



OFFICE OF INSPECTOR GENERAL
U.S. Agency for International Development

USAID'S Global Health Supply Chain Would Benefit From More Rigorous Risk Management and Actions To Enhance Local Ownership

AUDIT REPORT 4-936-20-002-P
JULY 10, 2020

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MEMORANDUM

DATE: July 10, 2020

TO: USAID/Bureau for Global Health, Assistant Administrator, Dr. Alma Golden

FROM: USAID OIG Africa Regional Office, Audit Director, Robert Mason /s/

SUBJECT: USAID'S Global Health Supply Chain Would Benefit From More Rigorous Risk Management and Actions To Enhance Local Ownership (4-936-20-002-P)

This memorandum transmits the final report on our audit of USAID's in-country management of its Global Health Supply Chain Program. Our audit objectives were to (1) examine how USAID assessed risks for in-country supply chains and (2) determine the extent to which selected missions in Africa undertook activities that aligned with good practices for addressing the root causes of in-country supply chain weaknesses. In finalizing the report, we considered your comments on the draft and included them in their entirety in appendix D.

The report contains two recommendations related to the Bureau for Global Health's management of its supply chain program. After reviewing information you provided in response to the draft report, we consider both recommendations resolved but open, pending completion of planned actions. For each recommendation, please provide evidence of final action to the Audit Performance and Compliance Division.

We appreciate the assistance you and your staff extended to us during this audit.

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INTRODUCTION

Public health challenges such as treating HIV and AIDS, preventing infectious diseases, and averting child and maternal deaths continue to burden national health systems. Some countries do not have the systems in place to appropriately safeguard and deliver the lifesaving medicines and other items, such as basic medical supplies and equipment, needed to combat these threats.¹ For more than a decade, USAID has delivered medicines and other healthcare commodities to help save lives around the world. In 2017, USAID's Global Health Supply Chain (GHSC) Program had five awards totaling nearly \$10.5 billion to provide healthcare commodities and technical assistance.

This large and multifaceted effort presents many risks for USAID. Commodities are often prone to theft, waste, and loss or can be unavailable due to stockouts or expired products when they are most needed. To effectively address these risks, supply chain activities should address systemic, underlying causes of in-country supply chain weaknesses to achieve the program's goals.

USAID's GHSC program has been under scrutiny both in the oversight community and in the media. In 2017, investigators in USAID's Office of Inspector General raised concerns that the Agency's inadequate oversight of USAID-funded commodities left them vulnerable to theft. Around the same time, a few media articles highlighted the poor performance of USAID's newest supply chain contractor implementing the \$9.5 billion Global Health Supply Chain – Procurement and Supply Management (GHSC-PSM) award—the Agency's largest single award to date.

These concerns garnered congressional attention, culminating in a request from the Senate Foreign Relations Committee for OIG to initiate work on the supply chains of USAID-funded health commodities. In response, we conducted this audit to examine USAID's management of in-country supply chain activities.² Our objectives were to (1) examine how USAID assessed risks for in-country supply chains and (2) determine the extent to which selected missions in Africa undertook activities that aligned with good practices for addressing the root causes of in-country supply chain weaknesses.

To address these objectives, we reviewed USAID processes for assessing in-country supply chain risks and interventions to mitigate root causes of in-country supply chain weaknesses at four selected USAID missions: Malawi, Mozambique, Nigeria, and Tanzania. The scope was limited to fiscal years 2017 and 2018, and two awards within USAID's GHSC program: GHSC-PSM and Global Health Supply Chain – Technical Assistance (GHSC-TA).³ We conducted this audit in accordance with generally accepted

¹ Source: Global Fund Inspector General, "The Global Fund's In-Country Supply Chain Processes," April 28, 2017.

² OIG concurrently conducted an audit of USAID's procurement and management of its GHSC-PSM award, which was ongoing at the time of this report.

³ The GHSC-PSM award was implemented by Chemonics, Inc. The GHSC-TA award was implemented by Pricewaterhouse Coopers Public Sector, whose name was later changed to Guidehouse after it was acquired by Veritas Capital.

government auditing standards. Appendix A contains additional information about the audit's scope and methodology.

SUMMARY

Risk identification for the in-country components of USAID's GHSC program is primarily done by overseas missions. USAID missions we reviewed used country-specific tools to identify some risks, including those related to the supply chain. Missions further identified weaknesses within supply chain systems through various external assessments conducted by implementers, oversight organizations, and other donors, and some used the original version of the optional National Supply Chain Assessment tool developed by the Bureau for Global Health. However, while the Agency's enterprise risk management framework calls for consideration of significant risks as an interrelated portfolio, USAID's risk identification efforts related to its supply chain investments were siloed by country without a coordinated or systematic effort to look across missions for broader risk patterns. Within the existing Agency structure for enterprise risk management, supply chain risks identified at the mission level were not reported up to Global Health, which manages USAID's worldwide supply chain activities. Instead, regional bureaus assessed the aggregate supply chain risks identified by missions. Global Health's 2018 risk profile did not include any risks related to its supply chain program. The absence of a robust, centrally managed risk identification process for supply chain activities limits the Agency's ability to proactively address patterns across missions, such as broken agreements between host governments and USAID and local infrastructure constraints, which we observed.

To address risks and achieve the program's goals, supply chain activities should address systemic, underlying causes of in-country supply chain weaknesses. We determined that 50 out of 58 selected activities at the missions we reviewed fully aligned with good practices we identified from industry standards for addressing the four root causes of supply chain weaknesses. For example, implementers in Mozambique adhered to good practices for providing technical assistance to the host country government to quantify commodity requirements and costs—which included working with the host country government, considering underlying assumptions, consumption data, and gap analyses, and conducting the exercise on an annual and quarterly basis. The remaining eight activities were partially aligned. For example, for an activity in Malawi where GHSC-PSM subcontracts firms to receive, store, and distribute commodities, the implementers adhered to warehousing, distribution, and inventory control good practices, but the host country government did not participate. While the selected mission activities mostly aligned with good practices for addressing root causes of supply chain weaknesses, in three of the four missions we visited, USAID undertook risk mitigation measures that can delay countries' transition to self-reliance. More specifically, in three missions USAID either (1) had project-funded consultants do the work of government officials instead of training and advising them or (2) operated a parallel supply chain. While often necessary to minimize the risks that U.S. taxpayer-funded property could be lost or that commodities might not be delivered, such workarounds also impede a

host country's ability to ultimately manage its own supply chain and do not directly contribute to USAID's goal of fostering self-reliance.

We are making two recommendations to the Bureau for Global Health. The first is to strengthen USAID's management of supply chain risks worldwide, and the second is to increase the capability of host governments to manage health commodity supply chains with reduced donor support in the missions we reviewed. USAID agreed with our recommendations.

BACKGROUND

USAID makes significant investments in global health supply chains to ensure healthcare commodities get to those in need while strengthening systems to foster self-reliance. GHSC program activities include providing lifesaving healthcare commodities, such as HIV/AIDS antiretroviral therapy medicines and malaria bed nets, and transferring knowledge on managing healthcare commodities.

The Bureau for Global Health provides oversight of USAID's worldwide supply chain management activities through an established management structure consisting of officials from five offices within the bureau: the Offices of HIV/AIDS; Infectious Disease; Population and Reproductive Health; Maternal/Child Health and Nutrition; and Health Systems. These five offices provide technical expertise and take the lead in overseeing the supply chain program.

Managing the GHSC program involves working with stakeholders at headquarters in Washington, DC, and in the field at missions worldwide across all elements of the supply chain. The six commonly adopted supply chain elements are:⁴

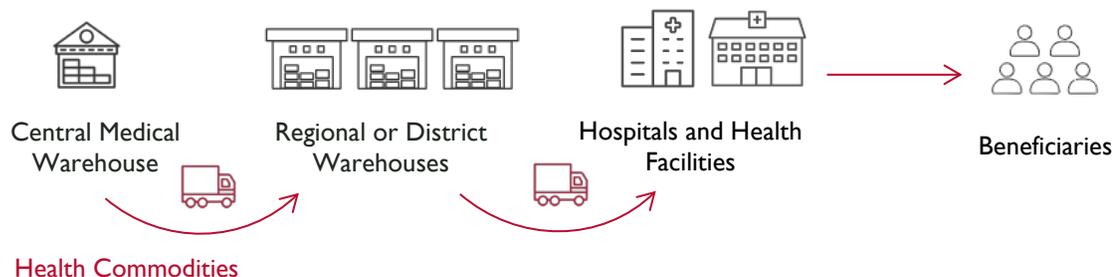
1. Product selection - Selecting drugs based on national treatment guidelines and approval.
2. Forecasting and supply planning - Estimating the quantity of commodities needed to ensure an uninterrupted supply.
3. Procurement - Contracting with suppliers to obtain drugs within agreed-upon production and delivery time frames and costs.
4. Warehousing - Maintaining appropriate security and environmental conditions.
5. Inventory management - Monitoring for shortages and waste due to expired products, keeping accurate records of available and anticipated stock, and preparing for distribution.
6. Distribution - Managing the flow of commodities from the point of production to the end user.

⁴ Source: U.S. Government Accountability Office (GAO), "PEPFAR: Drug Supply Chains Are Stronger, But More Steps Are Needed to Reduce Risk," April 26, 2013.

For USAID-funded commodities, depending on each country’s context, some of these elements are carried out by staff in Agency headquarters while some are managed in country.

Once commodities arrive in country, they are either delivered to host country governments for distribution through the national supply chain, or distributed through a parallel supply chain that the Bureau for Global Health uses to mitigate risks in countries where they believe it is prudent to do so. While the exact pathways for commodities vary depending on multiple factors, including country requirements and commodity type, figure 1 shows the typical flow of commodities through an in-country supply chain.

Figure 1. Commodity Flow in National Supply Chains



Note: In parallel supply chains, USAID bypasses one or more elements in the national supply chain.
 Source: OIG-generated based on analysis of in-country supply chains for selected missions.

USAID’s Global Health Supply Chain Program

For many years, USAID has undertaken supply chain activities to help meet its three strategic priorities for global health: 1) preventing maternal and child deaths, 2) controlling the HIV/AIDS epidemic, and 3) combating infectious diseases. Like all USAID programming, the Agency’s supply chain efforts must also support the Agency’s overarching objective to help countries become self-reliant, thus ending the need for foreign assistance altogether.

In 2015, the Bureau for Global Health revamped its supply chain portfolio. This included awarding the GHSC-PSM contract —\$9.5 billion for a maximum of 8 years—to procure and provide health commodities and improve supply chain activities in partner countries. By June 2017, the GHSC program had five awards totaling nearly \$10.5 billion to deliver health commodities and provide systems strengthening technical assistance around the world. Of the five awards USAID used to operate its GHSC program, the GHSC-PSM and GHSC-TA contracts comprised 96 percent, or \$10 billion.⁵ GHSC-PSM was USAID’s primary award for procuring and providing health commodities. It also provided technical assistance in improving in-country supply chains. The GHSC-TA award also offered supply chain technical assistance, but it did not provide commodities.

⁵ As of June 2017, the Global Health Supply Chain Program also included the GHSC – Rapid Test Kits, GHSC – Quality Assurance, and GHSC – Business Intelligence and Analytics award mechanisms.

All four missions we reviewed used GHSC-PSM for commodity procurement and shipping. USAID missions could choose to receive technical assistance for supply chain management from either GHSC-PSM or GHSC-TA. USAID/Tanzania chose GHSC-TA while the three other selected missions chose GHSC-PSM. Table I shows the allocation of expenditures for fiscal years (FY) 2017 and 2018 across the four missions we reviewed.

Table I. Expenditures (in Millions) for Procured Commodities and Technical Assistance in Selected Missions

	Malawi		Mozambique		Nigeria		Tanzania		Total
	FY 17	FY 18	FY 17	FY 18	FY 17	FY 18	FY 17	FY 18	
Procured Commodities	\$10	\$14	\$28	\$85	\$89	\$165	\$72	\$71	\$534
Technical Assistance	\$7	\$9	\$12	\$17	\$21	\$37	\$4	\$5	\$112

Source: OIG analysis of expenditures received from Global Health and missions.

Supply Chain Risk Management

USAID’s operations, centered in the world’s poorest and most vulnerable countries, are inherently risky. In general, the level of risk increases as operations increase in complexity, and the GHSC program, given its large size, broad geographical scope, and diverse array of commodities, is complex. The Office of Management and Budget’s (OMB) 2016 directive that Federal agencies adopt comprehensive enterprise risk management (ERM) programs to identify, assess, and respond to risks is vitally important for USAID in general and the GHSC program in particular.⁶ In the context of ERM, enterprise risks can be seen as those that could significantly affect an agency’s ability to achieve its objectives. These risks can be either organization-wide or centered on one unit that carries out a key program or function.

To identify significant risks across the Agency, USAID has established an ERM framework. According to USAID’s governance charter for ERM and internal control, USAID’s missions, bureaus, and independent offices are required to “identify key risks and internal control deficiencies using a structured and systematic approach.” The ERM process is meant to be a holistic approach to risk management and consider all risks, internal and external, as an interrelated portfolio, rather than in isolation. Used properly, ERM helps organizations continuously, proactively, and comprehensively assess risks to optimize risk management efforts and make better decisions.

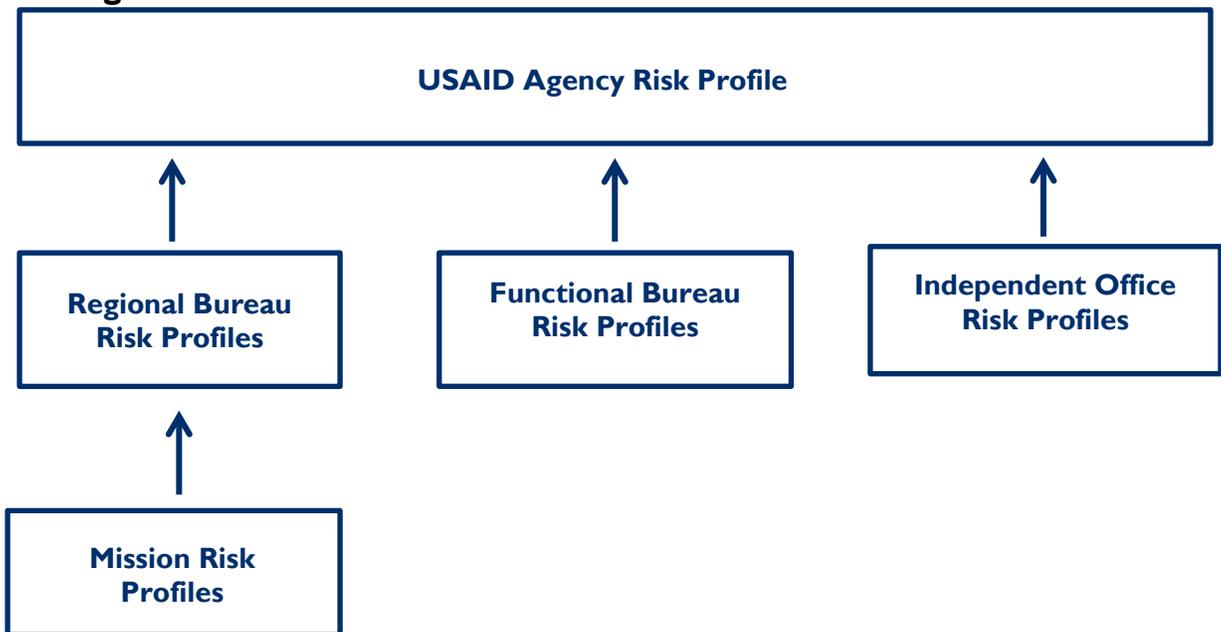
USAID’s governance structure for implementing ERM consists of management and oversight bodies responsible for reviewing, managing, and approving identified risks and deficiencies of various Agency units: bureaus, independent offices, divisions, and missions. Each of these units has a Management Council on Risk and Internal Control

⁶ OMB Circular A-123, “Management’s Responsibility for Enterprise Risk Management and Internal Control,” July 15, 2016.

(MCRIC) that manages ERM and prepares its unit’s risk profile.⁷ Risk profiles developed at different levels of the organization are reported up to the next management level. The Risk Management Council assesses the collective risk profiles prepared by each MCRIC to develop the overall Agency risk profile, which is reviewed at least semiannually and updated as needed. The Agency’s risk profile is then endorsed by the Executive Management Council on Risk and Internal Control (EMCRIC), chaired by the Deputy Administrator.⁸

In the case of Agency units that are part of the GHSC program, the risk profiles developed by USAID’s overseas missions are reported to their respective regional bureaus, like Africa Bureau, which then develop a risk profile for their region. In a separate reporting chain, USAID’s functional bureaus, like Global Health, develop separate risk profiles for their respective areas of responsibility. The risk profiles from all bureaus and independent offices are then used to collectively develop the Agency’s risk profile (see figure 2).

Figure 2. Risk Reporting Structures Under USAID’s Enterprise Risk Management Process



Note: This figure is not intended to depict all parts of the ERM process, such as the consideration of financial internal controls.

Source: OIG analysis of USAID’s ERM process described in ADS 596mab, “Governance Charter for Enterprise Risk Management and Internal Control.”

⁷ In 2017, the Agency adopted Automated Directives System (ADS) 596mab, USAID’s governance charter for ERM, as a mandatory reference for ADS 596. ADS 596mab required each organizational unit to submit a risk profile to the next management level.

⁸ The Inspector General sits as a non-voting observer on the EMCRIC.

Some supply chain risks are already well established. In an April 2017 report, the Global Fund OIG identified four root causes of persistent supply chain problems at the in-country level that also pose risks for USAID: (1) inadequate or ineffective country ownership and governance, (2) lack of accurate and reliable data, (3) inadequate human resources, and (4) insufficient host government funding (see table 2).⁹

Table 2. Root Causes of In-Country Supply Chain Weaknesses

Root Cause	Description
Country Ownership and Governance	Challenges with country ownership and governance structures have affected prioritization, coordination, and accountability within supply chain activities.
Data Reliability	Challenges in obtaining accurate and reliable data to support informed decision making.
Human Resources	Inadequate human resources for service delivery and supply chain management.
Funding	Inadequate financial resources for supply chain transformation.

Source: Global Fund Inspector General, “The Global Fund’s In-Country Supply Chain Processes,” April 2017.

These four root causes adversely affect all six key elements of supply chain management and are important considerations for oversight of USAID-funded technical assistance and healthcare commodities.

MISSIONS TOOK SOME STEPS TO IDENTIFY COUNTRY-LEVEL SUPPLY CHAIN RISKS, BUT USAID DOES NOT HAVE A COMPREHENSIVE AND CENTRALIZED RISK ASSESSMENT PROCESS FOR ITS GLOBAL HEALTH SUPPLY CHAIN PROGRAM

While an organization cannot respond to all potential risks related to achieving its goals and objectives, Federal managers are required to identify, analyze, and assess major risks. These Federal requirements emphasize the importance of understanding the combined impact of internal and external risks as an interrelated portfolio.¹⁰ As part of USAID’s broader framework for assessing and managing significant, enterprise-level risks facing the Agency, missions identify supply chain risks at the country level. However, the

⁹ These four root causes were identified in a Global Fund OIG capping report published in April 2017. That capping report was a review of prior Global Fund audits that identified supply chain weaknesses in 15 countries. Global Fund’s analysis of those prior audits led them to identify these four systemic root causes and report on them in its capping report.

¹⁰ OMB Circular A-123, “Management’s Responsibility for Enterprise Risk Management and Internal Control,” July 15, 2016.

lack of a comprehensive risk assessment process dedicated to the supply chain program may hinder Global Health's ability to identify and mitigate risks across the entire program.

Missions Took Some Steps To Identify Supply Chain Risks at the Country Level

USAID missions use country-specific tools to identify risk, including those related to the supply chain, at the country level. Three of the four missions we reviewed reported using some country-specific tools to consider risk in USAID programs, including Country Development Cooperation Strategies (CDCSs) and Project Appraisal Documents (PADs). CDCSs describe USAID's strategic approach in a given country and lay the groundwork for subsequent decision making; the strategies are not designed to provide in-depth details about USAID projects and thus have limited use in developing risk assessment strategies for supply chain activities. Similarly, the PAD described country health systems in general terms and did not incorporate a detailed or ongoing assessment of supply chain challenges.¹¹

To further identify weaknesses within supply chain systems, missions we reviewed relied on various external assessments conducted by implementers, oversight organizations such as the Global Fund OIG, and other donors. These assessments included end-user verification reports, warehouse capacity assessments, logistics management information systems assessments, and commodity leakage studies.¹² These assessments allowed missions to be aware of persistent challenges in each country. While missions used these assessments to gain further understanding of supply chain risks, they were not used by the Agency to yield broader insight into whether similar problems existed in other countries and were not intended to provide detailed, ongoing assessment of supply chain challenges.

To obtain consistent information on the state of in-country supply chains, the Bureau for Global Health created the National Supply Chain Assessment tool. By examining 11 technical areas of a public health supply chain in developing countries, such as human resources, forecasting and supply planning, and distribution, this tool provides a snapshot of the capacity and performance of the national system. According to Global Health, the assessment is resource intensive and is optional for missions. The assessment was revamped in 2018, and at the time of our audit, none of the four countries we visited had used the updated version. Mozambique and Nigeria missions last used this tool in 2014 and 2015, respectively, and Malawi and Tanzania had not used the tool.

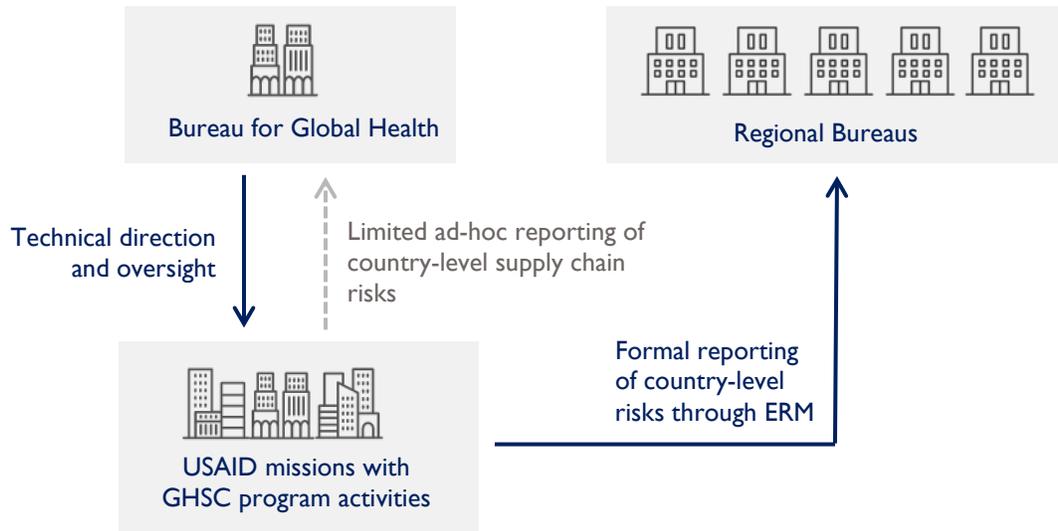
¹¹ USAID policy requires missions to prepare a PAD that codifies how each project will contribute to the mission's development strategy.

¹² End-user verification reports examined health facilities to assess the availability of commodities for beneficiaries. Warehouse capacity assessments determined the status of warehouse conditions and made recommendations for improvements. Logistics management information systems assessments examined the network of in-country systems used to track logistics data related to demand, inventory, and pipeline information of health commodities. Commodity leakage studies examined what factors contributed to loss and theft of health commodities.

Lack of Comprehensive Risk Management for the Global Health Supply Chain Hindered USAID’s Ability To Identify and Mitigate Risks

While the missions we reviewed took some steps to identify supply chain risks at the country level, USAID lacked a structured process for comprehensively managing risks for the GHSC program. Within USAID’s ERM structure, the risks identified at the mission level, including supply chain risks, are not reported up to the Bureau for Global Health. Instead, supply chain risks are reported up to regional bureaus (see figure 3). Bureau officials explained that while mission risk profiles are managed by their respective regional bureaus, feedback from the missions could be considered by Global Health but this is not required.

Figure 3. Management of and Risk Reporting for USAID’s Global Health Supply Chain Program



Source: OIG analysis of flow of reported in-country supply chain risks and USAID’s ERM process described in ADS 596mab, “Governance Charter for Enterprise Risk Management and Internal Control.”

Given its technical expertise and leadership role in overseeing the supply chain program, the Bureau for Global Health is best positioned to assess the aggregate supply chain risks identified by the missions. A structured framework would allow Global Health to request information it would need in order to inform its technical guidance to the missions with GHSC activities and manage supply chain risks.

Global Health’s FY 2018 risk profile included five risks affecting its programs.¹³ For example, the bureau identified risks related to providing substantial funding in countries

¹³ The first round of risk profiles was completed in FY 2018.

where USAID has no staff presence or non-permissive environments and the risk of maintaining proper oversight of USAID health programs in these areas. However, the bureau's FY 2018 risk profile did not include any risks specifically related to its supply chain program. Bureau officials explained that since media attention and poor performance of the implementer led USAID to include the risk of late delivery of commodities in the overall Agency's risk profile, it would have been redundant and confusing to also include supply chain-related risks in Global Health's risk profile. Although these risks were ultimately included in the Agency's risk profile, this reactive approach weakened the intent of the ERM process: proactive, continuous risk management, with information on risks flowing upward to higher levels of the organization from the field and guidance on risk appetite flowing downward.¹⁴

While assessing USAID's management of in-country supply chains, we observed challenges across multiple countries that could point to more widespread risks affecting the GHSC program, but they were not captured in the missions' or Global Health's risk profiles. For example:

- In Tanzania and Malawi, the governments agreed to absorb financial responsibilities for some USAID-funded supply chain activities. However, when the time came to transfer these responsibilities, the governments did not fulfill their financial commitments. In Tanzania, the Government agreed to absorb salaries of advisors who provided technical assistance in logistics management to Government officials. At the time of our site visit, this transition had already been delayed. According to Tanzanian Government officials and USAID staff in Tanzania, the Government did not have the funds to hire the advisors at their current salary. Also, the advisors told us they were concerned about being absorbed by the Government because of a potential salary decrease and said that moving on to other donors with equal or higher pay was an option. In Malawi, the Government agreed to provide fuel for prefabricated warehousing unit generators in order to maintain proper storage temperatures for USAID-funded commodities. However, during our site visit we observed instances when the generator was not working because the Government did not provide the fuel.
- In Tanzania and Mozambique, USAID advocacy resulted in supply chain activities being added to each Government's budget, but these disbursements had not yet occurred during the period under review. While including the budget line item shows each Government's commitment to managing its national supply chain, financial constraints in both countries prevented them from following through. The Tanzanian Government's failure to contribute its portion of supply chain funds affected its central medical store's ability to effectively deliver commodities and meet its financial obligations to suppliers. In Mozambique, the country's 2016 financial crisis hampered efforts by the Government to take over some elements of the supply chain, including warehousing costs and distribution to health facilities.

¹⁴ According to OMB Circular A-123, risk appetite is the "broad-based amount of risk an organization is willing to accept in pursuit of its mission/vision." Established by an agency's highest officials, risk appetite "serves as the guidepost to set strategy and select objectives."

- In all four countries we reviewed, problems with electricity supply or internet connectivity hindered proper storage of commodities and timely reporting of commodity data. In Malawi, electricity blackouts occur for about 6 hours every day. We found that USAID-funded generators were not being used at all or were being used for purposes other than maintaining proper storage conditions for commodities during the blackout period, such as supplying power to the operating room. In all selected countries, some health facilities did not have stable internet access and some selected countries reported challenges causing untimely data reporting. In Malawi, staff sometimes lacked transportation to travel to district facilities to enter monthly data. In Malawi and Nigeria, staff sometimes entered data after working hours using personal computers or phones when internet access was available.

Continuous, comprehensive risk management for supply chain activities would identify, assess, and aggregate various risks and feed them into the ERM process. Given the importance of global health to USAID's overall development objectives, the aggregate risks identified within the GHSC program could be significant enough to be considered enterprise risks. Regardless, the adoption of a structured, systematic, and strategic approach to risk management for the GHSC program would provide the Bureau for Global Health with reasonable assurance that risks which could impede its ability to achieve program goals and objectives are being identified for mitigation by the Agency.

Global Health officials acknowledged that USAID does not have a centralized, comprehensive risk management process for its GHSC program. Considering Global Health is responsible for overseeing the program, a risk management program would provide structure around this critical oversight responsibility in proactively identifying, assessing, and responding to supply chain risks. Such a program would allow Global Health to utilize information reported by missions that use various tools and external assessments at the country level, assess supply chain risks, and evaluate them in a more strategic and coordinated manner. An effective program would prepare management to respond to risks by considering alternative risk management options in accordance with the level of risk it is willing to accept.

Global Health officials also recognized the need for greater oversight given the GHSC program's scope. In FY 2019, the Agency contracted a temporary consultant to develop a risk management framework for the GHSC program and the scope of work for a risk management officer within the bureau. The consultant's report was completed in August 2019. A structure to implement risk management responsibilities across the GHSC program was being piloted as of December 2019.

SELECTED MISSION ACTIVITIES MOSTLY ALIGNED WITH GOOD PRACTICES FOR ADDRESSING ROOT CAUSES OF SUPPLY CHAIN WEAKNESSES, BUT USE OF PARALLEL OPERATIONS COULD IMPEDE COUNTRIES' EFFORTS TO BECOME SELF-RELIANT

When implementing its programs, USAID aims to account for known challenges affecting the Agency's ability to meet development goals while helping host countries become more self-reliant by promoting sustainable solutions. The four USAID missions we selected undertook activities that mostly aligned with good practices for addressing the four root causes of supply chain weaknesses identified by the Global Fund OIG. However, in the absence of a transition plan, some of the risk mitigation measures undertaken by those missions could impede countries' transition to self-reliance, particularly completing work on behalf of host country officials or using parallel supply chains.

Reviewed Activities at Selected Missions Mostly Aligned With Good Practices for Addressing Root Causes of In-Country Supply Chain Weaknesses

Effective management of Federal programs requires officials to determine appropriate corrective action for identified deficiencies or vulnerabilities.¹⁵ We used four root causes identified by the Global Fund OIG as a lens to classify the activities USAID has undertaken to mitigate in-country supply chain vulnerabilities.

In collaboration with a supply chain subject matter expert,¹⁶ we developed criteria to determine the extent to which missions in Malawi, Mozambique, Nigeria, and Tanzania had activities that were aligned with mitigating the four root causes of in-country supply chain weaknesses, using evidence collected during our site visits. We reviewed good supply chain management practices from over 30 sources, such as the World Health Organization (WHO) and World Bank. For example, we used a Management Sciences for Health resource, "Promising Practices in Supply Chain Management," which provides a series of briefs developed for use by in-country stakeholders to address supply chain barriers faced by each country, and the World Bank's resource "National HIV/AIDS Programs, A Handbook for Supply Chain Management for HIV/AIDS Commodities." The selected criteria represented general supply chain practices such as conducting annual forecasting of commodities and working with the host country government. See appendix B for the sources used to develop the list of good practices used in our analysis.

¹⁵ OMB Circular No. A-123, "Management's Responsibility for Enterprise Risk Management and Internal Control."

¹⁶ The supply chain subject matter expert had 17 years of work and consulting experience in procurement supply management in the private and public sectors, including other international donors. See appendix A for more detail.

We selected a judgmental sample of 58 out of 149 different supply chain activities managed by one or more of the four selected USAID missions in Africa, and then categorized the activities according to the root causes of weaknesses of in-country supply chain systems they were intended to address, such as human resources or data reliability (see table 3).¹⁷

Table 3. Categorization of Sampled Activities Aligned With Addressing Root Causes of In-Country Supply Chain Weaknesses, for Selected Missions

Country	Activity Sample Size	Root Causes of In-Country Supply Chain Weaknesses			
		Country Governance and Governance	Data Reliability	Human Resources	Funding
Nigeria	13	11	9	9	1
Mozambique	17	14	12	10	2
Malawi	17	16	10	8	1
Tanzania	11	6	12	3	3
Total	58	47	43	30	7

Note: Selected supply chain activities typically addressed more than one root cause and were therefore counted under multiple root causes. For example, the Forecasting and Supply Planning Quantification activity in Mozambique addressed country ownership, data reliability, and human resources and was counted under each of those root causes.

Source: OIG sample of supply chain activities.

We reviewed the 58 activities to determine whether they aligned with good practices for addressing the root causes of supply chain weaknesses. We determined whether the activities included elements outlined in these good practices based on documentary evidence and direct observation, and whether the missions worked with the host governments to implement the activities to promote sustainability. We evaluated each activity and determined if it fully aligned, partially aligned, or did not align with good practices. If an activity fully met all the selected criteria, we considered it fully aligned with addressing the root causes of supply chain weaknesses. If it met some but not all criteria, we considered it to be partially aligned. We did not find an instance where an activity did not align with any criteria.

A fully aligned activity does not mean that no problems or challenges were observed during our site visits or that the root causes will necessarily be mitigated after the activity's conclusion. For example, in Mozambique, an activity to install tablets at health facilities to improve data entry timeliness and accuracy aligned with good practices, but

¹⁷ The audit team judgmentally selected a sample of activities from the FY 2017 and FY 2018 project workplans and based our decision on the following factors: a) within our audit scope, b) related to mitigating at least one of the four root causes, and c) not duplicated under an activity already selected or excluded.

we observed challenges with internet connectivity for the tablets to transmit the data up the supply chain.

Overall, 50 out of 58 activities fully aligned with good practices to address one or more of the four root causes of supply chain weaknesses, while the remaining 8 were partially aligned. One example of an activity that fully aligned with good practices was in Mozambique where implementers provided technical assistance to the Government to quantify commodity requirements and costs. In this case, implementers adhered to data reliability and country ownership and governance good practices by working with the host country government, considering underlying assumptions, consumption data, and gap analyses, and projecting commodity requirements and costs on an annual and quarterly basis.¹⁸

The eight activities that were partially aligned either did not meet all elements of good practices or did not work with host country governments to address the root cause of country ownership and governance and human resources weaknesses. For example, an activity in Malawi where GHSC-PSM subcontracts firms to receive, store, and distribute commodities, without involving the Government, is an example of a partially aligned activity. This activity adheres to warehousing, distribution, and inventory control good practices, but the host country government does not participate, in contrast to good practices.¹⁹ Essentially, the implementer is completing work on behalf of the government. The donation of storage units to health facilities in Malawi is another example of a partially aligned activity. In this case, USAID/Malawi worked with the Government to procure and install health facilities that needed storage, and USAID/Malawi signed an agreement with the Government to provide fuel for generators during power outages. Good practices stipulate that warehouses have continuous access to power. However, as described earlier, the Malawian Government did not provide fuel as planned, resulting in power outages at some units.²⁰

Nigeria also had an example of a partially aligned activity. In this activity, the implementer established a vendor assessment checklist to identify a pool of local vendors with the ability to follow a procurement plan and GHSC-PSM guidelines to provide quality products to the national health supply chain. While this activity adhered to procurement good practices, the implementer did not involve the host country government and therefore did not build the Nigerian Government's capacity to assess local vendors on its own.²¹

¹⁸ See appendix C for good practices reviewed for this supply chain activity.

¹⁹ See appendix C for good practices reviewed for this supply chain activity.

²⁰ See appendix C for good practices reviewed for this supply chain activity.

²¹ See appendix C for good practices reviewed for this supply chain activity.

Efforts To Mitigate Risks by Completing Work on Behalf of Government Officials or Using Parallel Supply Chains Can Have Unintended Consequences for Countries' Progress Toward Self-Reliance

USAID's key objective is to help aid recipients become self-reliant, thus ending the need for foreign assistance altogether. While the activities we reviewed mostly aligned with good practices for addressing root causes of supply chain weaknesses, some faced challenges working toward improving the host government's ability to oversee and manage its local supply chain. More specifically, in response to program challenges and risks at three of the four missions we visited, USAID either (1) had project-funded consultants do the work of government officials instead of training and advising them or (2) operated a parallel supply chain, which are logistics channels operated by donors separately from the host government's national supply chain system.

In two of the four missions reviewed, some capacity-building activities did not fully prepare host government officials to take over supply chain functions, with implementers instead assuming the tasks of government staff. In Malawi, the GHSC-PSM advisors hired to train and build capacity of Ministry of Health staff in product selection and inventory management were doing the work. The mission explained that the Government counterparts were not always available or in place to transfer skills or build capacity, which led to project-funded consultants assuming these duties. In Mozambique, at the request of the Government, GHSC-PSM's transportation adviser planned and approved distribution strategies, rather than advising his local counterpart on how to carry out this critical function. This approach did not contribute toward building Government capacity to manage the supply chain without assistance.

In three of the four missions, USAID was operating parallel supply chains. In Malawi, USAID has been operating a parallel supply chain for nearly a decade, and according to Global Health, it will continue to do so for the foreseeable future. USAID and other stakeholders developed a draft plan, the "Malawi Supply Chain Integration Roadmap Report" that outlined proposed activities to integrate donor-funded supply chain activities into the system operated by the Government. However, USAID and other donors had not yet committed to funding activities relating to inventory management and information systems at the Government's central warehouse because USAID did not want to risk managing its commodities there, and was still in negotiations with the Government. In Nigeria and Mozambique, USAID operated a partial parallel supply chain for some functions, such as warehousing and distribution. However, in both countries USAID lacked a plan for transitioning these activities to the governments, which would help missions gauge increased capacity over time, measure incremental progress being made, and make programming decisions for the GHSC program.

USAID and implementer officials acknowledged the tradeoffs associated with strategies that bypass longstanding challenges of in-country supply chains to enable commodities to reach those in need. USAID officials explained that operating parallel supply chains helps mitigate the risk of corruption and lack of commodity accountability in host country systems. Implementer officials stated that it is difficult to transition from operational

support and build host government capacity when it is the project itself doing the work. Although USAID's policy on self-reliance requires that missions understand programmatic tradeoffs, make hard choices, and take measured risks to achieve this goal, USAID sometimes lacked the plans necessary to transform that vision into reality.²² Such plans would help the governments of Malawi, Nigeria, and Mozambique make incremental yet steady progress in increasing their capability to manage and oversee their own supply chains while gradually reducing their reliance on donor support.

CONCLUSION

A comprehensive and systematic approach to identifying supply chain risks is essential to effective management of USAID's multibillion dollar Global Health Supply Chain Program. To successfully oversee this critical program and meet the spirit of the Agency's ERM framework, the Bureau for Global Health would benefit from a robust risk management process that provides reasonable assurance that risks are properly identified and mitigated across global supply chain activities. While the USAID missions we reviewed took some steps to address known root causes of supply chain weaknesses, this sometimes involved mitigating risks by operating parallel supply chains or completing work on behalf of governments. While designed to safeguard the delivery of lifesaving commodities and minimize the risk that U.S. taxpayer-funded property could be lost or stolen, these activities do not contribute to building capacity of host governments to independently manage their own supply chains. Accordingly, USAID may not be taking sufficient action to mitigate supply chain risks across its global program. Also, in the absence of plans and milestones to increase host country capability to manage the health commodity supply chain, USAID may be missing opportunities to reduce reliance on donor support to advance Agency goals for country self-reliance.

RECOMMENDATIONS

We recommend that the Bureau for Global Health:

1. Develop and implement a robust risk management process that identifies, mitigates, and monitors risks across the Global Health Supply Chain Program.

²² The USAID Policy Framework, "Ending the Need for Foreign Assistance," serves as the Agency's guiding policy document that informs its strategies and plans to help partner countries become self-reliant. Setting targets or milestones is an integral component of USAID strategies and plans, ranging from broad, mission-wide CDCSs to more specific project monitoring, evaluation, and learning plans. For longer-term transitions to self-reliance, Agency guidance requires that a CDCS assess the potential for transition and what is achievable over the life of the strategy, which "might include USAID's historical and planned trajectory in-country, sector-specific end-states of USAID's work in-country, milestones toward achievement of these end-states, and options for transition." Among other things, a CDCS guides the planning of individual projects and activities to achieve the strategy's goals and provides a framework for a mission's collaboration, learning, and adapting activities to improve development outcomes.

2. Develop and implement a plan, with milestones, to increase the capability of the host governments to manage health commodity supply chains in Malawi, Nigeria, and Mozambique, to reduce reliance on donor support.

OIG RESPONSE TO AGENCY COMMENTS

We provided our draft report to USAID on May 23, 2020, and received its response on June 24, 2020, which is included as appendix D. The report included two recommendations and we acknowledge management decisions on both of them. We consider the two recommendations resolved but open, pending completion of planned actions.

APPENDIX A. SCOPE AND METHODOLOGY

We conducted our work from November 2017 through May 2020 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We conducted this audit to (1) examine how USAID assessed risks for in-country supply chains and (2) determine the extent to which selected missions in Africa undertook activities that aligned with good practices for addressing the root causes of in-country supply chain weaknesses.

The audit scope was limited to FY 2017 and FY 2018 and two awards within USAID's GHSC program: GHSC-PSM and GHSC-TA. We selected these two awards out of the five awards USAID used to operate its GHSC program during the period under review (see table 4). We made our selection based on these awards being the mechanisms used for supply chain technical assistance, and they comprised 96 percent of the total award amount, or \$10 billion.

Table 4. List of USAID's Global Health Supply Chain Projects as of June 2017

Project Name	Project ID	Award Amount (\$)
Procurement and Supply Management	GHSC-PSM	9,500,000,000
Rapid Test Kits	GHSC-RTK	300,000,000
Quality Assurance	GHSC-QA	123,000,000
Business Intelligence and Analytics	GHSC-BIA	18,000,000
Technical Assistance	GHSC-TA	500,000,000
Total		10,441,000,000

Source: Global Health Supply Chain Program awards portfolio.

Using expenditure data from the GHSC-PSM award, we judgmentally selected four missions in sub-Saharan Africa: Malawi, Mozambique, Nigeria, and Tanzania. Our sample was based on (1) FY 2017 expenditures, and among the top 10 countries with the highest expenditures, selecting a mix of high, medium, and low expenditures, (2) procurements of commodities across the four GHSC-PSM task orders that represent different health programs, HIV, malaria, family planning and reproductive health, and maternal and child health, rather than procuring from just one or two; and (3) percentage of complaints regarding healthcare commodity supply chain fraud reported to USAID OIG.

We judgmentally selected supply chain management activities across the four selected missions from FY 2017 and FY 2018 project workplans (see table 5). Our sample was based on activities (1) within our audit scope and related to improving supply chains for

HIV, malaria, maternal and child health, and family planning and reproductive health commodities (excluding lab and administrative-related activities), (2) related to mitigating at least one of the four root causes, and (3) not duplicated under an activity already selected or excluded. We selected 58 of 149 activities across the four selected missions.

Table 5. Population and Sample Size for Global Health Supply Chain Activities by Country

Country	Population Size	Sample Size
Malawi	48	17
Mozambique	42	17
Nigeria	29	13
Tanzania	30	11
Total	149	58

Source: FY 2017 and FY 2018 GHSC implementing partners' project workplans.

To address the audit objectives, we reviewed prior USAID OIG, GAO, and Global Fund OIG audit reports with a nexus to supply chain management. We relied on the root causes of in-country supply chain weaknesses defined in the April 2017 Global Fund OIG's audit report on in-country supply chain processes: country ownership and governance, data reliability, human resources, and funding.²³ These four root causes were based on prior Global Fund OIG audits of procurement and supply chain management in 15 selected countries, most of which were in Africa. Three of the four countries we selected for this audit, Malawi, Nigeria, and Tanzania, were included in the sample of countries reviewed by Global Fund OIG. USAID concurred with the characterization of these four problem areas as root causes of supply chain weaknesses.

To answer the first audit objective, we conducted desk reviews to identify policies and procedures and gain an understanding of risk assessment and in-country supply chain processes. We reviewed USAID policy related to internal control and enterprise risk management, including ADS chapter 596 and supplement 596mab. We reviewed documents provided by missions that require consideration of risk, including CDCSs, PADs, and supply chain assessments performed by implementers. We reviewed the requirements outlined in selected awards.

To answer the second audit objective, we used industry standards and good practices to assess whether selected missions' supply chain activities were aligned with good practices for addressing underlying causes of supply chain weaknesses. The audit team and a contracted subject matter expert, with 17 years' experience in international supply chain management, researched and documented industry standards to develop a

²³ Global Fund OIG, "The Global Fund's In-Country Supply Chain Processes" (GF-OIG-17-008), April 28, 2017.

list of good practices for operating health supply chains in developing countries.²⁴ Appendix B contains the full list of sources consulted to identify the good practices.

To determine the extent to which USAID missions aligned with good practices for addressing root causes of in-country supply chain weaknesses, the audit team developed a template referred to as an intersection analysis. This template consisted of a 4x6 matrix to plot activities by the four root causes—country ownership and governance, data reliability, human resources, and funding—and the six supply chain elements—product selection, forecasting and supply planning, procurement, warehousing, inventory management, and distribution. Wherever an activity is plotted in the 4x6 matrix, it would intersect with at least one root cause and one supply chain element. We used the intersection analysis to categorize (1) good practices for supply chain management and (2) sampled supply chain activities, to determine whether those activities aligned with good practices based on documentary evidence and direct observation. Using this methodology, the audit team was able to quantify the number of activities seeking to address each of the four root causes, and the number of activities undertaken in each supply chain element. For each reviewed country, the audit team worked with the implementing partner and confirmed the categorization of the sampled activities in the 4x6 matrix.

We conducted audit fieldwork at the OIG Africa Regional Office in Pretoria, South Africa, at USAID headquarters in Washington, DC, and at USAID missions in Tanzania, Malawi, Mozambique, and Nigeria. During fieldwork, we conducted 165 interviews and 38 site visits. We performed desk reviews and interviewed USAID, implementer, host country government, and other donor personnel. We also interviewed other stakeholders working with the host country government or implementers.

We determined that a data reliability assessment of computer-processed data was not necessary for this audit. Although we did not test the effectiveness of internal controls (including information systems controls), we included steps in our audit methodology to address internal control components and activities that we considered to be significant to our audit objectives. For example, we made inquiries regarding other control activities deemed significant, such as monitoring and risk assessment. Where weaknesses were indicated, we followed up with the missions and Global Health and obtained evidence as to the effectiveness of those control activities through direct observation and other techniques. For example, we determined whether USAID's Bureau for Global Health and selected missions had policies and procedures in place for assessing risk within their supply chain program, and how they monitored and addressed identified deficiencies.

²⁴ The supply chain subject matter expert earned a Master's in International Management and had 17 years of experience in procurement supply management (PSM) in the private and public sectors. In the private sector, her work experience focused on PSM for HIV/AIDS. As a consultant to the public sector, she provided expert opinion and research on PSM for audits and evaluations conducted by other international donors, including Global Fund's OIG and the United Kingdom's Department of International Development. She has provided technical assistance to numerous countries in forecasting, procurement, and supply chain management.

APPENDIX B. SOURCES REVIEWED TO IDENTIFY GOOD PRACTICES FOR ADDRESSING THE FOUR ROOT CAUSES OF SUPPLY CHAIN WEAKNESSES

Organization	Publication Title
Aidspan (independent observer of the Global Fund)	Deficiencies in National Supply Chains Hinder Global Fund Grants Operations
Anti-Corruption Resource Center	Anti-Corruption in the Health Sector: Preventing Drug Diversion through Supply Chain Management
Episcopal Relief & Development	Episcopal Relief and Development-World Malaria Day
The Global Fund	Price and Quality Reporting Mechanism
The Global Fund	Quality Assurance
John Snow, Inc. (JSI)	JSI Quantification of Health Commodities (John Snow International)
The Lancet	Joint Learning Initiative: Human Resources for Health: Overcoming the Crisis
Management Sciences for Health (MSH)	Management Sciences for Health (MSH) International Medical Products Price Guide
MSH	Promising Practices - Quantification: Forecasting and Supply Planning
MSH	Promising Practices - Warehousing and Inventory Management
MSH	Promising Practices - Distribution
MSH	Promising Practices - Data Management
MSH	Promising Practices - Human Resources
People That Deliver	People That Deliver - A Global Advocacy Initiative
Science Direct	The People Factor: An Analysis of the Human Resources Landscape for Immunization Supply Chain Management
Systems for Improved Access to Pharmaceuticals and Services (SIAPS)	SIAPS Project LMIS Technical Brief

Organization	Publication Title
USAID/Deliver, JSI	The Logistics Handbook (TLH): A Practical Guide for Supply Chain Management of Health Commodities
USAID/Deliver, JSI	Guidelines for Warehousing Health Commodities
USAID/Deliver, JSI	Quantification of Health Commodities
USAID/Deliver, JSI	Supply Chain Management Implications for HIV/AIDS Policymakers and Program Managers
World Bank	National HIV/AIDS Programs, A Handbook for Supply Chain Management for HIV/AIDS Medical Commodities
WHO	WHO's Operational Principles for Good Pharmaceutical Procurement
WHO	WHO Medicine Prequalification Program – Procurement Agencies
WHO	WHO – Quantification of Health Commodities - RMNCH Supplement
WHO	WHO – Guide to Good Storage Practices for Pharmaceuticals
WHO	WHO - Good Distribution Practices for Pharmaceutical Products
WHO	WHO - Post Market Surveillance
WHO	WHO Medicine Prequalification Diagnostics – Product Data and Quality Assurance
WHO	WHO Guidance - Logistics Management Information Systems

APPENDIX C. GOOD PRACTICES REVIEWED FOR ACTIVITY EXAMPLES

Cited Examples	Good Practices Reviewed
Footnote #18	<p>Good practices for improving country ownership and governance and data reliability in forecasting and supply planning include: (1) annual but regular review and updates to commodity supply and costs, (2) use of multiple data sets such as consumption, morbidity, and services data, unit costs, stock on hand, and expired drugs, (3) consideration of standard treatment guidelines, and (4) documenting of the forecasting and supply planning process. These practices were obtained from publications such as: “The Logistics Handbook” by JSI for USAID/Deliver, “Quantification of Health Commodities” by JSI for USAID/Deliver, and MSH’s “Promising Practices – Quantification: Forecasting and Supply Planning.”</p>
Footnote #19	<p>Good practices for country ownership and governance and human resources in warehousing, distribution, and inventory management activities include (1) establishing policies and procedures, (2) maintaining adequate storage space, (3) implementing an inventory control system to avoid stock shortages and overstock, (4) providing available, reliable, and quality transportation infrastructure and services, and (5) ensuring logistics staff are trained in proper management operations for warehousing, inventory control, and distribution. These practices were obtained from publications such as: “The Logistics Handbook” by JSI for USAID/Deliver and MSH’s “Promising Practices - Distribution” and “Promising Practices - Warehousing and Inventory Management.”</p>
Footnote #20	<p>Good practices for country ownership and governance p in warehousing include maintaining adequate storage space and environmental conditions for commodities, which includes (1) safe shelf storage, (2) adequate lighting, (3) temperature and humidity controls, and (4) proper environmental controls. These practices were obtained from publications such as: “The Logistics Handbook” by JSI for USAID/Deliver and MSH’s “Promising Practices - Warehousing and Inventory Management.”</p>
Footnote #21	<p>Good practices for human resources in procurement include training responsible staff on (1) pharmaceutical procurement for different products with different technical parameters, specifications, and requirements, (2) maintaining and developing a procurement plan, (3) separation of duties to procure commodities, and (4) working with the government to implement use of pooled procurement mechanism. These practices were obtained from publications such as: “The Logistics Handbook” by JSI for USAID/Deliver, WHO’s “Operational Principles for Good</p>

Cited Examples Good Practices Reviewed

Pharmaceutical Procurement,” and subject matter expertise.

APPENDIX D. AGENCY COMMENTS



USAID
FROM THE AMERICAN PEOPLE

TO: Office of the Inspector General, Africa Regional Office, Audit Director, Robert Mason

FROM: Bureau for Global Health, Assistant Administrator, Alma Golden, M.D. /s/

DATE: June 23, 2020

SUBJECT: Management Comments to Respond to the Draft Audit Report Produced by the Office of the Inspector General (OIG) titled, *USAID'S Global Health Supply Chain Would Benefit From More Rigorous Risk Management and Actions To Enhance Local Ownership* (4-936-20-002-P)

The U.S. Agency for International Development (USAID) would like to thank the Office of the Inspector General (OIG) for the opportunity to provide comments on the subject draft report. The Agency agrees with the recommendations, herein provides plans to implement them, and reports on significant progress already made.

The Bureau for Global Health (GH) appreciates the recommendations from the OIG and has identified risk-management for the contract for Global Health Supply-Chain-Procurement and Supply-Management (GHSC-PSM) as core to our operations. As noted in the audit report, GH has designed a model to identify, prioritize, mitigate, and monitor risk. GH also has been working to balance the need to move products to those who need them while ensuring accountability throughout the supply-chain and increasing national ownership and financing.

GH is using USAID's robust, three-tier corporate risk-management process as the framework for our risk-management approach to GHSC-PSM at the Agency, Bureau, and Mission level. The Bureau is establishing supply-chain risk-management (SCRM) teams at the Bureau and Mission levels to identify, monitor, and report risks systematically for inclusion on Mission and Bureau Risk Profiles, and for onward reporting in USAID's Enterprise Risk-Management process.

As noted in the audit report, USAID has multiple tools and approaches Missions have used successfully to identify and mitigate supply-chain risks and address their root causes. GH oriented Mission-level supply-chain staff on our SCRM model during a meeting in July 2019, and provided the opportunity for them to share best practices in SCRM. GH is collecting these tools and best practices to form a SCRM toolkit. We also will develop a common template for plans, including milestones, to increase the

capability of host governments to act as stewards of the supply-chains for drugs and health commodities and reduce donor support over time. GH will use USAID's Policy Framework, "Ending the Need for Foreign Assistance," to guide the development of our plans.

GH is transforming our supply-chain investments to accelerate both improvements in performance and national ownership and financing. USAID believes that neither the delivery of health care nor the management of supply-chains to provide drugs and medical supplies is inherently and exclusively the responsibility of government. We are working to reshape the role of Ministries of Health from owning and operating supply-chains to acting as the stewards and regulators of the availability, security and safety of products. GH will encourage governments to outsource to private-sector logistics providers or other local organizations that bring supply-chain expertise and assets as a core capacity. This fundamental shift will help mitigate risk in supply-chains and promote the Journey to Self-Reliance. GH is applying this approach to all of our investments under the GHSC-PSM contract and other awards, beyond the three countries included in Recommendation Two of the OIG's draft report.

We look forward to continued engagement with the OIG as USAID proceeds with this foundational and life-saving component of our work to build sustainable capacity and commitment through our global health assistance.

**COMMENTS BY THE U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
(USAID) ON THE REPORT RELEASED BY THE USAID OFFICE OF THE
INSPECTOR GENERAL (OIG) TITLED, USAID’S Global Health Supply Chain
Would Benefit From More Rigorous Risk Management and Actions To Enhance
Local Ownership (4-936-20-002-P)**

Please find below the Management Comments from the U.S. Agency for International Development (USAID) on draft report 4-936-20-002-P produced by the Office of the USAID Inspector General (OIG), which contains two recommendations for USAID:

Recommendation 1: Develop and implement a robust risk-management process that identifies, mitigates, and monitors risks across the Global Health Supply-Chain Program.

- **Management Comment:** USAID agrees with Recommendation 1. Our corrective action is the implementation of a robust supply-chain risk-management process that builds on the USAID’s three-tier corporate risk-management approach at the Agency, Bureau, and Mission level. At the Agency level, we rely on USAID’s [Policy Framework “Ending the Need for Foreign Assistance”](#) and our Enterprise Risk-Management program. At the Bureau level, we use the Global Health Results Framework and Risk Profile. At the Mission level, we depend on each Operating Unit’s *Country Development Cooperation Strategy* (CDCS) and individual Risk Profile.

The Agency outlines below the actions we have taken to address this recommendation and additional steps we have planned.

Ongoing Actions

The Bureau for Global Health (GH) is establishing a Supply-Chain Node led by a Supply-Chain Senior Officer (Supervisory Public Health Advisor, 0685, General Schedule-15), who will report to a Deputy Assistant Administrator in the GH Front Office. The Bureau posted the vacancy announcement for the position on [usajobs.gov](https://www.usajobs.gov) on April 28, 2020, and it closed on May 5, 2020 (<https://www.usajobs.gov/GetJob/ViewDetails/566830300>). The selection process is underway. The Senior Officer will have responsibility to ensure coordination for risk-management, reporting and communications, strategic planning, and monitoring and evaluation associated with the global Supply-Chain Program-Procurement and Supply Management (GHSC-PSM) contract managed by GH. The Node will consist of two or three individuals to ensure effective coordination across GH’s supply-chain teams and program components. The second of these staff, which the Bureau will recruit by the end of Calendar Year 2020, will be a Supply-Chain Risk-Management (SCRM) Advisor.

In addition, each of the offices that is managing supply-chain activities in GH is hiring dedicated staff with SCRM responsibilities. The Office of HIV/AIDS

(OHA) hired a Risk-Manager, who is scheduled to begin in August 2020; the Malaria Division in the Office of Infectious Diseases (ID/MAL) hired a Supply-Chain Risk Advisor, who is scheduled to begin work on July 20, 2020; and an equivalent position in the Office of Population and Reproductive Health (PRH) is under recruitment.

Together, these positions will form GH's SCRM Team, coordinated by the SCRM Advisor, and will manage the process of supporting our Missions and partners to identify, prioritize, mitigate, and monitor supply-chain risks systematically.

Completed Actions

In October 2017, the Agency called an extraordinary meeting of our Risk-Management Council (RMC) at which GH presented the corporate risks associated with the GHSC-PSM contract. The RMC voted to recommend to the Executive Management Council on Risk and Internal Control (EMCRIC) to add the GHSC-PSM contract to the Agency's Risk Profile. GH, as part of the governance structure of the RMC and EMCRIC, reports quarterly on the risk rankings, the impact of mitigation measures, and new risks connected with the contract. The risk has evolved from an initial focus on project-performance risk to include the potential risk of fraud or loss in our supply-chains.

GH hired a SCRM expert to assess supply-chain risks and develop a model the Bureau can use to identify, prioritize, mitigate, and monitor risks with the GHSC-PSM contract on a continuous basis. The consultancy was completed in August 2019.

In July 2019, GH held a meeting of Supply-Chain Activity Managers that brought together 31 USAID staff from 26 countries. During the meeting, GH facilitated a session to review supply-chain risk by using the SCRM model and laid out our expectations that we are moving to a more proactive approach. The Activity Managers shared best practices and tools in SCRM that they use to identify and monitor risks.

Planned Actions

Mission SCRM Teams - Just as GH is establishing a SCRM Team at USAID headquarters, we will create SCRM Teams at a number of USAID's Missions, each of which will include the Supply-Chain Activity Manager(s) and the Mission's Risk-Management Liaison. GH will roll out the aforementioned SCRM model to each Mission and facilitate its completion to identify and prioritize supply-chain risks on a country-specific basis. The SCRM model is considered a living document, owned by each Mission's SCRM Team. They will be responsible for updating it and sending it to GH's SCRM Team on a quarterly basis. Each SCRM Team will present significant supply-chain risks to their Mission's Management Council for Risk and Internal Control (MCRIC) for inclusion on the Mission's Risk Profile.

SCRM Risk Registry - Based on how each Mission completes the SCRM model, the headquarters SCRM Team will consolidate risks across countries on a SCRM Risk Registry and focus its efforts on the top common risks. The headquarters SCRM Team will present significant supply-chain risks to the GH MCRIC for inclusion on GH's Risk Profile. In turn, GH will present significant supply-chain risks to the RMC to review and consider sending them to the EMCRIC.

SCRM toolkit - The headquarters SCRM Team will develop a SCRM toolkit, also called a Playbook, to address common risks and provide tools to address them. The purpose of the SCRM Playbook is to systematize the process for identifying, assessing, responding to, and anticipating supply-chain risks of any type. The Playbook establishes a standardized and collaborative step-by-step process for managing risk for everyone in the organization to follow. The steps in the Playbook will link to templates, SCRM audit tools and checklists, and other SCRM "assets" to ensure the necessary implementation tools are readily available to users as appropriate. The SCRM Playbook also will provide common risk-management approaches and indicators to guide the design of new supply-chain awards.

Award(s) in supply-chain risk-management - To provide additional resources to Missions, GH has included one or more supply-chain risk-management awards as part of the Next Generation Global Health Supply-Chain suite of programs. (See USAID's business forecast, [found here](#).) GH will design the awards to identify and mitigate supply-chain vulnerabilities and potential risks both globally and locally, including fraud, abuse and/or misuse, counterfeit, and the diversion of products and financial resources. GH anticipates issuing the solicitation for the award(s) by October 2020.

- **Target Completion Date:** March 31, 2021

Recommendation 2: Develop and implement a plan, with milestones, to increase the capability of the host governments to manage health-commodity supply-chains in Malawi, Nigeria, and Mozambique, to reduce reliance on donor support.

- **Management Comment:** USAID agrees with Recommendation 2. The corrective action plan will include three elements: a GH-produced common template for Mission-level SCRM plans, three Mission-prepared country plans, and three Mission-prepared progress reports. The Agency outlines below the actions we have planned to address this recommendation:

GH will develop a common template that highlights the key elements an SCRM plan should include, such as assumptions, core activities, and milestones. Documents that will influence the template will include updated guidance for Operating Plans for the [President's Emergency Plan for AIDS Relief \(PEPFAR\)](#)

and the [President's Malaria Initiative \(PMI\)](#), Mission-level CDCSSs, USAID's [Policy Framework](#), national health and supply-chain strategies, USAID's [Private-Sector Engagement Strategy](#), and other Agency and national strategies and policies as appropriate.

GH will support the Ministries of Health of the Republics of Malawi and Mozambique and the Federal Republic of Nigeria and other partners to use the template to develop plans, including milestones, to increase the capability of the host governments to be good stewards of supply-chains for drugs and health commodities while reducing donor funding over time. The plans will be living documents, updated annually by the Missions, which will prepare semi-annual progress reports and share them with GH. Below, we elaborate further on some of the key considerations and support for the proposed country plans:

- [The Agency's Policy Framework](#) - The draft audit highlights one of the key tensions faced by the GHSC-PSM contract—the need to ensure that life-saving commodities reach those who need them and to act as good stewards of taxpayer resources, while fostering national ownership and financing. The audit found that GH is applying best practices in addressing the root causes of supply-chain risk. However, achieving sustained change in these root causes—governance, human resources, finances, and access to data—takes time. As articulated in the Agency's [Policy Framework](#), "*Ending the Need for Foreign Assistance*," each country is at a different point in its Journey to Self-Reliance. Therefore, any plan to increase national commitment and capacity to manage supply-chains for drugs and health commodities and reduce reliance on donor financing will need to account for these varying degrees of self-reliance.
- [Strategic Approach and Tools](#) - GH has been reviewing our past achievements in strengthening supply-chain systems and the ongoing challenges in transitioning more responsibilities to national actors, many of which the OIG's draft report outlines. GH is working to transform our supply-chain investments to accelerate both improvements in performance and national ownership and financing. This requires shifting the role of governments from operating supply-chains to serving as stewards and regulators of them. USAID believes that neither the delivery of health care nor the management of supply-chains to provide drugs and medical supplies is inherently and exclusively the responsibility of government. Instead of working with national governments to own and manage supply chains, GH will encourage them to outsource to private-sector logistics providers or other local organizations that have supply-chain expertise and assets as a core capacity. Updated [PEPFAR](#) and [PMI](#) guidance, shared with the field in early 2020, reflects this philosophy.

In 2019, USAID began monitoring the capacity of host governments to perform supply-chain functions through the indicator of technical independence reported under the GHSC-PSM contract: *Percentage of targeted supply-chain activities in which the host-country entity has achieved technical independence with GHSC-PSM technical assistance.* To be considered “technically independent” the host-country entity must be the primary entity responsible for an activity and must have the institutional elements in place to perform it (e.g., standard operating procedures, training, and the necessary tools and systems). Outsourcing the activity to a local non-profit or private-sector entity that the host government oversees is considered technical independence.

- Awards for technical assistance in supply-chain management - To support our Missions to implement this new approach, GH has included one or more awards for technical assistance as part of the Next-Generation Global Health Supply-Chain suite of programs. (See USAID’s business forecast, [found here](#).) The mechanism(s) will provide a comprehensive array of technical assistance services to improve operational excellence in the performance of national supply-chains and improve the availability of drugs and health commodities as part of the Journey to Self-Reliance. The award(s) will also provide support to refocus the role of Ministries of Health from the owners and operators of supply-chains to stewards and regulators of the availability, security and safety of products. This includes leveraging the broader landscape of in-country capacities, including the increased use of the private sector, to strengthen the performance and fidelity of supply-chains and improve clients’ experience.
- GH is also working with other key supply-chain donors, including the Global Fund to Fight AIDS, Tuberculosis and Malaria, to align our investments to support this transformation. Our joint priorities include strengthening national governance of, and financing for the supply-chains for drugs and medical products, and increasing private-sector engagement in them. Mozambique and Nigeria are among the initial focus countries for this collaboration.
- **Target Completion Date:** December 31, 2020

In view of the above, USAID requests that the OIG inform us when it agrees or disagrees with the Management Comments above.

APPENDIX E. MAJOR CONTRIBUTORS TO THIS REPORT

The following people were major contributors to this report: Robert Mason, audit director; John Vernon, auditor; Rameeth Hundle, auditor; Deanna Scott, lead auditor; Mamesho Macaulay, auditor; Hugo Solano, auditor; Tanner Horton-Jones, senior counsel; Laura Pirocanac, writer-editor; and Steven Ramonas, auditor.