emphasizes learning throughout the project lifecycle. Two fundamental aims of "learning" are reflected in our activities, to:

1. Encourage adjustments in project activity implementation in response to identified changes in environment, circumstances or as our understanding evolves, and;
2. Communicate insights gained through evaluation, reviews, monitoring learning events and other activities to the donor and implementer communities to stimulate more effective programming in the future.

Many of the learning actions are regularly scheduled; others are ad hoc and will be conducted when needed, or when opportunities present. These may focus on challenges and successes in implementation, changes in the operating environment or context that could affect the activity or the related project, opportunities to collaborate, or other relevant topics.

The M&E team is integrated into the GHSC-PSM Communications, Learning, Evidence, and Analytics for Results (CLEAR) team. Insights provided by the Knowledge Management and Communications (KMC) and Data Analytics teams will help inform how our actions will identify and address knowledge gaps. This learning plan is further expanded into a comprehensive strategy being implemented across this CLEAR team and in coordination with both the M&E and KMC Technical Working Group.

Examples of regularly scheduled times when reflection on implementation (progress and quality) occurs includes:

- Annual work planning
- Quarterly and annual reporting
- Quarterly Country Performance Reviews (CPRs)
- Technical Working Groups and Commodity Councils
  To share project information, gain consensus and concurrence, and facilitate decision-making at senior-most levels.
- Annual review of B8 indicator results and update of the associated Supply Chain Activity Targeting worksheet

Ad-hoc events will include:

- After-action reviews:
  Quick action-oriented events which focus on challenges and successes following an event or task to facilitate continual improvement
- Conferences:
  To share learning by GHSC-PSM activities and ensure that staff are kept up to date on current knowledge within key technical areas
- Communities of Practice (CoPs):
  These contribute to the development staff capacity, provide an opportunity to share best practices with other IPs and governmental organizations, and contribute to the adaptation of

successful practices in other countries. We will also capitalize on existing CoPs, e.g., People that Deliver, International Association of Public Health Logisticians, and APICS

- Regional M&E Learning workshops

Country Performance Reviews

Through CPR, organized and facilitated by the headquarters M&E team, every portfolio reviews performance information to identify key issues and corrective actions as necessary. This information includes regular monitoring data, as well as available evidence from other sources: e.g., work plans, country M&E plans, or evaluations. Each TO and operational team will also contribute to these CPRs as a means of strengthening evidence use within technical support and implementing units.

CPRs will be designed to evaluate:

- Program achievements to date and the contextual factors that have facilitated or inhibited progress
- The program's intended results and key implementation processes to determine their continued relevance and appropriateness
- Any changes in program objectives, priorities, and resources resulting in the need for any modifications in the program's scope, approach, or activities
- Any concrete recommendations to strengthen or reorient the program, if required
- Stakeholders' satisfaction with the implementation methodologies

This learning process is coordinated with a larger Knowledge Management Strategy and Learning Agenda that will be submitted to USAID by GHSC-PSM.

Section 5: Data Management

Data collection and storage

Global supply chain operational data is generated and maintained by technical and functional teams across the project, which is then compiled into indicators, analyzed, and reported by the Monitoring and Evaluation team at GHSC-PSM headquarters per the methodology described in the indicator reference sheets (see Annex B). As noted above, most data related to global supply chain transactions is automated, captured, and stored in ARTMIS. Additional relevant data is collected and stored using other tools, such as the QA database, PipeLine supply planning databases, Continual Improvement Incident Tracker, and hard-copy files. All data and source documentation that is not retained in ARTMIS or other electronic systems is stored in the internal files on SharePoint, accessible to all GHSC-PSM headquarters employees.

In-country data is collected by technical and M&E personnel in GHSC-PSM field offices per the methodology described in the indicator reference sheets (see Annex B). Each quarter, field office M&E points of contact compile their data for IDIQ indicators into standardized Excel templates and submit them to the headquarters M&E team by email.

Together, the headquarters and field office M&E teams undertake a rigorous validation review to ensure data reliability. Field office teams then upload their final validated data and source documentation to DevResults, a web-based data management system. With all countries entering data using the same standard templates and indicator definitions, the headquarters M&E team can easily compile the results across countries for reporting and analysis. Field offices also have access to their own data within DevResults, to run indicator reports and track progress over time. (No field office has access to another country's data). While DevResults is primarily intended as an internal system for data storage and management, viewer access has also been provided to members of the GHSC-PSM/USAID M&E technical working group (TWG).

Data quality approach

Headquarters

GHSC-PSM has established several mechanisms to ensure ARTMIS' data quality is maintained. An ARTMIS Data Quality team has been created, and has become the focal point for ARTMIS data quality issues. The team's responsibility is not only to troubleshoot and resolve data problems but also to create data quality standard operating procedures so data quality improves over the life of the project. The data quality team also serves as a coordination point between GHSC-PSM teams and MIS for any focused data quality reviews related to a specific country or commodity. Also, GHSC-PSM has created a process to categorize and track help desk tickets related to data quality issues. This process enables GHSC-PSM and USAID employees to submit data issues to one centralized location. These help desk tickets, which are maintained by the GHSC-PSM MIS Help Desk but reviewed by the data quality team, keep track of the issues by ARTMIS application, enabling the project to understand where issues lie and identify any trends. Finally, GHSC-PSM completes routine spot checks of the data, sampling a percentage of the data to check for accuracy, completeness, and timeliness, as well as to identify if certain data fields are more prone to error. As part of the routine spot check, an audit of the project's document retention for orders is done. Any issues raised during the spot check are brought to the ARTMIS Data Quality team and relevant GSC employees to resolve. These routine spot checks are meant not only to identify errors so they can be fixed in the system but also to ensure the supply chain SOPs accurately reflect reality. Findings from spot checks can be used to help revise the documents and inform the project where additional training is needed.

Field offices

Several mechanisms are in place to ensure the quality of data reported from the field offices. Each quarter, field office M&E personnel review all country indicator data using a standardized validation checklist before submitting to headquarters. M&E managers are encouraged to connect with their country's LMIS team on any data quality issues arising from in-country logistics systems and to engage with the various technical teams in the field office for programmatic data quality issues as needed. Following submission to headquarters, the GHSC-PSM M&E team conducts a rigorous validation exercise, checking that all data elements are reported correctly, that indicator values fall within plausible ranges, and that responses are consistent with previous reporting periods. Where questions or inconsistencies arise, the data are sent back to the field offices for revalidation and correction.

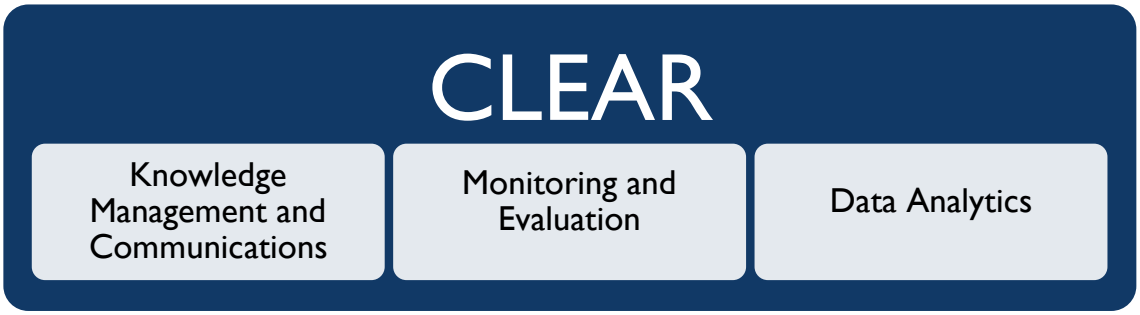
Along with routine quality checks, field offices are expected to conduct a Data Quality Assessment (DQA) on their in-country LMIS data annually. While GHSC-PSM's control over LMIS data quality varies from country to country, understanding the data quality environment is particularly important in interpreting reported supply chain results. Assessment results are shared with the Ministry of Health and other stakeholders as needed. Results are also scored and reported as specified under indicator B4. Average rating of in-country data confidence (see indicator reference sheet in Annex B).

Section 6: Roles and Responsibilities

Communications, Learning, Evidence, Analytics, and Results team

The CLEAR team is GHSC-PSM's headquarters hub for data, evaluation, communications, and learning. CLEAR cultivates information and shares insights that guide decision-making across the project. The larger CLEAR team is comprised of three smaller units: Knowledge Management and Communications (KMC), Monitoring and Evaluation, and Data Analytics.

Exhibit 7. CLEAR team composition



The Monitoring and Evaluation unit is primarily responsible for all centrally managed M&E activities. This unit develops and rolls out M&E policies, procedures, tools, templates, and methods; provides training and guidance to in-country M&E personnel; and ensures data quality. The M&E unit works in close collaboration with the MIS team to ensure that ARTMIS forms and dashboards accurately capture and display indicator information. The team also works across headquarters technical and functional units to ensure that teams have the data they need to identify problems, make decisions, and evaluate progress toward the project's objectives. Members of the M&E unit also conduct short-term technical assistance assignments in field offices, those geared toward supporting the field office's M&E activities and those providing M&E systems strengthening support to government counterparts.

Within the CLEAR team, the M&E and KMC units collaborate to support knowledge exchange and learning across the project. M&E and KMC also work in tandem to produce quarterly and semiannual performance reports, as well as other knowledge products for USAID, conferences, www.ghsupplychain.org, and other external audiences. Lastly, M&E and Data Analytics work together to develop research questions and conduct analyses that leverage the project's unique depth of data to develop the insights that will advance global and in-country supply chains.

GHSC-PSM and USAID M&E technical working group

Since the project's launch, USAID and GHSC-PSM monitoring and evaluation specialists have met together in a technical working group. This group includes the members of GHSC-PSM's M&E and Data Analytics teams as well as USAID technical specialists representing PEPFAR, PMI, the Office of Population and Reproductive Health, and the Maternal and Child Health Program. The TWG meets biweekly.

The TWG is the GHSC-PSM M&E team's main touch point with USAID on issues relating to the M&E plan, indicator definitions, reporting requirements and feedback on submitted reports, data quality assessments, National Supply Chain Assessments, and other M&E matters.

Field office M&E personnel and points of contact

As determined by the mission and activity budgets, field offices will aim to employ at least one M&E specialist, who will be responsible for managing the in-country portion of this M&E plan. If a field office has no dedicated M&E specialist, the country director will designate another technical specialist or staff member as the country's M&E point of contact.

Field office M&E personnel are responsible for developing and maintaining their office's CMEP, tailoring standard tools and operating procedures to fit the local context, submitting quarterly indicator data to headquarters through DevResults, meeting USAID mission reporting requirements, facilitating data use and learning activities in their office, and ensuring the quality of the data GHSC-PSM collects in country. Field office M&E staff may also support technical assistance activities, such as developing surveys or other data tools for systems strengthening initiatives, or working with counterpart government ministries to develop monitoring and evaluation frameworks for their supply chains. In some field offices, the M&E staff is also responsible for providing regular central level stock status data for PPMR and PPMRm, and/or assisting the country in conducting EUV surveys.

Exhibit 8. Monitoring and Evaluation Roles and Responsibilities

Major Task	Frequency	Responsible party
Developing and maintaining the IDIQ M&E plan	Reviewed annually; updated as needed	GHSC-PSM headquarters M&E team, M&E technical working group
Collecting and validating indicator data	At least quarterly	GHSC-PSM headquarters and field office M&E teams
Facilitating indicator and performance reviews	Monthly or quarterly	GHSC-PSM headquarters M&E team, field office M&E specialists
Analyzing indicator data and reviewing performance information	Quarterly	GHSC-PSM headquarters M&E team, field office M&E specialist, headquarters, and field office technical specialists, task order directors
Compiling and submitting performance reports	Quarterly	GHSC-PSM headquarters M&E team and KMC teams, field office M&E, and KMC specialists,
Conducting data quality assessments[6]	Annually	GHSC-PSM headquarters M&E team, field office M&E specialists
Conducting evaluations, assessments, and special studies	As needed	GHSC-PSM headquarters M&E team, field office M&E specialists, consultants
Responding to ad hoc data and reporting requests	As needed	GHSC-PSM headquarters M&E and Data Analytics teams
Conducting M&E-related technical assistance visits to field offices	As needed	GHSC-PSM headquarters M&E team

[6] This includes routine spot checks of the Global Supply Chain data generated from ARTMIS.

Annex A. Tracer Product Lists

Exhibit A-1. Tracer Product Categories for Global Supply Chain Indicators

HIV/AIDS	Malaria
Food and WASH (ready-to-use therapeutic food/ready-to-use supplementary food, and safe water products)	Artemisinin-based combination therapies (ACTs)
Adult ARV	Malaria rapid diagnostic tests
Pediatric ARV	Sulphadoxine-pyrimethamine (SP)
Condoms (female, male, lubricant)	Long-lasting insecticide-treated nets (LLINs)
Other pharma (opportunistic infection drugs, methadone, anesthetics, other pharmaceuticals)	Seasonal malaria chemoprevention (SMC)
Laboratory (all lab products, including equipment, reagents, consumables)	Severe malaria medications (includes all injectables (e.g., quinine, artemether, artesunate, and rectal artesunate)
HIV rapid test kits (RTKs)	Other pharma (chloroquine, primaquine, quinine tablets)
Other RTKs (syphilis tests, pregnancy tests, other non-malaria and non-HIV tests)	All other TO2 products (non-pharma)
Other non-pharma (gloves, beds, all other nonpharmaceutical supplies)	
Prefab (any warehouse, clinic, lab, or storage units)	
TB HIV (Isoniazid tablets, Vitamin B6)	
Vehicles and other equipment (vehicles and nonlaboratory equipment)	
Voluntary medical male circumcision (VMMC) (surgical kits, PrePex device, related products)	
Family Planning and Reproductive Health	**Maternal and Child Health**
Injectable contraceptives	Due to limited MCH procurement through the Global Supply Chain, distinct TO4 tracer product categories have not been specified in the GHSC-PSM catalog. The project will use existing categories when reporting on TO4 procurements and deliveries, such as: • Other pharma • Laboratory • Other non-pharma
Implantable contraceptives	
Combined oral contraceptives	
Copper-bearing intrauterine devices (IUDs)	
Emergency oral contraceptives	
Progestin-only pills	
Standard days methods	
Hormone-releasing intrauterine systems	
All other TO3 products	

COVID19
All COVID19 products (ventilators, personal protective equipment, oxygen, etc.)

Additional note on condom reporting

- All condoms and lubricants will be reported under TO1, regardless of funding source. Detailed data by funding source and specific product group (male condoms, female condoms, and/or lubricants) may be requested through an ad hoc report.

For the in-country supply chain indicators on stockout rates, stocked according to plan, and forecast error, Exhibit A-2 provides a prioritized list of *recommended* tracer products to report on, by program element. Field offices must report on all tracer products for which data is available for all program elements for which they receive technical assistance funds. The project will adjust this list as appropriate, country by country, in consultation with USAID/Washington.

Exhibit A-2. Tracer Product List for In-Country Indicators

HIV/AIDS		HIV lab
Most-used first-line adult ARV		Most-used early infant diagnosis (EID) reagent
Most-used second-line adult ARV		Most-used EID consumable
Most-used first-line pediatric ARV		Most-used viral load reagent
First RTK		Most-used viral load consumable
Second RTK		
Tie-breaker RTK		
Male condoms		
Female condoms		
Ready-to-use therapeutic food		
Malaria		**Maternal and child health**
First-line ACTs (four presentations)		Oxytocin (10 I.U. injectable)
Artemether-lumefantrine (AL)	Artesunate/ amodiaquine (AS/AQ)	Chlorhexidine gel (7.1% chlorhexidine digluconate, delivering 4% chlorhexidine)
6 x 1	25/67.5 mg	Injectable gentamicin
6 x 2	50/135 mg	Oral rehydration salt (ORS) + zinc (together)
6 x 3	100/270 mg x 3	Magnesium sulfate (50% injectable)
6 x 4	100/270 mg x 6	Amoxicillin (125 mg or 250 mg dispersible tablets)
Malaria RDTs		Zinc (alone)
SP		ORS (alone)
LLINs		

FP/RH (methods and products)
Injectable contraceptives • Depot medroxyprogesterone acetate 104 mg/0.65 mL, subcutaneous prefilled syringe • Depot medroxyprogesterone acetate 150 mg vial, intramuscular • 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
Copper-bearing IUDs
Emergency oral contraceptives • Levonorgestrel 0.75 mg, 2 tablets • Levonorgestrel 1.5 mg, one tablet
Progestin-only pills • Levonorgestrel 30 mcg 35 tablets/cycle
Male condoms
Female condoms
Standard-days methods
Hormone-releasing intrauterine systems

Additional notes on HIV/AIDS tracer products

- In countries where ARV treatment is a regimen with multiple products, a single most-used item should be selected as the tracer product in each category (first line adult, second line adult, and first line pediatric).
- Laboratory reagents and consumables often work together in bundles, with multiple items required to run a test. A single item from each category (EID reagent, EID consumable, viral load reagent, viral load consumable) should be selected as the most used item for monitoring purposes
- For in-country indicators, male and female condoms will be reported under TOs 1 or 3, depending on which task order is operating in the country. In countries where both task orders are operating, the project will report condoms under both task orders; the data will be the same under each TO.

Additional notes on malaria tracer products

- Field offices should report on the first line ACT that is most widely used in their country. Countries that use both AL and AS/AQ should report on both.
- When reporting on SDP stockouts (indicator B1), all field offices reporting on AL tracer products must also report the percentage of SDPs that were stocked out of all four presentations of AL, indicating that they were unable to treat malaria patients with AL. Additional details on the "inability to treat" indicator can be found under Points of Clarification 5 in the indicator reference sheet for B1.

- LLINs are usually distributed separately from the regular commodity supply chain. Stock level, forecasting, and consumption data may not be available for all indicators, or may be collected from different sources than other malaria products.

Additional notes on FP/RH tracer products

- All field offices must report at least at the method level for PRH tracer products. Countries with access to detailed product-level data broken down within each method should report at the product level as well.
- For in-country indicators, male and female condoms will be reported under TOs 1 or 3, depending on which task order is operating in the country. In countries where both task orders are operating, the project will report condoms under both task orders; the data will be the same under each task order.

Annex B. Indicator Reference Sheets

Global Health Supply Chain Indicators

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A1a
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result IR 1.1. Enhanced global health commodity procurement.
Intermediate Result IR 1.2. Strengthened global logistics processes associated with the storage and delivery of any health commodity to any point in donor-supported countries.

Indicator Name: On Time, In Full Delivery (OTIF) - Percentage of line items delivered on time and in full, within the minimum delivery window (within -14/+7 calendar days of the agreed delivery date (ADD)).

Description

Precise Definition(s):
Numerator: Number of line items delivered to the recipient on time and in full during the quarter.
Denominator: Total number of line items delivered to the recipient during the quarter
Disaggregated by: a. task order; b. tracer product category; c. global supply chain versus decentralized procurement.
Purpose: OTIF refers to the percentage of line items delivered to recipients on time and in full. OTIF measures supply chain reliability and the degree to which the right products are delivered at the right time and in the right quantity, as specified by the customer.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using ARTMIS.
Data Source: ARTMIS (order management and LMIS modules).
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: As often as order and shipment transactions flow to ARTMIS, at least daily.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
- Data aggregation, indicator calculation, and analysis: M&E Specialist(s)
- Data entry and performance results: Integrated Supply Chain (ISC) Managers; Procurement Supervisors and Specialists

Data Quality Issues

Date of Initial Data Quality Assessment: September 2020-May 2021, by GH EvaLS
Known Data Limitations and Significance (if any):
- **Validity**: Use of reason codes to adjust agreed delivery dates allows the measurement to control for factors beyond the project's manageable control, but it may limit the ability of the indicator to measure recipient satisfaction or experience.
- **Reliability**: The definition of the on-time delivery window changed in FY2017 Q2, from -30/ +5 business days to -14/+7 calendar days from the agreed delivery date. The data source also changed a few times early in the project, from Excel shipment trackers (FY16 Q4-FY17 Q3), to the GSC Performance Reporting Tool (an Excel tool merging the Requisition Order History Report and the LMIS Shipment Tracker, FY17 Q4-FY18 Q2), and now to the Performance Dataset (FY18 Q3-current). Lastly, defects in the data flows from ARTMIS transactional modules to the reporting module may cause occasional errors in the dataset. Once detected, these are addressed via the ARTMIS Help Desk and Change Control Board process.

- **Timeliness**: Line items are counted in the period that they are delivered, which may be later than their agreed delivery date. See indicator A1b. On-time Delivery for data that captures late deliveries as soon as the agreed delivery date is missed.
- **Precision**: No known limitations. Missing data or other errors are identified as they arise and flagged to the Help Desk for correction.
- **Integrity**: No known limitations.

Points of Clarification (other notes)

1. Every requisition order (RO) that is sent to USAID for approval will include an Estimated Lead Time (ELT) for each line item in the order, expressed in number of weeks. The ELT is the estimated time it will take for a line item to be delivered to the recipient, starting from the date that USAID approves the RO in ARTMIS. Upon USAID approval, an ADD for each line item will be automatically calculated and captured in ARTMIS.
2. The minimum delivery window is defined according to GHSC-PSM business rules as 14 calendar days before the ADD through seven calendar days after the ADD.
3. Once set, the ADD may be changed only if it is covered by one or more of the approved reason codes, enabling a customer-approved change to the ADD. A list of approved reason codes and details on how the codes are applied are available in the "ADD, EDD, and Reason Code" guidance document in the GHSC-PSM Quality Management System (QMS). All customer approvals of ADD changes must be documented and retained.
4. A line item is considered on time and in full if it is delivered to the recipient at the requested quantity within the minimum delivery window. The project may use USAID-approved reason codes to allow some shipments to be considered in full even if they are under-shipped, in limited circumstances (e.g. QA sampling, palletization, etc.).
5. GHSC-PSM is expected to deliver line items on time in full subject to ELTs and the minimum delivery window.
6. A customer's line item may be split into multiple shipments for various reasons. If the line item is split at the request of the customer with an ADD specified for each portion of the split, each portion will be considered a separate line item. If the line item is split for any other reason (for instance, a production issue, limited freighter capacity for air shipments), the split will still be considered one line item. All portions of the split (i.e., the total quantity of the line item as requested to be delivered) must be delivered within the minimum delivery window for the line item to be considered on time and in full. If a portion of the line item is delivered within the window but not all of it, the line item will be considered on time but not in full. Consider the following scenarios:

   Scenario 1
   RO12345, line item ABC: 1,000 units with ADD March 31
   Split 1: 500 units delivered to recipient March 1 (30 days early)
   Split 2: 250 units delivered to recipient March 25 (six days early, within delivery window)
   Split 3: 250 units delivered to recipient April 20 (20 days late)
   The above line item is considered on time, not in full.

   Scenario 2
   RO12345, line item ABC: 1,000 units with ADD March 31
   Split 1: 500 units delivered to recipient March 28 (three days early, within delivery window)
   Split 2: 250 units delivered to recipient March 31 (zero days early/late, within delivery window)
   Split 3: 250 units delivered to recipient April 2 (two days late, within delivery window)
   The above line item is considered on time, in full.

   Scenario 3
   RO12345, line item ABC: 1,000 units with ADD March 31
   Split 1: 500 units delivered to recipient April 15 (15 days late)
   Split 2: 250 units delivered to recipient April 16 (16 days late)
   Split 3: 250 units delivered to recipient April 17 (17 days late)
   The above line item is considered not on time, in full.

7. A split line item will be counted only once toward the numerator and denominator. In some cases, splits may arrive in different reporting periods; if so, the line item will be reported in the quarter in which the final split is delivered.
8. See Exhibit A-1 in Annex A of this document for a list of tracer product categories used for disaggregation of this indicator.
9. Additional disaggregation elements, such as country, will be available in ARTMIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytical insight.

PIRS Updates

- **31 May 2016:** First approved PIRS (as indicator A1)
- **3 January 2018**: Indicator number updated to A1a. Substantial detail added throughout to define the on-time delivery window, split-line scenarios, and other relevant business rules and processes.
- **11 February 2019:** Note added to Point of Clarification 4 to indicate that the project may use USAID-approved reason codes to allow some shipments to be considered in full even if they are under-shipped, in limited circumstances (e.g. QA sampling, palletization, etc.). Targets information relocated to Annex C.
- **17 March 2020:** No changes.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A1b
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result IR 1.1. Enhanced global health commodity procurement.
Intermediate Result IR 1.2. Strengthened global logistics processes associated with the storage and delivery of any health commodity to any point in donor supported countries.

Indicator Name: On Time Delivery (OTD) — Percentage of line items delivered on time, within the minimum delivery window (within -14/+7 calendar days of the agreed delivery date (ADD)).

Description

Precise Definition(s):
Numerator: Number of line items with an ADD during the quarter that were delivered to the recipient on time.
Denominator: Total number of line items with an ADD during the quarter.
Disaggregated by: a. task order; b. tracer product category; c. global supply chain versus decentralized procurement.
Purpose: OTD is an essential, industry-standard measure of supply chain reliability. It reflects the extent to which customers can be confident that their order will arrive at the right time, according to the ADD timeframe.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using ARTMIS.
Data Source: ARTMIS (order management and LMIS modules).
Frequency/Timing of Data Acquisition: As often as order and shipment transactions flow to ARTMIS, at least daily.
Reporting Frequency: Quarterly
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
- Data aggregation, indicator calculation, and analysis: M&E Specialist(s)
- Data entry and performance results: Integrated Supply Chain (ISC) Managers; Procurement Supervisors and Specialists

Data Quality Issues

Date of Data Quality Assessment: September 2020-May 2021, by GH EvaLS
Known Data Limitations and Significance:
- **Validity**: Use of reason codes to adjust agreed delivery dates allows the measurement to control for factors beyond the project's manageable control, but it may limit the ability of the indicator to measure recipient satisfaction or experience.
- **Reliability**: The data source also changed once early in the project, from the GSC Performance Reporting Tool (an Excel tool merging the Requisition Order History Report and the LMIS Shipment Tracker, FY18 Q1-2), to the Performance Dataset (FY18 Q3-current). Defects in the data flows from ARTMIS transactional modules to the reporting module may cause occasional errors in the dataset. Once detected, these are addressed via the ARTMIS Help Desk and Change Control Board process.
- **Timeliness**: No known limitations.
- **Precision**: No known limitations. Missing data or other errors are identified as they arise and flagged to the Help Desk for correction.
- **Integrity**: No known limitations.

Points of Clarification (other notes)

1. Every RO that is sent to USAID for approval will include an Estimated Lead Time for each line item in the order, expressed in number of weeks. The ELT is the estimated time it will take for a line

item to be delivered to the recipient, starting from the date that USAID approves the RO in ARTMIS. Upon USAID approval, an ADD for each line item will be automatically calculated and captured in ARTMIS.

2. A line item is considered on time when it is delivered to the recipient within the minimum delivery window. The minimum delivery window is defined according to GHSC-PSM business rules as 14 calendar days before the ADD through seven calendar days after the ADD.
3. Once set, the ADD may be changed only if it is covered by one or more of the approved reason codes, enabling a customer-approved change to the ADD. A list of approved reason codes and details on how the codes are applied are available in the "ADD, EDD, and Reason Code" guidance document in the GHSC-PSM Quality Management System (QMS). All customer approvals of ADD changes must be documented and retained.
4. A customer's line item may be split into multiple shipments for various reasons. If the line item is split at the request of the customer with an ADD specified for each portion of the split, each portion will be considered a separate line item. If the line item is split for any other reason (for instance, a production issue or limited freighter capacity for air shipments), the split will still be considered one line item. If any portion of the split line item is delivered within the minimum delivery window, the entire line item is considered delivered on time. Consider the following scenarios:

   Scenario 1
   RO12345, Line Item ABC — 1,000 units with ADD March 31
   Split 1: 500 units delivered to recipient March 1 (30 days early)
   Split 2: 250 units delivered to recipient March 25 (six days early, within delivery window)
   Split 3: 250 units delivered to recipient April 20 (20 days late)
   The above line item is considered on time.

   Scenario 2
   RO12345, Line Item ABC — 1,000 units with ADD March 31
   Split 1: 500 units delivered to recipient April 15 (15 days late)
   Split 2: 250 units delivered to recipient April 16 (16 days late)
   Split 3: 250 units delivered to recipient April 17 (17 days late)
   The above line item is considered not on time.

5. See Exhibit A-1 in Annex A of this document for a list of tracer product categories used for disaggregating this indicator.
6. Additional disaggregation elements, such as country, will be available in ARTMIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytical insight.

PIRS Updates

- **3 January 2018:** First approved PIRS
- **11 February 2019**: Targets information relocated to Annex C.
- **17 March 2020:** No changes.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A2
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result IR 1.1. Enhanced global health commodity procurement.

Indicator Name: Percentage of QA processes completed within the total estimated QA lead times (on-time completion rate for QA processes).

Description

Precise Definition(s):
Numerator: Number of consignments complying with the pre-established QA lead times during the quarter.
Denominator: Total number of consignments requiring QA processes that were cleared for shipment during the quarter.
Unit of Measure: Consignments.
Disaggregated by: a. Malaria tracer product category (ACTs, RDTs, SP, LLINs, severe malaria medications, other pharma.)
Purpose: This indicator reports on the timeliness of completion of QA processes. It reflects on the project's management of QA subcontracts and the impact of QA procedures on the overall product procurement and delivery cycle time.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected by the GHSC-PSM Task Order 2 QA team and managed in an Excel database.
Data Source: QA database.
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: As often as QA data flows to GHSC-PSM QA, as much as daily.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: TO2 QA/QC team; M&E Specialist(s)
– Data entry and performance results: TO2 QA/QC team

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity:** No known limitations.
– **Reliability:** Beginning in Q2 FY2020, the QA team implemented a COVID-19 reason code, used to flag processes that were delayed due to external pandemic, not relating to lab capacity or performance. These processes are excluded from the results of the indicator, to provide a result that reflects performance within the labs' manageable control. Beginning in FY2022 Q2, the QA team extended the standard lead time for two product groups (artesunate injectable and SPAQ), following changes in the operating context, product allocation streategy, and a review of standard procedures. Results before and after this quarter will therefore be based on different benchmarks for these products.
– **Timeliness:** No known limitations.
– **Precision:** No known limitations.
– **Integrity:** No known limitations.

Points of Clarification (other notes)

1. This indicator will be reported for TO2 only. For TOs 1, 3, and 4, QA processes are conducted under GHSC-QA. Results under these task orders will be reported by GHSC-QA.

2. For this indicator, a consignment is defined as a shipment of commodities, including one or more line items. QA process transactions are managed at the consignment level, regardless of the number of line items in the consignment.
3. Pre-established QA lead time is product specific. QA lead times are maintained by GHSC-PSM QA.
    - Post-shipment QC, field incidents, and other nonroutine QA interventions are not included in this indicator.
4. QA process start date is defined as follows:
    - For products requiring sampling/inspection/testing: "date goods are confirmed by the supplier to be available for sampling"
        - QA start time for products requiring on-time method verification/ validation/transfer will begin once this process has been completed.
    - For products not sampled/inspected/tested: "date of receipt of manufacturer Certificate of Analysis"
5. QA process end date is defined as "date of issuance of Certificate of Conformance (CoC)."
    - LLIN-specific note: Upon receipt of the PMI request, some shipments require witnessing the loading/sealing of goods. Compliant witnessing of this process will be reported through a standalone report and not reported in the CoC. CoCs will be issued once inspection/test results are deemed compliant.
6. Products that are subject to a TO2 QA investigation (e.g., out of specification (OOS) and atypical results) will not be included in this indicator. These instances are excursions from the routine process and inputs for final determination are often outside the control of TO2 QA.
7. The same batch can be included in multiple shipments, therefore a delay in testing of a batch may affect multiple shipments.
8. One shipment may have multiple batches, all of which need to be tested in the established QA lead time for the shipment to be counted as complying with QA lead times.
9. Under exceptional circumstances, with previous agreement from PMI, shipments that overloaded laboratory network capacity may be exempted from this calculation.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018**: Substantial updates to clarify definitions and data collection processes, in line with existing reporting practice and definitions used by the QA team.
- **11 February 2019:** Targets information relocated to Annex C.
- **17 March 2020**: No changes.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** Data Quality section updated.

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A3
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result IR 1.1. Enhanced global health commodity procurement.
Intermediate Result IR 1.2. Strengthened global logistic processes associated with the storage and delivery of any health commodity to any point in donor-supported countries.

Indicator Name: Cycle time (average)

Description

Precise Definition(s):
Numerator: The sum of cycle time for all line items delivered during the quarter.
Denominator: The count of all line items delivered during the quarter.

Overall cycle time is defined as the number of days between when a customer order is submitted to when the shipment is actually delivered to the customer, inclusive of the start and end days.

Two variants of this indicator will be reported:
- Average overall cycle time, inclusive of all days
- Average dwell-adjusted cycle time, excluding all defined inactive dwell periods from the overall cycle time (see additional details below).

Unit of Measure: Days.
Disaggregated by: *a. task order; b. tracer product category; c. sourcing channel, d. mode (land, sea, air)*
Purpose: Measures the responsiveness of the GHSC-PSM supply chain and how quickly customer orders can be filled.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using ARTMIS.
Data Source: ARTMIS (order management and LMIS modules).
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: As often as order and shipment transactions flow to ARTMIS, at least daily.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
- Data aggregation, indicator calculation, and analysis: M&E Specialist(s)
- Data entry and performance results: Integrated Supply Chain (ISC) Managers; Procurement Supervisors and Specialists

Data Quality Issues

Date of Data Quality Assessment: September 2020-May 2021, by GH EvaLS
Known Data Limitations and Significance:
- **Validity**: Dwell time (i.e., any inactive days during order cycle time where there is no expectation that GHSC-PSM should be taking steps to source, fulfill, or deliver the order.) can obscure the actual active cycle time for process segments. When dwell is not identified and excluded, the average segment times may not represent the actual time required to complete the process. The project will mitigate this with the use of hold statuses and the reporting of dwell-adjusted cycle time in FY2021 Q1.
- **Reliability**: A few adjustments have been made to data collection and milestones use over time, including: use of parent Order Entry Date in instances where lines are split off to a new RO; introducing RO Clarified Date as a proxy for RO Sent to Plan/Source milestones; introducing Actual Cargo Ready Date as a proxy for Actual Goods Available Date for Distribution Orders; introducing the Delivery Progress flag in the Performance Dataset to filter for line items for which all associated

shipments have been delivered. The completeness of milestone data may vary from quarter to quarter, so segments are not always reported consistently in every period (see Point of Clarification #5).
– **Timeliness**: No known limitations in terms of end-to-end results. Segment results are reported at the time that line items are delivered, meaning that the results for early-stage segments often represent processes that took place several months in the past. These results may therefore not capture the outcomes of more recent process changes in early segments.
– **Precision**: No known limitations. Missing data or other errors are identified as they arise and flagged to the Help Desk for correction.
– **Integrity**: No known limitations.

Points of Clarification (other notes)

1. For overall, end-to-end, cycle times, the starting milestone for all line items is the order entry date. For all line items, the end date of the cycle is the actual delivery date to the recipient.
2. While cycle time measures the average overall process time for fulfilling customer orders, the cycle time must also be able to be decomposed and calculable for the various segments of the fulfillment process. The following cycle segments will be reported regularly to USAID:

Cycle segment name	Starting milestone	Ending milestone
1. RO validation	Order entry date	RO sent to sourcing for request for X (RFx) (for POs) RO sent to plan for fulfillment options (for DOs) In cases where either of the two above milestones are blank for a line item, RO Clarified Date will be used as a proxy
2. Sourcing or planning	RO sent to sourcing for RFx (for POs) RO sent to plan for fulfillment options (for DOs) In cases where either of the two above milestones are blank for a line item, RO Clarified Date will be used as a proxy	Recipient approval date
3. USAID approval	Recipient approval date	USAID approval date
4. Process PO/DO	USAID approval date	PO released for fulfillment date
5. Manufacture/ prepare	PO released for fulfillment date	Actual goods available date (for POs) Actual cargo ready date (for DOs)
6. Pick-up	Actual goods available date (for POs) Actual cargo ready date (for DOs)	Pick-up date
7. Deliver	Pick-up date	Actual delivery date

Additional segments and milestones are available in ARTMIS for more detailed internal analysis.

3. **Quality assurance:** Quality assurance testing may be conducted before shipment, or concurrent with shipment. Products that often undergo concurrent testing include LLINs and most contraceptives (except condoms). Due to this potential overlap with other segments of the cycle, a quality assurance cycle time will be calculated and reported separately from the overall cycle time, using the following milestones:

Cycle segment name	Starting milestone	Ending milestone
Quality assurance	Actual goods available date	QA complete date

The quality assurance segment will be reported for TO2 only. QA processes for other task orders are managed by the GHSC-QA mechanism.

4. **Split shipments:** Where a single line item is split into multiple shipments, the same line item may have multiple dates for the same milestone. In these cases, the end date of the segment will be the latest date recorded for the milestone.
5. **Data completeness:** In some cases, delivered line items may be missing data for some of the milestone dates along the fulfillment cycle. GHSC-PSM will report cycle times for the segments listed above when both milestones in the segment have dates populated for at least 60 percent of line items delivered. If data completeness for a milestone is less than 60 percent, GHSC-PSM will expand the segment to the next milestone that meets this threshold. For example, if the actual goods availability date (GAD) is 75 percent complete, pick-up date is 30 percent complete, and actual delivery date is 100 percent complete, the project will combine the pick-up and deliver segments into one segment, starting at the actual GAD and ending at actual delivery date.
6. In disaggregating this indicator, "sourcing channels" include the following:
    - Warehouse fulfillment (from GHSC-PSM regional distribution centers and emergency stockpiles)
    - Direct-drop fulfillment,
7. For tracer product categories that will be reported for this indicator, see Exhibit A-1 in Annex A of this document.
8. Additional disaggregation elements, such as country and line item, will be available in ARTMIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytical insight.
9. **Dwell-adjusted cycle time: "**Dwell" is defined as any inactive days during order cycle time where there is no expectation that GHSC-PSM should be taking steps to source, fulfill, or deliver the order. Dwell time may occur routinely because of early order placement or other foreseeable process steps, or as a result of exceptional circumstances. The full policy is defined in the "Policy and Rules for Use of GHSC-PSM Hold Statuses", available in the project Quality Management System. Dwell durations for all holds are captured in ARTMIS, in the Dwell Policy Monitoring Report. Dwell-adjusted cycle time is defined as the overall cycle time minus the sum of all dwell durations for all holds placed on the line item during its fulfillment. Dwell-adjusted cycle time will be reported beginning in FY2021 Q1, with the same applicable disaggregations (task order, tracer product category, fulfillment channel, and transportation mode) as overall cycle time.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Substantial updates throughout, especially to Points of Clarification, to provide more detail about segment definition and reporting practices.
- **11 February 2019:** Definition of dwell-adjusted cycle time revised. Note added stating the project intent to begin reporting a dwell-adjusted variant in FY2020. Targets information relocated to Annex C.
- **17 March 2020:** Revision to Point of Clarification defining "sourcing channel," to remove framework/non-framework contract and vendor-managed inventory disaggregations, which were never reported in practice. Point of Clarification for dwell-adjusted cycle time update to specify formal reporting expectations in FY2021.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated. Points of Clarification updated to reflect the use of additional relevant milestones for RO Validation, Planning/Sourcing, Manufacture/Prepare, and Pick Up segments; to remove reference to the new product request segment, which was determined to not be a primary order cycle time driver and has not been reported since FY2018; and to clarify that the Quality Assurance segment is calculated for TO2 only. Point of Clarification 9 regarding dwell-adjusted cycle time updated to cite the hold status policy and to reflect implementation of reporting beginning FY2021 Q1.
- **09 March 2022:** No changes.

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A4
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result IR 1.2. Strengthened global logistic processes associated with the storage and delivery of any health commodity to any point in donor supported countries.

Indicator Name: Inventory turns (average number of times inventory cycles through GHSC-PSM controlled global facilities).

Description

Precise Definition(s):
Numerator: Total ex-works cost of goods distributed from GHSC-PSM-controlled global inventory stocks (in USD) within the fiscal year.
Denominator: Average monthly inventory balance (in USD).
Unit of Measure: Ratio of value in USD.
Disaggregated by: a. task order.
Purpose: Inventory turns, also referred to as average annual inventory turns, measure the degree to which inventory held by GHSC-PSM to fulfill customer orders is appropriately sized to buffer for uncertain demand. The indicator assesses cost-effectiveness and asset management by evaluating the degree to which inventoried product is not sitting for too long in GHSC-PSM-controlled global inventory stocks. It indicates the number of times the inventory "turns over" in a year.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using the daily inventory reports sent from the three RDCs to GHSC-PSM HQ on the last day of each quarter. These reports contain data on all stock currently on hand, including quantities and values, for the calculation of average inventory balance for the year.

Total cost of goods distributed from the RDCs is extracted from ARTMIS and calculated based on order ship date, shipped quantities, and unit price.

Data Source: Daily inventory reports from RDCs; ARTMIS (Cognos reports).
Reporting Frequency: Annual
Frequency/Timing of Data Acquisition: As often as order and shipment transactions flow to ARTMIS, at least daily.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
- Data aggregation, indicator calculation, and analysis: Demand/Supply Planning Supervisor; M&E Specialist(s)
- Data entry and performance results: Demand/Supply Planning Supervisor; Plan Team Director

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any:
- **Validity**: No known limitations.
- **Reliability**: The calculation methodology has changed for Task Order 2. In FY2017-FY2019, the indicator included all products that were stored, staged, or pre-positioned in the RDC. Beginning in FY2020, the indicator has included only items stored as part of the Alu emergency stockpile. Results are therefore not comparable before and after this change.
- **Timeliness**: No known limitations.
- **Precision**: No known limitations.
- **Integrity**: No known limitations.

Points of Clarification (other notes)

1. Calculation of this indicator will include only GHSC-PSM-controlled inventory in GHSC-PSM-controlled facilities, and not for vendor-managed or vendor-owned inventory. This should be revisited once GHSC-PSM has a better sense of the level of visibility into such stock.
2. Goods are considered "distributed" from GHSC-PSM inventory when distribution orders (DO) are shipped (i.e. "ship date" is in the reporting period). Average inventory balance is calculated based on all inventory available in the warehouse per the daily inventory reports. (Exact stock status labels vary by warehouse vendor).
3. For Task Order 2, the only products that will be included in this indicator are the ACT stockpile. Any products in the RDC for another purpose or strategy (i.e. orders staging in transit from suppliers to countries; prepositioned inventory for annual seasonal malaria chemoprevention campaigns; cancelled and redirected country orders; etc.) will be excluded from the calculation.
4. Additional disaggregation elements, such as RDC or stockpile location, will be available in ARTMIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytical insight.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Small updates to Description, Plan for Data Acquisition, and Points of Clarification to provide more detail and reflect current process.
- **11 February 2019:** Targets information relocated to Annex C.
- **17 March 2020:** Data source revised to align with actual data collection practice, specifically the use of daily inventory reports from the RDCs. Definition for TO2 revised to include only products that are in the RDC as part of the ACT stockpile (change effective for FY2020 reporting).
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A5
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result IR 1.2. Strengthened global logistic processes associated with the storage and delivery of any health commodity to any point in donor-supported countries.

Indicator Name: Total Landed Cost (as a percentage of total value of commodities delivered to recipients).

Description

Precise Definition(s):
Numerator: Sum of all freight and logistics costs (in USD) paid by GHSC-PSM during the reporting period.
Denominator: Sum of the value of all commodities delivered to recipients during the reporting period. Value is determined by multiplying line item shipped quantities by the unit price for the item.

The following variants will also be calculated:
– Total sum of all freight and logistics costs paid during the reporting period (USD)
– Total freight and logistics and global supply chain headquarters operations costs per USD delivered to customers (expressed as a percentage of total value of commodities delivered)

Unit of Measure: Costs.
Disaggregated by: a. task order; b. financially tagged technical categories (see Points of Clarification 1 and 2).
Purpose: Total landed cost, for this indicator, refers to the total landed cost expressed as the amount of money (in USD) spent to deliver all commodities to GHSC-PSM customers. It is also expressed as the total costs to deliver one USD of product. Total landed cost is a function not only of operational efficiency but also a result of the supply chain strategy employed to determine the optimal trade-off of cost, reliability, and responsiveness.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using ARTMIS and Chemonics' financial systems.
Data Source: ARTMIS (order management and LMIS modules); GHSC-PSM Monthly Financial Statement.
Reporting Frequency: Semiannual, based on a rolling annual period. (Q2 reporting will reflect spending and deliveries from April-March; Q4 reporting will reflect spending and deliveries from October-September).
Frequency/Timing of Data Acquisition: As often as shipment and financial transactions flow to ARTMIS and Chemonics finance systems, at least daily.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: M&E Specialist(s)
– Data entry and performance results: Deliver/Return team; Procurement Specialists; Task Order Finance Managers

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity:**
  - Changes in commodity prices can impact the relative weight of similar delivery volumes from year to year. A price increase will cause the denominator to increase, making the same volume appear cheaper to deliver, all else equal. A price decrease will cause the denominator to shrink, making the same volume appear more expensive to deliver, all else equal.

- Additionally, time lags between deliveries and invoice payments for freight costs can take several months. Numerator costs can therefore lag behind denominator costs and not represent the actual cost of shipping those commodities delivered.
- For items shipped under D Incoterms, freight costs are typically paid by the vendor. They may be wrapped into the price of the commodity. These freight costs therefore cannot be separated out and assigned to the numerator.

– **Reliability:** There have been instances where HQ costs have been billed to different codes in different years (for instance, Operations Excellence costs were billed first to the Procurement category, then shifted to the M&E category). This can distort the relative spending changes in those cost categories and limit the reliability of trend analysis for HQ operations costs.
– **Timeliness**: Monthly financial statement data is typically available 5 weeks after the end of each quarter, too late for the first reporting due date. Provisional data will be submitted in the first report draft, to be revised with final figures in the revised submissions.
– **Precision**: Freight cost data is not invoiced at the line item level. Some costs may be parsed down to that level, but those calculations rely on assumptions, and not all costs can be matched automatically. The MFS data is available at the aggregated task order level only, which limits the ability to do precise analysis on product groups, countries, transportation modes, or other relevant factors.
– **Integrity**: No known limitations.

Points of Clarification (other notes)

1. Costs paid under the following financially tagged technical categories are included in this indicator:
   - Logistics costs (included in main indicator and all variants)
   - Inbound freight
   - Warehousing
   - Loss
   - Insurance
   - Quality assurance (TO2 only, calculated separately)
   - Outbound freight
   - Drop ship freight
   - Other costs (may include demurrage, security, and country-specific logistics costs)

   Global supply operations at headquarters (included in variant b.)
   - Forecasting and supply planning
   - Procurement
   - Quality assurance (TO2 only; calculated separately)
   - Warehousing and distribution
   - Monitoring and evaluation
   - MIS
2. The sum of all logistics costs paid in the period (variant a) will be disaggregated by financially tagged technical area and task order. All other variants will be reported at the task-order level only.
3. Freight, logistics, and global supply operations costs will be determined based on invoices GHSC-PSM pays during the reporting period. Due to invoice processing lead times, freight invoices for shipments delivered toward the end of the reporting period may not be paid by the time of reporting. Invoices paid at the beginning of the reporting period may be related to shipments delivered in earlier reporting periods. Likewise, the outcomes of operations activities in a period may be associated with shipments that are delivered in later periods. The numerator and denominators for all variants will therefore not be exactly correlated. However, the data should still show a meaningful trend over time.
4. U.S. dollar (USD) value delivered to customers includes outbound deliveries from the RDCs to customers (distribution orders) and direct-drop deliveries from suppliers to customers (purchase orders). It excludes inbound orders delivered to the RDCs (replenishment orders).
5. GHSC-PSM is responsible for quality control activities for TO2 products only. Quality assurance activities for TOs 1, 3, and 4 are managed by the GHSC-QA activity. Therefore, GHSC-PSM has direct access to financial data for QA costs for TO2 only. To maintain consistency with other task orders, QA costs will be excluded from the calculation of this indicator for Task Order 2. A version of the indicator, including QA costs for TO2, may be calculated and discussed in narrative portions of project reports.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Substantial updates to indicator definition, data collection procedures, and Points of Clarification.
- **11 February 2019:** Reporting period updated to a semiannual rolling four-quarters cadence. Costs previously referred to as "commodity-related" revised to "freight and logistics" costs, to align with more broadly used terms. The data source for expenditures data explicitly identified as the project Monthly Financial Statement. Data limitation note added to identify the effects of commodity price changes on the results of the indicator. Targets information relocated to Annex C.
- **17 March 2020:** No changes.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A6a
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics)
Intermediate Result IR 1.1. Enhanced global health commodity procurement.
Intermediate Result IR 1.2. Strengthened global logistic processes associated with the storage and delivery of any health commodity to any point in donor-supported countries.

Indicator Name: Absolute percent supply plan error, with variants annual absolute percent error and supply plan bias

Description

Precise Definition(s):
Numerator: Absolute value of the differences between the actual quantities with requested delivery dates during the quarter minus the quantities planned for delivery according to country supply plans.
Denominator: Sum of the actual quantities with requested delivery dates during the quarter

The following variant should be calculated:
- Annual absolute percent error over the four most recent quarters
- Forecast bias (calculated using the actual value of the difference between quantities planned in supply plans and quantities requested, rather than the absolute value)

Unit of Measure: Quantity of products.
Disaggregated by: a. tracer product category (adult ARVs, pediatric ARVs, molecular testing products, ACTs, malaria RDTs).
Purpose: This indicator will be used to assess the accuracy of aggregated country supply plans and to promote efficient supply management practices.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using ARTMIS and country supply plans.
Data Source: ARTMIS (order management module) and country supply plans.
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: As often as order transactions flow to ARTMIS, at least daily. Country supply plans are updated quarterly.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
- Data aggregation, indicator calculation, and analysis: Demand Planning Analysts; M&E Specialist(s)
- Data entry and performance results: Demand Planning Analysts; Plan Team Director

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
- **Validity**: The indicator as defined aggregates product quantities across countries and product types. For instance, a 100-unit shortfall in one supply plan will be offset by a 100-unit surplus in another plan, balancing out to 0 supply plan error. Dynamics within specific products or countries, as well as the "total error" of the supply planning system, may therefore be difficult to discern from the result.
- **Reliability**: From FY19 Q2-FY20 Q3, data for malaria commodities was collected in terms of packs. From FY20 Q4 onward, data is collected in terms of treatments or tests. This change had no impact on the outcome for mRDTs, but it did shift the proportions of ASAQ to Alu within the ACT category given the differing pack sizes of those products.
- **Timeliness**: No known limitations.
- **Precision**: Forecast planning and decision-making typically must happen at the product-level. This data is available, but it is more granular than the product category level used for reporting here.
- **Integrity**: No known limitations.

Points of Clarification (other notes)

1. The goal is to achieve a result as close to zero as possible. As this result deviates from zero, the global forecasts become increasingly inaccurate.
2. ARTMIS data can provide SKU-level forecast error and annual APE results, while the quarterly report will only reflect the aggregated tracer product category supply plan error, supply plan bias, and annual APE/bias.
3. Annual supply plan error represents the mean absolute percent error over the four most recent quarters. Is it calculated as follows:
    - **Numerator:** Absolute value of the difference between the actual quantities with requested delivery dates during the last four quarters minus the quantities planned for delivery in the last four quarters according to country supply plans
    - **Denominator:** Sum of the actual quantities with requested delivery dates during the last four quarters
4. Country supply plans are developed by technical working groups or other appropriate in-country entities. This indicator is measured for orders planned and placed through GHSC-PSM only; country supply plans should therefore be disaggregated by the entities funding the commodities.
5. This indicator will capture ordered quantities based on the requested delivery dates in a country's ROs, not the ADDs or the actual dates that the commodities were received by recipients. This distinction is to capture the outcomes of planning and forecasting activities, without biasing the indicator if problems arise during order placement, production, or fulfillment. The source for ordered quantities and requested delivery dates is customer ROs, as captured in ARTMIS.
6. Additional disaggregation elements, such as country, will be available in ARTMIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytical insight.
7. Quarterly and annual absolute percent error indicator variants should be calculated using absolute values in the numerator, whereas the supply plan bias variant should be calculated using actual values. This will illustrate under or over forecasting through positive or negative numerical results.
8. Currently, GHSC-PSM measures supply plan error for core Task Order 1 product groups (adult and pediatric ARVs, molecular testing lab products) only. For forecast error reporting for Task Order 3, including condoms, see indicator A6b below. Task Order 2 intends to begin reporting on supply plan error in FY2019 Q2, subject to adequate country supply plan submissions and available headquarters resources for supply plan review, aggregation, and error measurement. Aggregated supply plans and/or global demand forecasts are not created for TO4 at this time; data will not be reported for this task order.
9. The project compares actual orders in a quarter to the supply plan that was created three months before the start of that period. For example, Q3 actual orders are compared to the supply plan created at the end of Q1.
10. The Global Fund to Fight AIDS, Tuberculosis, and Malaria is aligning to use this supply plan error approach, for consistent methodology and collaboration among HIV/AIDS donors.

PIRS Updates

- **31 May 2016:** First approved PIRS (as indicator A6)
- **3 January 2018**: Indicator separated into a dedicated PIRS for supply plan error (A6a). Definition and calculation details added.
- **11 February 2019:** Language updated to remove uses of "mean" and "MAPE", to clarify that the annualized variant of this indicator is calculated based on a full annual period's worth of data, rather than averages of quarterly performance. Point of Clarification 10 about the Global Fund added. Task Order 2 reporting added, effective FY2019 Q2. Targets information relocated to Annex C.
- **17 March 2020:** No changes
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A6b
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result IR 1.1. Enhanced global health commodity procurement.
Intermediate Result IR 1.2. Strengthened global logistic processes associated with the storage and delivery of any health commodity to any point in donor-supported countries.

Indicator Name: Absolute percent forecast error, with variants annual absolute percent error and forecast bias

Description

Precise Definition(s):
Numerator: Absolute value of the differences between the actual quantities with requested delivery dates during the quarter minus the quantities planned for delivery according to the global demand forecast.
Denominator: Sum of the actual quantities with requested delivery dates during the quarter.

The following variant should be calculated:
– Annual absolute percent error over the four most recent quarters.
– Forecast bias (calculated using the actual value of the difference between quantities planned in the global demand forecast and quantities requested, rather than the absolute value)

Unit of Measure: Quantity of products.
Disaggregated by: a. tracer product category (injectable contraceptives, contraceptive implants, combined oral contraceptives, copper-bearing IUDs, progestin-only pills, and condoms).
Purpose: This indicator will be used to assess the accuracy of the global demand forecasts to promote efficient supply management practices.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using ARTMIS and the global demand forecasts created by the GHSC-PSM Demand Planning team. Global demand forecasts are created based on country supply plans and additional inputs, such as country order history, data from coordinated planning groups (PPMR, CSP), and global market dynamics indicator.
Data Source: ARTMIS (order management module) and global demand forecasts.
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: As often as order transactions flow to ARTMIS, at least daily. Global demand forecasts are updated monthly.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: Demand Planning Analysts; M&E Specialist(s)
– Data entry and performance results: Demand Planning Analysts; Plan Team Director

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity**: The indicator as defined aggregates product quantities across countries and product types. For instance, a 100-unit shortfall in one country will be offset by a 100-unit surplus in another, balancing out to 0 supply plan error. Dynamics within specific products or countries, as well as the "total error" of the supply planning system, may therefore be difficult to discern from the result.
– **Reliability**: No known limitations.
– **Timeliness**: No known limitations.
– **Precision**: Forecast planning and decision-making typically must happen at the product-level. This data is available, but it is more granular than the product category level used for reporting here.
– **Integrity**: No known limitations.

Points of Clarification (other notes)

1. The goal is to achieve a result as close to zero as possible. As this result deviates from zero, the global forecasts become increasingly inaccurate.
2. The ARTMIS dashboard will present the SKU-level forecast error, while the quarterly report will reflect only the aggregated tracer product category forecast error, forecast bias, and annual APE.
3. Annual APE represents the absolute percent error over the four most recent quarters. Is it calculated as follows:
    - **Numerator:** Absolute value of the difference between the actual quantities with requested delivery dates during the last four quarters minus the quantities planned for delivery in the last four quarters according to the global demand forecasts
    - **Denominator:** Sum of the actual quantities with requested delivery dates during the last four quarters
4. Country supply plans for condoms and contraceptives are aggregated into global demand forecasts and supplemented with additional inputs. The global forecasts should reflect the country supply plans developed by technical working groups or other appropriate in-country entities and other relevant data. The global demand forecast represents USAID shipments only; country supply plans should therefore be disaggregated by the entities funding the commodities.
5. This indicator will capture ordered quantities (where USAID is the noted supplier) based on the requested delivery dates in a country's ROs, not the ADDs or the actual dates that the commodities were received by recipients. This distinction is to capture the outcomes of planning and forecasting activities, without biasing the indicator if problems arise during order placement, production, or fulfillment. The source for ordered quantities and requested delivery dates is customer ROs, as captured in ARTMIS.
6. Additional disaggregation elements, such as country, will be available in ARTMIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytical insight.
7. Quarterly and annual APE indicator variants should be calculated using absolute values in the numerator, whereas the supply plan bias variant should be calculated using actual values. This will illustrate under or over forecasting through positive or negative numerical results.
8. Currently, GHSC-PSM measures absolute percent forecast error for core TO3 product groups (contraceptives and condoms) only. For supply plan error reporting for TO1 and TO2, see indicator A6a above. Aggregated supply plans and/or global demand forecasts are not created for TO4 at this time; data will not be reported for this task order.
9. The project compares actual orders in a month to the forecast that was created three months before that period. For example, January actual orders are compared to the forecast created in October; February orders are compared to the forecast created in November; etc.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Indicator separated into a dedicated PIRS for forecast error (A6b). Definition and calculation details added.
- **11 February 2019:** Language updated to remove uses of "mean" and "MAPE", to clarify that the annualized variant of this indicator is calculated based on a full annual period's worth of data, rather than averages of quarterly performance. Targets information relocated to Annex C.
- **17 March 2020:** No changes
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A7
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result IR 1.1. Enhanced global health commodity procurement.
Intermediate Result IR 1.2. Strengthened global logistic processes associated with the storage and delivery of any health commodity to any point in donor-supported countries.

Indicator Name: Percentage of line items imported using a temporary registration waiver (temporary waiver percentage).

Description

Precise Definition(s):
Numerator: Total number of line items delivered during the quarter that required a temporary registration waiver for importation
Denominator: Total number of line items delivered during the quarter
Unit of Measure: Line items
Disaggregated by: a. task orders; b. tracer product
Purpose: This indicator will track products imported into a country using a temporary registration waiver. This indicator will assist with tracking registration problems during the importation process that can lead to costly delays in delivering goods to customers, and help to identify where to prioritize registration efforts with suppliers.

Plan for Data Acquisition

Data Collection Method:

1. A list of line items delivered during the quarter is extracted from ARTMIS, at least 15 days following the end of the quarter. The denominator will be equal to the count of all line items delivered in the reporting period. It will align with the denominators for indicators A1a and A3.
2. Based on destination country and Item ID number, each line item is crosschecked with a Country Registration Status form (Task Order 2) or Registration Database (Task Order 3) to verify its registration status.
3. Items with the following status are considered "registered/no waiver required":
   - Registered
   - Registration not required, or NA
   - Registration submitted/renewal submitted

   Items will the following status will be clarified with the relevant GHSC-PSM procurement team:
   - Not registered
   - Registration expired
   - Planning to submit registration
   - Variation submitted
   - Missing, Unknown, or no data
4. GHSC-PSM procurement staff will confirm the status of each of these line items. For line items that are confirmed to have been unregistered for a country and product that requires registration, the GHSC-PSM procurement staff will confirm the use of a registration waiver to import the line item.
5. All line items that are confirmed to 1) require registration, 2) be unregistered in the delivery time frame, and 3) use a registration waiver for importation will be counted in the numerator.

Data Source: ARTMIS (for delivery data); Country Registration Status Forms; Registration Database
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: Registration data is updated on an ad hoc basis, usually annual or at the time of RFx events. Delivery data is updated as often as order transactions flow to ARTMIS, at least daily.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:

- Data aggregation, indicator calculation, and analysis: M&E Specialist(s)
- Data entry and performance results: TO2 and TO3 Integrated Supply Chain (ISC) Mangers; TO2 Procurement Specialists and Supervisors; TO3 Supplier Relationship Manager

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):

- **Validity:** Validity of the data relies on the quality of the underlying FP registration database, and registration annexes provided by malaria commodity suppliers. Validity may suffer when this data is incomplete, outdated, or unclear.
- **Reliability:** No known limitations. Processes and definitions have remained consistent since first implementation.
- **Timeliness:** Compilation of this data is heavily manual and time intensive, especially for TO2. Results have been delayed in some quarters but has always been included by no later than the second draft of any quarterly report.
- **Precision:** No known limitations.
- **Integrity:** No known limitations.

Points of Clarification (other notes)

1. Data for this indicator will be reported for Task Orders 2 and 3. Reporting is not expected for Task Orders 1 or 4.
2. The Task Order 3 Registration database is a .csv file maintained by the Suppler Relationship Management team based on supplier-reported registration data. The Country Registration Status Form is an annex submitted by suppliers during RFx events.
3. If a supplier has more than one manufacturing site for a product and the registration status varies depending on the manufacturing site, the relevant GHSC-PSM procurement staff will be asked to verify whether the line item originated from a registered manufacturing site.
4. Additional disaggregation elements, such as country, will be available in ARTMIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytic insight.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Revisions to definition and Points of Clarification.
- **11 February 2019:** Definition details removed. Note added that the indicator is undergoing revisions for TO2 and TO3 for FY2019, and reporting is not expected for TO1 and TO4. Targets information relocated to Annex C.
- **17 March 2020:** Full reference sheet developed. All sections updated.
- **19 May 2021**: PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A8
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result IR 1.2. Strengthened global logistic processes associated with the storage and delivery of any health commodity to any point in donor-supported countries.

Indicator Name: Average percentage of shelf life remaining for warehoused commodities, weighted by the value of each commodity's stock (product at risk percentage).

Description

Precise Definition(s):
Numerator: Percentage of shelf life remaining at the end of the quarter, weighted by value of commodities, summed across all products.
Denominator: Total value of commodities, summed across all products, at the end of the quarter.
Unit of Measure: Shelf life remaining (percentage).
Disaggregated by: a. Task order. (See Points of Clarification below for specific details related to Task Order 2)
Purpose: This indicator is the warehoused commodities' average percentage of shelf life remaining, weighted by the value of each commodity's stock. It can be used as a gauge of the amount of product that is at risk of expiration in a specified time. This indicator measures warehouse efficiency and can be managed through efficient product turnover. As such, it is closely related to indicator A4, Inventory Turns.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using the daily inventory report from each RDC from the last day of each quarter. Reports are sent from the RDCs to GHSC-PSM headquarters via email. Reports contain batch-level data for stock on hand, including manufacture date, expiry date, quantities, and value.
Data Source: Daily inventory reports from RDCs from the last day of the quarter.
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: Quarterly.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
- Data aggregation, indicator calculation, and analysis: Demand/Supply Planning Supervisor; M&E Specialist(s)
- Data entry and performance results: Demand/Supply Planning Supervisor; Plan Team Director

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
- **Validity**: No known limitations.
- **Reliability**: For Task Order 2, there was a change in which products are included in the indicator. In FY2017-FY2019 Q2, the indicator included all products that were stored, staged, or pre-positioned in the RDC. Beginning in FY2019 Q3, the indicator has included only items stored as part of the Alu emergency stockpile. Results before and after the change are therefore not comparable.
- **Timeliness**: No known limitations.
- **Precision**: Expressing shelf life as a percentage can obscure some practical facts about the longevity of the product. For instance, a 5-year product at 50% has a longer life remaining than a 2-year product at 90%. Expressing the results in terms of the number of months of shelf life remaining may be a more precise and actionable indicator.
- **Integrity**: No known limitations.

Points of Clarification (other notes)
1. If products do expire in the regional distribution centers, this will need to be reported to the Inspector General (IG). All losses will also be reported under indicator C7. Product Loss Percentage. 2. Shelf life will be calculated based on all inventory available in the warehouse as of the last day of the quarter, excluding expired items. Exact stock status labels vary by warehouse vendor. Both allocated and unallocated stock is included. 3. For Task Order 2, the only products that will be included in this indicator are the ACT stockpile. Any products in the RDC for another purpose or strategy (i.e. orders staging in transit from suppliers to countries; prepositioned inventory for annual seasonal malaria chemoprevention campaigns; cancelled and redirected country orders; etc.) will be excluded from the calculation. 4. Additional disaggregation elements, such as tracer product, RDC or stockpile location, and line item, will be available in ARTMIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytic insight.
PIRS Updates
– **31 May 2016:** First approved PIRS – **3 January 2018:** Small language updates to the definitions. Points of clarification revised and expanded. – **11 February 2019:** Targets information relocated to Annex C. – **17 March 2020:** Data source revised to align with actual data collection practice, specifically the use of daily inventory reports from the RDCs. Definition for TO2 revised to include only products that are in the RDC as part of the ACT stockpile (change effective beginning in FY2019 Q3 reporting). – **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated. – **09 March 2022:** No changes.

A9. Percentage of qualified suppliers from which USAID procures product (Supplier concentration)

– **3 January 2018:** Indicator removed with USAID approval, following definition and measurement challenges.

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A10
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result IR 1.1. Enhanced global health commodity procurement.

Indicator Name: Percentage of product procured using a framework contract (framework contract percentage).

Description

Precise Definition(s):
Numerator: Value of product purchased through framework contracts during the quarter.
Denominator: Total value of commodities purchased during the quarter.
Unit of Measure: Product value.
Disaggregated by: a. task order; b. tracer product category.
Purpose: This indicator refers to the proportion of products purchased through contracts that represent long-term agreements with respective suppliers. This indicator helps to assess whether GHSC-PSM is promoting strategic sourcing and as a result ensuring the best value for GHSC-PSM customers. The hope is that framework contracts are negotiated for best value. An established mechanism such as this should also eliminate significant steps in the procurement process, enabling a much quicker cycle time and reduced transaction costs.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using ARTMIS.
Data Source: ARTMIS (contracting module).
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: As often as order transactions flow to ARTMIS, at least daily.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: M&E Specialist(s)
– Data entry and performance results: ISC Managers, Procurement Supervisors and Specialists

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity**: No known limitations.
– **Reliability**: Data sources for this indicator were variable in the earlier quarters of the project. Manual procurement trackers were used FY16 Q4-FY17 Q3; ad hoc Cognos reports were used FY17 Q4-FY18 Q2; and the Performance Dataset has been in use from FY18 Q3 to present.
– **Timeliness**: No known limitations.
– **Precision**: Contract attributes associated with the contract number cannot flow to reporting if contract numbers are missing or mis-entered at the line item level. Missing data is filled in manually based on the assumption that line items within the same Purchase Order must have the same contract type, or by verifying the contract type in ARTMIS' contract module. When missing data appears to be the results of a systematic defect, this is flagged to the Help Desk and MIS team for resolution.
– **Integrity**: No known limitations.

Points of Clarification (other notes)

1. Framework agreements include IDIQs, blanket purchase agreements, long-term agreements, and basic ordering agreements. Non-framework agreements include firm fixed price and fixed unit price subcontracts.

2. Applicability of this indicator may vary across products, product types and/or health elements/TOs, as framework contracting may not be appropriate for certain products based on relevant market factors.
3. Although this metric is measured in value, GHSC-PSM is expected to track the breakout of framework contract, nonframework contract, or both framework and nonframework contracts for SKU count, PO count, line items purchased, customer order count, supplier count, and volume.
4. For a list of the tracer product categories that will be reported for this indicator, see Exhibit A-1 in Annex A of this document.
5. Additional disaggregation elements will be available in ARTMIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytical insight.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Small updates to indicator description and points of clarification to provide more detail.
- **11 February 2019:** Targets information relocated to Annex C.
- **17 March 2020:** Point of Clarification stating that decentralized procurements (DCP) are excluded from this indicator removed. DCP teams in the field offices can and do execute procurements under framework contracts. DCP procurements were excluded in some early reporting periods, but have been included in all reporting periods since FY2018 Q1.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

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.

- **11 February 2019** – Indicator removed. This indicator was little used by project stakeholders and has been removed. Instead, USAID and GHSC-PSM have developed a methodology for calculating cost savings on the procurement of key commodities. GHSC-PSM began reporting these results in the narrative of its quarterly report in FY2018 Q4. Reporting has and will continue to occur on a semiannual basis since then. USAID has also coordinated this methodology with the Interagency Supply Chain Group (ISG) to ensure consistency and collaboration across global agencies supporting procurement of essential health commodities.

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A13
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result IR 1.3. Ensured adherence to quality assurance requirements.

Indicator Name: Percentage of batches of product for which the final result is showing nonconformity (out of specification percentage).

Description

Precise Definition(s):
Numerator: Total number of batches of product showing nonconformity during the quarter.
Denominator: Total number of batches tested during the quarter.
Unit of Measure: Batches of product.
Disaggregated by: a. task order.
Purpose: Measures whether manufactured products meet acceptance criteria and critical quality standards as defined by regulatory authorities. Test results falling outside of established acceptance criteria that have been established in USAID Quality Assurance compendia and/or by GHSC-QA and GHSC-PSM QA documentation.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using ARTMIS
Data Source: ARTMIS (fulfillment module).
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: Monthly, or frequency of testing.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: TO2 QA/QC team; M&E Specialist(s)
– Data entry and performance results: TO2 QA/QC team

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity**: No known limitations.
– **Reliability**: No known limitations.
– **Timeliness**: No known limitations.
– **Precision**: No known limitations.
– **Integrity**: No known limitations.

Points of Clarification (other notes)

1. Stringent Drug Regulatory Authority (SRA)-approved commodities will not be included in this indicator because testing is not required for SRA-approved commodities. Note: The WHO Listed Authority (WLA) framework (policy and operational guidance) that is envisaged to be operational in 2022 will change the NRA to one of 4 maturity Levels (Level 1, Level 2, Level 3 and Level 4) with the existing SRAs being of the highest level..
2. Quality control testing is managed within the GHSC-PSM consortium for TO2 only. QC testing for TOs 1, 3, and 4 is managed by GHSC-QA. Results under these task orders will be reported by GHSC-QA.
3. Additional disaggregation elements, such as batch number and catalog item, will be available in ARTMIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytical insight.

PIRS Updates

– **31 May 2016:** First approved PIRS

- **3 January 2018:** Small updates to indicator description and Points of Clarification to provide more detail.
- **11 February 2019:** Targets information relocated to Annex C.
- **17 March 2020:** No changes.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A14
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result IR 1.1. Enhanced global health commodity procurement.

Indicator Name: Average vendor rating score.

Description

Precise Definition(s):
Numerator: Sum of all key vendor ratings.
Denominator: Number of key vendors from whom GHSC-PSM procured products/commodities, lab testing services, or freight forwarding during the quarter.
Unit of Measure: Numerical score.
Disaggregated by: a. vendor type (commodity supplier, QA lab services, or freight forwarder).
Purpose: This is a management indicator to enable GHSC-PSM and USAID in monitoring performance across vendors, helping the project to better manage vendor relations and as an additional consideration in the competitive vendor selection process.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using vendor records available in ARTMIS and elsewhere, such as subcontracts, invoices, certificates of analysis, goods received notices, customer satisfaction surveys, and other relevant technical documents. Ratings for each vendor will be determined using the following criteria for each vendor type:

Indicator #	Vendor type	Scorecard criteria	Responsible team
14a	Commodity supplier	On time order fulfillment rate	Supplier Management team
14b	QA lab services	Reliability Completeness (of documentation) Cost Service	Quality assurance (TO2 only)
14c	Freight forwarder (third-party logistics)	Reliability (ETA destination port accuracy, EDI status timeliness and completeness) Customer service Responsiveness (On-time delivery, Spot quote turnaround time, timeliness of booking confirmation) Quality of shipment Invoice accuracy (completeness, accuracy, and timeliness) Compliance	Deliver/Return

Scores for QA and freight forwarder vendors will be calculated using a weighted average of indicators to achieve a score between 0 and 100, with 100 indicating a perfect score.

The commodity supplier on time order fulfillment rate is reported for high-risk, high-value suppliers, as assessed by the Supplier Relationship Management (SRM) team using their Supplier Segmentation and Engagement framework. Supplier on-time performance is defined as follows:

– Percentage of a supplier's purchase order line items for which goods were fully released, with complete and accurate shipping documents provided to GHSC-PSM, within the acceptable time window of 7 days prior up to 3 days after the Committed Goods Available Date (CGAD) for "E" and "F" incoterms, and goods delivered within the acceptable time window of 14 days prior up to 7 days after the CGAD for "C" and "D" incoterms

- Orders made available earlier than acceptable time window prior to the CGAD are considered on-time, if the remaining product shelf life meets the minimum requirement of 85% at the CGAD, and GHSC-PSM has agreed in writing to accept the early consignment

Data Source: ARTMIS, subcontracts, invoices, technical documents.
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: Data for QA vendors will be collected based on standard fiscal quarters, while supplier and 3PL vendor scores will be reported on a one-month lag.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: A14a - Supplier Relationship Management and Procurement teams; A14b - TO2 QA/QC team; A14c - Deliver/Return Procurement team; A14a-c - M&E Specialist(s)
– Data entry and performance results: A14a - Supplier Relationship Management team; A14b - TO2 QA/QC team; A14c - Deliver/Return Procurement team

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
A14a – Commodity supplier
– **Validity**: No known limitations.
– **Reliability**: Tweaks to supplier performance calculations have happened over time. A scorecard including several criteria (product quality, on-time order fulfillment, invoice accuracy, and customer service) was used from FY17 Q2-Q4. This scorecard was revised in FY18, during which no results were reported. A simplified indicator focused on on-time performance to the committed goods availability date was rolled out in FY2019 Q1 and has been in use since then. (Note that while tools and reports have often referred to this as an on-time, in-full fulfillment rate, the "in-full" parameter has never been factored into this indicator result). A set of supplier delay codes was implemented in FY19 Q4, allowing the Procurement and SRM teams to adjust for performance when delays were outside the supplier's manageable control. The score includes a selection of the project's high risk/high value suppliers who supplied orders in the reporting quarter. This group of suppliers is reassessed periodically (about annually) and may be revised.
– **Timeliness**: Data is reported on a one-month lag.
– **Precision**: Results for individual vendors are not reported externally. However, these results are used for internal management and provided to the vendor as performance feedback. The quarterly supplier OTD result is not disaggregated by task order; only one rate is reported. Internally, it is broken down into on-time categories (more than 2 weeks early,1-2 weeks early, less than 1 week early, on-time, 1-2 weeks late, more than two weeks late).
– **Integrity**: No known limitations.

A14b – QA lab services
– **Validity**: No known limitations.
– **Reliability**: Tweaks to the QA lab scorecard have occurred over time. It was revised in FY17 Q1 to add a customer service component and to score each component on a sliding scale. It was revised again in FY19 Q3 to update the component weightings to more heavily emphasize reliability (from 35 to 47.5%) and responsiveness (from 10 to 15%) of the provision of lab test results, and to reduce the relative weighting of cost accuracy from 15 to 10%. Cost accuracy was also revised to give a full score only for original invoices submitted that exactly match the contract price. In FY20 Q3, the project began applying pandemic delay codes to the reliability component, which allow labs to be rated on-time in the case of pandemic-related delays.
– **Timeliness**: No known limitations.
– **Precision**: Results for individual vendors are not reported externally. However, these results are used for internal management and provided to the vendor as performance feedback.
– **Integrity**: No known limitations.

A14c – Freight forwarders
– **Validity**: No known limitations.

- **Reliability**: The 3PL rating scorecard used for this indicator was first revised in FY17 Q1 and then overhauled for FY2018 Q2 reporting, adding new criteria. Results before and after that change are not strictly comparable. Beginning in FY20 Q3, data for the customer service criteria could not be collected, as Deliver/Return staff priorities shifted to managing the logistics impacts from the COVID19 pandemic. This missing data prevented GHSC-PSM from reporting the full result, although data for all other criteria was reported.
- **Timeliness**: Data is reported on a one-month lag.
- **Precision**: Results for individual vendors are not reported externally. However, these results are used for internal management and provided to the vendor as performance feedback.
- **Integrity**: No known limitations.

Points of Clarification (other notes)

1. Only vendors who completed at least one service within the reporting period (made commodities available for pick-up, completed QA lab services, or delivered a shipment) will be rated for the quarter. Ratings will be based on all completed services provided by the vendor within the quarter. When large discrepancies exist between the quantity of services completed during the reporting period among vendors within a single vendor category, these will be discussed in the quarterly report narrative.
2. For commodity vendors, "critical and strategic" vendors will be evaluated each quarter. These vendors have been selected based on a detailed framework for supplier management, and the selection may vary with strategic sourcing priorities. For quality assurance and freight forwarders, all vendors will be rated. Details on selection criteria are available in the SOP manual.
3. Aggregate (overall vendor category) scores for QA lab vendors and commodity suppliers are determined by averaging all vendor scores, such that all vendor scores have equal weight. Aggregate vendor scores for freight forwarders, by contrast, are determined by aggregating numerators and denominators across all 3PL vendors for each of the indicators. Therefore, in the case of freight forwarders, vendors who delivered a larger number of shipments in the reporting period will have a relatively greater impact on the overall score.
4. Calculations will be increasingly automated through ARTMIS as new functionality becomes available.
5. Scores within each performance category will also be presented in quarterly performance reports. The project may report additional disaggregations in quarterly performance reports when they provide useful analytical insight.
6. Individual vendor identities will be kept confidential in reporting this indicator. Only aggregate vendor scores will be reported in the project's performance reporting.
7. Additional details on the results can be provided upon request.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Substantial updates throughout to provide more detail regarding the different scorecards approaches by vendor type.
- **11 February 2019:** Commodity supplier scorecard updated to focus only on on-time, in-full fulfillment rate. Revisions to scorecard criteria and weighting for QA lab vendors and freight forwarders, to align with QA and Deliver/Return processes for assessing and managing vendors. Timeframe updated to specify a one-month reporting lag for freight forwarder and commodity supplier scorecards.
- **17 March 2020:** No changes
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated. On-time delivery definition for commodity suppliers updated to reflect rules and definitions in use by the SRM team since FY2019.
- **09 March 2022:** No changes.

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A15
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result IR 1.1. Enhanced global health commodity procurement.

Indicator Name: Percentage of quality assurance Investigation reports submitted within 30 calendar days of outcome determination (QA investigation report submission).

Description

Precise Definition(s):
Numerator: Number of QA investigation reports submitted to PMI within 30 days of outcome determination.
Denominator: Total number of QA investigation reports due during the reporting period.
Unit of Measure: Investigation reports.
Disaggregated by: a. malaria tracer product categories (ACTs, RDTs, SP, LLINs, severe malaria medications, other pharma).
Purpose: This indicator reports on the timeliness of GHSC-PSM submissions of QA investigation reports.

Plan for Data Acquisition

Data Collection Method: Review of QA investigation records and incident management records.
Data Source: QA investigation records and incident management records.
Reporting Frequency: Semiannual
Frequency/Timing of Data Acquisition: As often as QA incident investigations are conducted and reports are completed.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: TO2 QA/QC team; M&E Specialist(s)
– Data entry and performance results: TO2 QA/QC team

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity:** No known limitations.
– **Reliability:** No known limitations
– **Timeliness:** No known limitations
– **Precision:** No known limitations.
– **Integrity:** This indicator is essentially self-reporting of the QA's team's report submission performance, which can create integrity risks. However, all data can be verified with documentation available in the QA database, incident reports, and/or emails, and there is no evidence of any integrity concerns thus far.

Points of Clarification (other notes)

1. This indicator will be reported only for TO2. For TOs 1, 3, and 4, incident investigations are conducted under GHSC-QA. Results under these task orders will be reported by GHSC-QA.
2. GHSC-PSM QA will define product incident as an OOS, regulatory notice, field reports questioning suitability or quality of products, or other occurrences that may have an impact on product quality.
3. Incidents that result in physical damage but do not impact the quality of the products will not be included in this indicator.
4. The action items indicating start/end of an investigation will be defined in the GHSC-PSM Incident Management SOP and the TO2 QA OOS Investigation Work Instruction.

PIRS Updates
– **3 January 2018:** First approved PIRS – **11 February 2019**: Targets information relocated to Annex C. – **17 March 2020:** No changes – **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated. – **09 March 2022:** No changes.

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A16
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result IR 1.1. Enhanced global health commodity procurement.
Intermediate Result IR 1.2. Strengthened global logistics processes associated with the storage and delivery of any health commodity to any point in donor-supported countries.

Indicator Name: Percentage of backlogged line items.

Description

Precise Definition(s):
Numerator: Number of line items with an ADD on or before the reporting period end date, within a rolling 12-month period, that have not been cancelled or put on hold and that are currently undelivered and late.
Denominator: Total number of line items with an ADD on or before the reporting period end date, within a rolling 12-month period, that have not been cancelled or put on hold.
Disaggregated by: a. task order; b. tracer product category; c. global supply chain versus decentralized procurement.
Purpose: Backlog is a critical performance and management indicator used to measure the number of outstanding late line items. Our commitment to measuring and tracking backlog enables an environment where undelivered late orders can be prioritized and quickly resolved to mitigate downstream impacts, even if after delivering those orders can no longer be counted as on time for OTD.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using ARTMIS.
Data Source: ARTMIS (order management and LMIS modules).
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: Given that the backlog number will continuously change as orders are fulfilled, cancelled, or placed on hold, data should be pulled two weeks after the reporting period end date.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
- Data aggregation, indicator calculation, and analysis: M&E Specialist(s)
- Data entry and performance results: Integrated Supply Chain (ISC) Managers; Procurement Supervisors and Specialists

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
- **Validity**: Use of reason codes to adjust agreed delivery dates allows the measurement to control for factors beyond the project's manageable control, but it may limit the ability of the indicator to measure recipient satisfaction or experience. Items with ADDs more than one year earlier than the reporting timeframe are not counted in the indicator, but are identified in the accompanying analysis.
- **Reliability**: The data source changed once early in the project, from the GSC Performance Reporting Tool (an Excel tool merging the Requisition Order History Report and the LMIS Shipment Tracker, FY18 Q1-2), to the Performance Dataset (FY18 Q3-current). Defects in the data flows from ARTMIS transactional modules to the reporting module may cause occasional errors in the dataset. Once detected, these are addressed via the ARTMIS Help Desk and Change Control Board process.
- **Timeliness**: No known limitations.
- **Precision**: No known limitations. Missing data or other errors are identified as they arise and flagged to the Help Desk for correction.
- **Integrity**: No known limitations.

Points of Clarification (other notes)

1. Every RO that is sent to USAID for approval will include an ELT for each line item in the order, expressed in number of weeks. The ELT is the estimated time it will take for a line item to be delivered to the recipient, starting from the date that USAID approves the RO in ARTMIS. Upon USAID approval, an ADD for each line item will be automatically calculated and captured in ARTMIS.
2. The ADD will define the minimum delivery window, which is defined according to GHSC-PSM business rules as 14 calendar days before the ADD through seven calendar days after the ADD. Once set, the ADD may be changed only if it is covered by one or more of the approved reason codes, enabling a customer-approved change to the ADD. A list of approved reason codes and details on how the codes are applied are available in the "ADD, EDD, and Reason Code" guidance document in the GHSC-PSM QMS. All customer approvals of ADD changes must be documented and retained. If an ADD is revised from the past to the future, it would no longer be counted in the backlog.
3. The actual delivery date will define the final delivery date of goods, for a specific line item, to the recipient. The actual delivery date is documented in ARTMIS for each line item after proof of delivery has been attained.
4. A line item is considered in backlog when it has an ADD on or before reporting period end date and has not been delivered and is late. Backlog calculation removes any line items that have been cancelled or placed on hold.
5. See Exhibit A-1 in Annex A of this document for a list of tracer product categories used for disaggregation of this indicator.
6. Additional disaggregation elements, such as country, will be available in ARTMIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytical insight.

PIRS Updates

– **3 January 2018:** First approved PIRS
– **11 February 2019:** Targets information relocated to Annex C.
– **17 March 2020:** No changes
– **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
– **09 March 2022:** No changes.

In-Country Supply Chain Indicators

B. IN-COUNTRY (Supply Chain Operations)

Indicator Number: B1
Indicator Type: Performance
Objective 2: Strengthened In-country supply chain systems.
Intermediate Result IR 2.2. Improved in-country logistics, including effective and efficient delivery of health commodities to service sites.

Indicator Name: Stockout rate at SDPs

Description

Precise Definition(s):
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 that offer the tracer product. See points of clarification for aggregation of stockouts.
Unit of Measure: Service delivery points.
Disaggregated by: a. task order; b. country; c. tracer product; d. GHSC-PSM-supported regions versus non-GHSC-PSM-supported regions.
Purpose: To determine the prevalence of stockouts at the facility or SDP level of each tracer product. In conjunction with other metrics, determine the location of bottlenecks within the supply chain and then focus on those areas to reduce future stockouts.

Plan for Data Acquisition

Data Collection Method: Data should be collected from the LMIS and analyzed regularly (at least quarterly if feasible), and reported quarterly using data from the ending stock balance of the second month of the quarter (November, February, May, and August), which is the most recent available data in most countries. Where monthly data are not available, the data should be reported for the most recent reporting period for which data is available as of the 7th day of the month following the end of the quarter. All SDPs included in the visit population or in the LMIS report should be analyzed for stockouts of the tracer products using the disaggregation above.

Data Sources:
The preferred source of data is the host-country LMIS, where the LMIS provides regular and reliable information for the specified indicator.
Where the national LMIS cannot provide reliable information for the specified indicator, and a parallel LMIS run by the project exists for other purposes, this LMIS can provide the data.
Where reliable LMIS data is not available, data from regular surveys, such as facility surveys, drug use surveys, and EUV surveys, may be used. Whenever possible, surveys that serve as data sources should provide statistically representative samples.
Where survey data are used for monitoring, USAID/Washington, the mission, and the project will annually reassess the need for surveys as the LMIS is strengthened.
Where no source of reliable data for the required indicators is available, the project, USAID/Washington, and the USAID mission will come to agreement on required indicators and on steps to be taken to improve country-level logistics data and LMIS performance, and on other means to temporarily collect this data.
Each GHSC-PSM-supported office should report the data source used.

Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: Data should be reported quarterly. Data collection should align with the LMIS reporting schedule. If regular LMIS data is not available, data should be reported as often as possible.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: Field office and HQ M&E Specialist(s)
– Data entry and performance results: Varies by country supply chain system

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):

- **Validity**: Validity of stockout rates may be impacted by numerous factors, such as:
  - Low or inconsistent reporting rates
  - Inconsistent rules about the meaning of 0s or blank/null values for stock on hand
  - Inconsistent rules about the inclusion of sites that have not had stock for extended periods, particularly for FP commodities requiring trained providers (e.g., implants and IUDs)
  - Complexities of calculating composite stockout rates, such as FP method-level rates and inability to treat with AL
- **Reliability**: Data collection systems, reporting methodologies, definition interpretations, and calculations can vary across health areas and countries, and within countries and health areas over time. Product transitions can also mean that the items tracked as tracer products may change over time. Due to data availability limitations, some countries only report data from certain districts or regions, while others report on data from the whole country. Few countries report data from non-GHSC-PSM-supported regions.
- **Timeliness**: Stockout data collection timelines may be monthly, bi-monthly, or quarterly, depending on the country and the reporting system. Data typically is not available in centralized systems until at least one month following the end of the in-country reporting cycle. As a result, the most recent available data typically represents closing balances as of the middle month of the quarter, or earlier. The lengthy time lag for this indicator can make it difficult to conduct root cause analysis or use for routine decision-making.
- **Precision**: Aggregations at the country or task order level are not likely to be meaningful, but product-level stockout rates are precise enough for most purposes.
- **Integrity**: The chain of reporting has numerous transition points, from health facilities, to subnational aggregation points, to centralized data extraction in-country, to GHSC-PSM field office process and transmission to HQ, to final HQ validation and processing. GHSC-PSM has procedures in place to minimize transcription errors and prevent unauthorized changes within its own systems, but upstream controls will vary within country systems.

Points of Clarification (other notes)

1. The term "stockout" indicates zero usable stock of the product or method at the location being assessed. Usable stock refers to stock that is not expired or damaged.
2. See Exhibit A-2 in Annex A of this document for the tracer products that will be measured for this indicator.
3. Additional disaggregation elements may be available in GHSC-PSM's in-country data tracking system. The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight.
4. For disaggregation of this indicator, the relevant region for determining "GHSC-PSM support" is the first subnational government administrative unit below the central level (subnational level 1). Examples include the state, provincial, or regional level, although terminology will vary between countries. The region will be considered "supported" if GHSC-PSM is providing "sustained support" to that region, meaning that it has one or more ongoing work plan activities directed at that region and can be expected to have some eventual influence on facility-level supply chain outcomes there.
5. For facilities carrying malaria commodities, specifically, AL, the project will also measure inability to treat, i.e., whether the facility is stocked out of all presentations of AL. For example, if a facility offers four presentations of AL, it must be stocked out of all four presentations to be unable to treat. If it has any stock for at least one presentation, it is able to treat. The denominator for inability to treat is the number of SDPs reporting on all four presentations of AL. (Note: AS/AQ packs cannot be cut and combined like AL packs, so this applies only to facilities carrying AL.)
6. For disaggregation at the task order and country levels, the definition of this indicator changes to the percentage of tracer product *observations* where a stockout was reported, rather than the percentage of SDPs stocked out of a tracer product. The numerator is calculated by summing the numbers of SDPs stocked out of each tracer product, and the denominator is calculated by summing the number of SDPs reporting for each tracer product.

7. For PRH contraceptive methods with more than one product, GHSC-PSM will report at both the product and method level where possible. A site will be considered stocked out at the method level only if it is simultaneously stocked out of all products for that method. Only product-level data will be factored in when calculating overall task order, country, and project performance (to avoid double-counting).
8. Countries that do not have data available for the middle month of the quarter in time for the quarterly report will be reported as "out of cycle" in indicator data tables and graphs. Their results will be factored into annual year-to-date results, but not in quarterly task order or projectwide averages.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Updates to definitions to provide additional detail, and substantial expansion of points of clarification.
- **11 February 2019:** Targets information relocated to Annex C.
- **17 March 2020:** No changes.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

B. IN-COUNTRY (Supply Chain Operations)

Indicator Number: B2
Indicator Type: Performance
Objective 2: Strengthened In-country supply chain systems.
Intermediate Result IR 2.2. Improved in-country logistics, including effective and efficient delivery of health commodities to service sites.

Indicator Name: Percentage of stock status observations in storage sites where commodities are stocked according to plan, by supply system level.

Description

Precise Definition(s):
Numerator: Number of stock status observations for a tracer product that are within the designated minimum and maximum quantities at storage sites.
Denominator: Total number of stock status observations for a tracer product at storage sites.
Unit of Measure: Stock status observations.
Disaggregated by: a. task order; b. country; c. stock status (stocked according to plan, overstocked, understocked, and stocked out); d. level of the supply chain system (national warehouse and subnational stores); e. tracer product.
Purpose: Identify stock management by distribution site to provide technical assistance and thus improve the inventory management of all commodities. This indicator checks to see if the supply chain system is functioning as it was designed by tracking if both the central level and subnational level medical stores can maintain the designated quantity of stock/months of stock to treat patients or to distribute to treatment facilities or secondary distribution centers. A view of each level of the system, using this metric level by level, can also help to locate bottlenecks within the system, which could prevent patients from receiving needed commodities, cause needless stockouts, or unnecessary expiries.

A **central medical store** is the physical location where pharmaceutical and/or medical products are delivered to and stored at a central site in the country. The central medical store then supplies those products to lower-level sites across the country — either distribution centers or health facilities — for distribution and use at the facility level.
A **subnational medical store** is a physical location that receives pharmaceuticals and/or medical products from the central medical store, safely stores the products, accepts orders from or supplies products to lower-level facilities within a discrete geographic area in the country (not the entire country), such as a state, region, province, or district, and then distributes those pharmaceuticals to the facilities where the pharmaceuticals are presumably used.

Tracer products for this and other in-country stock metrics should be those listed in Exhibit A-2 in Annex A of this document.

Plan for Data Acquisition

Data Collection Method: For this indicator, data must be collected at the central medical store and at subnational medical stores. Disaggregation by store level is accomplished by entering numerator and denominator data for the appropriate facility: a central medical store or a subnational medical store. GHSC-PSM staff in country will count the number of stock status observations per store level and aggregate store levels as defined above in the "definition" section.

Multiple observations (through physical counts performed or reports) of stock status may be made for the products of interest per reporting period. The number of observations is determined by the capability and procedures of each country. These observations should be analyzed in this way:

1. Document observations for each product of interest.
2. Sort observations for each product of interest into "quantities between maximum and minimum quantities/months of stock" and "quantities above or below maximum and minimum."
3. The number of observations where quantities are between maximum and minimum is the numerator.
4. The total number of observations available is the denominator.

Example 1: If the CMS has monthly stock observations for RTKs, nine of which are within maximum and minimum levels but the remaining three of which represent a stockout, then for the CMS, the resulting measurement would be 9/12 (75 percent). Likewise, in the stockout disaggregation, 3/12 (25 percent) of the observations would represent a stockout.

Data Source: The country's supply chain SOPs should outline the minimum and maximum stock level for each tier of the system. The CMS should also have a WMS. Software used in PEPFAR- or USAID-supported countries has been: MACS, SAGE, Epicor, Access or even Excel. Often these systems can pull data from subnational sites, or subnational sites may send their stock information to the central level. Observations of storage site and level-specific quantity of stock should be available through one or several of the following sources: program monitoring reports, an existing LMIS (including but not limited to WMS), stock status reports/stock keeping records/regular physical counts, order forms from the central/regional/district/facility levels, or regular supervision visits.

As data sources will vary from country to country, each country should report the data source used.

Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: Quarterly
Estimated Cost of Data Acquisition: Data to be collected by GHSC-PSM staff according to the capability and procedures for each country.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: Field office and HQ M&E Specialist(s)
– Data entry and performance results: Varies by country supply chain system

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity**: The most significant validity factor impacting stocked according to plan rates is low-quality consumption data, which is a necessary input for determining average monthly consumption (AMC) and months of stock on hand. Countries may use warehouse issues as a proxy for consumption or may model AMC based on additional factors.
– **Reliability**: Data collection systems, reporting methodologies, definition interpretations, and calculations can vary across health areas and countries, and within countries and health areas over time. Product transitions can also mean that the items tracked as tracer products may change over time. Minimum and maximum policy guidance may also change over time.
– **Timeliness**: Data from the last month of the quarter may not be available from all warehouses in every country at the time of reporting.
– **Precision**: Aggregations at the country or health level may obscure nuance at different supply chain levels or at the product level. The indicator as defined here also only reports descriptive stock status, not the exact product quantity or months of stock available.
– **Integrity**: The chain of reporting has numerous transition points, from subnational to central warehouses, to GHSC-PSM field office process and transmission to HQ, to final HQ validation and processing. GHSC-PSM has procedures in place to minimize transcription errors and prevent unauthorized changes within its own systems, but upstream controls will vary within country systems.

Points of Clarification (other notes)

1. Additional disaggregation elements will be available in GHSC-PSM's in-country data tracking system. These elements include country program, store level (e.g., central warehouse, subnational medical store), and health element. The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight.
2. For TO3 tracer products, countries may report at the method and product level, according to the products and data available in their country. Only product-level data will be factored into overall task order, country, and project performance, to avoid double counting.
3. In-country storage data is also reported to PEPFAR through DATIM, and may also be reported to PMI and the PRH program through other channels, including the PPMRm and PPMR.

PIRS Updates
– **31 May 2016:** First approved PIRS – **3 January 2018:** Updates to definitions and points of clarification to provide additional detail. – **11 February 2019:** Targets information relocated to Annex C. – **17 March 2020:** No changes – **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated. – **09 March 2022:** No changes.

B. IN-COUNTRY (Supply Chain Operations)

Indicator Number: B3
Indicator Type: Performance
Objective 2: Strengthened In-country supply chain systems.
Intermediate Result IR 2.2. Improved in-country logistics, including effective and efficient delivery of health commodities to service sites.

Indicator Name: SDP reporting rate to the LMIS.

Description

Precise Definition(s):
Numerator: Number of SDPs whose LMIS report(s) or order form(s) were received at the central level within 30 days of the specified in-country deadline.
Denominator: The total number of SDPs in country that are required to report.
Unit of Measure: Service Delivery Point.
Disaggregated by: a. task order; b. country; c. GHSC-PSM-supported region versus non-GHSC-PSM-supported region.
Purpose: To determine whether timely SDP-level data is available to supply chain managers at the relevant decision-making levels. It illustrates whether SDP data is flowing smoothly up through the LMIS, without becoming stuck in bottlenecks along the way. Performance on this indicator requires both timely submission of reports by the SDPs, as well as timely aggregation and/or data entry at any intermediate levels as required. As such, it is a holistic measure of performance of the entire LMIS, rather than performance at any one supply chain level.

Plan for Data Acquisition

Data Collection Method: Routine data collection; data should be collected from the LMIS (in country) at least quarterly if feasible, and reported using data from the second month of the quarter (November, February, May, and August), which is the most recent available data in most countries. Where monthly data are not available, the data should be reported for the most recent reporting period for which data is available as of the 7th day of the month following the end of the quarter. LMIS in country may be paper-based, electronic, or a hybrid.
Data Source: Data for this metric is the LMIS, which is then cross-referenced with the national facility list, ensuring that the total represented in the denominator is accurate. Each country should report the data source(s) used.
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: Data should be reported quarterly. Data collection should align with the LMIS reporting schedule.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM in-country staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: Field office and HQ M&E Specialist(s)
– Data entry and performance results: Varies by country supply chain system

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity**: The indicator measures report submission only. It does not provide insight into report completeness or accuracy.
– **Reliability**: Data collection systems, reporting methodologies, definition interpretations, and calculations can vary across health areas and countries, and within countries and health areas over time.
– Timeliness: LMIS reporting timelines may be monthly, bi-monthly, or quarterly, depending on the **country** and the reporting system. Data typically is not available in centralized systems until at least one month following the end of the in-country reporting cycle. As a result, the most recent available data typically represents the reporting rate for the middle month of the quarter, or earlier.
– **Precision**: The 30-day timeframe of this indicator may not be a precise enough measure of timely LMIS reporting for all uses.

– **Integrity**: The chain of reporting has numerous transition points, from health facilities, to subnational aggregation points, to centralized data extraction in-country, to GHSC-PSM field office process and transmission to HQ, to final HQ validation and processing. GHSC-PSM has procedures in place to minimize transcription errors and prevent unauthorized changes within its own systems, but upstream controls will vary within country systems.

Points of Clarification (other notes)

1. Indicator will be measured per TO within each country. In countries where SDPs are required to submit multiple reports per TO, the SDP must submit at least one required report for the TO to count toward the numerator. The denominator will include all unique sites per TO required to submit any report; it will not include sites more than once if they are required to submit more than one report.
2. In countries with combined LMIS reporting across health elements (i.e. one report for multiple or all TOs), one submission will count toward the reporting rate for all applicable TOs.
3. SDPs are counted toward the numerator if their LMIS data is available at the central level by the deadline (specified in country) or up to one month after the deadline.
4. In countries where significant decision-making authority has been devolved to a subnational level, such as the state or province, SDPs may be counted toward the numerator if their data is available at the relevant level, even if it is not yet available at the central level.
5. Additional disaggregation elements will be available in GHSC-PSM's in-country data tracking system, DevResults. These elements include SDP type (primary, secondary, tertiary, other) and time of reporting (by deadline or up to one week after, between one and two weeks after deadline, between two weeks and one month after deadline, more than one month after deadline). The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight.
6. Countries that do not have data available for the middle month of the quarter in time for the quarterly report will be reported as "out of cycle" in indicator data tables and graphs. Their results will be factored into annual year-to-date results, but not in quarterly task order or project-wide averages.
7. For disaggregation of this indicator, the relevant region for determining "GHSC-PSM support" is the first subnational government administrative unit below the central level (subnational level 1). Examples include the state, provincial, or regional level, although terminology will vary between countries. The region will be considered "supported" if GHSC-PSM is providing "sustained support" to that region, meaning that it has one or more ongoing work plan activities directed at that region and can be expected to have some eventual influence on facility-level supply chain outcomes there.

PIRS Updates

– **31 May 2016:** First approved PIRS
– **3 January 2018:** Updates to definitions to provide additional detail, and substantial expansion of points of clarification.
– **11 February 2019:** Targets information relocated to Annex C.
– **17 March 2020:** No changes.
– **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
– **09 March 2022:** No changes.

B. IN-COUNTRY (Supply Chain Operations)

Indicator Number: B4
Indicator Type: Context
Objective 2: Strengthened In-country supply chain systems.
Intermediate Result IR 2.2. Improved in-country logistics, including effective and efficient delivery of health commodities to service sites.

Indicator Name: Average rating of in-country data confidence at the central, subnational, and SDP levels

Description

Precise Definition(s):
Numerator: Sum of all rating scores (0-9 points each) for all sites reporting, as described under Plan for Data Acquisition.
Denominator: Total number of sites reporting.
Unit of Measure: Points
Disaggregated by: a. task order; b. country; c. supply chain level (central, subnational, and SDP levels).
Purpose: Project perspective on in-country data accuracy.

Plan for Data Acquisition

Data Collection Method: Field Office team reviews available in-country data for the pertinent in-country metrics (*stocked according to plan, stockout rate, and LMIS reporting rate*) then provides a rating on the quality of the data, using the *LMIS reporting rate* metric for data timeliness (SDP level only), and the *stocked according to plan* (storage site level only) and *stockout rate* (SDP level only) indicators for data availability and accuracy. The data can be assessed by review of routine LMIS or warehouse reports, warehouse receipts and issues documents, site-level supportive supervision records, or surveys. Each level of the supply chain system will be rated on the following zero to three-point scales for data availability, accuracy, and timeliness, using the same indicators. The maximum score to be attained per each level of the supply chain system is **9**.

Data availability scale

0. Very poor data availability (no existing data, thus no confidence)
1. Poor data availability
2. Fair/good data availability
3. Very good data availability

Data accuracy scale- compare reports with source documents/physical count of commodities (for stockout rate and stocked according to plan).

0. Very poor data accuracy (no matching data between reports and source for any of the two indicators).
1. Poor data accuracy
2. Fair/good data accuracy
3. Very good data accuracy

Timeliness scale (for stockout rate and stocked according to plan).

0. Very poor data timeliness (most recent [expected] report not submitted at all)
0. Poor data timeliness
1. Good data timeliness
2. Very good data timeliness

Detailed methodology for determining the ratings is available in the GHSC-PSM Standard Operating Procedures for In-Country Nonroutine M&E Indicators and will be subject to adaptation to country landscape and context.

Data Source: Warehouse management reports, warehouse receipts and issues documents, LMIS reports, stock cards, ROs, warehouse management systems and documentation, physical counts, and other country-specific stock data sources
Reporting Frequency: Annual
Frequency/Timing of Data Acquisition: Data should be reported annually. Data collection should align with the LMIS reporting schedule.
Estimated Cost of Data Acquisition: Moderate to be coordinated with other facility visits as feasible, data to be collected by GHSC-PSM in-country staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: Field office and HQ M&E Specialist(s)
– Data entry and performance results: Varies by country supply chain system

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity**: The indicator is a limited measure of three dimensions of data quality at the site level. It is not a complete measure of data quality of the entire supply chain data systems and may leave critical components unexamined. Countries may bundle their data collection with supportive supervision visits, which often target low performing sites and may bias the indicator toward lower results.
– **Reliability**: Data collection tool and method has remained consistent. However, countries may change their sampling approach, the types/levels of sites visited, and their tracer product selection from year to year. Data collection may take place at different times of year or may not take place at all (a notable problem during the COVID19 pandemic).
– **Timeliness**: Data collection may be delayed or may not take place every year, depending on resource availability for large-scale data collection.
– **Precision**: Due to various constraints and in-country priorities, the health facilities visited for this indicator collection are typically not selected to be representative of the country as a whole or any other sampling frame. Margins of error are generally unknown. The bucketing of the data quality scores is broad; the final result may not be sensitive enough to detect incremental changes in system data quality.
– **Integrity**: Data collection is conducted using paper forms in some countries, which increases the risk of transcription error. Countries using mobile data collection tools have more safeguards.

Points of Clarification (other notes)

1. A country with excellent data at the central level may receive a 9 for the central level, but may receive a 5 only at the subnational level, where the LMIS is weaker. Therefore, an average rating could mask differences between supply chain levels, and a review of the data disaggregated by supply chain level will be important for interpreting results.
2. To minimize the cost of reporting on this indicator, field offices are encouraged to combine the collection of this data with other health facility and storage site visits. As such, in some cases the collection of this data may be spread out over several months of the year. In these cases, field offices will collect the data over the same intervals each year to maintain consistency.
3. Related to LMIS reporting rate, this metric is meant to give the USAID Contracting Officer's Representative and project team perspective on the accuracy or trustworthiness of the LMIS data at each level within the system and would be reported as per the scenario below:

   The CMS in "Country A" has a well-staffed CMS that keeps track of stock status data accurately with a WMS, which is updated with each transaction. The regional medical stores maintain Excel files for the stock which are updated monthly and transmitted when internet is available. The facilities report their stock status and order requests through a paper-based system, but often do not have time to measure consumption, update stock cards, or count inventory. About one-third of the facilities in the country are reporting, and they report only when someone is traveling to the regional medical stores.

   Country A Scenario Ratings:
   Average rating: 6.7
   Disaggregation:

Central: 9
Subnational: 7
SDPs: 4

PIRS Updates

- **31 May 2016**: First approved PIRS
- **3 January 2018:** Minor revisions to reference the GHSC-PSM Standard Operating Procedures for In-Country Nonroutine M&E Indicators and provide more detail about data collection approached.
- **11 February 2019:** Targets information relocated to Annex C.
- **17 March 2020:** No changes.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

B. IN-COUNTRY (Supply Chain Operations)

Indicator Number: B5
Indicator Type: Performance
Objective 2: Strengthened In-country supply chain systems.
Intermediate Result 2.1. Improved strategic planning and implementation related to supply chain management and commodity security.

Indicator Name: Percentage of required annual forecasts conducted

Description

Precise Definition(s):
Numerator: Number of required annual forecasts conducted.
Denominator: Total number of required annual forecasts.
Unit of Measure: Forecasts.
Disaggregated by: a. commodity group; b. country.
Purpose: Forecasts are a key step in effective supply planning as well as medium-term procurement planning and resource mobilization. This indicator measures the occurrence and consistency of forecasts conducted annually.

Plan for Data Acquisition

Data Collection Method: Nonroutine data collection. Tally sheets are used to mark off the required annual forecasts conducted per GHSC-PSM-supported country.
Data Source: Project records.
Reporting Frequency: Annual
Frequency/Timing of Data Acquisition: Annual.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: Field office and HQ M&E Specialist(s)
– Data entry and performance results: Field office forecasting and supply planning technical lead (specific position/title varies by field office)

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity**: No known limitations in the straightforward measure of process completion. Indicator B12 provides more insight into forecast quality.
– **Reliability**: No known limitations.
– **Timeliness**: Forecasts may be conducted at any time of the year. Forecasts may be reported many months after their completion in-country.
– **Precision**: No known limitations.
– **Integrity**: No known limitations.

Points of Clarification (other notes)

1. Annual forecasts are reported by commodity group as follows: ARVs, Lab (HIV Diagnostics), VMMC, TPT, RTKs, condoms, malaria commodities, family planning commodities, and maternal and child health commodities.
2. The annual forecasts required to be reported are those agreed upon by GHSC-PSM, USAID and countries, based on the supply plan expectation exercise conducted and updated regularly. One country may be responsible for multiple annual forecasts, based on commodities procured. For IDIQ reporting, the denominator will be equal to the sum of all annual forecasts required across groups.
3. Additional disaggregation elements may be available in GHSC-PSM's in-country data tracking system. The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Tweaks to some terminology and expansion of points of clarification to identify product groups and how expectations for forecast completion are set.
- **11 February 2019:** Targets information relocated to Annex C.
- **17 March 2020:** No changes.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

B. IN-COUNTRY (Supply Chain Operations)

Indicator Number: B6
Indicator Type: Performance
Objective 2: Strengthened In-country supply chain systems.
Intermediate Result 2.1. Improved strategic planning and implementation related to supply chain management and commodity security.

Indicator Name: Percentage of required supply plans submitted to GHSC-PSM during the quarter

Description

Precise Definition(s):
Numerator: Number of required supply plans that were submitted to GHSC-PSM in the quarter
Denominator: Total number of required supply plans.
Unit of Measure: Supply plan.
Disaggregated by: a. commodity group; b. country.
Purpose: Regular visibility into country supply plans is an integral part of proper forecasting to ensure commodity security. This indicator measures the occurrence and consistency of supply plan submissions to GHSC-PSM's Forecasting and Supply Planning (FASP) team.

Plan for Data Acquisition

Data Collection Method: Nonroutine data collection. Field offices use tally sheets to mark off required quarterly supply plan submissions. Data is triangulated with the FASP team records.
Data Source: Project records.
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: Quarterly.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
- Data aggregation, indicator calculation, and analysis: HQ Forecasting and Supply Planning (FASP) Health Systems Strengthening team; Field office and HQ M&E Specialist(s)
- Data entry and performance results: Field office forecasting and supply planning technical lead (specific position/title varies by field office)

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
- **Validity**: No known limitations in the straightforward measure of process completion. The indicator does not provide any insight into supply plan quality.
- **Reliability**: In Q2 FY2018, the indicator was updated to disaggregate results by product group rather than by task order. The denominator was updated to reflect expectations for supply planning by product group.
- **Timeliness**: No known limitations.
- **Precision**: No known limitations.
- **Integrity**: No known limitations.

Points of Clarification (other notes)

1. In-country supply plan information must be communicated to GHSC-PSM headquarters and fed into the global supply plan for tracer commodities.
2. Supply plans are reported by commodity groups as follows: ARVs, Lab (HIV Diagnostics), VMMC, RTKs, TPT, condoms, malaria commodities, and family planning commodities.
3. The supply plans required to be reported are those agreed upon by GHSC-PSM, USAID and countries, based on the supply plan expectation exercise conducted and updated regularly. One country may be responsible for submitting multiple supply plans per quarter, based on task order buy-in and commodities procured. For IDIQ reporting, the denominator will be equal to the sum of all supply plans required across task orders and commodity groups.

4. Additional disaggregation elements may be available in GHSC-PSM's in-country data tracking system. The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Tweaks to some terminology and expansion of points of clarification to identify product groups and how expectations for supply plan updates are set. Changed from task order disaggregation to product group-level disaggregation.
- **11 February 2019:** Targets information relocated to Annex C.
- **17 March 2020:** Maternal and child health commodities removed from the product groups listed in Point of Clarification 2, as this reporting is no longer required by USAID Task Order 4.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

B. IN-COUNTRY (Sustainability)

Indicator Number: B7
Indicator Type: Context
Objective 2: Strengthened in-country supply chain systems.
Intermediate Results
IR 2.1. Improved strategic planning and implementation related to supply chain management and commodity security.
IR 2.4. Strengthened enabling environments to improve supply chain performance.

Indicator Name: Percentage of total spent or budgeted on procurement of commodities for public sector services by the government, the U.S. government, the Global Fund, UNFPA, or other sources

Description

Precise Definition(s):
Numerator: Total budgeted/spent on health care commodities by a specific stakeholder in a country.
Denominator: Total budgeted/spent on health care commodities in a specific country.
Unit of Measure: Money budgeted or spent in USD.
Disaggregated by: a. health element (mapped to task orders); b. country; c. funding source.
Purpose: To document either the budgeted amount each country allocates for the various types of products or the amount each country spends on various types of products. In reporting, the amount must be explicitly identified as budgeted or spent. For sustainability it is important to note what portion of commodities are purchased by the host country compared to partners/donors and if this shifts over time. This metric will help determine if the investment increases over time or if differing political requirements result in fluctuating financial hydraulics between commodity types, e.g., funds shift from HIV to MCH.

Plan for Data Acquisition

Data Collection Method: Nonroutine data collection. Review of agreed upon supply plans, cross referenced with the country's CMS receipts and any customs clearance records as well as the national budget. Spent is the preferred metric, but when not available or where data quality is poor, budgeted values are acceptable. Program must determine if budgeted or spent figures are reported and must clarify when reporting whether data is for budgeted or spent figures.
Data Source: Annual budgeting exercises, quantifications, supply plans, host country records from government and donors, customs clearance records.
Reporting Frequency: Annual
Frequency/Timing of Data Acquisition: Data should be reported annually.
Estimated Cost of Data Acquisition: Data to be collected by GHSC-PSM in-country staff.
Responsible Individual(s) at the Project:
- Data aggregation, indicator calculation, and analysis: Field office and HQ M&E Specialist(s)
- Data entry and performance results: Varies by country and donor

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
- **Validity**: The most common challenge for validity is missing data, which can lead to misrepresentations of funding percentages because the full funding landscape is unknown. The project will not report funding percentages where data is missing from relevant funding sources. Budget figures may also not represent ultimate spending totals. Data sources for budget or spending data vary by country, health area, and availability of data.
- **Reliability**: Data sources and timeframes will vary by country/health area and may vary from year to year within a country. Data from all non-USG funding sources may not be available in every country.
- **Timeliness**: Timeframes of data availability may vary by country and by funding source due to varying fiscal years and budget cycles. To ensure that a full year of data is available, data timeframes may vary by country and may not be current at the time of GHSC-PSM's USG fiscal year reporting

cycle. (For instance, data may be three quarters out of date if the only available figures in a country are based on calendar year periods).
- **Precision**: Missing data is the most impactful limitation on indicator precision.
- **Integrity**: Data on GHSC-PSM funding totals comes from ARTMIS, Chemonics' financial statements, or budget plans such as MOPs and COPs, all of which have a high degree of system controls, approvals, and/or transparency. Integrity of other data will vary by source.

Points of Clarification (other notes)

1. USAID understands that performance for this indicator is dependent on factors external to the project's influence. Access to national budgets/expenditures might not reflect the reality or might not be made available.
2. "Other sources" refers to an aggregate of commodity financing from any source beyond the local government, the U.S. government, and the Global Fund.
3. The preferred period for this indicator is the U.S. government fiscal year (Oct-Sept). If data is not available for this period, countries should report for the most recent annual period completed before the end of the U.S. government fiscal year. For example, if data is available for the calendar year only, the country should report calendar year 2015 at the end of the U.S. government fiscal year 2016.
4. Additional disaggregation elements will be available in GHSC-PSM's in-country data tracking system. These elements include country program and health element. The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight.
5. GHSC-PSM field offices will report data only for the health elements for which a corresponding task order is operating in their country.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Small revisions throughout to provide more detail and clarity.
- **11 February 2019:** Targets information relocated to Annex C.
- **17 March 2020**: No changes.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated. UNFPA added as an explicit disaggregation category. (Previously, it was rolled in under "Other.")
- **09 March 2022:** No changes.

B. IN-COUNTRY (Sustainability)

Indicator Number: B8
Indicator Type: Performance
Objective 2: Strengthened in-country supply chain systems.
Intermediate Results
IR 2.3. Increased capacity building efforts by implementing strategies to transfer of skills, knowledge, and technology for improved and sustained performance.
IR 2.4. Strengthened enabling environments to improve supply chain performance.

Indicator Name: Percentage of targeted supply chain activities in which the host country entity has achieved technical independence with GHSC-PSM technical assistance.

Description

Precise Definition(s):
Numerator: Total number of targeted supply chain activities for which the relevant host country entity has achieved technical independence with GHSC-PSM technical assistance.
Denominator: Total number of targeted supply chain activities
Unit of Measure: Targeted supply chain activities
Disaggregated by: a. country; b. technical sub-category; c. task order, where appropriate
Purpose: This indicator is intended to measure GHSC-PSM supply chain systems strengthening performance in helping an assisted country achieve technical independence in important supply chain activities under major supply chain technical sub-categories. It measures a country's technical independence, or the country's ability to perform the supply chain activities independently from a technical perspective. Technical independence includes two dimensions: (1) the presence of key components important to sustained technical proficiency and (2) the host country's assumption of the role of primary technical implementer of the activity. Key components of technical independence are defined as formal designation of responsibility, standardization, resources, an institutionalized training approach, and monitoring systems. A country is deemed the primary technical implementer of a targeted activity when a host entity is responsible for leading, managing, and ensuring completion of the activity. This indicator does not measure financial independence, or the host country's ability to independently pay to sustain the activity absent current levels of financial support. It is one of several measures that may provide a monitoring perspective on project contributions toward a country's journey to self-reliance in the public sector supply chain.

Plan for Data Acquisition

Data Collection Method:
1. Annual consultation between GHSC-PSM field office leadership and USAID mission to assess priorities, resources, and expectations for which supply chain activities should be targeted to achieve technical independence by the end of the project. Agreement on the targeting expectations is documented using the GHSC Supply Chain Activity Targeting Worksheet. The host country is a pivotal actor in achieving technical independence in targeted activities, and active engagement with relevant government bodies (e.g. MOH, CMS, responsible host entities) is highly encouraged throughout this process.
2. Annual completion of the GHSC Supply Chain Technical Independence Scorecard. Through document reviews and key informant interviews, GHSC-PSM field office M&E and technical staff gather evidence of the current status of the host country entity on six criteria signifying technical independence:
    I. Designation of responsibility
    II. Standardization
    III. Training approach
    IV. Other resources
    V. Performance indicator
    VI. Implementation role

Data Source: Documentary evidence of supply chain policies, procedures, plan, strategies, programs, initiatives, etc. Key informant interviews with staff at the relevant host country agencies, partners, and GHSC-PSM technical staff.
Reporting Frequency: Annual, reported in Q3

Frequency/Timing of Data Acquisition: Annually
Estimated Cost of Data Acquisition: Data to be collected by GHSC-PSM in-country staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: Field office and HQ M&E Specialist(s)
– Data entry/collection and performance results: GHSC-PSM Country Directors; USAID Activity Managers; various country supply chain technical stakeholders

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity**: The indicator takes the complex concept of "technical independence" and breaks it down into a simplified set of criteria and a rating scale. The result may lack nuance and may over- or understate capabilities in certain areas. There is also a high potential for response bias from key informants, mitigated to the extent possible by triangulation among several sources and documentation.
– **Reliability**: In-country priorities, funding levels, and contextual factors may change from year to year, resulting in changes in which activities are targeted for technical independence within a country. Interpretation of the various activities and capacity elements may also vary by country, health area, and the individuals responsible for targeting and data collection from year to year.
– **Timeliness**: No known limitations.
– **Precision**: Data is often not disaggregated by health area in integrated systems. The "all-or-nothing" nature of the numerator means that progress that falls short of full independence may not be readily apparent in the annual result (although the underlying data is available to provide more detail).
– **Integrity**: Results are reviewed and validated by the HQ M&E team, but the simplicity of the Excel data collection tool/process means there are few data integrity safeguards beyond this oversight.

Points of Clarification (other notes)

1. **Targeted activities:** This indicator measures a standardized set of 29 fundamental supply chain technical activities within 10 technical sub-categories. The sub-categories align with the same categories used for GHSC-PSM technical assistance budgeting and financial reporting. Field offices and USAID missions will review the 29 activities each year and designate each one as "targeted" or "not targeted" to achieve technical independence by the end of the project. Activities should be considered targeted if:
    a. Technical assistance for the activity has been included in GHSC-PSM project work plans and budgets
    b. GHSC-PSM has been instrumental in leading or contributing to the development of host country entity capacity in the supply chain activity
    c. The USAID mission, GHSC-PSM, and relevant host country entity share an expectation that the host country will become technically independent by the end of the GHSC-PSM project. Where and when possible, engagement with relevant host government counterparts in the targeting exercise is highly recommended.

    Activities that were technically independent prior to the start of GHSC-PSM technical assistance should not be considered targeted. Activities for which GHSC-PSM is providing some TA, but which are still unlikely to achieve technical independence by the end of the project, should not be targeted. (This indicator is not intended to measure the full scope of GHSC-PSM TA activities. The project and its counterpart host country entities may achieve significant progress or milestones in non-targeted activities that will not be reported here. Additional project efforts, innovations, or achievements may be reported under indicators C1, C11, or other project narratives).
2. **End of project:** By default, the end of the project is assumed to be the end of calendar year 2023. Field offices that are scheduled to close earlier than this date should use their known close-out date as the "end of project" for the purposes of their targeting exercise.
3. **Responsible host country entity:** Each supply chain activity should have a clearly designated non-donor host country entity that is responsible for carrying out the activity. The entity may be a government ministry, agency, unit, committee, or individual staff position. It may also be a parastatal, private sector, or non-governmental organization to which the government has outsourced the activity.

4. **Technical independence:** A supply chain activity will be considered technically independent when the responsible host country entity has five institutional capacity elements in place and is the primary technical implementer of the activity. The five institutional capacity elements are as follows:
    a. **Designation of responsibility:** There is a document that assigns responsibility for implementing this activity to a non-donor host country entity in the host country. Examples of documentation include terms of reference, legislation or executive action, entity charter, entity mission statement, or other establishing document for a governmental or non-governmental unit, agency, group, committee, corporation or other organization. If the entity is a specific staff position, such documentation may include, but is not required to include, a job description, scope of work, or other documentation of duties.
    b. **Standardization:** There are guidelines or standard operating procedures that describe how the activity is to be completed by the responsible host country entity. These guidelines or standard operating procedures reflect the current process and expectations.
    c. **Training approach:** The responsible host country entity has the means to train new personnel to an adequate level of competency to carry out this activity. This may include established pre-service, in-service, or online training programs; guidelines for onboarding and on-the-job training; formal mentorship programs; etc. Collected evidence and interviews must establish that the host entity has an institutionalized and intentional approach to training new staff in the successful execution of the given activity.
    d. **Other resources:** The responsible host country entity has the information, equipment, software, and other tools it needs to carry out the activity. (Data collectors should only consider non-labor resources for this capacity element.)
    e. **Performance indicator**: The responsible host country entity is monitoring the performance of this activity using one or more relevant key performance indicator(s).
5. **Primary technical implementer:** The responsible host country entity is responsible for leading, managing, and ensuring completion of the activity. The entity is responsible for planning, scheduling, coordination, and technical oversight of the activity. The entity may complete the activity with its own personnel, supervise vendors such as 3PLs or software services, or manage a collaborative arrangement with other partners. The entity is fluent in the technical requirements for the activity and is ultimately accountable for its outcomes.
6. **Financial considerations:** This indicator is intended to measure technical skills, knowledge, and institutionalization at a host country entity. It does not measure financial resources or sustainability. A host country entity may become technically independent while still relying on outside donor financing to support personnel or other resources.
7. **National-level reporting:** By default, this indicator will be reported at the national level only. If some supply chain activities are partially taking place at lower levels, e.g. subnational warehousing, these lower levels will not be considered. However, if the activity is primarily or entirely taking place at lower levels, as can be the case in decentralized supply chains, the field office may measure at the relevant lower level. The field office must identify the number of entities that are targeted to achieve technical independence at the relevant level, collect data for all targeted entities, and achieve all six criteria for all targeted entities in order for the activity to be considered technically independent. The activity will only be counted once in the denominator and numerator.
8. **Task Order reporting:** By default, this indicator will not be disaggregated by task order or health area, as most country supply chain activities are integrated across health elements. In instances where there are separate responsible host country entities for separate health areas, (e.g. National AIDS Control Program, National Malaria Control Program, etc.), a field office may choose to target and measure each entity separately within the same activity. In these cases, the activity will be counted in the denominator/numerators for as many entities as are targeted and assessed. Results for these activities will be reported by health area/task order.
9. **Quality, or level of sophistication.** Please note that this indicator does not dictate a standard level of quality for implementation of targeted activities. Recognizing that targeted activities will be implemented and assessed in supply chains of varying levels of sophistication, the indicator does not assume standardized performance outcomes. For example, "monitoring inventory levels" may involve manual counting and the use of stock cards or it might reference maintaining complex Warehouse Management Systems. While the level of sophistication differs, a host entity might achieve technical independence using either method once it is deemed to have all the requirements necessary to independently monitor inventory levels. The indicator avoids dictating capacity minimums by assessing instead component parts and host country leadership.

10. **Adjusting targeted activities.** In rare instances, a GHSC-PSM field office and USAID mission may adjust the activities selected as targeted for technical independence from prior years. Adjustments will be made in the annual targeting discussions between GHSC-PSM field office leadership and the USAID mission, and noted in the signed targeting worksheets. Reasons for adjustment might include changes in funding/support, the presence of new donors leading to a reallocation of project priorities, a change in Host Country Entity priorities, etc.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Reporting period updated from semiannual to annual.
- **11 February 2019:** Definition details for this indicator have been removed. The indicator has never been reported, due to definition and measurement challenges. It will be redefined in consultation with USAID during FY2019, with the intent of reporting results in the FY2019 fourth quarter/annual report. Targets information relocated to Annex C.
- **17 March 2020**: Full reference sheet developed for this indicator.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

B. IN-COUNTRY (Sustainability)

Indicator Number: B9
Indicator Type: Context
Objective 2: Strengthened in-country supply chain systems.
Intermediate Result
IR 2.1. Improved strategic planning and implementation related to supply chain management and commodity security.
IR 2.4. Strengthened enabling environments to improve supply chain performance.

Indicator Name: Supply chain technical staff turnover rate.

Description

Precise Definition(s):
Numerator: Number of supply chain technical staff who left the active health labor force in the last year.
Denominator: Total number of supply chain technical staff at the beginning of last year.
Unit of Measure: Supply chain technical workers.
Disaggregated by: a. country.
Purpose: The supply chain turnover rate provides information on the health sector's retention and loss of health workers with supply chain expertise. This indicator provides information to policy makers on the results of investments in training health workers with supply chain expertise, along with pay scale and initiatives to retain supply chain health workers. It also informs decisions on how many new supply chain health workers need to be trained to mitigate attrition. A high turnover rate of health workers with supply chain expertise signals that the country's policies may not be sufficiently competitive to retain supply chain health workers, although some employees may leave for such reasons as retirement, death, attrition to other sectors, and migration.

Plan for Data Acquisition

Data Collection Method: Nonroutine data collection; retrieve the number of employees (with supply chain technical expertise) who left the active health labor force in the last year, for any reason. Consider only public-sector employees in GHSC-PSM-supported countries.
Data Source: The preferred source of data is the host-country human resource information system (HRIS). If HRIS data is not available, data sources may include employment records and payroll records obtained from the country's HR department and staff (e.g., Ministry of Health, Department of Human Resources, Human Resources Director).
Reporting Frequency: Annual
Frequency/Timing of Data Acquisition: Annual
Estimated Cost of Data Acquisition: Data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
- Data aggregation, indicator calculation, and analysis: Field office and HQ M&E Specialist(s)
- Data entry/collection and performance results: Varies by country supply chain system; Data is retrieved by GHSC-PSM M&E specialists

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
- **Validity**: The indicator measures supply chain workforce turnover at higher technical levels. It (explicitly) does not include workers with some supply chain responsibilities, such as health care workers responsible for stock management and consumption reporting at the facility level. It will therefore not speak to the supply chain impact of turnover in these areas.
- **Reliability**: Data collection procedures and data sources vary by country, and may vary over time within the same country. Interpretation of which positions fall within the "supply chain technical workforce" may vary by country and reporting individual.
- **Timeliness**: Workforce data may not be available on an annual cycle aligning with the USG fiscal year. To ensure that a full year of data is available, data timeframes may vary by country and may not be current at the time of GHSC-PSM's USG fiscal year reporting cycle. (For instance, data may be

three quarters out of date if the only available workforce data in a country is published on a calendar year basis).
– **Precision**: Data is not captured or disaggregated by health area.
– **Integrity**: Integrity may vary by country and data collection system.

Points of Clarification (other notes)

1. The preferred period for this indicator is the U.S. government fiscal year. If data is not available for this period, countries should report for the most recent annual period completed before the end of the U.S. government fiscal year. For example, if HRIS data is available only for the calendar year, the country should report calendar year 2016 at the end of the U.S. government fiscal year 2017.
2. Additional disaggregation elements may be available in GHSC-PSM's in-country data tracking system. Data will be collected and reported only at the central and subnational level 1, when possible. The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight.

PIRS Updates

– **31 May 2016:** First approved PIRS
– **3 January 2018**: Small updates to description to provide clarity. Point of clarification added about annual timeframes for data collection.
– **11 February 2019:** Targets information relocated to Annex C.
– **17 March 2020**: No changes
– **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
– **09 March 2022:** No changes.

B. IN-COUNTRY (Sustainability)

Indicator Number: B10
Indicator Type: Context
Objective 2: Strengthened in-country supply chain systems.
Intermediate Result IR 2.1. Improved strategic planning and implementation related to supply chain management and commodity security.
IR 2.4. Strengthened enabling environments to improve supply chain performance.

Indicator Name: Percentage of GHSC-PSM-supported countries that have a functional logistics coordination mechanism in place.

Description

Precise Definition(s):
Numerator: Total number of countries with a functional logistics coordination mechanism in place as determined by a qualitative assessment.
The following criteria will be assessed and taken into account to determine whether a country's logistics coordination mechanism is counted as "functional":

1. Formal legislative or administrative status
2. Formal written terms of reference
3. Membership of relevant government agencies, central medical stores, and relevant donors, private-sector entities, non-governmental organizations, and civil society organizations
4. Holding a meeting at least quarterly, with good representation from the mechanism's contributing actors
5. Development of policies, procedures, and/or action plans
6. Showing evidence of adherence to policies and procedures, implementing action plans, and following up on and addressing issues raised at previous meetings

Denominator: Total number of countries supported by GHSC-PSM for technical assistance.
Unit of Measure: Countries.
Disaggregated by: a. country; b. task order.
Purpose: This qualitative "yes/no" indicator (per country) is related to coordination, leadership, and commitment. For commodity availability/security and systems strengthening to become a reality, stakeholders that are involved in commodity financing, procurement, and distribution must work together to promote sustainable, effective, and efficient service delivery and supply chain systems. An active mechanism at the national level can play an important technical and/or political role by coordinating these actors and showing country commitment toward sustained national commodity availability and systems strengthening. Furthermore, such a committee can maintain a national focus on issues related to long-term commodity access and availability, reduce duplication and inefficiency in efforts, and promote information sharing. An "active" committee and/or mechanism should meet regularly (typically monthly or quarterly and at least biannually), though it may remain active by working through other means (e.g., electronically). Coordination mechanism includes participation of a host-country relevant government agency (Ministry of Health, National Malaria Control Program, National AIDS Control Program, or National Reproductive Health/Family Planning agency or equivalent) and central medical store (or their equivalents), relevant donors, and nongovernmental organizations. Ideally, such a committee should be supported by a legal document that formally establishes the entity.

Plan for Data Acquisition

Data Collection Method: Qualitative review and assessment of formal documents (such as a Terms of Reference) or legal mandate establishing the committee; committee meeting agendas and minutes; key informant interviews with committee members.

Documentation and interview responses will be scored on the six criteria listed above using a structured rating tool. Rating tool and detailed scoring instructions are available in the GHSC-PSM Standard Operating Procedures for In-Country Non-Routine M&E Indicators.

Data Source: Committee meeting agendas and/or minutes; interviews with committee members.
Reporting Frequency: Annual

Frequency/Timing of Data Acquisition: Annual.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: Field office and HQ M&E Specialist(s)
– Data entry/collection and performance results: Varies by country supply chain system; Data is collected by GHSC-PSM M&E specialists

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity**: The indicator takes the complex concept of "functional coordination" and breaks it down into a simple set of criteria and a rating scale. The result may lack nuance and may over- or understate effectiveness in certain areas. There is also a high potential for response bias from key informants, mitigated to the extent possible by triangulation among several sources and documentation.
– **Reliability**: Data collection tool and functionality criteria were revised between FY2017 and FY2018.
– **Timeliness**: No known limitations.
– **Precision**: Countries with integrated coordination mechanisms do not report results disaggregated by health area, even though outcomes by health area may still vary within the same mechanism.
– **Integrity**: Results are reviewed and validated by the HQ M&E team, but the simplicity of the Excel data collection tool/process means there are few data integrity safeguards beyond this oversight.

Points of Clarification (other notes)

1. This is a qualitative "yes/no" indicator. Through a thorough review of evidence from documents and key informant interviews, the assessment team will use the weighting criteria and assigned point values defined in the Standard Operating Procedures for In-Country Non-routine M&E Indicators to arrive at a result.
2. In general, procurement and logistics coordination committees are predominantly comprised of representatives from various government agencies, donors, NGOs, civil societies, and private sectors. Therefore, this indicator should assess the inclusion of the following in the national coordination committee: a) Ministry of Health, b) NGO, c) private/commercial sector, and d) donor. The coordination committee does not have to be dedicated to commodity availability or logistics and systems strengthening exclusively; as long as a committee addresses commodity availability or logistics and systems strengthening, it counts for this indicator.
3. The potential exists for observer or reporting bias, stemming from the assessment team's affiliation with the project that is tasked with strengthening the coordination mechanism it is assessing. To address this bias, it will be important to closely link each finding with the associated back-up documentation. If field office technical staff members participate in the committee, then it is preferable that a different person from the field office or from the headquarters M&E team conduct key informant interviews of committee members to minimize bias.

PIRS Updates

– **31 May 2016:** First approved PIRS
– **3 January 2018:** Additional criteria detail provided in Data Collection Method.
– **11 February 2019:** Definition updated to reflect changes to the rating criteria for this indicator, which increased from four to five criteria. Changes bring the PIRS into alignment with updated and clarified data collection tools for this indicator, which were implemented for FY2018 reporting. Targets information relocated to Annex C.
– **17 March 2020:** No changes
– **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
– **09 March 2022:** No changes.

B. IN-COUNTRY (Sustainability)

Indicator Number: B11
Indicator Type: Context
Objective 2: Strengthened in-country supply chain systems.
IR 2.1. Improved strategic planning and implementation related to supply chain management and commodity security.

Indicator Name: Percentage of leadership positions in supply chain management that are held by women (in countries where GHSC-PSM is providing technical assistance related to workforce development)

Description

Precise Definition(s):
Numerator: Number of leadership positions in supply chain management that were held by women in a specified time in countries where GHSC-PSM is providing technical assistance related to workforce development.
Denominator: Total number of leadership positions held in a specified time, in countries where GHSC-PSM is providing technical assistance related to workforce development.
Unit of Measure: Supply chain leadership positions.
Disaggregated by: a. task order; b. country.
Purpose: This indicator seeks to measure the success of GHSC-PSM advocacy efforts to increase women's participation at higher levels of the supply chain within the countries where GHSC-PSM workforce development technical assistance is being provided. The aim is to achieve equal participation and opportunities for men and women in the supply chain leadership and workforce in general.

Plan for Data Acquisition

Data Collection Method: Workforce surveys.
Data Source: Workforce surveys.
Reporting Frequency: Annual
Frequency/Timing of Data Acquisition: Annually.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
- Data aggregation, indicator calculation, and analysis: Field office and HQ M&E Specialist(s)
- Data entry/collection and performance results: Varies by country supply chain system; Data is collected by GHSC-PSM M&E specialists

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
- **Validity**: No known limitations.
- **Reliability**: Data collection procedures and data sources vary by country, and may vary over time within the same country. Interpretation of what is a "leadership" position may vary by country and reporting individual.
- **Timeliness**: Workforce data may not be available on an annual cycle aligning with the USG fiscal year. To ensure that a full year of data is available, data timeframes may vary by country and may not be current at the time of GHSC-PSM's USG fiscal year reporting cycle. (For instance, data may be three quarters out of date if the only available workforce data in a country is published on a calendar year basis).
- **Precision**: No known limitations.
- **Integrity**: Integrity may vary by country and data collection system.

Points of Clarification (other notes)

1. This indicator will be reported only for countries in which GHSC-PSM is providing technical assistance in workforce development.
2. "Leadership positions in supply chain management" refers to public-sector directors or other heads of units responsible for public health commodity supply chain policy, implementation, or

administration at the national level. In countries with decentralized supply chains, where significant autonomy and leadership responsibilities are devolved to lower levels, this definition may also include positions one subnational level below the national level (for example, state-level positions in Nigeria). Countries reporting on leadership positions at both national and subnational levels should clearly disaggregate these levels when reporting.

3. Disaggregation by Task Order: Leadership positions that are clearly related to a single TO will be reported under that TO. Integrated or crosscutting positions will be reported under a "crosscutting" disaggregation, rather than separated out by TO.
4. Additional disaggregation elements, including supply chain level, will be available in GHSC-PSM's in-country data tracking system. The project may report these additional disaggregations in annual performance reports when they provide useful analytical insight.
5. Additional details about the collection of this indicator can be found in the SOPs manual for Nonroutine Indicators.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Small language tweaks to improve clarity. Points of clarification added to provide more definition detail.
- **11 February 2019:** Targets information relocated to Annex C.
- **17 March 2020:** No changes.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

B. IN-COUNTRY (Supply Chain Operations)

Indicator Number: B12
Indicator Type: Context
Objective 2: Strengthened In-country supply chain systems.
Intermediate Result 2.1: Improved strategic planning and implementation related to supply chain **management and commodity security.**
Intermediate Result 2.2: Improved in-country logistics, including effective and efficient delivery of health commodities to service sites.

Indicator Name: Absolute percent consumption forecast error, with forecast bias variant.

Description

Precise Definition(s):
Numerator: Absolute value of the difference between the actual quantities of products consumed at service delivery points during the year minus the forecasted consumption for the year.
Denominator: Sum of the actual quantities of products consumed during the year.

The following variants should be calculated:

a) Forecast Bias (calculated using the real value of the difference between actual and forecasted consumption in the numerator).

Unit of Measure: Quantity of products.
Disaggregated by: a. tracer product, b. country
Purpose: This indicator will be used to assess the accuracy of the country consumption forecasts and promote efficient supply management practices throughout the country supply chain.

Plan for Data Acquisition

Data Collection Method: Country consumption forecasts for essential HIV, malaria, family planning, and maternal and child health (and Zika) products are produced during annual quantification exercises. The quantification results should be used as the forecasted values for this indicator. Quantification processes vary by task order and product.

Actual consumption is reported throughout the year through routine LMIS reports, SDP order forms, or other stock consumption reports. In countries where SDP consumption data is not routinely reported, this data may be collected through surveys. Countries may also use quantities issued from storage facilities when SDP consumption data is not available.

See Exhibit A-2 in Annex A of this document for the list of GHSC-PSM tracer products for in-country indicators.

Data Source: Routine LMIS or consumption reports; annual consumption forecasts for each tracer product.
Reporting Frequency: Annual
Frequency/Timing of Data Acquisition: Consumption and/or issues data is captured routinely, at least monthly in most countries. Consumption forecasts are usually completed annually. The indicator will be calculated annually.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
- Data aggregation, indicator calculation, and analysis: Field office and HQ M&E Specialist(s)
- Data entry/collection and performance results: Field office forecasting and supply planning technical leads (positions/titles vary by country)

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
- **Validity**: Availability and quality of product consumption data varies by country and health area. Low reporting rates from SDPs can mean underreporting of consumption. Units used for planning,

procurement, storage, distribution, and dispensing can all vary, and conversion errors may bias indicator results in either direction. (These are corrected where detected but are not always discernible, especially when they happen at the primary levels of reporting).
- **Reliability**: Data collection procedures and data sources vary by country/health area, and may vary over time within the same country/health area as systems and procedures change in the wider supply chain context.
- **Timeliness**: Forecast data may not be available on an annual cycle aligning with the USG fiscal year, depending on when countries complete their quantifications. To ensure that a full year of data is available, data timeframes may vary by country and may not be current at the time of GHSC-PSM's USG fiscal year reporting cycle. (For instance, data may be three quarters out of date if the only available annual forecast in a country is based on calendar year periods).
- **Precision**: No known limitations.
- **Integrity**: The chain of reporting has numerous transition points, from health facilities, to subnational aggregation points, to centralized data extraction in-country, to GHSC-PSM field office process and transmission to HQ, to final HQ validation and processing. GHSC-PSM has procedures in place to minimize transcription errors and prevent unauthorized changes within its own systems, but upstream controls will vary within country systems.

Points of Clarification (other notes)

1. The annual APE indicator variant should be calculated using absolute values, whereas the forecast bias variant should be calculated using actual values that illustrate under or over forecasting. Ideally, the values should be as close to zero as possible. As this number deviates from zero, the forecasts become increasingly inaccurate.
2. The time period used for the sum of actual quantities of products consumed should be a 12-month period equivalent to the 12-month period of the most recently available forecast.
3. The country forecasts (products of quantification) should be developed by a country's technical working group or other appropriate entity. The forecast accuracy will be measured against the entire national commodity forecast, which may comprise forecasted quantities from multiple funding entities.
4. Countries should report on total national forecast and consumption, regardless of who funded the commodities. In countries where forecast **and** consumption data are both disaggregated by commodity funding source, the project may report on the U.S. government-funded forecast accuracy in addition to total national forecast accuracy.
5. The project may report additional disaggregations in annual performance reports when they provide useful analytical insight.

PIRS Updates

- **3 January 2018:** First approved PIRS
- **11 February 2019:** All uses of "mean" or "MAPE" removed. The "MAPE" variants of this indicator is calculated based on a full annual period's worth of data, rather than averages of quarterly performance. Disaggregations updated to include both country and tracer product. Targets information relocated to Annex C.
- **17 March 2020:** No changes.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

Crosscutting Indicators

C. CROSSCUTTING

Indicator Number: C1
Indicator Type: Performance
Objective 3: Effective global collaboration to improve long term availability of health commodities.
Intermediate Result 3.2. Market dynamics research and innovations conducted, shared and implemented.

Indicator Name: 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

Description

Precise Definition(s): 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. Disaggregated by type of innovation, with narrative description of actual or potential impact.
Unit of Measure: Innovations as defined in the purpose section.
Disaggregated by: a. task order; b. type of innovation (technology, product, approach, operations research study).
Purpose: To operationalize this indicator, 'Innovation' refers to new technologies, new products, new approaches and/or operational research studies developed, implemented or introduced during the period of reporting. This indicator requires an accompanying narrative description of actual or potential impact of innovation.

Plan for Data Acquisition

Data Collection Method: Nonroutine data collection; GHSC-PSM project reports and periodic country office reports.
Data Source: Project records.
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: Quarterly
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: Field office and HQ M&E Specialist(s)
– Data entry/collection and performance results: Field office M&E specialist and technical leads

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity**: Innovations are often implemented over several quarters and may be double counted. The HQ M&E team reviews this data and prevents this where it is found. Data is collected via recall and self-reporting of technical activities. It may therefore be incomplete and/or biased toward more recent activities or current priorities.
– **Reliability**: Interpretation of the definition of "innovation" and of the innovation category may vary by country and reporting individual.
– **Timeliness**: Innovations spanning several quarters may be reported too early or too late, depending on the interpretation of when the activity is "launched." Guidelines for when to report are laid out in the Standard Operating Procedures for In-Country Non-routine M&E Indicators.
– **Precision**: No known limitations.
– **Integrity**: No known limitations.

Points of Clarification (other notes)

1. GHSC-PSM will report only on innovations that are implemented with project support. We will not report any innovation that was implemented independently by a counterpart government or other partner.

2. Additional disaggregations by country will be available in GHSC-PSM's in-country data tracking system and will be described in the narrative about each innovation. The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight.
3. Definitions of the four types of innovations are as follows:
    - **Technologies**: New or repurposed tools being put to practical use to make improvements in the health supply chain and/or health commodity market.
    - **Products**: Medicines, devices, or medical equipment that are entering the public-sector supply chain for the first time, resulting in expected or actual improvement in patient outcomes.
    - **Approaches**: New designs for business processes, organizations, or interventions that are being implemented for the first time in the regions where GHSC-PSM is operating.
    - **Operational research (OR) studies:** Studies that seek to diagnose problems in the supply chain, identify new strategies, implement and test these strategies under quasi-experimental conditions, and disseminate the findings to decision-makers, with the aim of improving the quality of, access to, and/or equity of supply chain services.
4. **When to report an innovation:** An innovation should be reported in the quarter when it is launched. For instance, if an operations research study is designed and approved in the first quarter, initiated in the second quarter, and concluded in the third quarter, it should be reported in quarter 2.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Definitions of different innovation types and reporting timeframes added to points of clarification.
- **11 February 2019:** Targets information relocated to Annex C.
- **17 March 2020:** No changes.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

C. CROSSCUTTING

Indicator Number: C2
Indicator Type: Performance
Objective 2: Strengthened in-country supply chain systems
Intermediate Result 2.3. Increased capacity building efforts by implementing strategies to transfer of skills, knowledge, and technology for improved and sustained performance.

Indicator Name: Number of people trained

Description

Precise Definition(s): 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).
Unit of Measure: Persons trained.
Disaggregated by: a. country; b. task order; c. task order funding source; d. sex; e. supply chain level (central, subnational, and SDP); f. functional area.
Purpose: This indicator serves as a measure of supply chain training activity. USAID and GHSC-PSM can use it for determining whether the project is making progress toward its capacity-building objectives, and/or for tracking progress from one year to the next.

Plan for Data Acquisition

Data Collection Method: Routine data collection; GHSC-PSM project reports and periodic country office reports.
Data Source: Project records.
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: Quarterly.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: Field office and HQ M&E Specialist(s)
– Data entry/collection and performance results: Field office M&E specialist and technical leads

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity**: The unit of measurement is not strictly speaking uniform, in that one trainee may have attended a course for one day, whereas another may have participated in a course for three months. Participants may be counted for each district training activity they attend; therefore, this indicator does not measure unique participants trained.
– **Reliability**: Training attendance data collection procedures vary by country and may vary over time within the same country.
– **Timeliness**: No known limitations.
– **Precision**: When participants of crosscutting trainings are divided by TO funding proportions, the results may be rounded to ensure whole numbers of people. Final results may therefore not match the funding splits exactly, especially for TOs that provide a lower proportion of the split, whose participants may be rounded down to 0.
– **Integrity**: Training attendance data collection procedures and their level of integrity may vary by country.

Points of Clarification (other notes)

1. Training participants who are GHSC-PSM or USAID employees are excluded from this indicator.
2. Training refers to a learning activity involving participants taking place in the U.S., a third country, or in the host country, in a setting predominantly intended for teaching or imparting knowledge or skills, with formally designated instructors or lead persons, learning objectives, and outcomes, conducted full time or intermittently. It is the transfer of knowledge, skills, or attitudes, as well as ideas and sector context, through structured learning and follow-up activities to solve job performance problems or fill identified performance gaps. This includes supportive supervision, a

common on-the-job capacity building activity for GHSC-PSM. Training can also consist of long-term academic degree programs, short or long-term non-degree technical courses in academic or other settings, seminars, workshops, conferences, on-the-job learning experiences, observational study tours, and the use of technology such as distance or e-learning, and online courses.

3. This indicator provides a general picture of GHSC-PSM's various training activities. The project has also reported to TrainNet, and will report to the Training & Exchanges Automated Management System (TEAMS) as needed.
4. Training that is not specific to any health element or funded by multiple task orders will be reported under a "crosscutting" disaggregation. These participants will be included in overall project totals, but not in the individual task order totals.
5. To demonstrate the number of people trained by task order funding source, participants in trainings that are not specific to any health element or are funded by multiple task orders are divided according to the task order funding split in each country. These participants are then added to those reported for task order specific trainings to determine the number trained by task order funding source. The project will therefore present two training totals per task order: 1) TO-specific training total, and 2) TO-specific plus TO share of crosscutting training total.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018**: Language updates and more detail added to indicator description. Data limitation about unit of measure added. Points of clarification added regarding the exclusion of USAID and GHSCPSM staff from the indicator and how to report by task order in cases of crosscutting funding.
- **11 February 2019**: Targets information relocated to Annex C.
- **17 March 2020:** No changes.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated. Revised definition of "training" added as Point of Clarification 2. Revised point of clarification about TraiNet to include USAID's new TEAMS training data system.
- **09 March 2022:** No changes.

C3. Overall customer satisfaction rating for GHSC-PSM services

– 8 January 2019: Indicator removed with USAID approval.

C4. Percentage of required files submitted to GHSC-BI&A in the reporting period

C5. Percentage of required files submitted to GHSC-BI&A in the reporting period

C6. Average percent variance between GHSC-PSM ARTMIS and GHSC-BI&A calculations of key supply chain indicators for Task Order 1

– 17 March 2020: Following the end of the GHSC-BI&A contract in FY2019 Q3, GHSC-PSM has no longer been reporting data into this system. These indicators are therefore no longer active and have been removed from the M&E plan, with USAID approval.

C. CROSSCUTTING

Indicator Number: C7a
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Objective 2: Strengthened in-country supply chain systems.
Intermediate Result IR 1.2. Strengthened global logistic processes associated with the storage and delivery of any health commodity to any point in donor-supported countries.
Intermediate Result IR 2.2. Improved in-country logistics, including effective and efficient delivery of health commodities to service sites.

Indicator Name: Percentage of product lost due to expiry while under GHSC-PSM control (product loss percentage).

Description

Precise Definition(s):
Numerator: Total value of product lost due to expiry during the quarter
Denominator: Average inventory balance (in USD) during the quarter
Unit of Measure: Value in terms of cost (USD).
Disaggregated by: a. task order; b. supply chain level (global or in-country); c. tracer product.
Purpose: This indicator tracks products lost due to expiry while under the control of the project in a warehouse controlled by GHSC-PSM, including global regional distribution centers and in-country medical stores. It is a key indicator for monitoring good warehouse and distribution practices, such as "first expired first out" (FEFO).

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using ARTMIS, continual improvement incident reports, and in-country QA reports.

At the global level:

- **Numerator:** Losses due to expiry are tracked by the operators of GHSC-PSM's regional distribution centers (RDCs), managed by the Deliver and Supply Planning teams. Expiry data flows to ARTMIS through the Kuehne + Nagle LMIS.
- **Denominator:** Average daily inventory balance for storage sites is available in ARTMIS through the Kuehne + Nagle LMIS.
- At the aggregate IDIQ-level, the denominator is equal to the sum of the RDC average inventory balances for task orders that reported a loss. **It may not include the sum of all GHSC-PSM-controlled global inventory**. For instance, if losses were reported in Task Orders 1 and 2, the denominator at the IDIQ level will include average inventory balance for TOs 1 and 2 only.

At the country level:

- In-country losses will be reported only for products under GHSC-PSM control. The loss must occur while products are in a GHSC-PSM-operated or subcontracted warehouse. Losses will be tracked down to the farthest level that GHSC-PSM controls.
- **Numerator**: Losses of all types are tracked through existing in-country loss reporting mechanisms, including incident reports and QA reports (specific methods will vary by country).
- **Denominator**: Average inventory balance for storage sites is tracked through in-country WMSs, such as MACS, Sage, Epicor, or others. Countries will calculate the average inventory balance daily or monthly, depending on system capabilities and data availability.
- At the aggregate task order and IDIQ levels, the denominator is equal to the sum of the GHSC-PSM-controlled average inventory balances for countries and task orders that reported a loss. **It does not include the sum of all GHSC-PSM-controlled inventory.**

Loss incidents reported through the GHSC-PSM continual improvement system will be reported in the quarter in which the incident is closed, to ensure accurate reporting of the final loss value; therefore, reporting might lag.

Data Source: ARTMIS, GHSC-PSM continual improvement incident reporting system, in-country QA and/or incident reports, in-country warehouse management systems.
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: 1. As often as order and shipment transactions flow to ARTMIS, at least daily. 2. As often as incidents are reported; 3. In-country distribution, QA, and warehousing data will be reported on country-specific routine reporting schedules. Data will be sent to GHSC-PSM headquarters quarterly.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: Field office and HQ M&E Specialist(s)
– Data entry/collection and performance results: Demand/Supply Planning Supervisor (HQ); in-country warehouse technical managers (positions/titles vary by country)

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– Validity: No known limitations.
– Reliability: No known limitations at the regional distribution centers. Systems for collecting and calculating shelf-life and expiry data in country warehouses vary by country and may change over time.
– Timeliness: No known limitations.
– Precision: No known limitations.
– Integrity: No known limitations.

Points of Clarification (other notes)

1. Loss percentages will be fully disaggregated and reported at the level of each instance of loss. Due to the challenges of compiling an appropriate denominator across all countries and RDCs where GHSC-PSM has control of products, the indicator will not be aggregated up to the task order or project level.
2. Targets will not be set at the project or task order level as a result of the aggregation challenges specified in Point of Clarification 1. Targets will also not be set for any single instance of loss. Loss percentages at the instance level can vary by circumstance, with a small value representing a sizeable percentage, or vice versa, in some cases. A single target for all instances would therefore not provide enough context to gauge project performance in limiting product losses.
3. USAID and the project must adhere to strict reporting requirements to the IG for products lost due to theft, damage, or expiry.
4. The value of product loss should be tracked at the transaction level and should reconcile with the monthly financial statement under product loss.
5. Existing in-country mechanisms will be used to report on this indicator. QA reports should be reconciled when determining losses in country.
6. Only countries in which GHSC-PSM is directly responsible for commodity storage (at any level) and/or distribution are required to report on this indicator.

PIRS Updates

– **31 May 2016:** First approved PIRS (as indicator C7)
– **3 January 2018:** Divided into a standalone indicator for expiries (C7a). Revisions throughout to provided definition and data collection detail focused on expiries only.
– **11 February 2019**: Targets information relocated to Annex C.
– **17 March 2020**: No changes.
– **19 May 2021**: PIRS format changes. Responsible Individuals and Data Quality section updated.
– **09 March 2022:** No changes.

C. CROSSCUTTING

Indicator Number: C7b
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Objective 2: Strengthened in-country supply chain systems.
Intermediate Result IR 1.2. Strengthened global logistic processes associated with the storage and delivery of any health commodity to any point in donor-supported countries.
Intermediate Result IR 2.2. Improved in-country logistics, including effective and efficient delivery of health commodities to service sites.

Indicator Name: Percentage of product lost due to theft, damage, or other causes, while under GHSC-PSM control (product loss percentage).

Description

Precise Definition(s):
Numerator: Actual value of product lost due to theft, damage, or other causes during the quarter.
Denominator for losses in transit: Total value (in USD) of product delivered during the quarter.
Denominator for losses in storage: Average inventory balance (in USD) during the quarter.
Unit of Measure: Value in terms of cost (USD).
Disaggregated by: a. type of loss (theft, damage, or other); b. site of loss (storage or transit); c. supply chain level (global or in-country); d. tracer product; e. loss quarter; f. impacted task order(s)
Purpose: This indicator tracks products lost due to theft, damage, or other causes, while under the control of the project, whether in a warehouse controlled by GHSC-PSM, in-transit to such a facility, or in-transit to the customer, within a specified time. Damage can also occur because of lack of adherence to cold chain requirements.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using the Insurance Claim Reimbursement Tracker, updated weekly by the Quality Improvement team.

At the global level:

- Losses in transit will be captured for all GHSC-PSM-controlled segments, including shipments from suppliers to RDCs, suppliers to customers, and RDCs to customers.
- **Numerator**: Actual value of losses due to theft, damage, and other causes are reported through the continual improvement incident reporting system. The Insurance Claim Reimbursement Tracker distills the continual improvement incident reporting system (AssurX) to track incidents where product loss was determined to have occurred in GHSC-PSM custody with the value of loss exceeding $500. The Quality Improvement team updates the tracker weekly with quality assurance determinations, loss values, and incident status.
- **Denominator**: The total value of product delivered during the quarter is tracked in the order fulfillment module of ARTMIS. Average daily inventory balance for storage sites is available in ARTMIS through the Kuehne + Nagle LMIS.
- At the aggregate IDIQ-level, the denominator is equal to the sum of the RDC average inventory balances and delivery totals for task orders that reported a loss. **It may not include the sum of all GHSC-PSM-controlled global inventory and/or deliveries**. For instance, if losses were reported in TO1 storage and a TO3 delivery, the denominator at the IDIQ level will be equal to the sum of the TO1 average inventory balance and the total value of deliveries for TO3.

At the country level:

- In-country losses will be reported only for products under GHSC-PSM control. The loss must occur while products are in a GHSC-PSM-operated or subcontracted warehouse, or while in transit with a GHSC-PSM-operated or subcontracted transportation provider. Losses will be tracked down to the farthest level that GHSC-PSM controls.
- **Numerator**: Losses of all types are tracked through existing in-country loss reporting mechanisms, including incident reports and QA reports (specific methods will vary by country). All theft, damage, and other losses are also reported through the GHSC-PSM

continual improvement incident reporting system. The Insurance Claim Reimbursement Tracker further distills the continual improvement incident reporting system (AssurX) to track incidents where product loss was determined to have occurred in GHSC-PSM custody with the value of loss exceeding $500.

- **Denominator**: The total value of product delivered during the quarter is tracked through existing in-country systems for distribution tracking (specific methods will vary by country). Average inventory balance for storage sites is tracked through in-country WMSs, such as MACS, Sage, Epicor, or others. Countries will calculate the average inventory balance daily or monthly, depending on system capabilities and data availability.
- At the aggregate Task Order- and IDIQ-levels, the denominator is equal to the sum of the GHSC-PSM-controlled average inventory balances and delivery totals for countries and task orders that reported a loss. **It does not include the sum of all GHSC-PSM-controlled inventory and distributions.** For example, if Nigeria reported damage on a TO2 delivery and Zambia reported missing product in TO3 storage, the denominator at the IDIQ level would be equal to the sum of TO2 deliveries in Nigeria and TO3 average inventory balance in Zambia.

Loss incidents reported through the GHSC-PSM continual improvement system will be reported in the quarter in which the incident is determined to have indeed involved a loss of product exceeding $500, to ensure accurate reporting of the final loss value.

Data Source: ARTMIS, GHSC-PSM continual improvement incident reporting system, in-country QA and/or incident reports, in-country warehouse management systems, in-country distribution tracking systems.
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: 1. As often as order and shipment transactions flow to ARTMIS, at least daily. 2. As often as incidents are reported. 3. Weekly update of the Insurance Claim Reimbursement Tracker. 4. In-country distribution, QA, and warehousing data will be reported on country-specific routine reporting schedules. Data will be sent to GHSC-PSM headquarters quarterly.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: HQ M&E Specialist(s) and Continual Improvement team
– Data entry/collection and performance results: Continual Improvement team

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
– **Validity**: The data collection system relies on timely reporting of loss incidents by those who observe the loss. Incidents not recorded in the Continual Improvement system cannot be reported.
– **Reliability**: Data collection methodology was updated for reporting starting in FY2021.
– **Timeliness**: Clear determination of the value of a loss may take time after the loss occurs. Data will be reported as soon as it is available, but this may be 1-2 quarters after the loss occurs.
– **Precision**: Starting FY2021, losses impacting several task orders within the same incident will not be fully disaggregated.
– **Integrity**: No known limitations.

Points of Clarification (other notes)

1. Loss percentages will be fully disaggregated and reported at the level of each instance of loss. Due to the challenges of compiling an appropriate denominator across all countries and RDCs where GHSC-PSM has control of products, the indicator will not be aggregated up to the task order or project level.
2. Targets will not be set at the project or task order level as a result of the aggregation challenges specified in Point of Clarification 1. Targets will also not be set for any single instance of loss. Loss percentages at the instance level can vary by circumstance, with a small value representing a sizeable percentage, or vice versa, in some cases. A single target for all instances would therefore not provide enough context to gauge project performance in limiting product losses.

3. USAID and the project must adhere to strict reporting requirements to the IG for products lost due to theft, damage, or expiry. Due to IG investigations, data on theft will not be disaggregated in public reports. Note that the $500 threshold falls below the $5,000 insurance deductible and industry standard for acceptable loss in a supply chain of this size. It reflects instead the extra efforts of the GHSC-PSM team to determine root causes and pursue reimbursement for lower level losses up to a reasonable threshold.
4. The value of product loss should be tracked at the transaction level and should reconcile with the monthly financial statement under product loss.
5. Existing in-country mechanisms will be used to report on this indicator. QA reports should be reconciled when determining losses in country.
6. Only countries in which GHSC-PSM is directly responsible for commodity storage (at any level) and/or distribution are required to report on this indicator.
7. Actual value is a more precise term, used to signal that this is the final confirmed value of the product loss, after the Continual Improvement team has evaluated the incident.

PIRS Updates

- **31 May 2016:** First approved PIRS (as indicator C7)
- **3 January 2018**: Divided into a standalone indicator for theft, damage, and other losses (C7b). Revisions throughout to provide definition and data collection detail focused on incident losses only.
- **11 February 2019**: Targets information relocated to Annex C.
- **17 March 2020**: No changes
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated. Updates throughout Description, Plan for Data Acquisition, and Points of Clarification to align with Continual Improvement loss data collection process and to set $500 or greater value threshold for reportable loss incidents.
- **09 March 2022:** No changes.

C. CROSSCUTTING

Indicator Number: C8
Indicator Type: Performance
Objective 3: Effective global collaboration to improve long term availability of health commodities.
Intermediate Result IR 3.1. Improved strategic engagement with global partners to ensure appropriate strategic coordination.
Intermediate Result IR 3.2. Global market dynamics research and innovations conducted, shared and implemented.
Intermediate Result IR 3.3. Improved awareness and advocacy to improve availability of essential health commodities.
Intermediate Result IR 3.4. Improved coordination and collaboration between TOs within the IDIQ and with other USAID supply chain funded activities.

Indicator Name: Number of global advocacy engagements in support of improved availability of essential health commodities.

Description

Precise Definition(s): Number of global advocacy engagements in support of improved availability of essential health commodities.
Unit of Measure: Engagements; such as forum or meetings that happen in a global setting.
Disaggregated by: a. task order.
Purpose: This indicator caters to GHSC-PSM global collaboration efforts. It measures the number of engagements of any kind at the global level that involve improved availability of essential health commodities. This indicator would also include narratives describing GHSC-PSM global collaboration efforts.

Plan for Data Acquisition

Data Collection Method: Global collaboration reports, meeting minutes and trip reports. This is a qualitative indicator, to be described in semiannual project reports.
Data Source: Project documents.
Reporting Frequency: Semiannual
Frequency/Timing of Data Acquisition: Semiannually.
Estimated Cost of Data Acquisition: Minimal.
Responsible Individual(s) at the Project:
- Data aggregation, indicator calculation, and analysis: HQ M&E Specialist(s)
- Data entry/collection and performance results: Task Order Directors and technical specialists; Global Supply Chain Director; Country Programs Director; Health Systems Strengthening Director

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
- **Validity**: Data is collected via recall and self-reporting of technical activities. It may therefore be incomplete and/or biased toward more recent activities or current priorities.
- **Reliability**: No known limitations.
- **Timeliness**: No known limitations.
- **Precision**: No known limitations.
- **Integrity**: No known limitations.

Points of Clarification (other notes)

PIRS Updates

- **31 May 2016:** First approved PIRS

– **3 January 2018:** Minor clarifications to plan for data acquisition section.
– **11 February 2019:** Targets information relocated to Annex C.
– **17 March 2020:** No changes.
– **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
– **09 March 2022:** No changes.

C9. Percentage complete and on time submissions to global knowledge management platform

– 8 January 2018: Indicator removed with USAID approval. A global knowledge management platform was not developed for GHSC-PSM

C. CROSSCUTTING

Indicator Number: C10
Indicator Type: Performance
Objective 1: Improved availability of health commodities.
Intermediate Result 1.1 Enhanced global health commodity procurement.
Objective 2: Strengthened in-country supply chain systems.
Intermediate Result 2.2. Improved in-country logistics, including effective and efficient delivery of health commodities to service sites.
IR 2.3. Increased capacity building efforts by implementing strategies to transfer of skills, knowledge, and technology for improved and sustained performance.

Indicator Name: Percentage of GHSC-PSM-procured or supported molecular instruments that remained functional during the reporting period.

Description

Precise Definition(s):
Numerator: Total number of GHSC-PSM-procured or supported molecular instruments that remained functional for the entire reporting period.
Denominator: Total number of molecular instruments in the country that were procured or are supported by GHSC-PSM.
Unit of Measure: Molecular instruments.
Disaggregated by: a. country.
Purpose: This indicator supports understanding of how supply chain activities impacts patient services, specifically early infant diagnosis and viral load testing for HIV patients. It reflects the effects of global procurement to influence service agreements and manufacturer response, as well as the results of in-country systems strengthening aimed at improving countries' capacity to manage the equipment in their health supply chain.

Plan for Data Acquisition

Data Collection Method: Daily functionality of instruments is logged by operators at the SDP where the instrument is located. Outages are reported to the relevant host-country government agency, who reports it to the manufacturer.
Data Source: Service delivery points. Government agencies or manufacturers may be contacted to triangulate data and confirm whether outages have been reported.
Reporting Frequency: Quarterly
Frequency/Timing of Data Acquisition: Quarterly.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project:
- Data aggregation, indicator calculation, and analysis: HQ and field office M&E Specialist(s)
- Data entry/collection and performance results: Varies by country lab supply chain system; field office M&E specialists gather the data for reporting

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
- **Validity**: No known limitations.
- **Reliability**: Data collection systems and procedures for reporting instrument outages may vary by country or over time within countries
- **Timeliness**: No known limitations.
- **Precision**: No known limitations.
- **Integrity**: Integrity may vary by country and data collection system.

Points of Clarification (other notes)

1. This indicator tracks only the molecular instruments for which GHSC-PSM holds a service agreement with the manufacturer, including those procured by GHSC-PSM and those transferred to the project from SCMS.
2. Additional disaggregation elements, including number of days out of service, and reason for service disruption, may be available in GHSC-PSM's in-country data tracking system. The project will report these additional disaggregations in quarterly performance reports when the indicator falls below 100 percent at the global level, to give greater insight into instrument outages.

PIRS Updates

- **31 May 2016:** First approved PIRS
- **3 January 2018:** Small language updates to clarify which instruments are included in the indicator.
- **11 February 2019:** Targets information relocated to Annex C.
- **17 March 2020:** No changes.
- **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
- **09 March 2022:** No changes.

C. CROSSCUTTING

Indicator Number: C11
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Objective 2: Strengthened In-country supply chain systems.
Objective 3: Effective global collaboration to improve long-term availability of health commodities.

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

Description

Precise Definition(s):
Description of major GHSC-PSM efforts around developing or updating supply chain policies, regulations, strategies, or SOPs. This is a qualitative indicator to be described in the quarterly report narrative.
Unit of Measure: NA.
Disaggregated by: NA.
Purpose: This indicator will be used to provide USAID with updates on key initiatives impacting GHSC-PSM's supply chain work across all three project objectives.

Plan for Data Acquisition

Data Collection Method: Nonroutine data collection; GHSC-PSM project reports and periodic country office reports.
Data Source: Project records such as work plans, technical reports, and presentations
Frequency/Timing of Data Acquisition: Quarterly
Reporting Frequency: Quarterly
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff
Responsible Individual(s) at the Project:
– Data aggregation, indicator calculation, and analysis: HQ and field office M&E Specialist(s)
– Data entry/collection and performance results: Field office technical leads

Data Quality Issues

Date of Initial Data Quality Assessment: NA.
Known Data Limitations and Significance (if any):
– **Validity**: Data is collected via recall and self-reporting of technical activities. It may therefore be incomplete and/or biased toward more recent activities or current priorities.
– **Reliability**: No known limitations.
– **Timeliness**: No known limitations.
– **Precision**: No known limitations.
– **Integrity**: No known limitations.

Points of Clarification (other notes)

1. The policies, regulations, strategies, or SOPs reported for this indicator may apply at any level of supply chain leadership, management, or operations. This can include high-level strategic work with in-country authorities or regulatory agencies, as well as SOPs for routine logistics operations.

PIRS Updates

– **3 January 2018:** First approved PIRS
– **11 February 2019:** No changes.
– **17 March 2020:** No changes.
– **19 May 2021:** PIRS format changes. Responsible Individuals and Data Quality section updated.
– **09 March 2022:** No changes.

C. CROSSCUTTING

Indicator Number: C##
Indicator Type: Performance
Objective 1: Improved availability of health commodities.
Intermediate Result 1.4. Improved data visibility

Indicator Name: TBD

Description

Precise Definition(s):
Numerator: TBD
Denominator: TBD
Unit of Measure: TBD
Disaggregated by: TBD
Purpose: The purpose of this indicator or set of indicators will be to monitor GHSC-PSM's data sharing with the Development Data Commons (DDC), a data warehouse and analytics platform for the USAID/Office of HIV and AIDS. Complete definition and data collection procedures for this indicator or indicators will be developed as GHSC-PSM's contributions to the DDC are finalized.

Plan for Data Acquisition

Data Collection Method: TBD
Data Source: TBD
Reporting Frequency: TBD
Frequency/Timing of Data Acquisition: TBD
Estimated Cost of Data Acquisition: TBD
Responsible Individual(s) at the Project: TBD

Data Quality Issues

Date of Initial Data Quality Assessment: TBD
Known Data Limitations and Significance (if any): TBD

Points of Clarification (other notes)

PIRS Updates

- **17 March 2020:** First approved PIRS.
- **19 May 2021:** PIRS format changes.
- **09 March 2022:** No changes.

U.S. President's Malaria Initiative Indicators

D. GLOBAL MALARIA INDICATORS — (for reporting only) Note that all indicators below will be disaggregated by country		
Indicator name	**Definition**	**Frequency***
D1. Number of ACT treatments purchased with U.S. government funds.	Number of ACT treatments (blister strip) purchased with U.S. government funds. "Purchased" = ACTs for which a purchase order has been released by the Procurement Service Agent within the given fiscal year. For orders filled by stockpile, this will be determined by the DO date.	Annually
D2. Number of malaria RDTs purchased with U.S. government funds.	Number of RDTs (tests) purchased with U.S. government funds. "Purchased" = RDTs for which a purchase order has been released by the Procurement Service Agent within the given fiscal year.	Annually
D3. Number of ITNs purchased with U.S. government funds.	Number of ITNs (nets) purchased with U.S. government funds. "Purchased" = ITNs for which a purchase order has been released by the Procurement Service Agent within the given fiscal year.	Annually
D4. Number of SP treatments purchased with U.S. government funds.	Number of SP treatments (3 tablets) purchased with U.S. government funds. "Purchased" = SP treatments for which a purchase order has been released by the Procurement Service Agent within the given fiscal year.	Annually
D11. Number of SP/AQ co-blisters purchased with U.S. government funds.	Number of SP/AQ co-blisters purchased with U.S. government funds. "Purchased" = SP/AQ for which a purchase order has been released by the procurement service agent within the given fiscal year.	Annually
D12. Number of ACTs purchased in any fiscal year with U.S. government funds that were delivered in this reported fiscal year into country supply chains for distribution	The sum of the number of ACT treatments (blister strips) delivered into a country's supply chain. A line item's treatments will only be counted once all associated shipments for that line item have been delivered to the recipient, as verified by a proof of delivery (POD). If a portion of the line item is delivered in one fiscal year and another portion is delivered in the following fiscal year, the full total of the two shipments will be counted in the period of the final shipment.	Annually
D13. Number of RDTs purchased in any fiscal year with U.S. government funds that were delivered in this reported fiscal year into country supply chains for distribution	The sum of the number of RDTs (tests) delivered into a country's supply chain. A line item's tests will only be counted once all associated shipments for that line item have been delivered to the recipient, as verified by a proof of delivery (POD). If a portion of the line item is delivered in one fiscal year and another portion is delivered in the following fiscal year, the full total of the two shipments will be counted in the period of the final shipment.	Annually
D14. Number of ITNs purchased in any fiscal year with U.S. government funds that were delivered in this reported fiscal	The sum of the number of ITNs (nets) delivered into a country's supply chain. A line item's tests will only be counted once all associated shipments for that line item have been delivered to the recipient, as verified by a proof of delivery (POD). If a portion of the line	Annually

D. GLOBAL MALARIA INDICATORS — (for reporting only) Note that all indicators below will be disaggregated by country		
Indicator name	**Definition**	**Frequency***
year into country supply chains for distribution	item is delivered in one fiscal year and another portion is delivered in the following fiscal year, the full total of the two shipments will be counted in the period of the final shipment.	
D15. Number of SP treatments purchased in any fiscal year with U.S. government funds that were delivered in this reported fiscal year into country supply chains for distribution	The sum of the number of SP treatments (3 tablets) delivered into a country's supply chain. A line item's treatments will only be counted once all associated shipments for that line item have been delivered to the recipient, as verified by a proof of delivery (POD). If a portion of the line item is delivered in one fiscal year and another portion is delivered in the following fiscal year, the full total of the two shipments will be counted in the period of the final shipment.	Annually
D16. Number of SP/AQ co-blisters purchased in any fiscal year with U.S. government funds that were delivered in this reported fiscal year into country supply chains for distribution	The sum of the number of SP/AQ co-blisters delivered into a country's supply chain. A line item's treatments will only be counted once all associated shipments for that line item have been delivered to the recipient, as verified by a proof of delivery (POD). If a portion of the line item is delivered in one fiscal year and another portion is delivered in the following fiscal year, the full total of the two shipments will be counted in the period of the final shipment.	Annually

Note that the following indicators have been discontinued by PMI and will not be reported after FY2019:

- D5. Number of ACT treatments purchased by other partners that were distributed with U.S. government funds
- D6. Number of ACT treatments purchased in any fiscal year with U.S. government funds that were distributed in this reported fiscal year
- D7. Number of RDTs purchased in any fiscal year with U.S. government funds that were distributed in this reported fiscal year
- D8. Number of ITNs purchased by other partners that were distributed with U.S. government funds
- D9. Number of ITNs purchased with U.S. government funds in any fiscal year that were distributed in this reported fiscal year
- D10. Number of SP tablets purchased in any fiscal year with U.S. government funds that were distributed in this reported fiscal year

Starting in FY20, delivery indicators D12-D15 were added by PMI.

Annex C. Indicator Targets

The table below lists indicator results and targets for key performance indicators. Targets are set at both the task order and IDIQ level, with some exceptions in cases where indicators are not relevant for certain task orders; where aggregated IDIQ-level results are not appropriate to report; or where a different type of disaggregation is more relevant for program management.

For quarterly indicators, annual targets for FY2018 represented desired performance in Q4 of that year. Moving forward, annual targets for FY2019 and future years represent desired performance over the whole fiscal year. Annual performance for quarterly indicators will be determined by calculating the indicator result over the full year period (i.e., not an average of each quarter's performance). Annual performance will be calculated using all available data at the time of annual reporting, which may include updates and corrections to the datasets that were used to calculate performance in earlier quarters.

Per ADS 201, targets are not required for context indicators. For certain performance indicators, GHSC-PSM and USAID have agreed that targets are not appropriate, either because performance is not fully within project control, to avoid unwanted incentives, or because there is insufficient data to set targets at this time. Targets for in-country performance indicators are set by the field offices through consultations with project technical staff and leadership, USAID missions, and/or government counterparts. These targets can be found in country specific M&E plans and project documents. A breakdown of indicators that do not require targets is included at the end of this annex.

Exhibit C-2. Indicators for which targets are not required or set in the IDIQ M&E Plan

Context Indicators – Targets not required	Performance Indicators – Targets not necessary or appropriate at this time	Performance indicators – Targets set by country
B4. Average rating of in-country data confidence	A14. Average vendor rating score	B1. Stockout rate at SDPs
B7. Percentage of total spent or budgeted on procurement of commodities for public sector services by funding source	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	B2. Percentage of stock status observations in storage sites where commodities are stocked according to plan
B9. Supply chain technical staff turnover rate	C2. Number of people trained	B3. SDP reporting rate to the LMIS
B10. Percentage of GHSC-PSM-supported countries that have a functional logistics coordination mechanism in place	C7a. Percentage of product lost due to expiry while under GHSC-PSM control	B5. Percentage of required annual forecasts conducted
B11. Percentage of leadership positions in supply chain management that are held by women	C7b. Percentage of product lost due to theft, damage, or other causes, while under GHSC-PSM control	B8. Percentage of targeted supply chain activities in which the host country entity has achieved technical independence with GHSC-PSM technical assistance
B12. Annual absolute percent consumption forecast error	C8. Number of global advocacy engagements in support of improved availability of essential health commodities	C10. Percentage of GHSC-PSM-procured or supported molecular instruments that remained functional during the reporting period
	C11. Supply chain policies, regulations, strategies, or SOPs developed or updated with GHSC-PSM assistance	

	Past Performance (Actuals)					FY2021 Quarterly Targets				FY2022 Quarterly Targets				Annual Targets						Detailed Justifications for FY2022 Targets
A1a. OTIF	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2021**	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2022 Q1**	**FY2022 Q2**	**FY2022 Q3**	**FY2022 Q4**	**FY2018 (Q4)**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**FY2023**	
IDIQ *(COVID-19*	84%	86%	84%	86%	86%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	No change is proposed for the GHSC-PSM project's OTD or OTIF targets in FY2022. The 80% target is a long-standing performance benchmark for the project, representing a high service-level standard within the unique and complex demands of global public health supply chains.
TO1 *(HIV only)*	83%	85%	82%	85%	85%	80%	80%	80%	80%	80%	80%	80%	80%	n/a	80%	80%	80%	80%	80%	
TO2	92%	95%	92%	85%	91%	80%	80%	80%	80%	80%	80%	80%	80%	n/a	80%	80%	80%	80%	80%	
TO3	88%	93%	100%	97%	95%	80%	80%	80%	80%	80%	80%	80%	80%	n/a	80%	80%	80%	80%	80%	
TO4	76%	98%	86%	93%	93%	80%	80%	80%	80%	80%	80%	80%	80%	n/a	80%	80%	80%	80%	80%	
A1b. OTD	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2021**	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2022 Q1**	**FY2022 Q2**	**FY2022 Q3**	**FY2022 Q4**	**FY2018 (Q4)**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**FY2023**	
IDIQ *(COVID-19*	89%	87%	90%	89%	90%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	No change is proposed for the GHSC-PSM project's OTD or OTIF targets in FY2022. The 80% target is a long-standing performance benchmark for the project, representing a high service-level standard within the unique and complex demands of global public health supply chains.
TO1 *(HIV only)*	90%	86%	90%	88%	90%	80%	80%	80%	80%	80%	80%	80%	80%	n/a	80%	80%	80%	80%	80%	
TO2	93%	97%	90%	96%	94%	80%	80%	80%	80%	80%	80%	80%	80%	n/a	80%	80%	80%	80%	80%	
TO3	93%	97%	100%	87%	94%	80%	80%	80%	80%	80%	80%	80%	80%	n/a	80%	80%	80%	80%	80%	
TO4	93%	96%	100%	100%	98%	80%	80%	80%	80%	80%	80%	80%	80%	n/a	80%	80%	80%	80%	80%	
A2. QA Lead Times (TO2)	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2021**	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2022 Q1**	**FY2022 Q2**	**FY2022 Q3**	**FY2022 Q4**	**FY2018 (Q4)**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**FY2023**	
TO2	99%	89%	99%	85%	92%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	GHSC-PSM will retain 80% as the target for completion of QA processes within standard lead times in FY2022. While performance has been high throughout FY2021, this was partially due to the use of acceptable delay codes which allowed transactions to be exempted when they were delayed due to COVID-19. As the pandemic enters its third year, the project is limiting its use of these codes, which may result in the inclusion of delayed processes which would have been previously exempted. The project expects results to remain at or above the targeted level, but performance may be lower than the high levels seen in FY2021.
A3. Cycle time (average)	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2021**	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2022 Q1**	**FY2022 Q2**	**FY2022 Q3**	**FY2022 Q4**	**FY2018 (Q4)**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**FY2023**	
IDIQ *(COVID-19 items included)*	261	264	284	270	271	250	250	250	250	250	250	250	250	n/a	237	225	250	250	250	GHSC-PSM proposes to maintain the target of 250 days for end-to-end cycle time for all products in FY2022. End-to-end cycle times have been on an increasing trend during the years of the COVID-19 pandemic. Cycle time increases have been seen throughout order processing, including pre-PO release, supplier manufacturing and/or preparation, and logistics. In the coming year, the project aims to continue to hold cycle time increases to a minimum, and to begin driving performance back down to the targeted level. Dwell-adjusted cycle time is expected to fall 30-40 days shorter than full end-to-end cycle time, as procurement staff continue to use hold statuses to identify periods where no activity is required or expected (e.g., orders placed early, awaiting funding, etc.).
TO1 (*HIV only)*	267	252	271	257	262	250	250	250	250	250	250	250	250	158	227	213	250	250	250	GHSC-PSM proposes to maintain the target of 250 days for end-to-end cycle time for HIV products in FY2022. After steadily increasing over the course of FY2020, quarterly average cycle times in FY2021 stabilized just above the targeted level, averaging 262 days for the year. Cycle time increases were seen throughout order processing, including pre-PO release, supplier manufacturing and/or preparation, and logistics. In the coming year, the project aims to continue to hold cycle time increases to a minimum, and to begin driving performance back down to the targeted level.

TO2	357	386	355	357	365	350	350	340	340	340	340	340	340	262	311	295	345	340	340	For FY2022, GHSC-PSM proposes retaining the 340 target from the second half of FY2021. End-to-end cycle time for malaria commodities has remained stable through the pandemic years of FY2020 and FY2021, increasing only 1 percent on average from FY20 to FY21. For the coming year, the project hopes to sustain this performance, while also beginning to see the benefits of cycle time improvement initiatives begun in FY2021. These include proactive procurement; improvements to planning, order processing, and procurement tools and procedures; and alignment of procurement, QA/QC, and logistics processes. Additionally, the project expects dwell-adjusted cycle time performance to fall between 40 and 60 days below overall end-to-end time. While the length of hold instances continues to vary depending on country and order requirements, holds are now applied to a greater proportion of line items as the hold statuses have settled into routine use. (Holds were applied to roughly one-third of delivered line items in FY21 Q1; holds are expected on more than half of lines in Q1 of FY22).
TO3 (RDC)	277	219	346	211	253	250	250	250	250	250	250	250	250	176	232	263	250	250	250	GHSC-PSM proposes maintaining a target of 250 days for end-to-end cycle time for family planning distribution orders. While performance fluctuated significantly from quarter to quarter in FY2021, average performance over the course of the year was on target, at 253 days. While individual quarterly performance may spike due to delivery of orders placed far in advance of requested delivery dates, or deliveries to long lead-time destinations (e.g., DRC), the benchmark of 250 days is expected to remain an appropriate benchmark for cycle time performance.
TO3 (DD)	248	353	303	370	328	275	275	275	275	300	300	300	300	244	272	268	275	300	300	GHSC-PSM proposes raising the direct drop target for family planning commodities to 300 days in FY2022. This is in response to cycle time performance in FY2021, which exceed the previous target in three out of four quarters, and averaged 328 days over the course of the year. Direct drop orders are lower volume than distribution orders from RDC, which leaves quarterly average performance susceptible to the influence of outliers. Volumes are expected to fall further in FY2022, as the project plans to route most DMPA-SC orders and orders from a large supplier though the RDC this year. Fluctuating performance is therefore expected to continue, with the goal of achieving average performance near 300 days for the year.
TO4	331	113	327	344	251	350	350	350	350	350	350	350	350	n/a	216	206	350	350	350	GHSC-PSM proposes maintaining the target of 350 for end-to-end cycle time for maternal and child health commodities. Apart from one outlying quarter (FY2021 Q2), cycle time performance remained within this target over the past year. Given the volatility in the global freight market and the challenges that suppliers are still experiencing due to the pandemic, maintaining the same target is expected to be an ambitious but achievable task, especially on an annual basis. Quarterly results may vary; MNCH cycle times often fluctuate due to lower delivery volume, meaning that quarterly averages may be more heavily influenced by outliers. The project expects to see similar fluctuations this year, as some quarters currently have very few (<10) line items requested or agreed for delivery. For quarters with greater volume, performance is expected to be similar to past results.
A4. Inventory turns	**FY2018**	**FY2019**	**FY2020**	**FY2021**	**FY2021**	**FY2021**				**FY2022**				**FY2018**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**FY2023**	

TO1	6.2	6.6	9.8	4.7	4.7	5	5.5	4	4	5	5	5.5	5.5	GHSC-PSM proposes a slight increase to the target for inventory turns to 5.5 in FY2022. The inventory strategy for the upcoming year remains the same as FY2021, with a high balance of TLD and buffer stocks. This will make more stock available for rapid response to emergencies but will yield slower turns compared to the peak of rapid distribution in FY2020. Given the high value of TLD products compared to other HIV products at the RDC, the performance of this indicator at the task order level will track closely with the performance of TLD. In FY2021, the project achieved 4.7 inventory turns. This included an unexpected and lengthy holdover of a high-value order for Kenya; with that order excluded, the project would have exceeded the FY21 target of 5 turns. The project has no orders to Kenya planned for this upcoming year and expects greater stability of demand and therefore improved efficiency of RDC operations. Given these factors, the project proposes an increased target to 5.5 turns for FY2022.
TO2	4.6	3.9	2.1	1.2	1.2	3	2	3	3	4	3	2	2	The project proposes a target of 2 inventory turns for FY2022. In FY2021, the ACT stockpile had 1.2 inventory turns, due to low levels of emergency demand, leading to the combination of a lower cost of goods distributed and a higher average inventory balance. In FY2022, the project is adopting the same strategy with the emergency stockpile, with the expectation that turns may again be lower if emergency demand does not materialize. The project is pleased to note reduced emergency needs, but recognizes that the result of this improved country planning is lower inventory turns.
TO3	3.3	1.4	2.8	1.7	1.7	2	2	3	3	2	2	2	2	The GHSC-PSM project proposes to maintain a target of 2 inventory turns for family planning products. The project fell short of this target in FY2021 but expects increased turnover this year, which should enable us to achieve it. Inventory turns will be primarily driven by injectables and implants, given lower stock volumes of IUDs and progestin-only pills. The project will also not be storing combined oral contraceptives in FY2022, due to the transition from iron to non-iron placebo. The remaining stock of iron-placebo COCs has already been allocated, and non-iron placebo will not be stocked until demand rises. Turns for implantable contraceptives are expected to be consistent with FY2021, but the project is expecting high turns on injectable contraceptives. This is because they are extremely supply constrained and shipping out rapidly once they arrive at the RDC. Additionally, the project is altering its fulfillment strategy for orders from some European suppliers, which now require extensive authorization documentation for destination warehouses which may not be available in some GHSC-PSM destination countries. The project will therefore use the RDC to cross-dock certain orders before final delivery to the consignee, which will have the effect of increasing RDC outflows and inventory turns.

A5. Total Landed Cost (logistics only)	FY2020 Q2	FY2020 Q4	FY2021 Q2	FY2021 Q4	FY2021	FY2021 Q2	FY2021 Q4	FY2022 Q2	FY2022 Q4	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	
IDIQ	12.5%	9.4%	9.3%	9.3%	9.3%	No target	No target	12.4%	12.4%	8%	11%	16.5%	None	12.4%	TBD	GHSC-PSM's total landed cost indicator remains difficult to interpret or predict. The effects of commodity cost savings, C- and D-term shipments, and lag times between deliveries and final payment of freight invoices can lead to unexpected results. That said, a general trend of pricing increases has been observed across the board in the shipping industry, as the direct and indirect effects of the pandemic have continued to put strain on carrier capacity. To set targets, GHSC-PSM made a blanket assumption that expenditures on freight will increase 35% over FY21
TO1	7.2%	6.2%	6.7%	7.4%	7.4%	No target	No target	9.8%	9.8%	n/a	8%	9.8%	None	9.8%	TBD	

TO2	28.5%	22.8%	17.8%	13.4%	13.4%	No target		No target		18.0%		18.0%		n/a	18%	33.8%	None	18.0%	TBD	levels, while other smaller logistics categories will increase 5%. For each task order, the project reviewed the order pipeline for FY22 to estimate the following changes in delivery value: >TO1: Delivery value will be 95% of FY21 value >TO2: Delivery value will be 85% of FY21 value >TO3: Delivery value will be 150% of FY21 value (due in part to large orders for DRC) >TO4: Delivery value will be 140% of FY21 value (also due to large DRC orders) Projected total landed cost values using those assumptions have been set as the targets listed here for FY2022. No targets at this time are set for FY2023, as the freight landscape remains difficult to predict far into the future.
TO3	13.2%	11.3%	12.6%	16.5%	16.5%	No target		No target		21.7%		21.7%		n/a	21%	15.2%	None	21.7%	TBD	
TO4	63.2%	22.4%	31.8%	10.9%	10.9%	No target		No target		14.1%		14.1%		n/a	21%	30.0%	None	14.1%	TBD	
A6a. Annual Supply Plan Error	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2021**	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2022 Q1**	**FY2022 Q2**	**FY2022 Q3**	**FY2022 Q4**	**FY2018 (Q4)**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**FY2023**	
Adult ARV	20%	31%	34%	19%	19%	<25%	<25%	<25%	<25%	<22%	<22%	<22%	<22%	<30%	<25%	<25%	<25%	<22%	<22%	GHSC-PSM proposes a target of 22% error or less for Adult ARVs. In FY2021, there was a slight deviation outside of the targeted range in quarters 2 and 3, due to under-ordering in late FY2020 following the surge in MMD distribution earlier that year. However, in FY2022, the four-quarter rolling metric is likely to fall back within the targeted range more consistently, as demand stabilizes and the effects of the MMD acceleration in FY2020 will no longer impact the metric. The project expects to see some error moving forward, due to sporadic order revisions and shifts between bottle sizes. Therefore, the project believes a slighly narrower target is realistic for the coming fiscal year.
Pediatric ARV	14%	35%	33%	18%	18%	<35%	<35%	<35%	<35%	<30%	<30%	<30%	<30%	<30%	<25%	<25%	<35%	<30%	<35%	GHSC-PSM proposes decreasing the target to 30% error or less for the coming fiscal year. FY2022 is anticipated to be a stable year, as performance has recovered from error due to product transitions in FY2020, which pushed performance outside of the targeted range into FY2021. No new transitions are planned for FY2022. However, with the anticipation of the introduction of a new product in FY2023, the project proposes a return to a 35% target at that time.
Laboratory	20%	19%	25%	35%	35%	<25%	<25%	<25%	<25%	<25%	<25%	<25%	<25%	<30%	<30%	<30%	<25%	<25%	<25%	GHSC-PSM proposes maintaining the current target of 25% error or less. While performance on the rolling annual supply plan error metric has been within the targeted range for all of FY2021 except for Q4, the trend has been increasing error, with single-quarter results reaching or exceeding 25% in three out of four quarters. The lab supply planning context is expected to see continued uncertainty FY2022, with the introduction of new USAID procurement agents in Rwanda and Uganda, as well as the introduction of a new platform for viral load products. For these reasons, the project believes quarterly supply plan fluctuations will continue, with the potential to balance out for smoother performance at or near the existing target on the four-quarter metric.
ACTs	90%	69%	53%	23%	23%	<35%	<35%	<35%	<35%	<35%	<35%	<35%	<35%	n/a	<35%	<35%	<35%	<35%	<35%	The GHSC-PSM project proposes maintaining the current target of 35% error or less for FY2022. Supply plan errors for ACTs peaked in FY2020 with lingering effects into FY2022, especially in regard to ASAQ. However, the project expects the error to stabilize in FY2022 since most countries have transitioned away from ASAQ, and the project reached its targeted four-quarter performance in Q4 of FY2021. We expect to see more success in FY2022.

mRDTs	38%	40%	16%	13%	13%	<35%	<35%	<35%	<35%	<25%	<25%	<25%	<25%	n/a	<35%	<35%	<35%	<25%	<25%	The GHSC-PSM project proposes decreasing the target to 25% error or less in FY2022. There was considerable volatility in the mRDT market in FY2020. This has stabilized to some extent in FY2021, and the impact of the unstable FY2020 market will no longer affect the FY2022 error rates. However, due to typical sporadic order changes and potential emergency orders, we expect to see some variability in FY2022. Therefore the project believes a goal of 25% is reasonable. The TO2 procurement team continues to actively manage supply to equitably address country needs.
A6b. Annual Forecast Error	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2021**	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2022 Q1**	**FY2022 Q2**	**FY2022 Q3**	**FY2022 Q4**	**FY2018 (Q4)**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**FY2023**	
Injectable contraceptives	2%	10%	13%	5%	5%	<25%	<25%	<25%	<25%	<25%	<25%	<25%	<25%	<35%	<35%	<30%	<25%	<25%	<25%	Following several quarters of strong performance, the GHSC-PSM project will keep its target at 25% or less for injectable contraceptives, implantable contraceptives, progestin-only pills, and condoms. While supply constraints and market variations are expected to continue into FY2022, especially for implants and injectables, these are expected to be no more disruptive than in FY2021. While single-quarter results may show greater variance, the project believes that the rolling annual metric will reach the target for these categories. Condoms had a large error in Q3 for FY2021 due to the fulfilment of an emergency order of male condoms to Malawi. This will impact the rolling four quarter metric into Q1 and Q2 of FY2022, but error is expected to stabilize in Q3 and Q4. For combined oral contraceptives, the project proposes a 35% target for Q1 and Q2, a 30% target for Q3, and a return to the 25% target in Q4. This is to account for a substantial forecast error that took place in FY2021 Q3 due to one social marketing organization increasing its order from 2 million to 8 million units as it expanded to new service delivery points. This will have lingering effects into the first few quarters of FY2022, at which point results are expected to return to previous strong performance, barring similar unforeseen SMO program changes. Finally, for copper-bearing IUDs, the GHSC-PSM project proposes a 35% target. Copper-bearing IUDs are a small market for which single order cancellations can cause substantial forecast errors, which then have a lingering effect in the four-quarter rolling metric. As a result, the project has seen spiky performance over the last two years, which is expected to continue. A 35% target will allow the project to account for these order changes with limited inventory risk due to the product's long shelf life.
Implantable contraceptives	4%	13%	13%	12%	12%	<25%	<25%	<25%	<25%	<25%	<25%	<25%	<25%	<35%	<35%	<30%	<25%	<25%	<25%	
Combined Oral Contraceptives	4%	22%	50%	52%	52%	<25%	<25%	<25%	<25%	<35%	<35%	<30%	<25%	<35%	<35%	<30%	<25%	<25%	<25%	
Copper IUD	23%	51%	31%	24%	24%	<25%	<25%	<25%	<25%	<35%	<35%	<35%	<35%	<35%	<35%	<30%	<25%	<35%	<35%	
Progestin-only Pill	0%	0%	0%	0%	0%	<25%	<25%	<25%	<25%	<25%	<25%	<25%	<25%	<35%	<35%	<30%	<25%	<25%	<25%	
Condoms	9%	31%	25%	30%	30%	<25%	<25%	<25%	<25%	<25%	<25%	<25%	<25%	<35%	<35%	<30%	<25%	<25%	<25%	
A7. Registration Waiver Percentage	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2021**	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2022 Q1**	**FY2022 Q2**	**FY2022 Q3**	**FY2022 Q4**	**FY2018 (Q4)**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**FY2023**	
TO2	11%	8%	8%	12%	10%	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	n/a	n/a	n/a	0.1	0.1	0.1	The GHSC-PSM project proposes to continue the target of 10% for use of registration waivers in FY2022. This target is consistent with FY2021 performance, and the project does not anticipate any significant changes in the registration landscape in FY2022.
TO3	8%	10%	14%	12%	11%	20%				20%				n/a	n/a	n/a	20%	20%	20%	The GHSC-PSM project proposes to continue the target of 20% for the use of registration waivers in FY2022 and for the remainder of the project. As anticipated last year, the project saw an increase in the need for waivers for injectables toward the end of FY2021. While the project had originally anticipated reducing the target at this stage, several circumstances are expected to extend the need for registration waivers: 1) DMPA-SC will have some changes to its registration in FY2022, which will increase the need for registration waivers. 2) Combined oral contraceptives are shifting to a non-iron placebo pill, which

																			may not yet be registered in all GHSC-PSM destination countries. 3) A supplier of one-rod implants has changed its name, so there may be a need for waivers while the transition takes place. 4) Finally, a supplier of both oral contraceptives and DMPA-IM has undergone a merger and is changing its name. Registration waivers are expected to be necessary during this transition as well.
A8. Shelf life remaining	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2021**	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2022 Q1**	**FY2022 Q2**	**FY2022 Q3**	**FY2022 Q4**	**FY2018 (Q4)**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**FY2023**	
TO1	83%	82%	80%	89%	89%	75%	75%	75%	75%	80%	80%	80%	80%	78%	78%	78%	75%	80%	80%	The GHSC-PSM project proposes an increased target of 80% shelf life remaining for FY2022. The previous target of 75% was set at time when most HIV products in the RDC had a maximum shelf-life of 24 months and could therefore lose substantial shelf life in a single quarter. For FY2022, the RDC is now stocking 36-month TLD, with an additional 48-month shelf life product coming later in the fiscal year. While TLD demand through GHSC-PSM has slowed, the project expects to be able to maintain shelf life above 80% given the longer overall life of the products currently kept in inventory.
TO2	NA	NA	81%	74%	74%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	The GHSC-PSM project proposes maintaining a target of 70% shelf life remaining for the Alu stockpile for FY2022. Much of the project's ALu supply has a two-year shelf-life, for which a single quarter represents 12.5% of its shelf life. This means that if stock comes into the RDC at 85% shelf life, it can only remain in the RDC for 2.4 months before it drops below 75% shelf life remaining (as occurred in FY2021 Q4). Additionally, because the ALu stockpile is intended for emergency use, shelf-life performance is contingent on having sufficient emergency demand to keep stock moving. While FY2021 emergency demand was sufficient to achieve shelf life performance exceeding 70%, similar demand in FY2022 and beyond is not guaranteed. It should also be noted that most countries will accept stock at a lower shelf life in emergency scenarios. A 70% target for this indicator will therefore enable the project to identify when shelf life is approaching a critical threshold for action, while allowing some stock to remain on hand for emergency response.
TO3	84%	81%	81%	79%	79%	78%	78%	78%	78%	80%	80%	80%	80%	75%	78%	78%	78%	80%	80%	The GHSC-PSM project proposes increasing the shelf life remaining target for FY2022 to 80%, an increase from the previously set 78% target. Performance skated very close to 80% throughout FY2021, but the project expects a more rapid turnover of products in FY2022. This is especially true for injectable contraceptives, where limited supply and high demand is resulting in products shipping out very soon after they arrive at the RDC. This will lead to a higher percentage of shelf life remaining than in FY2021. The project expects that indicator performance will be consistently maintained above the 80% target over the next year.
A10. Framework Contracts	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2021**	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2022 Q1**	**FY2022 Q2**	**FY2022 Q3**	**FY2022 Q4**	**FY2018 (Q4)**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**FY2023**	
TO1 *(HIV only)*	93%	82%	89%	86%	89%			85%				90%		75%	77%	83%	85%	90%	90%	The GHSC-PSM project proposes increasing the target to 90% for FY2022. ARVs, condoms, other pharmaceuticals, and other smaller product categories will continue to be fully covered under framework contracts. ARV procurement (which is heavily weighted in this indicator due to the high value of procurements) is expected to stay consistent this upcoming fiscal year. Procurement of lab commodities under the global RFP has continued to increase as a share of the total procurement value over FY2021, with the second half of the year at or near 80% framework contract procurement for laboratory items. Additionally, the project is expanding its use of long-term

																				Additionally, the project is expanding its use of long-term agreements for dried blood spot (DBS) collection kits, which will add 6-7 million dollars in procurement value to the metric over the fiscal year. The combination of high-value ARV procurements and increasing use of frameworks for lab items is expected to push this indicator over 90% this fiscal year.
TO2	95%	88%	89%	89%	90%	85%	85%	85%	85%	90%	90%	90%	90%	30%	39%	73%	85%	90%	90%	The GHSC-PSM project proposes increasing the target to 90% for FY2022. Nearly all TO2 commodities are procured under framework agreements. The one exception has been LLINs, for which use of framework contracts has been steadily increasing. This trend is expected to continue in FY2022, as the project will be implementing a new long-term agreement for LLINs that will account for most of the products the project procures. A few SP or other pharmaceutical orders may fall outside of the framework contracts the project currently utilizes while LTAs with some suppliers are in progress, but a 90% goal should be sufficient in capturing these strategic changes.
TO3	100%	100%	100%	100%	100%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	The GHSC-PSM project proposes maintaining the target of 95% for FY2021. No changes in contracting strategy or performance are expected.
TO4	NA	100%	100%	13%	91%	85%	85%	85%	85%	85%	85%	85%	85%	55%	90%	75%	85%	85%	85%	The GHSC-PSM project proposes maintaining the target to 85% for FY2022. All of the core essential meds for MNCH are currently covered under framework contracts, which often yields high quarterly performance results on this indicator. However, there are sometimes requests for non-standard products that require non-framework mechanisms, which can cause quarterly performance on this indicator to fluctuate significantly due to the Task Order's relatively small procurement volume. These factors may cause quarterly dips in procurement via framework contracts, which will be noted in analysis accompanying reported results.
A13. Out-of-specification	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2021**	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2022 Q1**	**FY2022 Q2**	**FY2022 Q3**	**FY2022 Q4**	**FY2018 (Q4)**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**FY2023**	
TO2	0.5%	1.4%	0.3%	0.0%	0.5%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	No change is proposed for the GHSC-PSM project's out-of-specification target in FY2022. The project recognizes this benchmark as indicative of the high quality standards that USAID and the project strive to secure from our suppliers.
A15. QA report submission	**FY2020 Q1-2**	**FY2020 Q3-4**	**FY2021 Q1-2**	**FY2021 Q3-4**	**FY2021**	**FY2021 Q1-2**		**FY2021 Q3-4**		**FY2022 Q1-2**		**FY2022 Q3-4**		**FY2018 (Q3-4)**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**FY2023**	
TO2	80%	100%	100%	50%	75%	90%		90%		90%		90%		90%	90%	90%	90%	90%	90%	No change is proposed for the GHSC-PSM project's QA report submission target in FY2022.
A16. Backlog percentage	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2021**	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2022 Q1**	**FY2022 Q2**	**FY2022 Q3**	**FY2022 Q4**	**FY2018 (Q4)**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**FY2023**	
IDIQ *(COVID-19*	4.2%	3.1%	2.5%	4.6%	4.6%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	No change is proposed for the GHSC-PSM project's backlog targets in FY2022. The 5% target is a long-standing performance benchmark for the project, representing a high service-level standard within the unique and complex demands of global public health supply chains.
TO1 *(HIV only)*	4.5%	3.8%	3.2%	3.7%	3.7%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	n/a	<5%	<5%	<5%	<5%	<5%	
TO2	1.6%	1.0%	2.1%	1.3%	1.3%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	n/a	<5%	<5%	<5%	<5%	<5%	
TO3	0.4%	1.2%	1.0%	1.4%	1.4%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	n/a	<5%	<5%	<5%	<5%	<5%	
TO4	2.6%	6.3%	0.0%	29.5%	29.5%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	<5%	n/a	<5%	<5%	<5%	<5%	<5%	
B6. Supply plan submissions	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2021**	**FY2021 Q1**	**FY2021 Q2**	**FY2021 Q3**	**FY2021 Q4**	**FY2022 Q1**	**FY2022 Q2**	**FY2022 Q3**	**FY2022 Q4**	**FY2018 (Q4)**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**FY2023**	
ARV	100%	100%	100%	100%	100%	90%	90%	90%	90%	95%	95%	95%	95%	87%	85%	88%	90%	95%	95%	The GHSC-PSM project's proposed target for ARV supply plan submissions in FY2022 has increased to 95% following a year of strong submissions in FY2021. Achieving this high target will ensure that the project has ample data for routine demand planning, while allowing for missed submissions for no more than one country per quarter.

Laboratory	100%	100%	100%	93%	98%	90%	90%	90%	90%	90%	90%	90%	90%	85%	85%	88%	90%	90%	90%	The GHSC-PSM project's proposed target for lab supply plan submissions in FY2022 remains at 90% following a year of strong submissions in FY2021. Continuing to achieve this high target will ensure that the project has ample data for routine demand planning, while allowing for missed submissions for no more than one country per quarter.
RTK	100%	100%	100%	94%	99%	90%	90%	90%	90%	90%	90%	90%	90%	88%	85%	88%	90%	90%	90%	The GHSC-PSM project's proposed target for RTK supply plan submissions in FY2022 remains at 90% following a year of strong submissions in FY2021. Continuing to achieve this high target will ensure that the project has ample data for routine demand planning, while allowing for missed submissions for no more than one country per quarter.
VMMC	67%	67%	83%	67%	71%	80%	80%	80%	80%	80%	80%	80%	80%	60%	60%	73%	80%	80%	80%	The GHSC-PSM project's proposed target for VMMC supply plan submissions in FY2022 remains at 80%. The target allows for no more than one missed submissions per quarter. The 80% target is set in recognition of the lower denominator for this product group and of ongoing barriers to consistent submission in some countries.
TPT	79%	93%	93%	93%	89%	85%	85%	85%	85%	85%	85%	85%	85%	n/a	n/a	n/a	85%	90%	90%	The GHSC-PSM project's proposed target for TPT supply plan submissions in FY2022 is 85%. Submissions were strong in FY2021, but with some barriers to submissions persisting in some countries for this product group. Continuing to achieve this target will ensure that the project has ample data for routine demand planning, while allowing for missed submissions for no more than two countries per quarter.
Condoms	95%	100%	100%	95%	98%	90%	90%	90%	90%	90%	90%	90%	90%	88%	85%	85%	90%	90%	90%	The GHSC-PSM project's proposed target for condoms supply plan submissions in FY2022 remains at 90% following a year of strong submissions in FY2021. Continuing to achieve this high target will ensure that the project has ample data for routine demand planning, while allowing for missed submissions for no more than two countries per quarter.
Malaria	100%	97%	97%	97%	98%	90%	90%	90%	90%	90%	90%	90%	90%	86%	60%	79%	90%	90%	90%	The GHSC-PSM project's proposed target for malaria supply plan submissions in FY2022 remains at 90% following a year of strong submissions in FY2021. Continuing to achieve this high target will ensure that the project has ample data for routine demand planning, while allowing for missed submissions for no more than two countries per quarter.
FP/RH	95%	100%	100%	100%	99%	95%	95%	95%	95%	95%	95%	95%	95%	86%	85%	88%	95%	95%	95%	The GHSC-PSM project's proposed target for FP/RH supply plan submissions in FY2022 is 95% following a year of strong submissions in FY2021. Achieving this high target will ensure that the project has ample data for routine demand planning, while allowing for missed submissions for no more than one country per quarter.

U.S. Agency for International Development
1300 Pennsylvania Avenue, NW
Washington, D.C. 20523
Tel.: (202) 712-0000
Fax: (202) 216-3524
www.usaid.gov