USAID GLOBAL HEALTH SUPPLY CHAIN –
**PROCUREMENT AND SUPPLY MANAGEMENT
PROJECT**

TASK ORDER 02 PROJECT MONITORING AND EVALUATION PLAN

May 31, 2016

CONTENTS

ACRONYMS

ACT	artemisinin-based combination therapy
AL	artemether-lumefantrine
AS/AQ	artesunate/amodiaquine
BI&A	Business Intelligence and Analytics
CMS	central medical store
DHIS2	District Health Information System 2.0
FMIS	financial management information system
FP	family planning
GHSC	Global Health Supply Chain
HQ	headquarters
IDIQ	Indefinite Delivery, Indefinite Quantity contract
IG	Inspector General
IR	intermediate result
ISO	International Organization for Standardization
K+N	Kuehne + Nagel
KPI	key performance indicator
LLINs	long-lasting insecticide-treated nets
LMIS	logistics management information system
M&E	monitoring and evaluation
MIS	management information system
MOH	ministry of health
NGO	non-governmental organization
NMCP	National Malaria Control Program
OTIF	on time in full
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PMI	President's Malaria Initiative
PMP	performance management plan
PPMRm	procurement planning and monitoring report for malaria
PRH	population and reproductive health
PSM	Procurement and Supply Management
QA	quality assurance

QC	quality control
RDC	regional distribution center
RDT	rapid diagnostic test
SCOR®	Supply Chain Operations Reference
SDPs	service delivery points
SKU	stock keeping unit
SOP	standard operating procedure
SP	sulphadoxine-pyrimethamine
SPSS	Statistical Package for the Social Sciences
TA	technical assistance
TO	task order
USAID-BI&A	United States Agency for International Development Business Intelligence and Analytics
WMS	warehouse management system
4PL	fourth-party logistics

A. INTRODUCTION

This document contains the monitoring and evaluation (M&E) plan designed for the USAID Global Health Supply Chain - Procurement and Supply Management (GHSC-PSM) project. The GHSC-PSM M&E plan serves as a tool for gauging progress against planned activities and will capture data on global and in-country supply chain performance, commodity availability, data availability, and program sustainability. Given that the M&E plan is a living document, GHSC-PSM anticipates submitting updated versions of the M&E plan throughout the life of the program. The M&E plan is presented in five sections: Section A contains an introduction to the GHSC-PSM M&E plan, including our approach to M&E and the project results framework. Section B describes essential elements of the M&E plan. It includes indicator selection and assumptions behind the selection process, monitoring and evaluation system, data collection, analysis and reporting, data sources, collection methods and data quality control. Section C describes the M&E staff resources that will be employed including their respective roles and responsibilities. Section D includes the project's plan to incorporate continuous quality improvement as part of our M&E strategy. Section E contains the Performance Indicator Reference Sheets and corresponding data requirements.

An essential element of an effective supply chain management system is a robust M&E system. Our M&E approach ensures that USAID, the GHSC-PSM team, and key counterparts have access to sufficient, timely, and accurate information to monitor program performance and make appropriate adjustments. Our management information system (MIS) will provide continuous, updated data that supports our monitoring and evaluating of the global supply chain's performance, and additionally, if feasible, the in-country supply chains we operate, to the farthest possible distribution points. The program results framework guides our M&E plan, which includes standard U.S. government recommended indicators and business rules, indicators from USAID recommendations/technical considerations for a global health supply chain M&E plan, and custom indicators that define our key performance indicators (KPIs). The continuous improvement process outlined below describes the cyclical activities that will ensure we are learning from our data, applying lessons learned to improve performance, and sharing what we learn with host-country counterparts, USAID, and other donors. Our focus is threefold, starting with a focus on supply chain performance excellence, reflected in our choice of KPIs, such as delivery in full and on time and cycle time. Second, we focus on supply chain costs to ensure more health for the money, examining various stages as well as the overall supply chain cost as a percentage of total cost of commodities per unit. Lastly, we focus on systems strengthening performance, by including cross cutting indicators that highlight the effects of our interventions on countries' supply chain systems as they evolve to become self sufficient. To maximize performance, we have included indicators that will help us identify where unnecessary steps in the process create inefficiencies, unnecessary costs, or inconsistencies that burden service. Determining the right metrics is key to optimizing processes and results and driving value for the program, without unduly burdening the team's and counterparts' efforts.

As many of our measures will be built into our information technology system, information capture will be available in near real time. Our M&E system will allow different data, statistical findings, and reports to become available to different kinds of system users. The "need to know" will regulate user access to specific information in the system, protecting confidential information. Timely and reliable performance information plays a critical role in planning and management since it can be used to scale up, scale down, or alter activities and processes based on evidence. Our results framework shows the hierarchy of results that will achieve GHSC-

PSM's goals and objectives. The indicator set uses the results framework as its structure. By assigning KPIs at each level of the results framework, we are able to monitor whether our development hypothesis is correct — that is, achieving the combination of lower-level results leads to the achievement of the higher-level results. These indicators allow us to identify achievement of the expected results organized in a cause-effect sequence.

Additionally, for metrics, our focus is on *supply chain performance* and *supply chain cost* to ensure more health for money. We are using the Supply Chain Council's proven Supply Chain Operations Reference (SCOR®) performance measures to build our KPIs. The SCOR® model describes the business activities associated with all phases of satisfying a customer's demand. The model itself is organized around the six primary management processes of Plan, Source, Make, Deliver, Return, and Enable. Using these process building blocks, the SCOR® model can be used to describe supply chains that are very simple or very complex using a common set of definitions across disparate industries. GHSC-PSM joins many public and private organizations and companies around the world that use the model as a foundation for global and site-specific supply chain improvement projects.
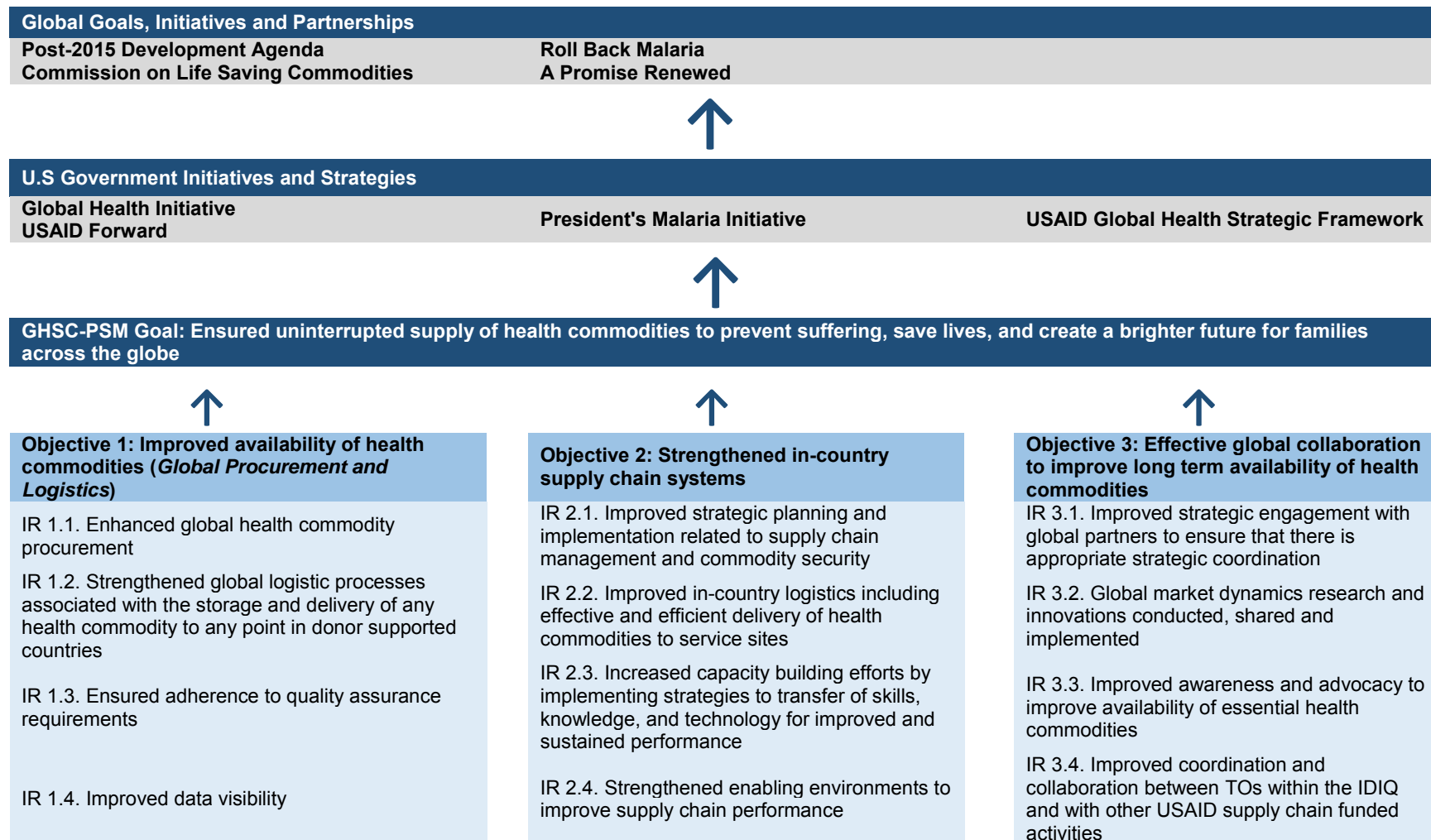
GHSC-PSM RESULTS FRAMEWORK

The project's results framework (Exhibit 1) conveys the development hypothesis implicit in the project goals and objectives, as well as the cause-effect relationships between project intermediate results and project objectives. Hence, the results framework provides a foundation for work planning and performance monitoring. GHSC-PSM's goal is to ensure uninterrupted supply of health commodities to prevent suffering, save lives, and create a brighter future for families across the globe. Under the IDIQ contract, there are three task orders (TOs) that directly support the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), the President's Malaria Initiative (PMI), and the USAID Office of Population and Reproductive Health (PRH), through a comprehensive array of services for health commodity procurement and related systems strengthening technical assistance that encompass different elements of a comprehensive supply chain. To attain the aforementioned GHSC-PSM goal, the project will meet the following objectives:

a. Objective 1: Improved availability of health commodities (global procurement and logistics)
b. Objective 2: Strengthened in-country supply chain systems
c. Objective 3: Effective global collaboration to improve long-term availability of health commodities

Objective 1: Improved availability of health commodities (global procurement and logistics). In order to ensure availability of commodities under the three TOs, GHSC-PSM will procure and deliver the requisite commodities. Core elements of Objective 1 encompass the activities listed in the first column of Exhibit 1 below. Exhibit 1 also details the logical associations between its core activities, intermediate results, and indicator reference themes. GHSC-PSM will ensure fidelity between core program elements and our results framework by closely monitoring progress toward intermediate results using appropriate key supply chain indicators, which have already been mapped to the SCOR® model and USAID M&E technical considerations document. The SCOR® model is organized around the six primary management processes of Plan, Source, Make, Deliver, Return, and Enable. The performance attributes of a supply chain permit it to be analyzed and evaluated against other supply chains with competing strategies. SCOR® identifies five core supply chain performance attributes: reliability, responsiveness, agility, costs, and asset management. Without these characteristics, it is difficult to compare an organization that strategically chooses to be the low-cost provider against an organization that chooses to

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	

U.S Government Initiatives and Strategies		
Global Health Initiative USAID Forward	President's Malaria Initiative	USAID Global Health Strategic Framework

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

Objective 1: Improved availability of health commodities (*Global Procurement and Logistics*)	Objective 2: Strengthened in-country supply chain systems	Objective 3: Effective global collaboration to improve long term availability of health commodities
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 that there is 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

compete on reliability and performance. The GHSC Objective 1 indicators are discussed in detail in the indicator Section B.1 below and the indicator reference sheets.

EXHIBIT 2: MAPPING OF OBJECTIVE 1 CORE ELEMENTS TO INTERMEDIATE RESULTS AND INDICATOR REFERENCE THEMES

OBJECTIVE 1: IMPROVED AVAILABILITY OF HEALTH COMMODITIES (GLOBAL PROCUREMENT AND LOGISTICS)		
CORE ELEMENTS	**INTERMEDIATE RESULTS**	**INDICATOR REFERENCE THEMES**
a. Health commodity procurement: support strategic sourcing, selection, procurement and subcontractor management, risk management, supply and demand forecasting, and continuous improvement of quality assured commodities.	**IR 1.1.** Enhanced global health commodity procurement.	Supply chain reliability. Supply chain responsiveness. Supply chain costs. Supply chain agility. Supply chain risk.
b. Logistics: deploy expert technical assistance to strengthen all logistics processes associated with the storage and delivery of any health commodity to any point in donor-supported countries.	**IR 1.2.** Strengthened global logistic processes associated with the storage and delivery of any health commodity to any point in donor supported countries.	Supply chain reliability. Supply chain responsiveness. Supply chain costs. Supply chain agility. Supply chain risk. Supply chain asset management efficiency.
c. Health commodity quality assurance: ensure adherence to USAID's quality assurance requirements and application of consistent quality assurance (QA) and quality control processes to manage product recalls, and build in house QA capacity of key stakeholders throughout the supply chain.	**IR 1.3.** Ensured adherence to quality assurance requirements.	Supply chain quality assurance.
d. Data visibility: provide USAID and partner countries the capacity to utilize data to effectively manage global supply chain from end to end in real time.	**IR 1.4.** Improved data visibility.	Supply chain visibility.

Objective 2: Strengthened in-country supply chain systems. Ensuring availability of commodities to end users under the three TOs requires well performing in-country supply chain systems from the central warehouse to the service delivery points (SDPs). Core elements of Objective 2 encompass the activities listed in the first column of Exhibit 2 below. Exhibit 2 also illustrates fidelity between the in-country core activities, intermediate results, and indicator reference themes. GHSC-PSM will ensure that the in-country program activities, including sustainability efforts, map to our results framework by closely monitoring progress toward intermediate results using appropriate in-country performance/sustainability and cross-cutting indicators. Achievements per indicator will be reported for countries where the project is providing technical assistance or operational support, including countries that have national and parallel supply chains. Where minimal or no technical assistance is funded or provided by USAID, on a case by case basis, GHSC-PSM, USAID/Washington, and USAID country missions will review and come to an agreement on which country performance monitoring indicators will be required, if any. Additionally, and in line with USAID's M&E technical guidance, the project may receive limited funding from USAID to report on indicators from a program element from

which it does not otherwise receive technical assistance funding. For example, a GHSC-PSM country office for which all of the in-country technical assistance is PMI-funded could receive a small population-funded budget to report on family planning (FP) commodities, without conducting additional technical assistance for FP. GHSC-PSM country offices will report on the requisite tracer products (see Exhibit 6) for any funding streams for which the project receives funding for in-country technical assistance.

EXHIBIT 3: MAPPING OF OBJECTIVE 2 CORE ELEMENTS TO INTERMEDIATE RESULTS AND INDICATOR REFERENCE THEMES

OBJECTIVE 2: STRENGTHENED IN-COUNTRY SUPPLY CHAIN SYSTEMS		
CORE ELEMENTS	**INTERMEDIATE RESULTS**	**INDICATOR REFERENCE THEMES**
a. Strategic planning: Support strategic planning and implementation related to supply chain management and commodity security.	**IR 2.1.** Improved strategic planning and implementation related to supply chain management and commodity security.	In-country performance and sustainability
b. In-country logistics: Provide 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.	**IR 2.2.** Improved in-country logistics including effective and efficient delivery of health commodities to service sites.	In-country performance and sustainability.
c. Capacity building: Implement strategies to transfer health commodity supply chain management skills, knowledge, and technology to the partner country, and identifying and overcoming barriers to effective skills transfer.	**IR 2.3.** Increased capacity building efforts by implementing strategies to transfer of skills, knowledge, and technology for improved and sustained performance.	In-country sustainability Cross-cutting
d. Enabling environments: Advocate 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.	**IR 2.4.** Strengthened enabling environments to improve supply chain performance.	In-country sustainability Cross-cutting

Objective 3: Effective global collaboration to improve long-term availability of health commodities. GHSC-PSM will engage relevant global partners to ensure strategic coordination, appropriate and adequate use of market intelligence information, awareness creation of the project's supply chain efforts/successes, and suitable global environments for the project's core activities to thrive. The cross-cutting indicators in Section 2.1 below and the indicator reference sheets are

tailored directly to reflect the global collaboration intermediate results and ultimately the global collaboration objective.

EXHIBIT 4: MAPPING OF OBJECTIVE 3 CORE ELEMENTS TO INTERMEDIATE RESULTS AND INDICATOR REFERENCE THEMES

OBJECTIVE 3: EFFECTIVE GLOBAL COLLABORATION TO IMPROVE LONG-TERM AVAILABILITY OF HEALTH COMMODITIES		
CORE ELEMENTS	**INTERMEDIATE RESULTS**	**INDICATOR REFERENCE THEMES**
a. Global strategic engagement: Engage with relevant global partners to ensure that there is appropriate strategic coordination and participate in key global health supply chain meetings and share lessons learned and best practices.	**IR 3.1.** Improved strategic engagement with global partners to ensure that there is appropriate strategic coordination.	Cross-cutting
b. Global market dynamics: Collect, analyze, and report market intelligence information and data for USG and partner strategic making decisions.	**IR 3.2.** Global Market dynamics research and innovations conducted, shared and implemented.	Cross-cutting
c. Advocacy: Support awareness-raising efforts with partners who have global or regional reach in health supply chain management, with the goal of making commodity security part of development agendas, strengthen programs, and help mobilize new and additional resources for commodity security.	**IR 3.3.** Improved awareness and advocacy to improve availability of essential health commodities.	Cross-cutting
d. Enabling environments: Advocate 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.	**IR 3.4.** Improved coordination and collaboration between TOs within the IDIQ and with other USAID supply chain funded activities.	Cross-cutting

APPROACH TO DATA COLLECTION, ANALYSIS, AND COMMUNICATION

Our approach is guided by the following principles:

- Make GHSC-PSM data visible to decision makers
- Build capacity of GHSC-PSM-supported countries to perform M&E (e.g., build capacity of data collectors to do first-line analysis)
- Institute flexibility and adaptability in program implementation: Using the global and in-country data actively, the project will feed back analysis outputs on program performance to GHSC-PSM leadership and USAID to ensure appropriate and targeted decision making
- Facilitate a learning culture with the program by ensuring cross-fertilization of best practices and lessons learned among GHSC-PSM-supported countries

Global health supply chain approach. Data is at the center of the GHSC-PSM project. Instant knowledge of the status of any commodity delivery, alongside a range of metrics related to market dynamics, logistics performance, and other factors will ensure that the project and USAID understand health impact per dollar, and that health commodities are provided to those who need them when they need them. To achieve a high level of data visibility, we have selected a smart supply chain MIS — GHSC-PSM MIS — that automates every step along the chain, from demand planning and sourcing to order management, logistics/warehouse management, financial management, and supply chain optimization. The project's MIS integrates three best-in-breed solutions – IBM's e-Commerce Suite, K+N's Logistics Management Information System (LMIS) and Chemonics' Financial Management Information System (FMIS) – all available to USAID and other users through a single portal. We will capture global supply chain data in near real time with a high degree of accuracy and will cover the indicators reflecting supply chain functions. We expect to begin reporting on GHSC-PSM global supply chain performance as order requests are received and processed by GHSC-PSM at the end of FY2016 Quarter 3 (i.e., the report is due July 31, 2016). The automated reporting module of GHSC-PSM MIS will not be ready until September 1, 2016 (Release 1), therefore GHSC-PSM performance for Objective 1 indicators will be calculated manually in the intervening reporting periods from July 2016 onwards.

In-country approach. During the transition phase, the project will ensure that data reporting is uninterrupted by working with existing in-country and incumbent structures to collect and manage data at the source. In conjunction with USAID, GHSC-PSM will consider a phased introduction of an agreed platform to support organization, management, and reporting of in-country M&E indicators centrally. Prior to this deployment, we will conduct a survey in each country to determine existing in-country supply chain M&E processes. Survey results will then inform targeted incremental modifications to existing in-country systems. The GHSC-PSM M&E approach is fully integrated into the supply chain, country programs, and global collaboration teams.

Additionally, analysis and communication are also important elements of a complete management system. GHSC-PSM will review global, in-country performance and sustainability data in the broader context in which it is gathered to identify factors underlying project performance. To this end, front line data collectors will receive training in basic analysis techniques to improve data quality at the source. Analysis outputs will be applied to decision-making processes and feed directly into continual improvement mechanisms and optimization of the supply chain. Periodic and regular reports will outline progress toward targets, challenges, strategies for overcoming challenges, and key successes. We will communicate information in user-friendly formats, such as infographics supplemented with narratives. We will blend quantitative data with qualitative data and narratives that illustrate the program's activities, outcomes, and overall impact.

GHSC-PSM MIS will support a dashboard for our Objective 1 indicators to help identify trends, major issues, and real-time data. In addition to the Objective 1 indicator data, the GHSC-PSM MIS dashboard will allow users to drill down on transactional data enabling the creation of complex, on-demand reports customized to answer users' questions. GHSC-PSM will consult with USAID on potential M&E solutions (including dashboards) that will cater to Objective 2 and 3 indicators. The project also will explore the possibility of utilizing GHSC-PSM and the GHSC-Business Intelligence and Analytics (BI&A) dashboards for viewing and analyzing Objective 2 and 3 indicators.

We expect to begin reporting on in-country and cross-cutting indicators two quarters after commencement of GHSC-PSM operations in country. For example, since the first phase of country operations startup will occur in FY2016 Quarter 3 (April - June 2016), the first in-country indicators for the aforementioned period of performance will be reported to USAID in the FY2016 Quarter 4 report due on October 31, 2016. Following this pattern, GHSC-PSM will progressively include country performance reports in subsequent quarters as countries are initiated into GHSC-PSM. Given the unique situation of each country that 'buys into' the GHSC-PSM central initiative, reporting on some in-country and cross-cutting indicators will be dependent on the type of technical assistance provided, the maturity of data collection systems, and data availability. In countries where GHSC-PSM only will provide short-term technical assistance, reporting requirements will be discussed with the mission and the USAID/Washington M&E points of contact.

B. INDICATORS

Following discussions with USAID/Washington, the indicators included in the M&E plan have been organized into three broad categories:

- Global supply chain indicators
- In-country indicators
- Cross-cutting indicators

GLOBAL SUPPLY CHAIN INDICATORS

The project has employed the SCOR® model (developed by the Supply Chain Council) as a framework in selecting indicators. Many of the SCOR® measures are a precise fit to the GHSC-PSM business model, as the project's workflows align directly with SCOR® methods. GHSC-PSM indicators directly relate to our strategy of delivery of service excellence at the lowest cost. The KPIs selected comprise a basket of indicators that measure these values, which include metrics for efficiency, effectiveness, and customer needs, while providing a forward-looking perspective. They are understandable, meaningful, and measurable, within our manageable interest, and in line with USAID M&E technical guidance.

The project will apply the three-tiered SCOR® approach to indicators. Level 1 indicators are primary, high-level strategic indicators that describe the performance attributes reflecting the priority values of USAID and Chemonics' consortium (see Exhibit 5, next page). Level 1 indicators do not necessarily relate to SCOR® processes (Plan, Source, Deliver, Return, and Quality Assurance); instead, these indicators can overlap between elements of SCOR® processes. SCOR® Level 1 indicators are composites – a set of measures reflecting the interrelatedness and complexity of supply chain key functional areas – and are informed by detailed SCOR® Level 2 and 3 KPIs that roll up into Level 1 indicators. Mostly Level 1 indicators will be reported to USAID, in addition to some Level 2 and 3 SCOR® metrics, such as On Time and In Full. Most other granular SCOR® Level 2 and 3 KPIs will come from transactions between the GHSC-PSM consortium and manufacturers, suppliers, procurement specialists, transportation providers, warehouse operations, and others who participate along the supply chain. At the GHSC-PSM project level, key SCOR® indicators to be routinely reported are:

- Indicator on time and in full: This is SCOR®'s key measurement of supply chain reliability. It is a composite indicator made up of four Level 2 data elements. Only two of them, "orders delivered in full" and "delivery performance to customer commit date (on time)" will be included in this M&E plan.
- Indicator cycle time: This is SCOR®'s key measurement of supply chain responsiveness.
- Indicator inventory turns: This is the project's key measurement of supply chain costs (efficiency).
- Indicator total landed costs: This monitors changes in operational efficiency and supply chain strategy employed to determine the optimal trade-off of cost, reliability, and responsiveness.
- Absolute percent forecast error: This assesses the accuracy of global forecasts compared to actual quantities ordered by GHSC-PSM-supported countries.

- Average shelf life percentage weighted by value of commodities: This gauges the amount of product at risk of expiration in global depot stock piles and regional distribution centers (RDCs); it is a proxy indicator for Agility SCOR metric Level 2 - Value at risk.

Also, these cost metrics provide a gauge of the effectiveness of SCOR® methodology adjustments to the supply chain's functional areas. For Indicator A5, Total Landed Cost, GHSC-PSM will use benchmarks captured by Kuehne + Nagel's competitive bidding process for assessing the costs of freight forwarders. Some indicators included in the global supply chain section are 'non-SCOR® related' indicators or highlight linkages between global supply chain and in-country systems while assessing performance of the entire global supply chain. These indicators include: (1) temporary waiver percentage, which tracks products imported into GHSC-PSM-supported countries using a temporary waiver; (2) supplier concentration, which measures sourcing risk for key product categories; (3) framework contract percentage; (4) catalog order percentage; (5) price variation by product; and (6) out-of-specification percentage. All of these indicators are well defined in the indicator reference sheets.

EXHIBIT 5. APPLICATION OF SCOR® HIGH-LEVEL KPIs TO GHSC-PSM

ATTRIBUTE	DEFINITION	SCOR® LEVEL 1 INDICATOR	SCOR® LEVEL 2 AND 3 INDICATORS
Supply chain reliability	The performance of the supply chain 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.	Percentage of shipments delivered on time in full, within the customer-specified delivery window Absolute percent forecast error	Orders delivered in full Delivery performance to customer commit date Percentage excess inventory
Supply chain responsive-ness	The speed at which a supply chain provides products to the customer.	Order fulfilment cycle time	Source cycle time Deliver cycle time
Supply chain agility	The agility of the supply chain to respond to market changes.	Product at risk percentage (Average percentage shelf life remaining)	
Supply chain cost efficiency and effectiveness	The costs associated with operating the supply chain.	Landed costs	Inventory turns (expressed as commodity value/cost)
Supply chain 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 turns	

Exhibit 5 demonstrates the application of SCOR®'s Level 1 indicators, tailored to reflect specific qualities and characteristics that are linked to the depth and breadth of GHSC-PSM project business activities ranging from plan, source, deliver, return, and quality assurance. These metrics will be used by GHSC-PSM project leadership and USAID to measure project performance across the overall supply chain. Level 1 metrics are tied to performance attributes — supply chain characteristics that allow for analysis and evaluation against similar types of

supply chain strategies. Our Level 2 KPIs, which will be used for granular project monitoring, will capture the tactical and operational performance of specific stages of the procurement, transport, and delivery processes across different types of products. We will disaggregate data to gain more knowledge about processes and results. Below is the complete list of global supply chain indicators to be reported on to USAID:

- Percentage of shipments delivered on time in full, within the customer-specified delivery window
- Percentage of orders delivered on time, within the customer-specified delivery window
- Cycle time
- Inventory turns
- Total landed cost
- Absolute percent forecast error (absolute percent error); and variant mean absolute percent error
- Percentage of line items imported using a temporary waiver
- Average percentage of shelf life remaining for warehoused commodities, weighted by the value of each commodity's stock (product-at-risk percentage)
- Percentage of qualified suppliers from which usaid procures product (supplier concentration)
- Percentage of product procured using a framework contract, within a specified period (framework contract percentage)
- Percentage of products ordered from the catalog (catalog order percentage)
- Percentage price variance between contract unit price and starting year/baseline historical unit price for non-catalog products
- Percentage of batches of product showing non-conformity in a specified time period (out of specification percentage)
- Average vendor rating score

Proper data disaggregation will help us better understand issues and results, and we will disaggregate by the following factors, as agreed upon by USAID. All indicators will be disaggregated by TO, with additional disaggregation elements available that may be featured in reports. The following are all the disaggregation elements that will be collected and available for analysis and feature reporting:

- Country: Destination country
- Health element code: Relevant U.S. State Department health element associated with the order line item
- Destination logistics location: Any site that holds or could hold USAID product (e.g., QA lab, global warehouse, depot stockpile, or RDC)
- Source logistics location: Any site that holds or could hold USAID product (e.g., manufacturer, QA lab, global warehouse, depot stockpile, or RDC)
- Task order: Relevant GHSC-PSM TO (TO 1, 2, or 3) associated with the order line item
- Allotted costs to transactions: Transaction costs associated with supply chain activities, as specified in the indicator (e.g., warehouse transactions, outbound transportation transactions)
- Tracer commodity
- Stock keeping unit (SKU)

- Batch number
- Line item: Refers to the product or commodity
- Freight forwarder: GHSC-PSM-selected vendor that transports the product to the destination country
- Item quantity: Line item quantity
- INCOTERM: The type of agreement for purchasing and shipping goods internationally
- Purchase order type: Whether the products in a particular order have been sourced through a framework or non-framework contract mechanism
- Purchase order urgency type: The order classification, i.e., whether the order is "planned", "unplanned", or "emergency."
  - *Planned*: Any order that is the result of an approved supply plan submitted to GHSC-PSM
  - *Unplanned*. Any order that is not the result of a GHSC-PSM supply plan, but can be fulfilled within the minimum lead time
  - *Emergency*. Any order requested to be delivered in less than the minimum lead time
- Supplier: Vendor providing the product (this may include the manufacturer or wholesaler)
- Country program: Final recipient of product (i.e., the entity in a country that will provide the product to the patient)
- Funding source: The origin of the funds associated with a particular order (e.g., USAID or non-USAID [other donor funds]; Mission field support, headquarters core, or other fund types [list to be determined])
- Technical subcategory: Relevant technical subcategory associated with the activity or line item

IN-COUNTRY SYSTEMS STRENGTHENING INDICATORS

GHSC-PSM will use the following indicators for regular monitoring of country-level systems strengthening programs. Indicator reference sheets have been developed for each indicator and are provided in Section E. Following consultation with USAID, these indicators have been simplified and streamlined across in-country program elements (HIV/AIDS, malaria, and population and reproductive health), to ensure harmonization of data collection processes and to reduce reporting burden. Beyond the M&E plan, the project will respond to ad hoc or other reporting requirements as requested by country missions or USAID/Washington. The in-country indicator set is composed of two sub sections: (1) in-country performance; and (2) in-country sustainability and development.

IN-COUNTRY PERFORMANCE INDICATORS

The in-country performance indicators are:

- Stockout rate at SDPs
- Percentage of stock status observations in storage sites, where commodities are stocked according to plan, by level in the supply system
- SDP reporting rate to the logistics management information system (LMIS)
- Percentage of countries conducting annual forecast reviews
- Rating of in-country data confidence

- Percentage of in-country supply plan updates done during the quarter (or as frequently as designated by countries)

IN-COUNTRY SUSTAINABILITY AND DEVELOPMENT INDICATORS

Five sustainability indicators are included as part of the indicator set to ensure that we are institutionalizing our supply chain systems strengthening interventions:

- Percentage of total spent or budgeted on procurement of commodities for public sector services by government, USG, and other sources, disaggregated by program
- Percentage of supply chain functions carried out by national authorities without external technical assistance
- Supply chain workforce loss ratio
- Percentage of countries that have a functional logistics coordination mechanism in place
- Percentage of leadership positions in supply chain management that are filled by women (in countries where GHSC-PSM is providing technical assistance related to workforce development)

Sustainability is achieved when host-country partners and beneficiaries are empowered to take ownership of development processes, including financing and maintaining project results beyond the life of the USAID project. Sustainability is a fundamental principle under the Global Health Initiative, PMI, and USAID Forward. From the start of the contract, we will identify, address, and measure how USAID investments contribute to the partial sustainability of project outputs and outcomes.

Elements/descriptions 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
- Diversified and sustainable health services funding provided by local partners

We will report on in-country indicators for all supply chains where the project is providing technical assistance or operational support, including national and parallel supply chains. Where parallel supply chains exist and are supported by GHSC-PSM technical assistance, USAID/Washington expects that GHSC-PSM will provide quality data. GHSC-PSM project country offices will report on products (see Exhibit 6: Tracer Product List) for any funding streams from which it receives funding for in-country technical assistance. In cases where

minimal technical assistance funding is provided and/or no country 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 country office supported by the GHSC-PSM project may receive minimal funding to report on indicators from a program element (HIV/AIDS, malaria, or PRH) from which it does not otherwise receive technical assistance funding. For example, a country office for which all in-country technical assistance is PMI-funded, could receive a small PRH-funded budget to report on FP commodities, without conducting additional technical assistance for FP.

TRACER PRODUCT LIST

For the in-country supply chain indicators on stockout rates and stocked according to plan, the following table provides a prioritized list of recommended tracer product groups to report on, by program element. All of the below-listed products will be reported by all country programs that receive technical assistance funds from malaria. The appropriate first-line drugs will be determined with each country mission based on in-country conversations. Adjustments to this list will be made, as appropriate on a country basis, in consultation with USAID/Washington.

EXHIBIT 6: TRACER PRODUCT LIST

MALARIA
First-line ACTs (4 presentations) *
Rapid diagnostic tests for malaria (RDTs)
Sulphadoxine-pyrimethamine (SP)
LLINs**
***First-line ACTs are either Artemether-lumefantrine (AL): (6x1, 6x2, 6x3 and 6x4) or Artesunate/ Amodiaquine (AS/AQ): (25/67.5mg, 50/135mg, 100/270mgX3, 100/270mgX6). Check with each country to determine their first-line antimalarial drug.**
**Note: LLINs are usually distributed separate from the regular commodity supply chain.

CROSS-CUTTING INDICATORS

For the purpose of this document, cross-cutting indicators are defined as indicators that track activities that involve both global health supply chain and in-country systems strengthening efforts. They include customer satisfaction, capacity building, gender related, data quality, and global collaboration.

- Number of new innovations (including operations research studies) that were developed, implemented, or introduced and are related to the health commodity market or supply chain best practices
- Number of people trained, disaggregated by supply chain level and functional area (disaggregated by sex)
- Overall customer satisfaction rating for GHSC-PSM services
- Percentage 'complete' submissions reported to BI&A in the reporting period
- Percentage 'accurate' submissions reported to BI&A in the reporting period
- Percentage 'timely' submissions reported to BI&A in the reporting period
- Percentage of product lost due to theft, damage, or expiry, while under GHSC-PSM control (product loss percentage)

- Number of global advocacy engagements in support of improved availability of essential health commodities (qualitative indicator to be described in quarterly project reports)
- Supply chain policies, regulations, strategies, or SOPs developed or updated (qualitative indicator to be described in quarterly report narratives)
- Percentage complete and on time submissions to global knowledge management platform

Also, the four indicators below have been included in the TO II M&E plan for reporting purposes. These indicators will have no baseline nor targets.
- Number of artemisinin-based combination therapy (ACT) treatments purchased with USG funds.
- Number of malaria rapid diagnostic tests (RDTs) purchased with USG funds.
- Number of insecticide treated nets (ITNs) purchased with USG funds.
- Number of sulfadoxine-pyrimethamine (SP) tablets purchased with USG funds.

BASELINES AND TARGETS

GHSC-PSM indicators do not align with indicators in the incumbents' performance management plans (PMPs), in terms of nomenclature and definition, so GHSC-PSM will not use incumbent indicator performance results as our baselines. Instead, and as agreed with USAID, baseline and targets for all indicator sets under the three objectives will be finalized before the end of Year 1. The expectation is that the project will make use of SCMS/DELIVER end-term evaluation indices as baselines for some GHSC-PSM indicators where these data align with our M&E plan; for the remaining indicators GHSC-PSM will use our performance in Year 1 as reference points for baseline. GHSC-PSM Objective 1 indicator targets will be finalized after business rules (minimum delivery window, minimum lead time, and maximum shipment size) have been established in Year 1. Similarly, baselines and targets for Objective 2 and cross-cutting indicators will be finalized by the end of Year 1.

DATA SOURCES AND COLLECTION METHODS

Global supply chain (Objective 1-related) data will come primarily from the GHSC-PSM MIS. In addition, the GHSC-PSM MIS will gather data from every step of the supply chain procurement and delivery process until delivery by our 4PL partner K+N. This data will be captured real time with a high degree of accuracy and will cover most of the program indicators. Our MIS will collect data from the sourcing and procurement of the product, through delivery and receipt, with quality and performance measured every step of the way.

Data will be analyzed to assist in decision-making processes that improve performance and processes. System modules covering all procurement steps, such as contracts and supplier management, will increase the available data in the GHSC-PSM MIS.

Our sourcing and procurement partners will institute their current supplier performance monitoring procedures to review, approve, and rate supplier performance, which directly affects the quality of GHSC-PSM sourcing and procurement partners' service and ability to meet USAID requirements. By sharing performance data with suppliers on a periodic basis, GHSC-PSM will continuously analyze and improve processes throughout the supply chain. GHSC-PSM will monitor our suppliers on a monthly basis and evaluate them on a quarterly basis. GHSC-PSM will share supplier performance scorecards with USAID regularly.

Monthly monitoring. GHSC-PSM will generate a supplier performance report based on KPIs that have been agreed upon with the supplier. The following categories are the basis for the supplier rating system:

- On time in full delivery (for direct drop by supplier only), as per the promised or agreed delivery date (goods availability date for malaria). In case of a delay of >1 day, a percentage will be deducted.
- Correct packaging, product specification, labeling, and loading of cargo. In case of a complaint by GHSC-PSM or the customer (verified by the project as a valid complaint), the supplier will receive a negative (-) score.
- Correct documentation. GHSC-PSM staff evaluate this based on the requested and agreed time with the supplier via email and information accuracy.
- On time confirmation of purchase order. Confirmation must be received within the number of days agreed upon with the supplier.
- Compliance with requested shelf life. The shelf life of the delivered products should be as stated in the purchase order and as confirmed by the supplier.

The result of this monthly analysis is a supplier rating score, expressed as a percentage.

Quarterly monitoring. On a quarterly basis, GHSC-PSM will meet with suppliers to discuss the results of the previous three months, based on the supplier rating scores that have been shared with them. Results will be evaluated and improvements agreed upon if applicable. Suppliers will be aware that a non-satisfactory supplier rating score can have a negative impact on future tenders, since past performance is a rating factor when awarding suppliers.

Although supplier performance is the main topic, GHSC-PSM also will use these meetings to discuss application programmer interface availability, price trends, formulation capacities, and market developments. This allows GHSC-PSM to respond proactively to new market developments and to ensure a continuity of supplies for customers.

Suppliers and others will benefit from quarterly monitoring in the following ways:

- Transparency and reliability. Discussing any performance score below 100 percent leads to awareness, reviews, discussions, and learning, which ultimately leads to an improved service level for customers.
- Better volume forecasting. Discussing lead time constraints for future deliveries allows for better forecasting and planning with the vendor, thus preventing stockout situations.
- Sharper negotiation skills. Discussing market dynamics with key suppliers increases our understanding of the market and improves our capabilities to negotiate lead times and prices — benefits which are translated directly to our customers.

In-country data collection. Regarding in-country data collection efforts, we will develop an M&E plan for each country office to which the project provides operational support or technical assistance. The in-country M&E plans will be tailored to the needs and requirements of USAID missions and host country governments. The project will ensure that a minimum standardized indicator set is utilized and that appropriate standardized data collection tools are employed and built on existing host country platforms. Extending data visibility to in-country systems would

improve demand and supply planning, but it requires working within existing structures. To address this need, we will survey local information systems to determine the information systems landscape, needs, and requirements and will work with USAID/Washington and the missions to determine targeted solutions to the GHSC-PSM in-country data needs on a country-by-country basis. As we devise these targeted solutions, we will continue to utilize other USAID/incumbent- supported centrally-situated databases, such as PPMR and PPMRm, to collect data and information on in-country procurement planning and logistics performance. Even though our MIS will cover the majority of our data collection needs, we will make a significant effort to collect country-level data that illustrates program impact. This data collection effort is described below.

Whenever possible, data will be entered via existing in-country systems. For example, health commodity order forms will feed directly into monthly, quarterly, and annual reports on different types of health commodity consumption, producing not only the amount of health commodity utilized in these periods but also evidence on which to base health commodity forecasts. In some locations, electronic entry is not yet feasible and data must be recorded with paper-based data collection tools such as the combined report, requisition, issue, and receipt forms. The project will put in place systems to manage the data using existing country information systems and will institute incremental changes to the existing systems as necessary. GHSC-PSM country offices will assist in determining when locales that use paper-based systems are ready for automation. GHSC-PSM will tailor technological solutions to the in-country context, need, data collection, and reporting requirement. Country office M&E staff also will review paper-based data collection tools to ensure that standard logistics terms have the intended definition and meaning in their locations, arrange for translation into local languages, and organize training sessions on data collection and entry when needed. All forms will be pre-tested before use.

Primary data collection will occur when collection of secondary data (from counterparts and other sources) is not feasible, reliable, or timely, or when the project receives ad hoc requests for this from the mission or USAID/Washington. We will use appropriate qualitative data collection techniques.

DATA QUALITY CONTROL

Our GHSC-PSM MIS has built-in controls to monitor data quality and sends alerts of integrity issues when outliers are entered. We have also incorporated three indicators that map to data quality dimensions to monitor quality of GHSC-PSM submission to the USAID-funded IntelliCog BI&A system. The project will institute data quality protocols to periodically and systematically ensure that indicators in the IDIQ and TO M&E plans use high quality data. Besides the automated checks within the MIS, the M&E team will review a select set of MIS data sets and data elements to determine validity, consistency, and completeness of reported data.

These same principles for data quality will be applied to country offices. The GHSC-PSM M&E team will oversee field data quality processes. Country office M&E staff will provide initial quality reviews for data elements. Training will ensure that counterparts and staff have a standardized process for collecting, processing, and reporting data. The central M&E team will develop a training plan to ensure that country office M&E staff are trained to verify data against original sources and backup documentation. During site visits, country office M&E staff will conduct random spot checks on data via document review, interviews, and observation. We will ensure

that backup documentation is available for audit purposes and organized to facilitate verification. The central M&E team will lead data quality assessments that check the validity, reliability, timeliness, precision, and integrity of indicators on an annual basis (or more frequently if needed). We will bring issues uncovered during these data quality assessments to USAID's attention and will address them immediately. These assessments will determine if the following criteria are in place:

- Written procedures are in place for data collection?
- Written procedures are implemented consistently?
- Procedures are reviewed periodically for effectiveness and efficiency?
- Data is collected by trained personnel?
- Data collectors are properly supervised?
- Duplicate data is detected?
- Safeguards are in place to prevent unauthorized access to and changing of data?
- Original source documents are maintained and readily available?

In addition, and in conjunction with USAID, GHSC-PSM will adapt an agreed-upon M&E electronic solution for each country office to improve data quality for monitoring and evaluating GHSC-PSM performance. In countries where GHSC-PSM is supporting an in-country LMIS, we will improve data entry requirements and controls to reduce data quality issues, in coordination with USAID.

DATA ANALYSIS AND REPORTING

The GHSC-PSM M&E team will work closely with the GHSC-PSM knowledge management and communications specialist to design informative, readable, and useable reports. We will report data according to the collection schedule for each indicator; for example, indicators collected quarterly will be highlighted in quarterly reports. At a minimum, all indicators will be reported annually. Annual and quarterly reports will illustrate progress toward targets, challenges, strategies for overcoming challenges, and key successes. We will use user-friendly formats to highlight information, with quantitative data represented via infographics, dashboards, charts, bars, and graphs. We will supplement quantitative data with narratives to help the reader understand the numbers' context. Success stories and other communication materials will blend data with personalized stories to illustrate the project's activities, outcomes, and overall impact.

Our GHSC-PSM MIS has powerful analytical and reporting tools built into it, including SPSS, Cognos, and Emptoris. These tools will generate a full array of reports and graphs as per USAID's requirements and instructions. The GHSC-PSM MIS will support a dashboard with real time data for mostly Level 1 indicators and some Level 2 indicators (as discussed more specifically above) to help identify trends and major issues. USAID also will have the capability to create its own custom reports and graphs in the GHSC-PSM MIS. The analytical power and flexibility of the GHSC-PSM MIS and updates to the USAID-supported BI&A system will improve USAID's ability to monitor, evaluate, and manage the GHSC-PSM project. As part of our continual improvement process, we will migrate data collection and metrics reporting to our dashboard and USAID's BI&A, leveraging the automation and technology of our GHSC-PSM MIS solution.

C. ROLES AND RESOURCES

GHSC-PSM staff, USAID, and host country counterparts have specific roles and responsibilities in our performance monitoring system and quality assurance plan. Exhibit 7, below, outlines the responsible parties for each of the major steps in the monitoring process. In the central GHSC-PSM office, the M&E manager will oversee all GHSC-PSM M&E efforts, along with M&E associates. This M&E team will develop and roll out M&E policies, procedures, tools, templates, and methods; provide training and guidance to in-country M&E personnel, and ensure data quality. As determined by the mission and the level of funding, 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.

Host country counterparts and country M&E specialists will analyze and investigate data outliers and unusual spikes or trends. The GHSC-PSM M&E manager will organize data collection processes, working with technical and GHSC-PSM MIS staff to ensure that forms accurately capture indicator information and that country M&E specialists have the necessary training to collect data and to support country counterparts in their data collection. The M&E manager is ultimately responsible for data quality, data analysis, and data reporting. Together with the IDIQ Director, TO Directors, and the TO Contracting Officer's Representatives, the M&E manager will review the M&E plan annually to determine if it would be beneficial to make adjustments to existing indicators.

EXHIBIT 7. PERFORMANCE MONITORING RESPONSIBILITIES

MAJOR STEPS	WHEN	RESPONSIBLE PARTY
Collecting performance data	Continuously	Counterparts and GHSC-PSM global and in-country staff
Providing data for weekly/ monthly progress review meetings	Weekly/Monthly	IDIQ project director, regional managers, and M&E team including in-country M&E team
Collecting feedback from stakeholders	At least annually or more often as needed	In-country M&E team, technical staff, regional and in-country supply chain staff
Conducting site visits	As needed	In-country M&E team, HQ M&E team and supply chain functional area staff
Identifying success data and stories	At least quarterly and more often as needed	M&E team including in-country M&E team, knowledge management and communications specialist, and technical staff
Conducting evaluations and special studies	As needed	Consultants, subcontractors, and M&E manager
Reviewing performance information (milestones)	Quarterly	IDIQ Director, TO Directors, M&E manager, technical staff
Reporting performance results	Quarterly	M&E manager, in-country M&E team, technical staff, knowledge management and communications specialists
Assessing data quality	Annually	M&E manager and in-country M&E team
Reviewing and updating the M&E Plan	Annually	M&E manager, technical staff, IDIQ director, and TO directors

D. PLAN FOR CONTINUOUS IMPROVEMENT

Systems. Our continuous improvement plan includes regular process and key area reviews that rely on our business models and systems. There are four interlocking elements to our continuous improvement framework: International Organization for Standardization (ISO), Lean Six Sigma, SCOR®, and a customer service orientation.

The ISO process has a built-in continuous improvement feature that allows processes to be tagged with a "corrective action needed" feature when inefficiencies or inconsistencies are identified. The ISO system also flags what resources, such as personnel, are needed to enable adequate functioning of the processes, which helps to highlight where resources are inadequate. Under the ISO system, we will ensure ongoing and continuous review of processes and procedures per entity. Once a process is tagged for improvement, we will rely on IBM's expertise in applying Lean Six Sigma procedures to create improvement methodologies. The SCOR® methodology provides industry standards for optimal supply chain functionality, giving entities and countries the necessary benchmarks for their goals and objectives. Using our maturity model, we will develop a matrix of improvement tools and methods to guide the selection of standards for entities, countries, and systems in various phases of maturity. A key element of our continuous improvement plan is developing and providing a customer service orientation for providers along the supply chain. Too few supply chain staff understand the vital role that each entity must play in ensuring that people have a chance for vitality and good health in their lives.

Once these processes are in place, they will be self sustaining. Local counterparts will have the training, application, experience, tools, and systems with inherent continuous improvement processes after program completion. Local partners and entities will understand how to apply principles and tools and will be able to avail themselves of resources (such as SCOR®) as they mature. This knowledge becomes power — entities and systems continually improve their performance and are empowered to continue contributing to the management of the global health supply chain.

Learning from sharing. The GHSC-PSM M&E team, in conjunction with the knowledge management team, will implement a knowledge-sharing plan for data collection and application. Each quarter, after compiling data into useful statistics and reports, the GHSC-PSM M&E team will host a learning meeting with the broader GHSC-PSM team. During this meeting, staff will review and apply the data and identify strengths and problem areas. The team also will dissect successes to understand the factors that helped to create those successes and apply solutions to problem areas. We will compare trends, identify new risks, and generate plans to address risks and challenges. After the quarterly learning meetings, GHSC-PSM and USAID will choose a particular area, sector, country, partner, or system as an area of focus for follow up. The M&E team periodically will host webinars and conference calls to address poor performing thematic areas and underlying themes. Biennially, the M&E team will aim to host a data summit for the benefit of host country counterparts. This two-day conference will be organized in conjunction with relevant stakeholders, rotating sites for hosting and preparing for the conference. Each biennial conference will have a different theme, reflecting current country priorities and emerging trends in optimizing the supply chain. The data summit may focus on a program

objective or a health element as a theme. We will confer with USAID to select a particular objective or element as a focus and use sessions during the conference to explore the topic in detail. We will invite key partners from host countries to present their work alongside academics and subject matter experts. The objective of the data summit will be to provide a platform for knowledge sharing.

E. PERFORMANCE INDICATOR REFERENCE SHEETS

GLOBAL HEALTH SUPPLY CHAIN KEY PERFORMANCE INDICATORS

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)
Indicator Number: A1   **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 shipments delivered ***on time in full***, within the customer-specified delivery window.

Description
Precise Definition(s):   *Numerator: Number of shipments delivered on time in full in the specified period.*   *Denominator: Total number of shipments that arrived in the specified time period.*   **The following variants should be calculated:**   a. Percentage of shipments delivered ***on time and not in full***, within the customer-specified delivery window.   b. Percentage of shipments delivered ***not on time and in full***, within the customer-specified delivery window.   c. Percentage of shipments delivered ***not on time and not in full***, within the customer-specified delivery window.   **Unit of Measure:** Shipments.   **Disaggregated by:** *a. Task order.*   **Purpose:** On time in full (OTIF), refers to the percentage of shipments delivered to customers' on time and in full. OTIF measures supply chain reliability and the degree to which the right products arrive 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 the GHSC-PSM MIS. The business rules; minimum delivery window, minimum lead time and maximum shipment size.   **Data Source:** GHSC-PSM MIS.   **Frequency/Timing of Data Acquisition:** As frequently as order and shipment transactions flow to GHSC-PSM MIS, at least daily.   **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.

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, & Reporting
Data Analysis: **Presentation of Data:**   **Review of Data:** Quarterly   **Reporting of Data:** Quarterly

Points of Clarification (other notes)

1. A shipment is considered on time in full when it is delivered with all requested products and quantities within the customer-specified delivery window.
2. GHSC-PSM is expected to deliver shipments on time in full subject to minimum lead times, minimum delivery windows, and maximum shipment sizes.
3. In full refers to an instance where all quantities of all products requested to be included in a shipment by a customer are actually included when that shipment is delivered. For split shipments, any of these split shipments are considered in full if they are split according to quantities requested by the customer. For split shipments that are not a result of customer request nor a result of maximum shipment size constraints (defined under normal business rules), all such shipments for that customer order are considered NOT in full and count against the metric.
4. In cases where GHSC-PSM agrees to provide a customer a shipment with shorter lead times than the minimum lead time, the shipment shall NOT be included in the calculation of the on time in full indicator.
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 the reason codes and primary responsible party designations for any non-OTIF shipments so that USAID is able to drill down on these aspects of OTIF.
6. Shipments should be flagged as excluded from the OTIF calculation when such exclusions occur, and such flag should be captured by the transactions passed to GHSC-PSM.
7. Additional disaggregations elements, such as country, will be available in the GHSC-PSM MIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytical insight.
8. Detailed in GHSC-PSM MIS Information Specification:
   - Format for submitting target percentage for this indicator.
   - Format for submitting minimum delivery window.
   - Format for submitting minimum lead times.
   - Format for submitting maximum shipment size.
   - Format for submitting domains for non-OTIF reason codes and primary responsible party.

Performance Indicator Values

Year	Baseline	Target	Comments
2016/2017	--	TBD, pending finalization of business rules	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A2
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 shipments delivered **on time**, within the customer-specified delivery window (with external benchmarks)

Description

Precise Definition(s):
Numerator: Number of shipments delivered on time in the specified period.
Denominator: Total number of shipments in the specified time period.
The following variants should be calculated:
Unit of Measure: Shipments.
Disaggregated by: *a. Task order.*
Purpose: On time refers to the percentage of shipments delivered to customers' on time. On time measures supply chain reliability and the degree to which the right products arrive at the right time as specified by the customer.

Plan for Data Acquisition

Data collection method: Data elements for this indicator will be collected using the GHSC-PSM MIS. The business rules; minimum delivery window, minimum lead time and maximum shipment size.
Data Source: GHSC-PSM MIS.
Frequency/Timing of Data Acquisition: As frequently as order and shipment transactions flow to GHSC-PSM MIS, at least daily.
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.

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, & Reporting

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

Points of Clarification (other notes)

1. A shipment is considered on time when it is delivered with all requested products and quantities.
2. GHSC-PSM is expected to deliver shipments on time subject to minimum lead times, minimum delivery windows, and maximum shipment sizes.
3. In cases where GHSC-PSM agrees to provide a customer a shipment with shorter lead times than the minimum lead time, the shipment shall NOT be included in the calculation of the in full indicator.
4. GHSC-PSM will use Kuehne + Nagel as the source for benchmarks for this indicator.
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 the reason codes and primary responsible party designations for any non-on time shipments so that USAID is able to drill down on these aspects of on time.
6. Shipments should be flagged as excluded from the on time calculation when such exclusions occur, and such flag should be captured by the transactions passed to GHSC-PSM.
7. Detailed in GHSC-PSM MIS Information Specification:
   - Format for submitting target percentage for this indicator.
   - Format for submitting minimum delivery window.

- Format for submitting minimum lead times.
- Format for submitting maximum shipment size.
- Format for submitting domains for non-on time reason codes and primary responsible party.
8. Additional disaggregations elements, such as country, 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	**Baseline**	**Target**	**Comments**
2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	-- Year 1		

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A3
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 lead times for all shipments in a specified period of time.
Denominator: The count of all shipments in a specified period of time.
Unit of Measure: Lead time average; defined as time between when a customer order is finalized to when the shipment of the order is actually delivered to the customer.
Disaggregated by: *a. Task order b. Channel*
Purpose: Measures the responsiveness of the GHSC-PSM supply chain and how quickly customer orders are able to be filled.

Plan for Data Acquisition

Data collection method: Data elements for this indicator will be collected using the GHSC-MIS. The business rules; minimum lead time.
Data Source: GHSC-PSM MIS.
Frequency/Timing of Data Acquisition: As frequently as order and shipment transactions flow to GHSC-PSM MIS, at least daily.
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.

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, & Reporting

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

Points of Clarification (other notes)

1. While cycle time measures the average overall lead 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. Such components of the cycle time would represent such segments as PO turnaround, USAID approval turnaround, transport time, etc.
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. Additional disaggregations elements, such as country and line item, will be available in the GHSC-PSM MIS. The project may report additional disaggregations in quarterly performance reports when they provide useful analytical insight.
4. Indicator will be disaggregated by specific channels- RDC/Depot stockpile vs. direct drop.

Performance Indicator Values

Year	Baseline	Target	Comments
2016/2017	--	TBD	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A4
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) in a single 365-day year.
Denominator: Average daily inventory balance (in USD) over a specified time period.
Unit of Measure: Ex works costs.
Disaggregated by: *a. Task Order*
Purpose: Inventory turns, also referred to as average annual inventory turns, measures 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 by evaluating the degree to which inventoried product is not sitting for too long in GHSC-PSM-controlled global inventory stocks. It tells you the number of times the inventory "turns over" in a year.

Plan for Data Acquisition

Data collection method: Data elements for this indicator will be collected using the GHSC-PSM MIS.
Data Source: GHSC-PSM MIS.
Frequency/Timing of Data Acquisition: As frequently as order and shipment transactions flow to GHSC-PSM MIS, at least daily.
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.

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, & Reporting

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

Points of Clarification (other notes)

1. Calculation of this indicator will only include GHSC-controlled inventory in GHSC-controlled facilities, and not for VMI/VOI. This should be revisited after the transition period, when the GHSC-PSM has a better sense of the level of visibility into such stock.
2. The indicator must be able to be computed for any 365-day window over the course of the project. Until there is a full year of historical storage by GHSC-PSM, GHSC-PSM should use the most recent USAID SCMS/DELIVER data for determining the numerator.
3. 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.
4. Additional disaggregation elements, such as logistics location (RDC, depot stockpile, etc.), 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	**Baseline**	**Target**	**Comments**
2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	-- Year 1	TBD, pending finalization of business rules	

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A5
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 (total cost of all supply chain operations and expenses associated with delivery of one cubic meter of product).

Description

Precise Definition(s):
Numerator: Total landed cost (in USD) incurred in the time period.
Denominator: Total cubic meters from shipments whose costs are reflected in the time period.
Unit of Measure: Costs.
Disaggregated by: *a. Task order; b. Financially tagged technical categories.*
Purpose: Total landed cost, for the purposes of this indicator, refers to the average total landed cost expressed as the amount of money (in USD) it takes, on average, to move one cubic meter of product to GHSC-PSM customers. 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 the GHSC-MIS.
Data Source: GHSC-PSM MIS.
Frequency/Timing of Data Acquisition: Updated monthly using monthly financial data sent to GHSC-PSM MIS.
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.

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, & Reporting

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

Points of Clarification (other notes)

1. GHSC-PSM will use Kuehne + Nagel as the source for benchmarks for this indicator.

2. The following technical categories (financially tagged) apply to this indicator disaggregation:

Global Supply Operations at HQ
1. Forecasting and Supply Planning
2. Procurement
3. Quality Assurance
4. Warehousing and Distribution
5. Monitoring and Evaluation
6. MIS

Commodities
1. Drop Ship Freight
2. Demurrage (not captured)
3. Inbound Freight
4. Outbound Freight
5. Warehousing
6. Security

7. Loss
8. Insurance
9. Quality Control
10. Country-specific Logistics Costs

Performance Indicator Values			
Year	**Baseline**	**Target**	**Comments**
2016/2017	--	TBD, pending finalization of business rules	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A6
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: Percent Forecast error (Absolute Percent Error); and variant Mean Absolute Percent Error

Description

Precise Definition(s):
Numerator: Absolute value of the differences between the actual quantities desired to be delivered during the period minus the forecasted values. **Denominator:** *Sum of the actual quantities desired to be delivered.*
The following variant should be calculated:
   a. Mean Absolute Percent Error (MAPE - average absolute percent error over time).
   b. Forecast Bias

Unit of Measure: Quantity of products.
Disaggregated by: *a.. Tracer product*
Purpose: This indicator will be used to assess the accuracy of the global forecasts, and promote efficient supply management practices.

Plan for Data Acquisition

Data collection method: Data elements for this indicator will be collected using the GHSC-PSM MIS.
Data Source: GHSC-PSM MIS and annual forecasts.
Frequency/Timing of Data Acquisition: Quarterly updates.
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.

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, & Reporting

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

Points of Clarification (other notes)

1. Ideally, this percentage should be as a close to zero as possible. As this number deviates from zero, the global forecasts become increasingly inaccurate.
2. The MIS dashboard will present the SKU-level forecast error and MAPE, while the quarterly report will only reflect the aggregated tracer products forecast error forecast bias, and MAPE.
3. MAPE represents the mean absolute percent error over time per SKU or Tracer Product.
4. The global forecasts should reflect the country forecasts developed by a country's technical working group or other appropriate entity in country. This forecast should represent USAID shipments only; country forecasts should therefore be disaggregated by the entities funding the commodities.
5. This indicator will capture orders based on their **requested** delivery dates, not the actual dates that the commodities were received by consignees. This distinction is to capture the outcomes of planning and forecasting activities, without biasing in the indicator if problems arise during fulfillment or delivery.
6. Additional disaggregation elements, such as country and tracer commodity, will be available in the GHSC-PSM MIS. 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 whereas the forecast bias variant should be caluceted using actual values, illustrating under or over forecasting through positive or negative numerical results.

Performance Indicator Values			
Year	**Baseline**	**Target**	**Comments**
2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	-- Year 1	TBD, pending finalization of business rules	

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A7
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 waiver (Temporary Waiver Percentage).

Description

Precise Definition(s):
Numerator: Line items imported using a temporary waiver in a specified period.
Denominator: Total line items delivered in a specified period.
Unit of Measure: Line items.
Disaggregated by: *a. Task order b. Tracer product.*
Purpose: This indicator tracks products imported into a country using a temporary 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 the GHSC-MIS.
Data Source: GHSC-PSM MIS.
Frequency/Timing of Data Acquisition: As frequently as order and shipment transactions flow to GHSC-PSM MIS, at least daily.
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.

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, & 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 smaller countries where there is less of a market.
2. GHSC-PSM will flag any line items requiring a waiver for importation.
3. Additional disaggregation elements, such as country and line item, 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	**Baseline**	**Target**	**Comments**
2016/2017	--	TBD, pending finalization of business rules	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A8
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, weighted by value of commodities, summed across all products and all days in specified time period. Shelf life remaining (in days), weighted by value of commodities, summed across all days in the specified time period.
Denominator: Total value of commodities, summed across all products and all days in specified time period.
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 period of time. This indicator measures warehouse efficiency and can be managed through efficient product turnover.

Plan for Data Acquisition

Data collection method: Data elements for this indicator will be collected using the GHSC-MIS.
Data Source: GHSC-PSM MIS.
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: MIS 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, & 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-PSM MIS 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 IG.
3. Targets should be set at the product level.
4. Additional disaggregation elements, such as tracer commodity, logistics location (RDC, depot stockpiles, etc.), health element, and line item, 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	Baseline	Target	Comments
2016/2017	--	TBD	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A9
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 qualified suppliers from which USAID procures product (Supplier concentration).

Description

Precise Definition(s):
Numerator: Number of qualified suppliers from which GHSC-PSM procured product in a specified time period. (Note: A qualified supplier is a supplier meeting the technical qualifications per USAID quality assurance requirements).
Denominator: Total number of qualified suppliers.
Unit of Measure: Qualified suppliers.
Disaggregated by: a. *Task order*
Purpose: This indicator measures sourcing risk for key product categories, calculating the number of suppliers from which USAID procures compared to the number of qualified suppliers in the marketplace. This metric provides insight into the stability of the markets USAID procures from to determine if any steps need to be taken to shape the supplier markets and/or inform our sourcing strategy.

Plan for Data Acquisition

Data collection method: Data elements for this indicator will be collected using the GHSC-PSM MIS.
Data Source: GHSC-PSM MIS.
Frequency/Timing of Data Acquisition: Semi-Annually.
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.

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, & Reporting

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

Points of Clarification (other notes)

1. Commodity Councils will review results bi-annually to progressively inform sourcing strategy or additional research as required.
2. The indicator must be able to be calculated directly from the raw data provided to GHSC-PSM MIS with no manual transformations required outside of the transaction records.
3. Additional disaggregation elements, such as health element, tracer commodity, and line item, 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 2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	**Baseline** -- Year 1	**Target** TBD, pending finalization of business rules	**Comments**

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A10
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, within a specified period (Framework contract percentage).

Description

Precise Definition(s):
Numerator: Value of product purchased through framework contracts in a specified time period.
Denominator: Total value of commodities purchased in a specified time period.
Unit of Measure: Product value.
Disaggregated by: *a. Task order*
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 the GHSC-PSM Program 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; and an established mechanism such as this should eliminate significant steps in the procurement process, allowing for 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 the GHSC-PSM MIS.
Data Source: GHSC-PSM MIS.
Frequency/Timing of Data Acquisition: As frequently as order and shipment transactions flow to GHSC-PSM MIS, at least daily.
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.

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, & Reporting

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

Points of Clarification (other notes)

1. 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.
2. Although this metric is measured in value, GHSC-PSM is expected to track the breakout of framework contract, non-framework contract, or both framework and non-framework contracts for SKU count, PO count, line items purchased, customer order count, supplier count, and volume.
3. Additional disaggregation elements, such as line item, 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	Baseline	Target	Comments
2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	-- Year 1	TBD, pending finalization of business rules	

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A11
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 products ordered from the catalog (Catalog Order Percentage).

Description

Precise Definition(s):
Numerator: Value of products purchased from the catalog within the specified period.
Denominator: Total value of products purchased within the specified period.
Unit of Measure: Product value.
Disaggregated by: *a. Task order*
Purpose: This indicator provides insight into the number of products that are ordered off-catalog and whether certain products should become a part of our catalog (standard) options, thus employing more efficient contract options.

Plan for Data Acquisition

Data collection method: Data elements for this indicator will be collected using the GHSC-PSM MIS.
Data Source: GHSC-PSM MIS.
Frequency/Timing of Data Acquisition: As frequently as order and shipment transactions flow to GHSC-PSM MIS, at least daily.
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.

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, & Reporting

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

Points of Clarification (other notes)

1. Relevant GHSC teams (namely, procurement) will work with GHSC-PSM to determine the threshold for pursuing long-term contracting options, and ultimately, inclusion in the GHSC-PSM program catalog.
2. Standard product information, as per the GHSC-PSM product master guidelines, for non-catalog products or product types will be collected with each line item processed.
3. If there is a high incidence of off-catalog purchases for a particular product or a number of product types under a specific TO, then GHSC-PSM should assess whether framework contracting is a more appropriate option for the product or product types in question.
4. GHSC-PSM is encouraged to consider the viability of partnering with strategic wholesalers to possibly expedite procurement of low-volume items purchased by GHSC-PSM (i.e. the "long tail" of items sold).
5. Additional disaggregation elements, such as line item, 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	Baseline	Target	Comments
2016/2017	--	TBD, pending	
2017/2018	Year 1	finalization of business	
2018/2019		rules	
2019/2020			
2020/2021			

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A12
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 contract unit price and starting year/baseline historical unit price for non-catalog products

Description

Precise Definition(s):
Numerator: Average price paid per base unit of measure in a specified period of time.
Denominator: Average price paid per base unit of measure in the first year of GHSC-PSM.
Unit of Measure: Price.
Disaggregated by: *a. Task order*
Purpose: This indicator measures how prices being paid for products by GHSC-PSM compare to prices paid by GHSC-PSM for the same product or at the SKU level in the first year of the project.

Plan for Data Acquisition

Data collection method: Data elements for this indicator will be collected using the GHSC-PSM MIS.
Data Source: GHSC-PSM MIS.
Frequency/Timing of Data Acquisition: Monthly or frequency of orders.
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.

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, & Reporting

Data Analysis: At stock keeping unit (SKU) level
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Quarterly

Points of Clarification (other notes)

1. Analysis for this indicator should be kept at SKU level.
2. Additional disaggregation elements, such as SKU, 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	Baseline	Target	Comments
2016/2017	--	TBD, pending	
2017/2018	Year 1	finalization of business	
2018/2019		rules	
2019/2020			
2020/2021			

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A13
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 showing non-conformity in a specified time period (out of specification percentage).

Description

Precise Definition(s):
Numerator: Total number of batches of product showing non-conformity in a specific time period.
Denominator: Total number of batches tested in a specified time period.
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 that fall outside of established acceptance criteria which have been established in USAID Quality Assurance compendia and/or by GHSC-QA documentation.

Plan for Data Acquisition

Data collection method: Data elements for this indicator will be collected using the GHSC-PSM MIS.
Data Source: GHSC-PSM MIS.
Frequency/Timing of Data Acquisition: Monthly or frequency of orders.
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.

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, & 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. Additional disaggregation elements, such as batch number and line item, 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	**Baseline**	**Target**	**Comments**
2016/2017	--	TBD, pending	
2017/2018	Year 1	finalization of business	
2018/2019		rules	
2019/2020			
2020/2021			

A. GLOBAL HEALTH SUPPLY CHAIN (PROCUREMENT AND LOGISTICS)

Indicator Number: A14
Objective 1: Improved availability of health commodities (Global Procurement and Logistics).
Intermediate Result IR 1.1. Enhanced global health commodity procurement
Indicator Name: Average supplier rating score

Description

Precise Definition(s):
Numerator: Sum of all supplier ratings.
Denominator: Number of suppliers from whom GHSC-PSM procured products or commodities during the reporting period.
Unit of Measure: Numerical score
Disaggregated by: *a. Task order*
Purpose: This is a management indicator to enable the GHSC-PSM and USAID to monitor performance across suppliers, enabling the project to better manage supplier 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 the GHSC-PSM MIS. GHSC-PSM's Source team will generate a monthly supplier performance report based on the following categories, which will be incorporated into supplier contracts: quality, delivery (for direct drop orders only), cost, responsiveness, and customer complaints (coming from USAID missions who receive the shipments). GHSC-PSM will develop a set of detailed criteria within these five categories and quantitative measures to capture performance against these criteria that can be reported as a numerical score.
Data Source: GHSC-PSM MIS.
Frequency/Timing of Data Acquisition: Monthly
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.

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, & Reporting

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

Points of Clarification (other notes)

1.	Additional disaggregation elements, such as score within each performance category, 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	**Baseline**	**Target**	**Comments**
2016/2017	--	TBD	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

IN-COUNTRY KEY PERFORMANCE INDICATORS

B. IN-COUNTRY (PERFORMANCE)

Indicator Number: B1
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 which offer the tracer product.
Unit of Measure: Service Delivery Points.
Disaggregated by: *a. Task order; **b.** Country; **c.** GHSC-PSM-supported regions vs. non-GHSC-PSM-supported regions*
Purpose: To determine the prevalence of stockouts at facility or SDP level of each tracer commodity. In conjunction with other metrics, determine the location of bottlenecks within the supply chain and consequently focus on those areas to reduce future stockouts.

Plan for Data Acquisition

Data collection method: Data should be collected from the Logistics Management Information System (LMIS) and analyzed regularly, most likely quarterly, but the timing of the analysis should align with the LMIS reporting schedule. 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 Source:
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 End Use Verification 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/W, 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 utilized.

Frequency/Timing of Data Acquisition: Data should be reported quarterly. Data collection should align with the LMIS reporting schedule. If regular LMIS data are not available, data should be reported as frequently 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.

Plan for Data Analysis, Review, & Reporting
Data Analysis:
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Annually

Points of Clarification (other notes)
1. See Exhibit 6 listed above for the tracer products that will be measured for this indicator.
2. Additional disaggregation elements may be available in GHSC-PSM's in-country data tracking system, and will be reported to the BI&A. These elements will include tracer products. The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight.
3. For the purpose of disaggregation of this indicator, the relevant region for determining "PSM support" is the first subnational government administrative unit above the SDP level. In most countries, this will be the district level, although terminology will vary between countries. "PSM support" is defined as a GHSC-PSM intervention of any kind, including both supply chain operations and technical assistance.
4. For facilities carrying malaria commodities, specifically artemether lumefantrine (AL), the project will also measure ability to treat, i.e. whether the facility is stocked out of all presentations of AL. (Note: AS/AQ packs cannot be cut and combined like AL packs, so this only applies to facilities carrying AL).

Performance Indicator Values			
Year	**Baseline**	**Target**	**Comments**
2016/2017	--	TBD	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

B. IN-COUNTRY (PERFORMANCE)

Indicator Number: B2
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 level in supply system.

Description

Precise Definition(s):
Numerator: Number of stock status observations for a tracer commodity (refer to the tracer list in this document) that are within the designated minimum and maximum quantities at storage sites.
Denominator: Total number of stock status observations for a tracer commodity 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).*
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 are able to 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 which 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 those facilities where the pharmaceuticals are presumably used.

Tracer products for this and other in-country stock metrics should be those listed in Exhibit 6.

Plan for Data Acquisition

Data collection method: Non-routine data collection. For the purposes of data collection 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 (CMS) 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.

There may be multiple observations (through physical counts performed or reports) of stock status 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 fashion:

- 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 RDTs, nine of which are within max and min levels but the remaining three of which represent a stockout, then for the CMS, the resulting measurement would be 9/12 (75%). Likewise, in the stockout disaggregation, 3/12 (25%) of the observations would represent a stockout.

Data Source: The country's supply chain standard operating procedures should outline the min and max stock level for each tier of the system. The CMS should also have a warehouse inventory management system (WMS). Software used in 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 source will vary from country to country, each country should report the data source utilized.

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, & Reporting

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

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 (i.e. central warehouse, subnational medical store, etc.), and health element. The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight.

Performance Indicator Values			
Year	**Baseline**	**Target**	**Comments**
2016/2017	--	TBD	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

B. IN-COUNTRY (PERFORMANCE)

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

Description

Precise Definition(s):
Numerator: Number of SDPs that submitted the required LMIS report(s) or order form(s) during the previous reporting period.
Denominator: The total number of SDPs in country which should be reporting.
Unit of Measure: Service Delivery Point.
Disaggregated by: *a. Task order; b. Country; c. GHSC-PSM-supported region vs. non-GHSC-PSM-supported region.*
Purpose: Determine the level of SDP participation in the LMIS. Data can then be used to determine future commodity needs.

Plan for Data Acquisition

Data collection method: Routine data collection; data should be collected from the LMIS (in country) and analysis should align with the LMIS reporting schedule. 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) utilized.
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, & 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 carry commodities for more than one TO and/or are responsible for submitting multiple reports, those reports will be collectively viewed as one report. Therefore, if an SDP submits one of the multiple reports late then that will count as non-submission. There will be no partial credit applied.
2. 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 SDP type (hospital, clinic, satellite site, etc.) and time of reporting (by deadline, within a week of deadline, more than a week after deadline, did not report). The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight.
3. **Example:** In a country with 1,000 SDPs stocking malaria commodities, if 800 report then 80% of the SDPs are reporting for Task Order 2.

Performance Indicator Values

Year	Baseline	Target	Comments
2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	-- Year 1	TBD	

B. IN-COUNTRY (PERFORMANCE)

Indicator Number: B4
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 (data availability, accuracy and timeliness).

Description

Precise Definition(s):
Numerator: Sum of all rating scores (0-9 points each) for all sites reporting, as described under Method of Measurement.
Denominator: Total number of sites reporting.
Unit of Measure: Points
Disaggregated by: *a.* Task Order; *b.* Country; *c.* Supply chain level: central, subnational level, SDP level
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 subjective review on the perceived quality of the data, using the ***LMIS reporting rate metric for data availability*** and ***stocked according to plan and stockout rate indicators for data accuracy***. The data can be assessed by review of routine LMIS reports, supportive supervision, 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 aforementioned 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

Data Source: GHSC-PSM country office reports.
Frequency/Timing of Data Acquisition: Data should be reported annually. 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, & Reporting
Data Analysis:
Review of Data: Quarterly
Reporting of Data: Annually

Points of Clarification (other notes)
1. A country with excellent data at the central level may receive a 9 for the central level, but may only receive a 5 at the subnational level, where the LMIS is weakest; 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. Related to LMIS reporting rate, this metric is meant to give the USAID COR 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 which keeps track of their 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 via a paper-based system, but often do not have time to measure consumption, update stock cards or count inventory. Approximately 1/3 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: 8 Disaggregation: Central –9 Subnational– 9 SDPs – 6

Performance Indicator Values			
Year	**Baseline**	**Target**	**Comments**
2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	-- Year 1	No target	

B. IN-COUNTRY (PERFORMANCE)

Indicator Number: B5
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 countries conducting annual forecast reviews

Description

Precise Definition(s):
Numerator: Number of all GHSC-PSM-supported countries that conducted annual forecast reviews at the end of the reporting period.
Denominator: Total number of GHSC-PSM-supported countries.
Unit of Measure: Country.
Disaggregated by: *a.* Task order; *b.* Country; *c. Whether or not forecast reviews were received by GHSC-PSM headquarters during the year.*
Purpose: Measures the occurrence and consistency of forecast reviews on an annual basis.

Plan for Data Acquisition

Data collection method: Non-routine data collection. Tally sheets are used to mark off ***annual*** forecast reviews per GHSC-PSM-supported country.
Data Source: Project records.
Frequency/Timing of Data Acquisition: Annual for forecast reviews.
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, & Reporting

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

Points of Clarification (other notes)

1. 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	**Baseline**	**Target**	**Comments**
2016/2017	--	TBD	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

B. IN-COUNTRY (PERFORMANCE)

Indicator Number: B6
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 countries conducting quarterly supply plan updates.

Description

Precise Definition(s):
Numerator: Number of all GHSC-PSM-supported countries that conducted supply plan updates in each quarter.
Denominator: Total number of GHSC-PSM-supported countries.
Unit of Measure: Country.
Disaggregated by: *a.* Task order, *b.* Country.
Purpose: Measures the occurrence and consistency of supply plan updates done routinely each quarter.

Plan for Data Acquisition

Data collection method: Non-routine data collection. Tally sheets are used to mark off *quarterly* supply plan updates per GHSC-PSM-supported country.
Data Source: Project records.
Frequency/Timing of Data Acquisition: Quarterly for supply plan updates.
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, & Reporting

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

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. 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	**Baseline**	**Target**	**Comments**
2016/2017	--	TBD	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

B. In-country (Sustainability)

Indicator Number: B7
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, USG, the Global Fund, or other sources disaggregated by program.

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 US$.
Disaggregated by: *a. Task order; 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 purposes of 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, i.e., funds shift from malaria to HIV, etc.

Plan for Data Acquisition

Data collection method: Non Routine 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, & 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 USG, and the Global Fund.
3. **Explanation of Numerator:** Total value of product procured or budgeted to be procured annually by a given stakeholder.
4. **Explanation of Denominator:** Total value of product procured or budgeted to be procured by any stakeholder.

5. **Interpretation:** Overall contribution by stakeholder to the individual country requirement by program area or product in a year. This metric will help the COR team keep track of the financial hydraulics within a country, particularly as that country is asked to take on responsibility for procuring program commodities. This is an important metric as the agency looks towards sustainability and country ownership.
6. **Disaggregation:** While data for this indicator will be reported by country, TO, and funding source in the quarterly report, 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.

Performance Indicator Values			
Year	**Baseline**	**Target**	**Comments**
2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	-- Year 1	Targets will not be set for this indicator.	

B. IN-COUNTRY (SUSTAINABILITY)

Indicator Number: B8
Objective 2: Strengthened in-country supply chain systems.
Intermediate Results
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 that are done without external technical assistance.

Description

Precise Definition(s):
Numerator: Number of (detailed level) initially GHSC-PSM-supported supply chain functions which 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: Semi-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.
Data Source: In-country project team
Frequency/Timing of Data Acquisition: Data should be reported semi-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, & Reporting

Data Analysis:
Review of Data: Semi-Annually
Reporting of Data: Semi-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 only be reported country-by-country. As countries become part of the GHSC-PSM central initiative, a mapping exercise will be conducted 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 workplan. Note that not all functional areas are expected to become independent.
3. The project will begin reporting on this indicator starting in Year 2. Only supply chain functions that initially receive technical assistance support from GHSC-PSM will be included in the denominator of this indicator.

4. **Explanation of Numerator:**
Includes all supply chain functions which are independently implemented by the host country authorities after initially receiving GHSC-PSM support. An illustrative list of functions include:

- LMIS – facility level data collection and cleaning
- LMIS – intermediate distribution/storage center (if applicable) data collection and reporting
- LMIS – central level data collection
- Quantification – semi-annual 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
- Customers clearance of pharmaceutical processes

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:** 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	**Baseline**	**Target**	**Comments**
2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	0%	*Targets will be set for this indicator on a country-by-country basis at the end of Year 1.*	

B. IN-COUNTRY (SUSTAINABILITY)

Indicator Number: B9
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 workforce loss ratio

Description

Precise Definition(s):
Numerator: Number of health workers with supply chain expertise who left the active health labor force in the last year.
Denominator: Total number of health workers with supply chain expertise at the beginning of last year.
Unit of Measure: Supply chain health workers.
Disaggregated by: *a. Country.*
Purpose: The supply chain workforce loss ratio 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, pay scale and initiatives to retain supply chain health workers, and informs decisions on how many new supply chain health workers need to be trained to mitigate attrition. A high workforce loss of ratio (of health workers with supply chain expertise) signals that the country's policies may not be sufficiently competitive to retain supply chain health workers.

Plan for Data Acquisition

Data collection method: Non routine data collection; Retrieve the number of employees (with supply chain expertise) who left the active health labor force in the last year (or period of measurement. Important to note that some employees may leave due to retirement, death, attrition to other sectors, migration, etc. Consider only public sector employees in GHSC-PSM-supported countries.
Data Source: The preferred source of data is the host country HRIS- otherwise, Health facility surveys, employment records and payroll records.
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, & Reporting

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

Points of Clarification (other notes)

1. While data for this indicator will be reported by country in the quarterly report, additional disaggregation elements will be available in GHSC-PSM's in-country data tracking system. These elements include supply chain functional area and health system level (central, subnational, SDP). Where possible, the project will also track workers by TO. The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight.

Performance Indicator Values			
Year	**Baseline**	**Target**	**Comments**
2016/2017 2017/2018 2018/2019 2019/2020 2020/2021		*Targets will not be set for this indicator, as the indicator is dependent on factors external to the project.*	

B. IN-COUNTRY (SUSTAINABILITY)

Indicator Number: B10
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 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, or equivalent), central medical store (or equivalent), and relevant donors, private sector entities, non-governmental 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 towards 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 the sharing of information. An 'active' committee and/or mechanism should meet on a regular basis (typically monthly or quarterly, at least biannually), though it may remain 'active' by working through other means (e.g., electronically). Coordination mechanism includes participation of host country relevant government agency (Ministry of Health, National Malaria Control Program, or equivalent) and central medical store (or equivalent), relevant donors and non-governmental 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.
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 HQ 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, & 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 weigh findings from the above-described criteria for functionality and make a determination.			
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) MOH; 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. To address the potential for observer or reporting bias stemming from the assessment team's affiliation with the project that is tasked with strengthening the coordination mechanism they are assessing, it will be important to closely link each finding with the associated back-up documentation.			
Performance Indicator Values			
Year	**Baseline**	**Target**	**Comments**
2016/2017	--	TBD	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

B. IN-COUNTRY (SUSTAINABILITY)

Indicator Number: B11
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 filled 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 are filled by women in a specified time period in countries where GHSC-PSM is providing technical assistance related to workforce development.
Denominator: Total number of leadership positions filled in a specified time period, 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: Logistics coordination mechanism records.
Frequency/Timing of Data Acquisition: Semi-annually
Estimated Cost of Data Acquisition: Minimal
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, & Reporting

Data Analysis:
Presentation of Data:
Review of Data: Semi-annually
Reporting of Data: Annually

Points of Clarification (other notes)

1. 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.

Performance Indicator Values

Year	Baseline	Target	Comments
2016/2017	N/A	TBD	
2017/2018			
2018/2019			
2019/2020			
2020/2021			

CROSS-CUTTING KEY PERFORMANCE INDICATORS

C. CROSS CUTTING

Indicator Number: C1
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 new 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 new 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.
Purpose: *In order 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: Non-routine data collection; GHSC-PSM project reports and periodic country office reports.
Data Source: Project records.
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: 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, & Reporting

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

Points of Clarification (other notes)

1. Additional disaggregations, by country and type of innovation, 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.

Performance Indicator Values			
Year	**Baseline**	**Target**	**Comments**
2016/2017	N/A	*Targets will not be set for this indicator, as the pace of innovation is difficult to predict and not fully within project control.*	
2017/2018			
2018/2019			
2019/2020			
2020/2021			

C. CROSS CUTTING

Indicator Number: C2
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.** Sex **d.** Supply chain level (central, provincial, district and SDP).
Purpose: *This indicator serves as a crude measure of supply chain training activity. USAID/GHSC-PSM can use it for determining whether a program meets its target 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): 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, & Reporting

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

Points of Clarification (other notes)

1. 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.
2. Reporting will be in accordance with TraiNet standards.
3. Additional disaggregation elements, including country, supply chain functional area, and 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.

Performance Indicator Values			
Year 2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	**Baseline** -- Year 1	**Target** Targets will not be set for this indicator	**Comments**

C. CROSS CUTTING
Indicator Number: C3
Objectives 1 and 2 (global and in-country)
Indicator Name: Overall customer satisfaction rating for GHSC-PSM services (disaggregated by customer category)

Description
Precise Definition(s):
Numerator: Sum of all customer ratings across all customer services where a rating was submitted using ***GHSC-PSM customer satisfaction score card.*** *Elements of the score card would include global supply chain themes (reliability, cost, responsiveness, flexibility and access to data), technical assistance for systems strengthening, and access to data.*
Denominator: Total number of customer ratings submitted.
Unit of Measure: Customer satisfaction rating per orders placed in a reporting period.
Disaggregated by: *a. Task order **b.** Customer category*.
Purpose: *This indicator measures how satisfied the customer is with GHSC-PSM services.*

Plan for Data Acquisition
Data collection method: A customer satisfaction score card will be designed for each group of customer (USAID/Washington, USAID missions, National Government counterparts, and other non-Government beneficiaries). Each score card will rate service on six themes: reliability, cost, responsiveness, flexibility, technical assistance for systems strengthening, and access to data.
Data Source: Project records and GHSC-PSM MIS.
Frequency/Timing of Data Acquisition: Quarterly.
Estimated Cost of Data Acquisition: Minimal, data to be collected by GHSC-PSM staff using GHSC-PSM customer satisfaction score card.
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, & Reporting
Data Analysis:
Presentation of Data:
Review of Data: Quarterly
Reporting of Data: Annually

Points of Clarification (other notes)
1. 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. Rating would be done using the GHSC-PSM developed customer satisfaction score card.
2. Additional disaggregation elements will be available in GHSC-PSM's in-country data tracking system, including country and customer type (USAID/Washington, country Missions, host-country ministry, other beneficiary). The project may report these additional disaggregations in quarterly performance reports when they provide useful analytical insight.

Performance Indicator Values			
Year	**Baseline**	**Target**	**Comments**
2016/2017	--	TBD	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

C. CROSS CUTTING

Indicator Number: C4
Objective 1: Improved availability of health commodities (*Global Procurement and Logistics*).
Intermediate Result 1.4. Improved data visibility
Indicator Name: Percentage '**complete**' submissions reported to BI&A in the reporting period.

Description

Precise Definition(s): A 'submission' refers to data element, which is a single datum input/import etc. into the BI&A. 'Completeness' refers to no missing data for any data elements reported to BI&A.
Numerator: Number of data elements with complete datum input (no blank fields or missing data) in the reporting period.
Denominator: Total number of data elements contained in the BI&A data set for the reporting period.
Unit of Measure: Submissions (data input/import for all data elements).
Disaggregated by: a. Task order.
Purpose: *This indicator measures completeness of reporting to the BI&A.*

Plan for Data Acquisition

Data collection method: Routine data collection; GHSC-PSM MIS and BI&A
Data Source: Project records and GHSC-PSM MIS (data trustee work logging process).
Frequency/Timing of Data Acquisition: Quarterly.
Estimated Cost of Data Acquisition: Minimal, data to be uploaded by GHSC-PSM staff using GHSC-PSM MIS.
Responsible Individual(s) at the Project: 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, GHSC-PSM MIS and BI&A.

Plan for Data Analysis, Review, & Reporting

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

Points of Clarification (other notes)

1. Each quarter, entries to the BI&A system will be checked for completeness. Data trustees will be required to log any issues identified.

Performance Indicator Values			
Year	**Baseline**	**Target**	**Comments**
2016/2017	--	TBD	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

C. CROSS CUTTING

Indicator Number: C5
Objective 1: Improved availability of health commodities (*Global Procurement and Logistics*).
Intermediate Result 1.4. Improved data visibility
Indicator Name: Percentage of sampled '**accurate**' submissions reported to BI&A in the reporting period.

Description

Precise Definition(s): A 'submission' refers to data element, which is a single datum input/import etc. into the BI&A. 'Accurate' refers to the extent of agreement between (1) data recorded in source documents (procurement and logistics transaction documents or GHSC-PSM MIS, and (2) data reported on Intellicog's BI&A reports/electronic forms. A sample of data submissions will be randomly selected to compute this indicator.
Numerator: Number of sampled data elements in BI&A in agreement with source documents or GHSC-PSM MIS during the reporting period.
Denominator: Total number of sampled data elements contained in the BI&A data set for the reporting period.
Unit of Measure: Submissions (data input/import for all data elements).
Disaggregated by: a. Task order.
Purpose: *This indicator measures accuracy of reporting to the BI&A.*

Plan for Data Acquisition

Data collection method: Random selection (minimal sample size agreed upon with USAID) of data submissions to BI&A and detailed analysis of discrepancy of agreement between source (transaction document), GHSC-PSM MIS, and BI&A.
Data Source: Project records, GHSC-PSM MIS, and BI&A (data trustee work logging process).
Frequency/Timing of Data Acquisition: Quarterly.
Estimated Cost of Data Acquisition: Minimal, data to be uploaded and analyzed by GHSC-PSM staff using GHSC-PSM MIS.
Responsible Individual(s) at the Project: 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, GHSC-PSM MIS and BI&A.

Plan for Data Analysis, Review, & Reporting

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

Points of Clarification (other notes)

1. Each quarter, a specified number of entries to the BI&A system will be checked for accuracy. Data trustees will be required to log any issues identified.

Performance Indicator Values			
Year	**Baseline**	**Target**	**Comments**
2016/2017	--	TBD	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

C. CROSS CUTTING

Indicator Number: C6
Objective 1: Improved availability of health commodities (*Global Procurement and Logistics*).
Intermediate Result 1.4. Improved data visibility
Indicator Name: Percentage of **'timely'** submissions reported to BI&A in the reporting period.

Description

Precise Definition(s): A 'submission' refers to data element, which is a single datum input/import etc. into the BI&A. 'Timely' refers to submission of reports to the BI&A on or before the due date.
Numerator: Number of data elements timely submitted in the reporting period.
Denominator: Total number of data elements contained in the BI&A data set for the reporting period.
Unit of Measure: Submissions (data input/import for all data elements).
Disaggregated by: a. Task order.
Purpose: *This indicator measures timeliness of reporting to the BI&A.*

Plan for Data Acquisition

Data collection method: Routine data collection; GHSC-PSM-MIS and BI&A
Data Source: Project records and GHSC-PSM MIS (data trustee work logging process).
Frequency/Timing of Data Acquisition: Quarterly.
Estimated Cost of Data Acquisition: Minimal, data to be uploaded by GHSC-PSM staff using GHSC-PSM MIS.
Responsible Individual(s) at the Project: 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 records, GHSC-PSM MIS, and BI&A.

Plan for Data Analysis, Review, & Reporting

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

Points of Clarification (other notes)

1. Each quarter, entries to the BI&A system will be checked for timeliness. Data trustees will be required to log any issues identified.

Performance Indicator Values

Year	Baseline	Target	Comments
2016/2017	--	TBD	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

C. CROSS CUTTING

Indicator Number: C7
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 expiry, while under GHSC-PSM control (Product Loss Percentage).

Description

Precise Definition(s):
Numerator: Total value of product lost due to theft, damage, or expiry in a specific time period.
Denominator: Total value of product delivered in a specified time period.
Unit of Measure: Value in terms of cost ($).
Disaggregated by: *a.* Task order *b.* Type of loss (theft, damage, or expiry).
Purpose: This indicator tracks products lost due to theft, damage, or expiry, 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 period. Damage can also occur because of lack of adherence to cold chain requirements.

Plan for Data Acquisition

Data collection method: Data elements for this indicator will be collected using the GHSC-MIS and in-country QA reports.
Data Source: GHSC-PSM MIS and in-country QA reports.
Frequency/Timing of Data Acquisition: 1. As frequently as order and shipment transactions flow to GHSC-PSM MIS, at least daily. 2. In-country QA reports
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.

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, & Reporting

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

Points of Clarification (other notes)

1. For products within the global supply chain, the indicator must be able to be calculated directly from the raw data provided to GHSC-PSM MIS with no manual transformations required outside of the transaction records.
2. There are strict reporting requirements to the IG for products lost due to theft, damage, or expiry that must be adhered to by USAID and the project.
3. The value of product loss should be tracked at the transaction level and should reconcile with the monthly financial statement under product loss.
4. Existing in-country mechanisms will be used to report on this indicator. QA reports should be reconciled when determining losses in country.
5. Additional disaggregation elements, including country, line item, and 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.

Performance Indicator Values

Year	Baseline	Target	Comments
2016/2017	--	TBD	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

C. CROSS CUTTING

Indicator Number: C8
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 that there is 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. (Qualitative indicator to be described in quarterly project reports).

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.
Data Source: Project documents.
Frequency/Timing of Data Acquisition: Semi-annually
Estimated Cost of Data Acquisition: Minimal
Responsible Individual(s) at the Project: Global collaboration 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, & Reporting

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

Points of Clarification (other notes)

Performance Indicator Values

Year	Baseline	Target	Comments
2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	0	No target.	

C. CROSS CUTTING

Indicator Number: C9
Objective 1: Improved availability of health commodities (*Global Procurement and Logistics*).
Intermediate Result 1.4. Improved data visibility
Indicator Name: Percentage complete and on time submissions to global knowledge management platform

Description

Precise Definition(s): A 'submission' refers to data element, which is a single datum input/import, etc., into the global knowledge management platform. "Timely' refers to submission of reports to the knowledge management platform on or before the due date, or within 1 week after the due date. 'Completeness' refers to no missing data for any data elements reported to knowledge management platform.
This indicator will include variants as specified below:
Variants
Percentage complete submissions to global knowledge management platform
Percentage on time submissions to global knowledge management platform
Numerator: Number of data elements timely submitted in the reporting period, or Number of data elements without any datum input (or with blank fields or missing data) in the reporting period.
Denominator: Total number of sampled data elements contained in the knowledge management platform for the reporting period.
Unit of Measure: Submissions (data input/import for all data elements).
Disaggregated by: a. Task order.
Purpose: *This indicator measures accuracy of reporting to the knowledge management platform.*

Plan for Data Acquisition

Data collection method: Routine data collection; Review submissions to knowledge management platform.
Data Source: Project records, GHSC-PSM MIS and knowledge management platform.
Frequency/Timing of Data Acquisition: Quarterly.
Estimated Cost of Data Acquisition: Minimal, data to be uploaded and reviewed by GHSC-PSM staff.
Responsible Individual(s) at the Project: M&E and knowledge management 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 reports, GHSC-PSM MIS, and knowledge management platform.

Plan for Data Analysis, Review, & Reporting

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

Points of Clarification (other notes)

1. Knowledge management platform will be defined by GHSC-PSM project when operational. No data will be reported for this indicator until the knowledge management platform is operational.
2. The project shall report on the composite indicator timely and complete, as well as the variants timely or complete.

Performance Indicator Values

Year	Baseline	Target	Comments
2016/2017	--	TBD	
2017/2018	Year 1		
2018/2019			
2019/2020			
2020/2021			

D. GLOBAL MALARIA INDICATORS - (for reporting only)		
Indicator Name	**Definition**	**Frequency**
D1. Number of artemisinin-based combination therapy (ACT) treatments purchased with USG funds.	Number of ACT treatments purchased with USG funds. "Purchased" = ACTs for which a purchase order has been issued by the Procurement Service Agent within the given fiscal year. For orders filled by stockpile, this would be the sales order date.	Annually
D2. Number of malaria rapid diagnostic tests (RDTs) purchased with USG funds.	Number of RDTs purchased with USG funds. "Purchased" = RDTs for which a purchase order/invoice has been issued by the Procurement Service Agent within the given fiscal year.	Annually
D3. Number of insecticide treated nets (ITNs) purchased with USG funds.	Number of ITNs purchased with USG funds. "Purchased" = ITNs for which a purchase order/invoice has been issued by the Procurement Service Agent within the given fiscal year.	Annually
D4. Number of sulfadoxine-pyrimethamine (SP) tablets purchased with USG funds.	Number of SP tablets purchased with USG funds. "Purchased" = SP tablets for which a purchase order/invoice has been issued by the Procurement Service Agent within the given fiscal year.	Annually