USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM

PROCUREMENT AND SUPPLY MANAGEMENT

IDIQ PROJECT MONITORING AND EVALUATION PLAN

Submitted January 3, 2018

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CONTENTS

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
BI&A	business intelligence and analytics
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
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.

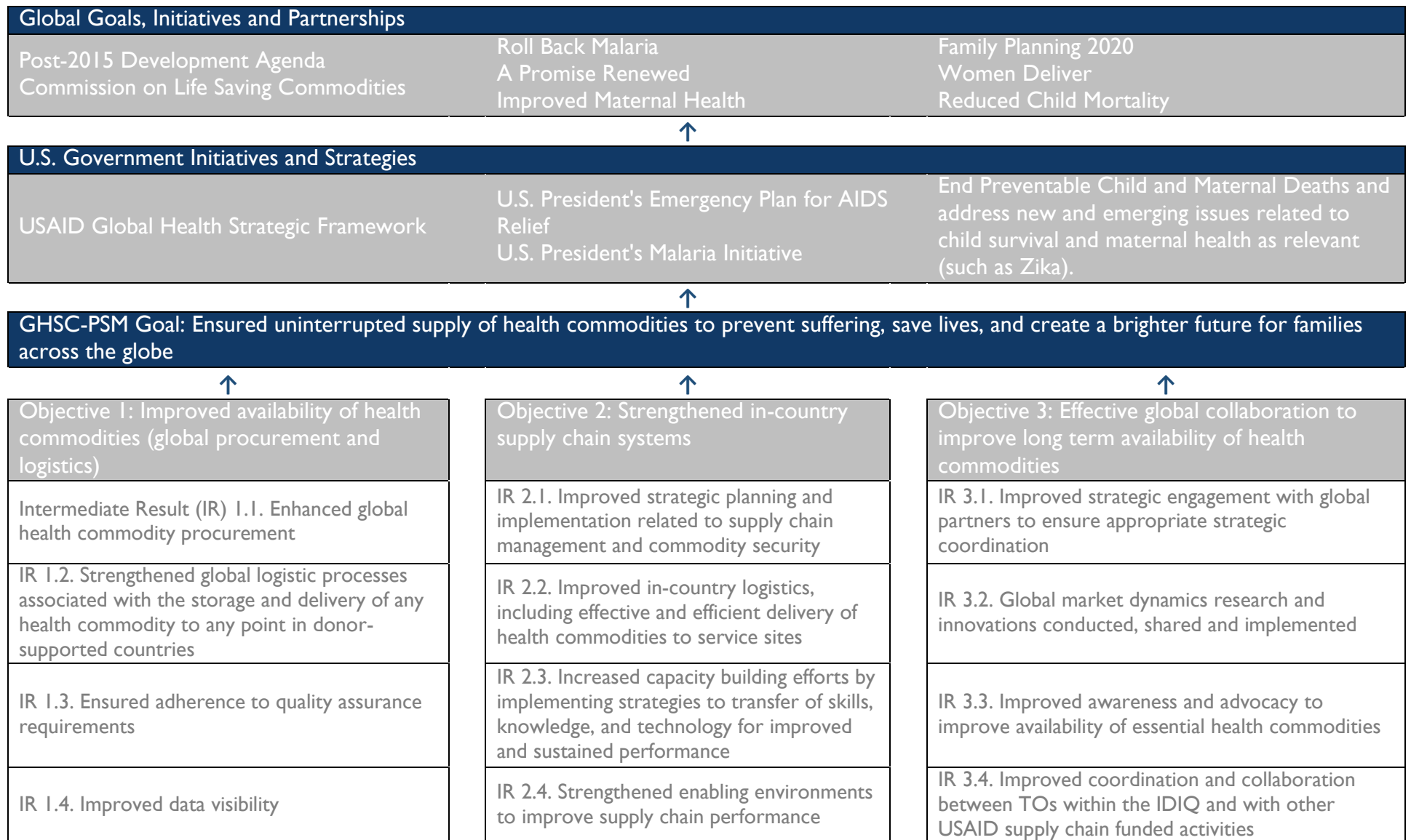Finally, the plan includes two annexes: Annex A lists specific products and product groups that GHSC-PSM will track to represent supply chain performance, and Annex B contains Indicator Reference Sheets for all performance and context indicators that the project will collect and report.

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 2020 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).

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

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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 (FP2020)
  A global movement that seeks to enable 120 million more women and girls to use contraceptives by 2020

- 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

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

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

- **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:[1]

- 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

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[1] 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.

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**

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.[1]

- **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

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

	A7. Temporary waiver percentage A10. Framework contract percentage A12. Percentage price variance 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.
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	C4. Percentage of required files submitted to BI&A C5. Percentage of required files timely submitted to BI&A C6. Percentage of complete submissions reported to BI&A

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	B5. Percentage of required annual forecasts conducted B6. Percentage of required supply plans submitted to GHSC-PSM

Improved strategic planning and implementation related to supply chain management and commodity security	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. Mean 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. Mean 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 initially GHSC-PSM-supported supply chain functions carried out by national authorities without external 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 initially GHSC-PSM-supported supply chain functions carried out by national authorities without external 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	C1. Number of innovations that were developed, implemented or introduced, and are related to the

Global market dynamics research and innovations conducted, shared and implemented	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	

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."[1]

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

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

Project Indicators

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

- 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 mean absolute percent error (MAPE) and supply plan bias

- A6b. Absolute percent forecast error, with variants mean absolute percent error (MAPE) 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)

- 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

- 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) and Chemonics' Financial Management Information System (FMIS). 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, A12, 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. Mean 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*

- B8. Percentage of initially GHSC-PSM-supported supply chain functions carried out by national authorities without external 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 include document reviews, site visits, surveys, key informant interviews, etc.

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* Context indicator

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

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

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

- C6. Percentage of complete submissions reported to BI&A in the reporting period

- 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. Finally, metrics related to GHSC-PSM's data

transmission to the GHSC program's Business Intelligence and Analytics (BI&A) platform are calculated by the GHSC-BI&A contractor and shared with GHSC-PSM quarterly.

U.S. PRESIDENT'S MALARIA INITIATIVE INDICATORS

The following standard indictors 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) tablets purchased with U.S. government funds.

- Number of ACT treatments purchased in any fiscal year with U.S. government funds that were distributed in this reported fiscal year.

- Number of ACT treatments purchased by other partners that were distributed with U.S. government funds.

- Number of RDTs purchased in any fiscal year with U.S. government funds that were distributed in this reported fiscal year

- Number of ITNs purchased by other partners that were distributed with U.S. government funds

- Number of ITNs purchased with U.S. government funds in any fiscal year that were distributed in this reported fiscal year.

- Number of SP tablets purchased in any fiscal year with U.S. government funds that were distributed in this reported fiscal year.

- Number of sulfadoxine-pyrimethamine + amodiaquine (SP/AQ) co-blisters purchased with U.S. government funds

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, 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 indicator reference sheets 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 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.	Last day of the month following the end of 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 support the design and strengthening of public health supply chain strategies in developing-country contexts by measuring 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, monitor supply chain status, and guide investment areas.

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

    o Are the specific activities and outputs of the program consistent with the overall GHSC-PSM goal and objectives?

    o Are the GHSC-PSM Country objectives in line with Ministry of Health objectives?

- Effectiveness

    o To what extent were the stated objectives achieved?

    o What were the major factors influencing the extent of achievement of the objectives?

- Efficiency

    o Were activities cost-efficient?

    o Were objectives achieved on time?

    o Was the project implemented in the most efficient way, compared to potential alternatives?

- Impact

    o What has happened as a result of the GHSC-PSM project?

    o What real difference has the activity made to the beneficiaries?

    o How many people have been affected?

- Sustainability

    o To what extent are the benefits of the project likely to continue after donor funding ceases?

    o 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.

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:

1. Annual work planning

2. Quarterly and annual reporting

3. Quarterly Country Performance Reviews (CPRs)

4. Technical Working Groups and Commodity Councils
    To share project information, gain consensus and concurrence, and facilitate decision-making at senior-most levels.

Ad-hoc events will include:

1. After-action reviews:
    Quick action-oriented events which focus on challenges and successes following an event or task to facilitate continual improvement

2. Conferences:
   To share learning by GHSC-PSM activities and ensure that staff are kept up to date on current knowledge within key technical areas

3. 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

4. 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.

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.

The project also transmits supply chain data to the Global Health Supply Chain program's Business Intelligence and Analytics (GHSC-BI&A) platform, a database that centralizes data across projects in the GHSC portfolio for USAID headquarters. Data element requirements for this platform are specified in the BI&A Information Specification for Implementing Partners, maintained by the GHSC-BI&A vendor.

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).

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 assessments4 *	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

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

Conducting M&E-related technical assistance visits to field offices	As needed	GHSC-PSM headquarters M&E team

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)	Severe malaria medications (includes all injectables (e.g., quinine, artemether, artesunate, and rectal artesunate)
Laboratory (all lab products, including equipment, reagents, consumables)	Other pharma (SP/AQ, chloroquine, primaquine, quinine tablets)
HIV rapid test kits (RTKs)	All other TO2 products (non-pharma)
Other RTKs (syphilis tests, pregnancy tests, other non-malaria and non-HIV tests)	
Other non-pharma (gloves, beds, all other nonpharmaceutical supplies)	
Prefab (any warehouse, clinic, lab, or storage units)	
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:
Implantable contraceptives	
Combined oral contraceptives	
Copper-bearing intrauterine devices (IUDs)	
Emergency oral contraceptives	
Progestin-only pills	• Other pharma
Standard days methods	• Laboratory
Hormone-releasing intrauterine systems	• Other non-pharma
All other TO3 products	

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 gluconate, 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). **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:** Global Supply Chain
Data Quality Issues
Date of Initial Data Quality Assessment: N/A. **Known Data Limitations and Significance (if any):** Unknown. **Actions Taken or Planned to Address Data Limitations:** **Date of Future Data Quality Assessments:** **Procedures for Future Data Quality Assessments:**
Plan for Data Analysis, Review, and Reporting
Data Analysis: **Presentation of Data:** **Review of Data:** Quarterly. **Reporting of Data:** Quarterly.
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.
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. The indicator must be able to be calculated directly from the raw data provided to USAID-BI&A with no manual transformations required outside of the transaction records. GHSC-PSM must include in the raw data the reason codes and primary responsible party designations for any non-OTIF line items so that USAID can drill down on these aspects of OTIF.

9. See Exhibit A-1 in Annex A of this document for a list of tracer product categories used for disaggregation of this indicator.
10. 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.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	31%	NA 80%	

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.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project: Global Supply Chain

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Quarterly

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. The indicator must be able to be calculated directly from the raw data provided to USAID-BI&A with no manual transformations required outside of the transaction records. GHSC-PSM must include in the raw data reason codes for any not-on-time line items so that USAID can drill down on these aspects of on-time performance.

6. See Exhibit A-1 in Annex A of this document for a list of tracer product categories used for disaggregating this indicator.

7. 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.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017	31% (Q4 only)	---	
FY2018		80%	
FY2019			
FY2020			

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.
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: Quality Assurance and M&E teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly.
Reporting of Data: Quarterly.

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.
   a. 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:

a. For products requiring sampling/inspection/testing: "date goods are confirmed by the supplier to be available for sampling"
    i. QA start time for products requiring on-time method verification/ validation/transfer will begin once this process has been completed.
b. 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)."
a. 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. Under exceptional circumstances, with previous agreement from PMI, shipments that overloaded laboratory network capacity may be exempted from this calculation.

Performance Indicator Values			
Year	Performance	Target	Comments
FY2017	78% (Q3–4)	--	
FY2018		80%	
FY2019			
FY2020			

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. New product request cycle time segment is defined below.
Two variants of this indicator will be reported:
1. Average overall cycle time, inclusive of all days
2. Average cycle time, less "Manufacture/Prepare" segment (see segment definitions below)

Unit of Measure: Days.
Disaggregated by: *a. task order; b. tracer product category; c. sourcing channel, d. mode (land, sea, air); e. global supply chain versus decentralized procurement.*
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).
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: Global Supply Chain

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Quarterly

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)
2. Sourcing or planning	RO sent to sourcing for RFx (for POs) RO sent to plan for fulfillment options (for DOs)	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
6. Pick-up	Actual goods available date	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

4. **New product requests**: Customers that want to order a product that does not appear in the GHSC-PSM catalog can submit a request to have that product added to the catalog. The project will report on the average time to complete a new product request each quarter, using the milestones listed before. Data for this segment is tracked by the catalog manager. Indicator results will be reported separately from the overall cycle time in the analysis portion of the quarterly report. The denominator for the average cycle time for this segment will be the number of new products and/or items added to the catalog in the reporting period.

Cycle segment name	Starting milestone	Ending milestone
New product request	New product request created date	New product or item added to catalog date

5. **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.
6. **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.

7. **Hold time:** The project is establishing a clear and consistent policy for when order line items may be placed in an on-hold status, during which time no activity takes place on the order. Once the policy is finalized and hold tracking is available in ARTMIS, this "dwell time" is deducted from each line item's total overall cycle time to determine the active cycle time (in line with SCOR's standard cycle time metric). This will be calculated by taking the sum of all days a line item spends in an on-hold status and subtracting it from the total overall cycle time. Hold time will also be deducted when calculating individual segments' average cycle times.
8. The indicator must be able to be calculated directly from the raw data provided to USAID-BI&A with no manual transformations required outside of the transaction records.
9. In disaggregating this indicator, "sourcing channels" include the following:
    a. Warehouse fulfillment (from GHSC-PSM regional distribution centers and emergency stockpiles)
    b. Direct-drop fulfillment, framework contract products
    c. Direct-drop fulfillment, non-framework contract products
    d. Direct-drop fulfillment, vendor-managed or vendor-owned inventory
10. For tracer product categories that will be reported for this indicator, see Exhibit A-1 in Annex A of this document.
11. 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.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017	155 days	--	
FY2018		TO1: 158	
FY2019		TO2: 262	
FY2020		TO3 (RDC): 176	
		TO3 (Direct Drop): 244	

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 ARTMIS.
Data Source: ARTMIS (LMIS module).
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: Plan, Deliver, and M&E teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Annually
Reporting of Data: Annually

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. The indicator must be able to be calculated directly from the raw data provided to USAID-BI&A with no manual transformations required outside of the transaction records.
3. Goods are considered "distributed" from GHSC-PSM inventory when distribution order (DO) status changes to "order included in shipment." Average inventory balance is calculated based on all inventory with the status "on hand." Quarantined and not-planned stock (including temporarily warehoused shipments in transit to customers) are excluded.

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.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	2.9	-- TO1: 4 TO2 and 3: 3	

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 commodity-related 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.

The following variants will also be calculated:
   a. Total sum of all commodity-related costs paid during the reporting period (USD)
   b. Total commodity-related costs per USD delivered to recipients (expressed as cost per dollar delivered)
   c. Total commodity-related and global supply chain headquarters operations costs per USD delivered to customers (expressed as a percentage of total value of commodities delivered and as cost per dollar 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.
Data Source: ARTMIS (order management, LMIS, and FMIS modules).
Frequency/Timing of Data Acquisition: As often as shipment and financial 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: Deliver/Return, Finance, and M&E teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Semiannually
Reporting of Data: Semiannually and annually

Points of Clarification (other notes)

   1. Costs paid under the following financially tagged technical categories are included in this indicator:

Commodity-related (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 **c.**)

- Forecasting and supply planning
- Procurement
- Quality assurance (TO2 only; calculated separately)
- Warehousing and distribution
- Monitoring and evaluation
- MIS

2. The sum of all commodity-related 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. 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.

Performance Indicator Values

Year	Baseline	Target	Comments
FY2017	9%	--	
FY2018		8%	
FY2019			
FY2020			

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 mean absolute percent error (MAPE) 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:
  a. MAPE: absolute percent error over the last four quarters
  b. 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).*
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.
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: Demand Planning and M&E teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Quarterly

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 and MAPE, while the quarterly report will only reflect the aggregated tracer product category supply plan error, supply plan bias, and MAPE.
3. MAPE 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. Absolute percent error and MAPE 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. Aggregated supply plans and/or global demand forecasts are not created for TOs 2 and 4 at this time; data will not be reported for these task orders.

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.

Performance Indicator Values

Year	Performance	Target	Comments
FY2017 FY2018 FY2019 FY2020	See quarterly reports for results per product group	-- 30%	

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 mean absolute percent error (MAPE) 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:
   a. MAPE: absolute percent error over the last four quarters.
   b. 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.
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: Demand Planning and M&E teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Quarterly

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 and MAPE, while the quarterly report will reflect only the aggregated tracer product category forecast error, forecast bias, and MAPE.
3. MAPE 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 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. APE and MAPE 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, see indicator A6a above. Aggregated supply plans and/or global demand forecasts are not created for TOs 2 and 4 at this time; data will not be reported for these task orders.
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.

Year	Performance	Target	Comments
FY2017	See quarterly reports for results per product group	--	
FY2018		35%	
FY2019			
FY2020			

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: Line items delivered to recipients that used a temporary registration waiver during the quarter.
Denominator: Total line items delivered to recipients during the quarter.
Unit of Measure: Line items.
Disaggregated by: *a.* *task order; **b.** tracer product category; **c.** country; **d.** waiver status (see Point of Clarification 2 below).*
Purpose: This indicator tracks 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.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using ARTMIS.
Data Source: ARTMIS
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: Source team, commodity procurement managers, Deliver/Return team, and M&E team.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Quarterly

Points of Clarification (other notes)

1. It is important to disaggregate this indicator by country, as manufacturers may not register their products in countries where there may be less of a market.
2. This indicator will provide data on any product legally entering the country that usually requires registration but that is not currently registered with the regulatory authority. Products could be imported using one of the following registration waiver statuses:
    a. A registration exemption- a legal status where nonregistered products do not require registration when provided by a validated entity (U.S. government, Global Fund) and/or meet certain quality and safety standards (WHO prequalified)

	b. A nonregistration agreement- a legal document that stipulates a time-limited and product specific agreement between the supplier and the government that allows products to legally enter the country without being registered.
3.	GHSC-PSM will flag any line items requiring a waiver for importation.
4.	This indicator measures the use of registration waivers only. Other types of import waivers, such as tax and duty waivers, are not included.
5.	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.
6.	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.

Performance Indicator Values

Year	Performance	Target	Comments
FY2017 FY2018 FY2019 FY2020	57% (TO3 data only)	No target is required for this indicator.	

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.*
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 ARTMIS
Data Source: ARTMIS (LMIS module)
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: Plan, Deliver/Return, and M&E teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Quarterly

Points of Clarification (other notes)

1. The indicator must be able to be calculated directly from the raw data provided to GHSC-BI&A with no manual transformations required outside of the transaction records
2. If products do expire in the global warehouses, this will need to be reported to the Inspector General (IG). All losses will also be reported under indicator C7. Product Loss Percentage.
3. Shelf life will be calculated based on all inventory with the status "On Hand." Quarantined, expired, released, and in transit stock (including temporarily warehoused shipments in transit to customers) is excluded.
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.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017	74%	TO1: 78% TO2:	
FY2018		70% TO3: 75%	
FY2019			
FY2020			

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).
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: Sourcing/Contracts and M&E teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Quarterly

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. This indicator includes all procurement through the Global Supply Chain operation based in Arlington, VA. It does not include any field-based (decentralized) procurement.
3. 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.
4. 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.

5. 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.	
6. Additional disaggregation elements will be available in ARTMIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytical insight.	

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017	63% (overall)	TO1: 75%	
FY2018		TO2: 30%	
FY2019		TO3: 95%	
FY2020		TO4: 55%	

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A12
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 price variance between the median unit price paid during the quarter and the median unit price paid over the life of the project.

Description

Precise Definition(s):
Numerator: Median price paid per base unit of measure during the quarter.
Denominator: Median price paid per base unit of measure over the life of the project.
Unit of Measure: Price.
Disaggregated by: *a. top three most frequently ordered products in the quarter for each task order.*
Purpose: This indicator measures how average prices being paid for a product by GHSC-PSM in a given quarter compare to average prices paid by GHSC-PSM for the same product over the life of the project, across task orders.

Plan for Data Acquisition

Data Collection Method: Data elements for this indicator will be collected using ARTMIS.
Data Source: ARTMIS (catalog and order management modules).
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: Source and M&E teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Data is reflective of the top three most frequently ordered products per quarter and is not necessarily reflective of price variance for all GHSC-PSM products ordered in the quarter.
Actions Taken or Planned to Address Data Limitations: None.
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis: At the product level
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Quarterly

Points of Clarification (other notes)

1. The top three most frequently ordered catalog products in the quarter will be analyzed. A catalog product has unique specifications, but no designated brand or manufacturer. Calculation at this level will consider unit prices paid across all suppliers of the product when determining the median unit price for both numerator and denominator.
2. Additional disaggregation elements will be available in the GHSC-PSM MIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytical insight.

Performance Indicator Values

Year	Performance	Target	Comments
FY2017 FY2018 FY2019 FY2020	See quarterly reports for results per product	This indicator does not have a target	

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).
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: Quality Assurance and M&E teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Quarterly

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.
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.

Performance Indicator Values

Year	Performance	Target	Comments
FY2017	<1%	NA	
FY2018		<1%	
FY2019			
FY2020			

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. task order (for commodity suppliers and TO2-only QA lab vendors); **b.** vendor type (commodity, 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, and other relevant technical documents, as well as email communications for service ratings. Ratings for each vendor will be determined using the following criteria for each vendor type:

Vendor type	Scorecard criteria	Responsible team
Commodity	Product quality Order fulfillment Invoicing accuracy	Supplier Management team
Freight forwarder (third-party logistics)	Reliability Responsiveness Quality of shipment Invoice accuracy Compliance	Deliver/Return
QA lab services	Reliability Completeness (of documentation) Cost Service	Quality assurance (TO2 only)

All scores will be provided on a scale of 0 to 100, with 100 indicating a perfect score. Complete data collection methodology will be available in the Vendor Rating Scorecard SOP manual.

Data Source: ARTMIS, subcontracts, invoices, technical documents, email records.
Frequency/Timing of Data Acquisition: As vendor subcontracts are executed and managed.
Estimated Cost of Data Acquisition: Minimal; data to be collected by GHSC-PSM staff.
Responsible Individual(s) at the Project: Supplier Management, Deliver/Return, QA, and M&E teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting			

Data Analysis:
Presentation of Data:
Review of Data: Quarterly, or more often as feasible
Reporting of Data: Quarterly

Points of Clarification (other notes)			

1. Only vendors who completed at least one service within the quarter (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 quarter among vendors within a single vendor category, these will be discussed in the quarterly report narrative.
2. For commodity vendors, only a sample of "key" vendors will be selected for evaluation each quarter due to the high volume of suppliers; however, in line with standard practice, the Supplier Management team will monitor the performance of these vendors in meeting contractual requirements. For quality assurance and freight forwarders, all vendors will be rated. Details on selection criteria are available in the SOP manual.
3. The freight forwarder vendor category will not be disaggregated by task order due to the lack of task order-disaggregated data available.
4. For commodity suppliers, performance reports will show a disaggregated reporting in table, graphic, and/or analysis form of the percentage of line items for which suppliers met the committed GAD.
5. Calculations may be automated through ARTMIS in the future. 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.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	See quarterly reports for results per vendor category	Targets are not required for this indicator	

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.
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: QA and M&E teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any):
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Semiannual
Reporting of Data: Semiannual

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.

Performance Indicator Values			
Year	Performance	Target	Comments
FY2017	75%	--	
FY2018		90%	
FY2019			
FY2020			

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).
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: Global Supply Chain.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly.
Reporting of Data: Quarterly.

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. The indicator must be able to be calculated directly from the raw data provided to USAID-BI&A with no manual transformations required outside of the transaction records.

6. See Exhibit A-1 in Annex A of this document for a list of tracer product categories used for disaggregation of this indicator.

7. 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.

Performance Indicator Values

Year	Performance	Target	Comments
FY2017	--	NA	
FY2018		<5%	
FY2019			
FY2020			

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:
a. The preferred source of data is the host-country LMIS, where the LMIS provides regular and reliable information for the specified indicator.
b. 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.
c. 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.
d. 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.
e. 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.
f. Each GHSC-PSM-supported office should report the data source used.

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: M&E team.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments: Review of project reports.

Data Analysis:
Presentation of Data:
Review of Data: Monthly, or according to LMIS reporting period in country.
Reporting of Data: Quarterly

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, and will be reported to the BI&A. 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.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	See quarterly reports for results by product and country	NA	Targets for this indicator will be set in country.

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:
  ● Document observations for each product of interest.

- 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."
- The number of observations where quantities are between maximum and minimum is the numerator.
- 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 mininum 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.

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: GHSC-PSM in-country and M&E team.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments: Review of project reports.

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly.
Reporting of Data: Quarterly.

Points of Clarification (other notes)

1. Additional disaggregation elements will be available in GHSC-PSM's in-country data tracking system, and will be reported to the BI&A. 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.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	See quarterly reports for results per country and product.	NA	Targets for this indicator will be set in country.

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.
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: M&E team (in country) with support from GHSC-PSM M&E team (global).

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments: Review of LMIS reports.

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Review of Data: Quarterly
Reporting of Data: Quarterly

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.

Context Indicator Values			
Year	**Values**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	See quarterly reports for results per task order and country.	NA	Targets for this indicator will be set in country.

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)
1.   Poor data timeliness
2.   Good data timeliness
3.   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
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: M&E team (in country) with support from GHSC-PSM M&E team (global).

<div style="background:gray">Data Quality Issues</div>

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments: Review of LMIS reports.

<div style="background:gray">Plan for Data Analysis, Review, and Reporting</div>

Data Analysis:
Review of Data: Monthly, quarterly, or annually, depending on each country's resources
Reporting of Data: Annually

<div style="background:gray">Points of Clarification (other notes)</div>

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

Context Indicator Values			
Year	Values	Target	Comments
FY2017 FY2018 FY2019 FY2020	See quarterly reports for results per country and task order.	NA	Per ADS 201, targets are not required for context indicators.

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.
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: M&E team.

Data Quality Issues
Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments: Review of project reports.

Plan for Data Analysis, Review, and Reporting
Data Analysis:
Presentation of Data:
Review of Data: Annually
Reporting of Data: Annually

Points of Clarification (other notes)
1. Annual forecasts are reported by commodity group as follows: ARVs, Lab (HIV Diagnostics), VMMC, 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, which will be reported to the BI&A. The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	75%	ARV: 87% RTKs: 88% Condoms: 88% Lab (HIV): 85% VMMC: 60% Malaria: 86% PRH: 86% MNCH: 67%	

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.
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: M&E team.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments: Review of project reports.

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly.
Reporting of Data: Quarterly.

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, condoms, malaria commodities, family planning commodities, and maternal and child health 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, and will be reported to the BI&A. The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017	65%	ARV: 87%	
FY2018		RTKs: 88%	
FY2019		Condoms: 88%	
FY2020		Lab (HIV): 85%	
		VMMC: 60%	
		Malaria: 86%	
		PRH: 86%	
		MNCH: 67%	

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, 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.
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: M&E team (in-country) with support from GHSC-PSM M&E team (global).

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments: N/A

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Review of Data: Annually
Reporting of Data: Annually

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.

Context Indicator Values			
Year	**Values**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	See quarterly reports for results per country.	NA	Per ADS 201, targets are not required for context indicators.

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 initially GHSC-PSM-supported supply chain functions carried out by national authorities without external technical assistance.

Description

Precise Definition(s):
Numerator: Number of (detailed level) initially GHSC-PSM-supported supply chain functions that are implemented without external donor technical assistance.
Denominator: Total number of (detailed level) initially GHSC-PSM-supported supply chain functions examined.
Unit of Measure: Supply chain functions: LMIS, quantification, inventory management, distribution planning, procurement, transportation, monitoring and custom clearance (see illustrative list of detailed level functions below under "points of clarification").
Disaggregated by: *a. task order; b. country.*
Purpose: To determine which and what proportion of supply chain functions initially supported by GHSC-PSM transition to being independently implemented by the host country authorities, or an agent of the host country authorities, without external donor technical assistance.

Plan for Data Acquisition

Data Collection Method: Annual review of supply chain activities within host countries to determine capability and sustainability within the supply chain.
Each country office should define the expected number of functions expected to "graduate" from technical assistance each year and by the end of the project.
Data Source: In-country project team
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: M&E team (in country) with support from GHSC-PSM M&E team (global).

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments: N/A

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Review of Data: Annually
Reporting of Data: Annually

Points of Clarification (other notes)

1. USAID understands that performance for this indicator is dependent on factors external to the project's influence.
2. This indicator will be country specific and unique. It will be reported country by country only. As countries become part of the GHSC-PSM central initiative, the project will conduct a mapping exercise in Year 1 to determine what functional areas the project will be supporting in each country. These functions will be identified at a detailed level (see list below), and then categorized according to the Financial Tags for Activity-Based Budgeting.

The project will also set targets for the number of functional areas that are expected to become independent per year and over the life of the project, based on the country's work plan. Note that not all functional areas are expected to become independent in all countries.

3. The project will begin reporting on this indicator starting in Year 2. Only supply chain functions that receive technical assistance support from GHSC-PSM will be included in the denominator of this indicator. Other functions may be added to the denominator if the project begins supporting new functions over the life of the project.

4. **Explanation of Numerator:**
Includes all supply chain functions that are independently implemented by the host-country authorities after initially receiving GHSC-PSM support. An illustrative list of functions includes:
- LMIS — facility-level data collection and cleaning
- LMIS — intermediate distribution/storage center (if applicable) data collection and reporting
- LMIS — central-level data collection
- Quantification — forecast or review
- Quantification — quarterly supply plan review
- Inventory management at the central level (validated by stocked according to plan)
- Inventory management at the intermediate distribution points (as applicable)
- Warehouse management system at the central level
- Warehouse management system at the intermediate level
- Pick and pack at the central level
- Pick and pack at the intermediate level
- Receiving at the central level
- Receiving at the intermediate level
- Dispatch at the central level
- Dispatch at the intermediate level
- Distribution planning — central to intermediate level
- Distribution planning — intermediate to facility level
- Transportation fleet management — central
- Transportation fleet management — intermediate to facility level
- Pharmaceutical procurement
- System monitoring — central
- System monitoring — intermediate
- System monitoring — facility level
- Customs clearance of pharmaceutical processes

Additional functions and guidance on mapping functions to technical assistance activities will be available in the GHSC-PSM Standard Operating Procedures for In-Country Nonroutine M&E Indicators.

5. **Explanation of Denominator:** Total number of supply chain functions supported by GHSC-PSM over the life of the project.
6. **Interpretation:** Determines which functions or the percent of functions the host-country government can independently support.
7. **Disaggregation by Task Order:** Activities that are clearly related to a single TO will be reported under that TO. Integrated or crosscutting activities will be reported under a "crosscutting" disaggregation, rather than separated out by TO.
8. **Disaggregation:** While data for this indicator will be reported by country and TO in the quarterly report, additional disaggregation elements, such as supply chain function, will 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.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	NA	NA	Targets for this indicator will be set in country.

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).
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: M&E team.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments: Review of project reports.

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Review of Data: Annually
Reporting of Data: Annually

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.

Context Indicator Values			
Year	**Values**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	See quarterly reports for results per country.	NA	Per ADS 201, targets are not required for context indicators.

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) participation of the host country's relevant government agency (Ministry of Health, National Malaria Control Program, National AIDS Control Program or National Reproductive Health/Family Planning agency or equivalent), central medical store (or their equivalents), and relevant donors, private-sector entities, nongovernmental organizations, and civil society organizations; (2) holding a meeting at least biannually with good representation from the mechanism's contributing actors; (3) developing policies, procedures, and action plans; and (4) 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, but this is not a requirement for the indicator.

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.

The following criteria will be assessed and considered to determine whether a country's logistics coordination mechanism is considered "functional":

- Participation of the host country's relevant government agency (Ministry of Health, National Malaria Control Program, National AIDS Control Program or National Reproductive Health/Family Planning agency or equivalent), central medical store

(or their equivalents), and relevant donors, private-sector entities, nongovernmental organizations, and civil society organizations

- Holding a meeting at least biannually with good representation from the mechanism's contributing participants
- Developing policies, procedures, and action plans;
- Showing evidence of adherence to policies and procedures, implementing action plans, and following up on and addressing issues raised at previous meetings.

Data Source: Committee meeting agendas and/or minutes; interviews with committee members.
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: In-country M&E team and headquarters M&E team.

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Annually.
Reporting of Data: Annually.

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 Manual for Nonroutine 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.

Context Indicator Values

Year	Values	Target	Comments
FY2017 FY2018 FY2019 FY2020	See quarterly reports for results per country	NA	Per ADS 201, targets are not required for context indicators.

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. **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:** Systems strengthening and M&E teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A. **Known Data Limitations and Significance (if any):** Unknown. **Actions Taken or Planned to Address Data Limitations:** **Date of Future Data Quality Assessments:** **Procedures for Future Data Quality Assessments:**

Plan for Data Analysis, Review, and Reporting

Data Analysis: **Presentation of Data:** **Review of Data:** Annual. **Reporting of Data:** Annual.

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 quarterly 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.

Context Indicator Values			
Year	**Values**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	See quarterly reports for results per country.	NA	Per ADS 201, targets are not required for context indicators.

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: Mean 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.*
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 in this documents 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.
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: In-country Forecasting and Supply Planning and M&E teams

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting	
Data Analysis: **Presentation of Data:** **Review of Data:** Annual. **Reporting of Data:** Annual.	
Points of Clarification (other notes)	

1. The MAPE 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. MAPE represents the mean absolute percent error over time per tracer product.
3. 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.
4. 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.
5. 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.
6. The project may report additional disaggregations in annual performance reports when they provide useful analytical insight.

Context Indicator Values

Year	Values	Target	Comments
FY2017 FY2018 FY2019 FY2020	See quarterly reports for results per product.	NA	Per ADS 201, targets are not required for context indicators.

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.
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: M&E team.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Validity of whether the innovations described by the field offices meet the definitions laid out in the CMEP. Ensuring the innovations are reported in the correct period and that innovations are not double counted.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments: Review of project reports.

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Quarterly

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.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	21	*Targets will not be set for this indicator, as the pace of innovation is difficult to predict and not fully within project control.*	

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.
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: M&E team.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): 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.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments: Review of project reports.

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Quarterly

Points of Clarification (other notes)

1. Training participants who are GHSC-PSM or USAID employees are excluded from this indicator.
2. This indicator provides a general picture of GHSC-PSM's various training activities. The project also reports to TraiNet, in accordance with TraiNet standards and definitions.
3. 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.
4. 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.			

<table>
<tr><td colspan="4">Performance Indicator Values</td></tr>
<tr><td>Year
FY2017
FY2018
FY2019
FY2020</td><td>Performance
13,989</td><td>Target
Targets not required
for this indicator</td><td>Comments</td></tr>
</table>

C. CROSSCUTTING

Indicator Number: C4
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result 1.4. Improved data visibility
Objective 2: Strengthened in-country supply chain systems.
Indicator Name: Percentage of required files submitted to BI&A in the reporting period.

Description

Precise Definition(s):
Numerator: Number of required files submitted to BI&A during the quarter
Denominator: Total number of files required for submission to BI&A during the quarter
Unit of Measure: File
Disaggregated by: *a. data content type.*
Purpose: This indicator measures completeness of reporting to the BI&A.

Plan for Data Acquisition

Data Collection Method: Within seven days of the end of each quarter, GHSC--BI&A will generate a report indicating all files they have received from GHSC-PSM during the course of the quarter. GHSC-PSM will then have one week to submit any missing files. After this window has closed, USAID-BI&A will re-run the report, which will serve as the basis for the final calculation of the indicator.
Data Source: GHSC-BI&A vendor
Frequency/Timing of Data Acquisition: Quarterly
Estimated Cost of Data Acquisition: None
Responsible Individual(s) at the Project: GHSC-BI&A Vendor, M&E and MIS teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments: Review of project reports, ARTMIS and BI&A.

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Quarterly

Points of Clarification (other notes)

1. Required files and the frequency of their submission are specified in the BI&A Information Specification for Implementing Partners ("infospec"). Files are categorized into the data content types listed below. The infospec is currently under review; required data content types and number of files are subject to change. Future final versions of the infospec will supersede the list below for determining the number and types of files required for submission.
   - Trade item (eight files): Submitted daily
   - Financials (two files): Submitted monthly and annually
   - Fulfillment request (four files): Submitted daily
   - Price quote (five files): Submitted daily
   - Purchase orders (five files): Submitted daily
   - Sales orders (five files): Submitted daily
   - Goods received note (five files): Submitted daily
   - Inventory management (two files): Submitted monthly

- Logistics/shipments (four files): Submitted daily
- Quality assurance (four files): Submitted to be determined (TBD)
- Forecasting and supply planning (four files): Submitted quarterly
- Technical assistance (seven files): Submitted TBD
- Supplier contracts (three files): Submitted daily
- Measurement and evaluation (four files): Submitted TBD
- Reference data (10 files): Submitted daily

Performance Indicator Values			
Year	Performance	Target	Comments
FY2017	--	--	
FY2018		TBD	
FY2019			
FY2020			

C. CROSSCUTTING

Indicator Number: C5
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result 1.4. Improved data visibility
Objective 2: Strengthened in-country supply chain systems.
Indicator Name: Percentage of required files timely submitted to BI&A in the reporting period.

Description

Precise Definition(s):
Numerator: Number of required files timely submitted to BI&A during the quarter
Denominator: Total number of files required for submission to BI&A during the quarter
Unit of Measure: File
Disaggregated by: *a. data content type.*
Purpose: This indicator measures the timeliness of reporting to the BI&A.

Plan for Data Acquisition

Data Collection Method: Within seven days of the end of each quarter, GHSC-BI&A will generate a report indicating all files they have received from GHSC-PSM by the required deadlines during the quarter. This report will serve as the basis for the final calculation of the indicator.
Data Source: GHSC-BI&A Vendor
Frequency/Timing of Data Acquisition: Quarterly
Estimated Cost of Data Acquisition: None
Responsible Individual(s) at the Project: GHSC-BI&A Vendor, M&E and MIS teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments: Review of project reports, ARTMIS and BI&A.

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Quarterly

Points of Clarification (other notes)

1. Periodicity of timely submissions relates to data content type and requirements agreed for submission to BI&A. Per the BI&A Information Specification, files must be submitted no later than 2:00 AM Mondays through Fridays.
2. Required files and the frequency of their submission are specified in the BI&A Information Specification for Implementing Partners ("infospec"). Files are categorized into the data content types listed below. The infospec is currently under review; required data content types and number of files are subject to change. Future final versions of the infospec will supersede the list below for determining the number and types of files required for submission.
   - Trade item (eight files): Submitted daily
   - Financials (two files): Submitted monthly and annually
   - Fulfillment request (four files): Submitted daily

• Price quote (five files): Submitted daily • Purchase orders (five files): Submitted daily • Sales orders (five files): Submitted daily • Goods received note (five files): Submitted daily • Inventory management (two files): Submitted monthly • Logistics/shipments (four files): Submitted daily • Forecasting and supply planning (four files): Submitted quarterly • Technical assistance (seven files): Submitted TBD • Supplier contracts (three files): Submitted daily • Measurement and evaluation (four files): Submitted TBD • Reference data (10 files): Submitted daily			

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	-- 	-- TBD	

C. CROSSCUTTING

Indicator Number: C6
Indicator Type: Performance
Objective 1: Improved availability of health commodities (global procurement and logistics).
Intermediate Result 1.4. Improved data visibility
Objective 2: Strengthened in-country supply chain systems.
Indicator Name: Percentage of complete submissions reported to BI&A in the reporting period.

Description

Precise Definition(s): *The definition for this indicator is still being specified.*
Numerator: TBD.
Denominator: TBD.
Unit of Measure: TBD.
Disaggregated by: TBD.
Purpose: This indicator will measure the completeness of data submitted from GHSC-PSM to the BI&A. It will analyze data below the file level to assess whether all require data elements have been transmitted.

Plan for Data Acquisition

Data Collection Method: GHSC-BI&A
Data Source: GHSC-BI&A
Frequency/Timing of Data Acquisition: Quarterly.
Estimated Cost of Data Acquisition: None
Responsible Individual(s) at the Project: GHSC-BI&A, M&E, and MIS teams.

Data Quality Issues

Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments: Review of project records, ARTMIS and BI&A.

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Review of Data: Semiannual
Reporting of Data: Semiannual

Points of Clarification (other notes)

1. Required data elements and the frequency of their submission are specified in the BI&A Information Specification for Implementing Partners.
2. Sampling frame will be determined with USAID and the GHSC-BI&A

Performance Indicator Values

Year	Performance	Target	Comments
FY2017	NA	--	
FY2018		TBD	
FY2019			
FY2020			

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.
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: MIS and M&E teams. (headquarters and in-country)

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Visibility and reliability of in-country data for this indicator will decrease as GHSC-PSM gets further down the supply chain.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly.
Reporting of Data: Quarterly.

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. For products within the global supply chain, the indicator must be able to be calculated directly from the raw data provided to GHSC-BI&A with no manual transformations required outside of the transaction records.
4. USAID and the project must adhere to strict reporting requirements to the IG for products lost due to theft, damage, or expiry.
5. The value of product loss should be tracked at the transaction level and should reconcile with the monthly financial statement under product loss.
6. Existing in-country mechanisms will be used to report on this indicator. QA reports should be reconciled when determining losses in country.
7. 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.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	See quarterly reports for performance per task order and country.	No targets will be set for this indicator (see Point of Clarification 2).	

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).

Precise Definition(s):
Numerator: Total 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. task order; b. type of loss (theft, damage, or other); c. site of loss (storage or transit); d. supply chain level (global or in-country) e. tracer product.*
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.

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:
- 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:** Losses due to theft, damage, and other causes are reported through the continual improvement incident reporting system. Incident reports include the task order, loss value, and description of loss circumstances, including type of loss and loss location.
- **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 will also be reported through the GHSC-PSM continual improvement incident reporting system.

- **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 closed, 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.

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: MIS and M&E teams. (headquarters and in-country)

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.

Known Data Limitations and Significance (if any): Visibility and reliability of in-country data for this indicator will decrease as GHSC-PSM gets further down the supply chain.

Actions Taken or Planned to Address Data Limitations:

Date of Future Data Quality Assessments:

Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:

Presentation of Data:

Review of Data: Quarterly.

Reporting of Data: Quarterly.

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. For products within the global supply chain, the indicator must be able to be calculated directly from the raw data provided to GHSC-BI&A with no manual transformations required outside of the transaction records.
4. 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.
5. The value of product loss should be tracked at the transaction level and should reconcile with the monthly financial statement under product loss.
6. Existing in-country mechanisms will be used to report on this indicator. QA reports should be reconciled when determining losses in country.
7. 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.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	See quarterly reports for performance per task order and country.	No targets will be set for this indicator (see Point of Clarification 2).	

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.
Frequency/Timing of Data Acquisition: Semiannually.
Estimated Cost of Data Acquisition: Minimal.
Responsible Individual(s) at the Project: Strategic Engagement and M&E teams.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Unknown.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Semiannually.
Reporting of Data: Semiannually.

Points of Clarification (other notes)

Performance Indicator Values

Year	Performance	Target	Comments
FY2017 FY2018 FY2019 FY2020	58%	No target.	

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.
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: In-country M&E team and headquarters M&E team.

Data Quality Issues

Date of Initial Data Quality Assessment: N/A.
Known Data Limitations and Significance (if any): Visibility and timeliness of data from the SDPs.
Actions Taken or Planned to Address Data Limitations:
Date of Future Data Quality Assessments:
Procedures for Future Data Quality Assessments:

Plan for Data Analysis, Review, and Reporting

Data Analysis:
Presentation of Data:
Review of Data: Quarterly.
Reporting of Data: Quarterly.

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.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	86%	NA	Targets for this indicator will be set in country.

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 **Estimated Cost of Data Acquisition:** Minimal; data to be collected by GHSC-PSM staff **Responsible Individual(s) at the Project:** Technical leads; Strategic Engagement and M&E teams

Data Quality Issues
Date of Initial Data Quality Assessment: NA. **Known Data Limitations and Significance (if any):** Since data collection is nonroutine and provided through reports, it may not be exhaustive. **Actions Taken or Planned to Address Data Limitations:** **Date of Future Data Quality Assessments:** **Procedures for Future Data Quality Assessments:**

Plan for Data Analysis, Review, and Reporting
Data Analysis: **Presentation of Data:** **Review of Data:** Quarterly. **Reporting of Data:** Quarterly.

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.

Performance Indicator Values			
Year	**Performance**	**Target**	**Comments**
FY2017 FY2018 FY2019 FY2020	See quarterly reports for narrative descriptions of this indicator.	No target.	

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 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 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 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 tablets purchased with U.S. government funds.	Number of SP tablets purchased with U.S. government funds. "Purchased" = SP tablets for which a purchase order has been released by the Procurement Service Agent within the given fiscal year.	Annually
D5. Number of ACT treatments purchased by other partners that were distributed with U.S. government funds.	Number of ACT treatments purchased by other partners (not U.S. government) but which were distributed (to central, regional, or district health facilities) with U.S. government funds within the given fiscal year.	Annually
D6. Number of ACT treatments purchased in any fiscal year with U.S. government funds that were distributed in this reported fiscal year.	Number of ACT treatments purchased in any fiscal year with U.S. government funds that were distributed in this reported fiscal year. "Distributed" = ACTs that have moved out from the central level of a country to peripheral levels. Peripheral points include: regional and district warehouses, facilities (e.g., hospitals, clinics, health posts), and community health workers.	Annually
D7. Number of RDTs purchased in any fiscal year with U.S. government funds that were distributed in this reported fiscal year.	Number of RDTs purchased in any fiscal year with U.S. government funds that were distributed in this reported fiscal year. "Distributed" = RDTs that have moved out from the central level of a country to peripheral levels. Peripheral points include regional and district warehouses, facilities (e.g., hospitals, clinics, health posts), and community health workers.	Annually
D8. Number of ITNs purchased by other partners that were distributed with U.S. government funds.	Number of ITNs purchased by other partners that were distributed with U.S. government funds within the given fiscal year.	Annually
D9. Number of ITNs purchased with U.S. government funds in any fiscal year that were	Number of ITNs purchased in any fiscal year with U.S. government funds that were distributed in this reported fiscal year (a) through campaigns, (b) to health facilities (ANC or child health	Annually

distributed in this reported fiscal year.	clinics), (c) through the private/commercial sector, or (d) through other distribution channels.	
D10. Number of SP tablets purchased in any fiscal year with U.S. government funds that were distributed in this reported fiscal year.	Number of SP tablets purchased in any fiscal year with U.S. government funds that were distributed in this reported fiscal year. "Distributed" = SP tablets that have moved out from the central level of a country to peripheral levels. Peripheral points include regional and district warehouses, facilities (e.g., hospitals, clinics, health posts), and community health workers.	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