



OFFICE OF INSPECTOR GENERAL

AUDIT OF USAID/NIGERIA'S PEPFAR-FUNDED ACTIVITIES AND COMMODITIES FOR THE PREVENTION OF MOTHER-TO- CHILD TRANSMISSION OF HIV

AUDIT REPORT NO. 7-620-10-002-P
January 19, 2010

DAKAR, SENEGAL



Office of Inspector General

January 19, 2010

MEMORANDUM

TO: USAID/Nigeria Director, Ray Kirkland

FROM: Regional Inspector General, Gerard Custer /s/

SUBJECT: Audit of USAID/Nigeria's PEPFAR-Funded Activities and Commodities for the Prevention of Mother-to-Child Transmission of HIV (Report No. 7-620-10-002-P)

This memorandum transmits our report on the subject audit. In finalizing this report, we considered management comments on the draft report and have included those comments in their entirety as appendix II.

The report includes five recommendations to strengthen USAID/Nigeria's activities under the President's Emergency Plan for AIDS Relief. Management decisions have been reached on all five recommendations.

Please provide USAID's Office of Audit, Performance, and Compliance Division (M/CFO/APC) with the necessary documentation demonstrating that final action has been taken on the recommendations.

Thank you for the cooperation and courtesy extended to my staff during the audit.

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SUMMARY OF RESULTS

Prevention of mother-to-child transmission (PMTCT) of HIV¹ is a critical part of USAID/Nigeria's implementation of the President's Emergency Plan for AIDS Relief (PEPFAR). Through these activities, USAID/Nigeria plans to (1) increase access to PMTCT services by making them available and closer to clients' homes and (2) increase the number of HIV-positive women taking antiretroviral drugs during pregnancy and labor. (See pages 2–3.)

To implement the activities, the mission entered into cooperative agreements with Family Health International (June 2004 to June 2009), Catholic Relief Services (July 2004 to March 2011), and Management Sciences for Health (October 2007 to May 2009). During fiscal year (FY) 2008, USAID/Nigeria obligated \$7.5 million and disbursed \$5.8 million for PMTCT activities. (See pages 2–3.)

For the items we tested during visits to 9 of 190 program sites, USAID/Nigeria's PMTCT activities contributed toward meeting mandated targets, and the mission funded the procurement, storage, and distribution of commodities to ensure that intended results were achieved. USAID-supported implementers reported that they exceeded performance targets for expanding service outlets, providing counseling and testing services and antiretroviral drugs to pregnant women, and training health workers. However, it is not known whether these activities had an impact on the rate of mother-to-child transmission because HIV/AIDS testing of infants began only in 2008, and implementers do not have baseline data from earlier years. (See page 4.)

Notwithstanding the program's accomplishments to date, results were significantly misstated in almost one third of the cases we tested, with an average misstatement of 16 percent. USAID/Nigeria needs to strengthen the program by verifying reported data (page 5). In addition, we found several instances of weak inventory management and serious control deficiencies. USAID/Nigeria needs to improve its supply chain management (page 7.)

To address the areas of concern identified by the audit, we recommend that USAID/Nigeria conduct training for all administrative staff and health workers, verify and maintain support for reported data, reevaluate internal controls over commodities, review unsecured items valued at \$57,000, and evaluate questioned costs of \$39,720 related to missing inventory and recover funds as appropriate. (See pages 6 and 10.)

On the basis of an evaluation of the mission's response to the draft report, the Office of Inspector General determined that management decisions have been reached on all five recommendations. The mission's written comments on the draft report are included in their entirety, as appendix II to this report (see pages 15–20).

¹ HIV/AIDS—Human immunodeficiency virus/acquired immunodeficiency syndrome.

BACKGROUND

Congress enacted legislation² to fight HIV/AIDS globally through the President's Emergency Plan for AIDS Relief (PEPFAR) in May 2003. As of January 2008, the U.S. Government committed \$18.8 billion, of which 58 percent was allocated to programs in 15 focus countries,³ including Nigeria. On July 30, 2008, President George W. Bush signed into law an act to extend the U.S. Government's leadership commitment to an additional 5 years, from fiscal year (FY) 2009 through FY 2013.⁴

Nigeria, 1 of the 15 PEPFAR focus countries, has been implementing prevention of mother-to-child transmission (PMTCT) of HIV since 2004. Nigeria has a population of 138 million to 148 million people, of whom 2.6 million are thought to be infected with HIV/AIDS, according to the international AIDS charity, AVERT. Funding for PEPFAR in Nigeria has grown from \$304.8 million in FY 2007 to \$447.6 million in FY 2008, making Nigeria the third largest recipient of PEPFAR funding among the 15 focus countries. According to the PEPFAR FY 2008 budget for focus countries, the \$447.6 million received by Nigeria was allocated as follows: the Department of Health and Human Services, through the Centers for Disease Control and Prevention, managed \$221.3 million; USAID, \$216.4 million; the Department of Defense, \$8.1 million; and the State Department, the remainder.

This audit focused on prevention of mother-to-child transmission of the virus. According to published reports, HIV infections in children are estimated at more than 700,000 cases annually worldwide. The leading source of infection is mother-to-child transmission. Without intervention, HIV-positive mothers have a 35 percent overall risk of transmitting HIV to their children during pregnancy, delivery, and breastfeeding. In 2009 alone, about 240,000 HIV cases have been reported among children in Nigeria.

However, the risk of mother-to-child transmission can be reduced to less than 2 percent with interventions that include antiretroviral (ARV) drugs given to women in pregnancy and at labor. Other important measures include the use of ARV drugs for infants in the first 6 weeks after delivery and complete avoidance of breastfeeding. Several drugs are prescribed for people living with HIV/AIDS. During labor, women receive Nevirapine,⁵ a 7-day regimen of Zidovudine (AZT),⁶ and Lamivudine (3TC),⁷ and newborns receive Nevirapine and AZT for 6 weeks. Cotrimoxazole (CTX)⁸ is administered routinely to all HIV-exposed children from the age of 6 weeks until they are proven HIV negative.

² The United States Leadership Against HIV/AIDS, Tuberculosis, and Malaria Act of 2003, Public Law 108–25, 117 Stat. 711 (codified as amended in scattered sections of 22 U.S.C.).

³ Botswana, Côte d'Ivoire, Ethiopia, Guyana, Haiti, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, Vietnam, and Zambia.

⁴ Tom Lantos and Henry J. Hyde United States Global Leadership Against HIV/AIDS, Tuberculosis, and Malaria Reauthorization Act of 2008, Public Law 110–293, 122 Stat. 2918.

⁵ A prescription medication used for treating HIV/AIDS in adults and children.

⁶ A medication used to treat patients infected with HIV/AIDS.

⁷ An antiretroviral drug used in combination with other antiretrovirals to suppress HIV.

⁸ An antibiotic commonly given to pregnant HIV-positive women to treat different types of bacterial infections.

USAID/Nigeria participates in an interagency implementation of PEPFAR, and its efforts complement activities of the Centers for Disease Control and Prevention, Department of Defense, and State Department. These efforts increase access to PMTCT services and bring services closer to clients' homes, where more HIV-positive pregnant women can have access to ARV drugs during antenatal care and labor. These drugs can prevent the transmission of the virus from mother to child during childbirth. Currently, USAID/Nigeria's PMTCT program includes a full range of services and technical assistance implemented by three implementing partners—Family Health International (June 2004 to June 2009), Catholic Relief Services (CRS, July 2004 to March 2011), and Management Sciences for Health (October 2007 to May 2009).

Each implementing partner carried out procurement, storage, and distribution of PEPFAR commodities individually. While CRS procured, managed, and distributed its commodities, the two other implementing partners used a procurement agent, Axios, to procure, store, and distribute their commodities. Axios uses a combination of government warehouses, which Axios upgraded, and leased commercial buildings to store the commodities, as most of the government-owned warehouses are of substandard quality and are not suitable to store antiretroviral drugs. Axios and CRS relied on freight companies and courier services to distribute the commodities to the health facilities.

For fiscal year 2008, USAID/Nigeria obligated \$92.8 million and disbursed \$74.8 million for PEPFAR activities. Of this amount, \$7.5 million was obligated and \$5.8 million was disbursed for preventing the transmission of HIV from mother to child.

AUDIT OBJECTIVES

This audit was conducted as part of a worldwide audit of USAID's PEPFAR-funded activities and commodities for the prevention of mother-to-child transmission of HIV. The Regional Inspector General/Dakar conducted this audit in Nigeria to answer the following questions:

- Did USAID/Nigeria's activities for the prevention of mother-to-child transmission of HIV contribute toward meeting mandated targets, and what has been the impact?
- Did USAID/Nigeria procure, store, and distribute commodities for the prevention of mother-to-child transmission of HIV to help ensure that intended results were achieved, and what has been the impact?

Appendix I contains a discussion of the audit's scope and methodology.

AUDIT FINDINGS

Did USAID/Nigeria’s activities for the prevention of mother-to-child transmission of HIV contribute toward meeting mandated targets, and what has been the impact?

For the items we tested during visits to 9 of 190 program sites, USAID/Nigeria’s activities for the prevention of mother-to-child transmission (PMTCT) of HIV contributed toward meeting mandated targets for fiscal year (FY) 2008. However, it is not known whether these activities had an impact on the rate of mother-to-child transmission because HIV/AIDS testing of infants began only in 2008, and implementers do not have baseline data from earlier years. During FY 2008, USAID, through its implementing partners, reported the following contributions to the PEPFAR program’s overall accomplishments in Nigeria:

- Supported 190 of the 472 service outlets providing PMTCT services.
- Provided HIV counseling, testing, and test results to 239,823 of the 556,317 pregnant women who were counseled and tested and who received test results in a PMTCT setting.
- Provided a complete course of antiretroviral drugs to 7,204 of the 26,933 pregnant women who received antiretroviral drugs in a PMTCT setting.
- Trained 1,187 of the 3,407 health workers trained in the provision of PMTCT services according to national and international standards.

As shown in table 1, these reported accomplishments significantly exceeded the established performance targets.

Table 1. FY 2008 USAID Targets and Reported Results (Unaudited)

Indicators	Targets	Reported Results	Percentage Achieved
Number of service outlets providing the minimum package of PMTCT services according to national and international standards.	78	190	244
Number of pregnant women who received HIV counseling and testing for PMTCT and received their test results.	85,150	239,823	282
Number of pregnant women provided with a complete course of antiretroviral prophylaxis in a PMTCT setting.	4,506	7,204	160
Number of health workers trained in the provision of PMTCT services according to national and international standards.	384	1,187	309

However, it is not known whether these activities had an impact on the mother-to-child transmission rate because HIV/AIDS testing of infants began only in 2008, and baseline data for earlier years are not available. Testing of infants did not begin until 2008 because Nigeria lacked a national policy to support infant testing until 2007, because of

the cost involved, and because the required technology was not widely available in Nigeria.

Nonetheless, it is clear that PMTCT activities supported by USAID/Nigeria had a significant effect on the health system in Nigeria and in the lives of HIV-positive mothers, as large numbers of women gained access to HIV testing and counseling and became aware of their HIV status. In FY 2008 USAID/Nigeria supported an additional 33 PMTCT sites, mostly in rural and difficult-to-access areas. The women we interviewed who had access to PMTCT services in the last year were pleased with the services received.

In spite of USAID/Nigeria's positive results and beneficial aspects of the PMTCT activities, the audit found problems with both the accuracy of the data reported and the data collection system as described below.

Reported Data Not Verified

Summary. To measure performance effectively and make informed management decisions, according to USAID guidance, missions must ensure that quality data are collected and made available. In almost one-third of the cases we tested, results were significantly misstated with an average misstatement of 16 percent. These problems occurred partly because implementing partners misinterpreted what was to be reported and because of high staff turnover and a lack of training available to staff responsible for collecting data. As a result, the Office of the U.S. Global AIDS Coordinator and USAID management relied on inaccurate data to make funding and programmatic decisions, such as the funding level for the PEPFAR activities and the overall assessment of PEPFAR's achievement in Nigeria.

To measure performance effectively and make informed management decisions, missions must ensure that quality data are collected and made available. USAID provides its operating units with extensive guidance to help them manage for improved results. Among this guidance is Automated Directives System (ADS) 203.3.5.2, which states that the USAID Mission/Office and Assistance Objectives Teams should be aware of the strengths and weaknesses of their data and the extent to which the data's integrity can be trusted to influence management decisions. According to ADS 203.3.5.1, "Data Quality Standards," performance data should meet data quality standards for validity, integrity, precision, reliability and timeliness, and missions should take steps to ensure that submitted data are adequately supported.

We performed spot checks of the data reported to USAID by the three PMTCT implementing partners to verify the accuracy of information reported to USAID and to confirm that each partner had an effective data collection system. At the nine sites visited, we verified the reported results for two of the four main indicators—the number of pregnant women who had received counseling and testing for HIV and had received their test results and the number of pregnant HIV positive women who had received antiretroviral (ARV) prophylaxis.

The audit found problems with both the accuracy of the data reported and the system of data collection. In 5 of the 18 cases checked, reported results were significantly misstated. For example, the health facility in Bankpor overreported by 11 percent the number of pregnant women who had been counseled, tested, and received test results.

The site reported that 336 pregnant women had been counseled and tested from July through September 2008, but the supporting documentation showed that only 299 women had received these services. As another example, the health facility in Ogoja reported that 10 pregnant HIV-positive women had received ARV prophylaxis but the auditors could verify only 6 that had received the treatment. On average, results were misstated by 16 percent.

Some reporting inaccuracies occurred because implementing partners had misinterpreted what was to be reported. For example, Catholic Relief Services (CRS) inaccurately reported the number of pregnant women who had received counseling and testing in FY 2008. CRS reported that 12,748 pregnant women had been counseled and tested, but the actual figure was lower. CRS reported all women receiving testing and counseling, whether or not they were pregnant or received the services at a PMTCT service outlet, but the indicator was meant to track pregnant women attending PMTCT service outlets only. This problem resulted from a design flaw in CRS's data collection tool.

These problems in data inaccuracy and collection occurred partly because of high turnover of monitoring and evaluation staff and staff responsible for data collection at the sites. As trained staff left, implementing partners did not train newly hired staff how to collect and report on data gathered at the sites. Also, a lack of training on data collection and monitoring and evaluation methods are contributing factors. As a result, the Office of the U.S. Global AIDS Coordinator and USAID management relied on inaccurate data to make funding and programmatic decisions, such as the funding level for the PEPFAR activities and the overall assessment of PEPFAR's achievement in Nigeria. To strengthen the data collection system and data reliability, we make the following recommendations.

Recommendation 1. *We recommend that USAID/Nigeria develop a plan with a timetable to conduct training for all administrative staff and health workers responsible for collecting, compiling, and reporting site data.*

Recommendation 2. *We recommend that USAID/Nigeria develop a plan for cross-checking and verifying reported data used to make management decisions and maintain support of their verification of reported results.*

Did USAID/Nigeria procure, store, and distribute commodities for the prevention of mother-to-child transmission of HIV to help ensure that intended results were achieved, and what has been the impact?

Through its implementing partners, USAID/Nigeria procured, stored, and distributed PMTCT commodities to help ensure that intended results were achieved and that the impact has been positive. USAID/Nigeria funded the purchase of \$451,430 of antiretroviral drugs for activities implemented during FY 2008 to ensure that intended results were achieved. These activities were intended to (1) provide a minimum package of PMTCT services according to national and international standards, (2) provide counseling, testing, and test results to pregnant women in a PMTCT setting, and

(3) provide antiretroviral prophylaxis to pregnant women in a PMTCT setting. In addition, implementing partners purchased several drugs used in the prevention of mother-to-child transmission of HIV, including nevirapine, lamivudine, zidovudine, and combinations thereof. Moreover, they procured laboratory supplies and test kits and supported health facilities in acquiring opportunistic-infection drugs for PMTCT activities. According to mission officials and implementing partners, PMTCT activities had not had any commodity shortages during the FY 2008 reporting period, and we found no indication to the contrary.

USAID/Nigeria-funded activities for procuring, storing, and distributing commodities for PMTCT activities have had a positive impact on HIV-positive pregnant women who received antiretroviral drugs and on their children. The number of pregnant women receiving antiretroviral drugs procured with USAID/Nigeria support increased by 18 percent from 6,128 in FY 2007 to 7,204 in FY 2008.

Also, during FY 2005–2008, USAID/Nigeria-funded PMTCT antiretroviral purchases helped 37 percent of the 45,000 pregnant women who had received antiretroviral prophylaxis in a PMTCT setting with U.S. Government support. Also during that period, test kits acquired with funding from USAID/Nigeria had supported HIV testing for some 394,000 pregnant women, or 42 percent of the 934,000 pregnant women counseled and tested with U.S. Government support.

Although USAID/Nigeria and its implementing partners had procured, stored, and distributed sufficient commodities to ensure that planned results were achieved, the audit found problems with supply chain management, as described below.

Supply Chain Management Needs Improvement

Summary. According to USAID guidance, inventory management is a vital part of the logistics system for antiretroviral (ARV) drugs and HIV tests. The audit found several instances of weak inventory management and serious control deficiencies. Causes of the problems included a lack of adequate experience and training in inventory management and control of ARV commodities. As a result of the weaknesses in inventory management and control, ARV drugs worth an estimated \$97,000 were either missing or improperly stored and therefore at risk of being lost or stolen.

According to USAID's "Guidelines for Managing the HIV/AIDS Supply Chain" (December 2005), inventory management is a vital part of the logistics system for ARV drugs and HIV tests. The high market value of these life-saving drugs can create incentives for mismanagement and pilferage if appropriate inventory control procedures and systems are not implemented and followed. ARV drugs are sensitive to moisture and should be stored in dry, well-lit, ventilated storerooms. Because these drugs have a short shelf life, they should be stored according to the first-to-expire, first-out method of inventory management. USAID guidelines also call for separating damaged and expired commodities from regular inventory. Moreover, commodity storage should be secured throughout the supply chain, including storage of damaged and expired commodities.

We found that the ARV supply chain supported by USAID/Nigeria needs improvement, and we identified several instances of weak inventory management with serious control

deficiencies. At a warehouse visited in Abuja, the audit found an estimated 150 boxes of expired and unexpired ARV drugs, valued at approximately \$57,000, heaped together on the ground behind the warehouse, unsecured. These boxes were stacked for disposal with rubbish and scrap materials. We sampled some of the boxes and found 10 boxes of stavudine that were expiring in May 2009 and 42 boxes of nevirapine, of which 3 boxes were expiring in March 2010 and 1 in June 2009. Two days later, we revisited the warehouse and found the 150 boxes still outside—unsecured, unattended, unsupported, and now wet, as it had rained the previous night. According to Axios, the purchasing agent responsible for the storage of the ARV drugs, the warehouse staff routinely removes expired drugs from stock to make room for incoming drugs. However, Axios did not explain why unexpired drugs had been grouped with expired drugs and rubbish outside the warehouse in an unsecured area, ready for disposal. Unsecured and unaccounted for, these drugs could have been easily expropriated or misused. In addition to storing USAID-funded ARV commodities, this warehouse also stored ARV drugs for other implementers, such as Vanderbilt University and the University of Maryland’s ACTION program. However, none of the boxes in the warehouse had been labeled to differentiate USAID-funded drugs from drugs from other sources.



Unexpired and expired drugs stacked outside a warehouse—unsecured, unattended, and unsupported. Photograph taken by OIG auditors on May 4, 2009.

Also, warehouses and storage rooms operated or supported by Axios and CRS were not always in compliance with storage guidelines. Typically, racks and shelves were used to optimize warehouse space. If pallets are stacked on several levels of racks above the floor, a warehouse can store several times its floor area capacity. We found that storage space at the two main warehouses in Abuja had not been fully utilized, as boxes lined the warehouse floor on pallets but not on racks. In fact, had Axios used the storage space efficiently, it would not have been compelled to ignore storage guidelines and store some 150 boxes of drug commodities outside the warehouse, exposed to rain and heat and susceptible to theft.

Furthermore, several storage rooms at the sites visited did not meet minimum storage conditions, as storerooms were dimly lit and boxes were stored on the floor. The room temperature at seven of the nine health facilities, the two zonal warehouses, and one of

the two central warehouses visited exceeded USAID’s maximum recommended storage temperature of 77 degrees Fahrenheit. For example, temperatures at Magajiya and Suleja were 90 and 82 degrees, respectively. Also, two of the nine health facility pharmacies did not utilize inventory stock cards, and in four of the nine pharmacies, balances on the stock cards did not match the physical inventory on hand.

Moreover, inventory records the implementing partners relied on to make procurement decisions and forecast ARV needs for PEPFAR were inaccurate. According to the implementing partners, monthly inventories are conducted at the sites. However, the audit found no documented indication of monthly physical inventory counts at the sites visited. In addition, ending balance amounts on stock cards at eight of the nine health facilities and at warehouses visited did not match our test counts. The total of all missing and unsupported inventory at the sites visited was approximately \$40,000. Table 2 below lists some examples.

Table 2. Differences Between Inventory Records and Physical Inventory Count

Location	Name of Drug	Inventory (Per Records)	Inventory (Verified)	Difference in Quantity	Difference in Value
Bida General Hospital	Lamivudine/Zidovudine 300 mg & 150 mg	1,030	137	(893)	(\$8,840)
Magajiya General Hospital	Nevirapine 200 mg	115	60	(55)	(\$201)
Suleja General Hospital	Nevirapine 200 mg	868	578	(290)	(\$1,059)
Regina Mundi Catholic Hospital	Cotrimoxazole suspension	0	8	8	\$34
St. Timothy Clinic	Nevirapine 200 mg	120	0	(120)	(\$438)
Akampa General Hospital	Cotrimoxazole suspension	92	30	(62)	(\$262)
Abubra General Hospital	Cotrimoxazole suspension	26	18	(8)	(\$34)
Total other locations	All drugs	N/A	N/A	N/A	(\$28,852)
Total					(\$39,720)⁹

The inventory management problems noted during the audit were due to a weak control environment. Basic control activities—such as monthly inventory check and first-to-expire, first-out storage guidelines—were not consistently applied, and we found no indication of management’s actions to enforce implementation of those controls. Other contributing factors were the lack of adequate inventory management experience and training needed to manage ARV commodities.

These weaknesses created vulnerabilities that could lead to fraud, waste, and abuse. They also resulted in the mismanagement of some \$97,000 of ARV drugs. A deficient control environment also cast doubt on the effectiveness and efficiency of the supply chain operations, on the reliability of reported data, and on the program’s ability to secure and safeguard PEPFAR commodities.

⁹ This total is the net value of all the over and under differences.

To correct the inventory management problems and weak control environment, we are making the following recommendations:

Recommendation 3. *We recommend that USAID/Nigeria, in conjunction with its implementing partners and the procurement agent, develop an action plan timetable to reevaluate internal controls over commodities management and address the inventory management deficiencies noted during the audit. The action plan should also include activities for raising mission management's and partners' awareness of the necessity of a proactive control environment.*

Recommendation 4. *We recommend that USAID/Nigeria, in conjunction with its implementing partners, review the unsecured items valued at \$57,000 and identify any expired or damaged commodities for disposal and unexpired and usable commodities for redistribution to beneficiaries.*

Recommendation 5. *We recommend that USAID/Nigeria determine the allowability of \$39,720 in unsupported questioned costs, as identified in the audit report, and recover from the implementing partner any amounts determined to be unallowable.*

EVALUATION OF MANAGEMENT COMMENTS

In its response to our draft report, USAID/Nigeria agreed with all five recommendations. The mission's comments and our evaluation of those comments are summarized below.

For Recommendation 1, the mission will request that the implementing partners conduct appropriate refresher training for all administrative staff and health workers responsible for collecting, compiling, and reporting data by April 3, 2010. The mission has also agreed to conduct refresher brownbags for USAID technical team staff, including key contracting staff, on appropriate data quality oversight and management responsibilities. USAID/Nigeria will share data quality concerns arising from the audit report with the interagency PEPFAR management team and develop an action plan for further complementary steps with partner U.S. Government agencies by February 12, 2010. Accordingly, we consider that a management decision has been reached on this recommendation.

For Recommendation 2, the mission will procure an external agent to conduct data quality assessments including data verification (cross-checking) to provide assistance to USAID HIV/AIDS partners with performance monitoring and reporting. The mission also will provide added technical assistance in monitoring and evaluation by July 30, 2010. Accordingly, we consider that a management decision has been reached on this recommendation.

For Recommendation 3, USAID/Nigeria, in conjunction with the implementing partner, will forecast, procure, import, and store at the central level all the ARV drugs, rapid-test kits, and PMTCT commodities, beginning in February 2010. By January 31, 2010, USAID/Nigeria will have a plan of action to investigate and rectify the weaknesses outlined in the report from the two prime partners. By March 31, 2010, USAID/Nigeria will institute a plan to visit warehouse and facility-based pharmacies quarterly. Accordingly, we consider that a management decision has been reached on this recommendation.

For Recommendation 4, USAID/Nigeria will more fully investigate the situation at the warehouse in question by January 30, 2010. If problems still exist, the mission will develop a plan of action to ensure that the commodities are either disposed of properly or redistributed to beneficiaries. USAID/Nigeria will address the unsecured items by January 30, 2010, develop an action plan to reduce these practices, and monitor through spot checks the practices used for the unsecured commodities. Also, the mission is taking steps to put in place a plan to increase control of expired commodities by February 2010. Accordingly, we consider that a management decision has been reached on this recommendation.

For recommendation 5, USAID/Nigeria's Office of Financial Management and the Office of Acquisition and Assistance will undertake a joint review with the technical team by March 31, 2010, to address the allowability of the \$39,720 in unsupported questioned costs. This will include the development of remediation steps to prevent co-mingling of

drugs from different funding sources and implementing partners. The mission also will incorporate regular, rigorous cross-checking and data verification to reconcile physical and inventory counts. USAID/Nigeria will review the current practices and establish an action plan for improved records keeping and management tracking controls by March 31, 2010.

The mission's written comments on the draft report are included in their entirety as appendix II to this report (see pages 15–20).

SCOPE AND METHODOLOGY

Scope

The Office of the Regional Inspector General/Dakar (RIG/Dakar) conducted this audit 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, pursuant to our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions in support of our audit objectives. The audit was conducted as part of a worldwide audit led by the Office of Inspector General's Performance Audit Division of USAID. The audit was designed to answer the following audit objectives:

- Did USAID/Nigeria's activities for the prevention of mother-to-child transmission of HIV contribute toward meeting mandated targets, and what has been the impact?
- Did USAID/Nigeria procure, store, and distribute commodities for the prevention of mother-to-child transmission of HIV to help ensure that intended results were achieved, and what has been the impact?

In planning and performing the audit, RIG/Dakar reviewed and assessed the effectiveness of internal controls related to the President's Emergency Plan for AIDS Relief (PEPFAR) activities for the prevention of mother-to-child transmission (PMTCT) of HIV. During the audit, we requested and reviewed (1) the mission's documentation related to managing and monitoring the program, (2) implementing partners' reports, (3) the mission's site visit reports, and (4) the mission's annual self-assessment of internal control in accordance with the Federal Managers' Financial Integrity Act of 1982, Public Law 97-255, 96 Stat. 814.

Fieldwork was conducted from April 27 to May 27, 2009, at USAID/Nigeria, partner offices in Abuja, and at selected sites throughout Nigeria including the states of Cross River, Lagos, and Niger. During the period covered by the audit, October 2007 to September 2008, USAID/Nigeria obligated \$7.5 million and disbursed \$5.8 million for PEPFAR-funded PMTCT activities.

Methodology

To answer the audit objectives, we met with USAID/Nigeria's officials, including staff from the health office. We also met with implementing partners and with staff from the Supply Chain Management System, Centers for Disease Control and Prevention, and the Department of Defense representative in Abuja. We reviewed and analyzed the following documents: FY 2007 and FY 2008 country operational plans, FY 2008 annual progress report, FY 2008 program portfolio review, implementing partners' work plans, quarterly progress reports, and trip reports.

For all four indicators listed on page 4 of this report, we validated performance results and compared reported information with documented results in work plans and progress reports submitted by the implementing partners. In addition, we reviewed documentation

(e.g., summary worksheets, records, and tables) supporting the results reported by USAID/Nigeria. We determined achievement of each indicator by utilizing a threshold criterion of at least 90 percent.

In addition, we judgmentally selected (on the basis of the nature, implementing partner, and location of the activities) 9 of the 190 PMTCT clinics in 3 of the 36 states (Niger, Cross River, Lagos) covered by PEPFAR. At the nine sites visited, we verified the reported results for two of the four main indicators—the number of pregnant women who had received counseling and testing for HIV and had received their test results and the number of pregnant HIV-positive women who had received ARV prophylaxis. At the nine sites visited, we verified the stock balance for three judgmentally selected drugs.

In addition, we visited two central warehouses in Abuja and two regional warehouses in the states of Lagos and Calabar. At the warehouses and the clinics visited, we observed storage conditions, conducted test counts of selected antiretroviral drugs and test kits, and interviewed responsible staff. We also observed storage conditions in the storerooms, pharmacies, and laboratories; tested the accuracy of reported data; reviewed monthly commodity ordering reports; and examined commodities to determine expiration dates.

To ascertain the impact of the results achieved, we relied on the testimony of USAID/Nigeria officials, implementing partners, and beneficiaries. We also reviewed mission and implementing partners' reports to determine the impact of the PMTCT activities.

MANAGEMENT COMMENTS



USAID | **NIGERIA**
FROM THE AMERICAN PEOPLE

MEMORANDUM

To: Gerard Custer, Regional Inspector General

From: Dr. Ray Kirkland, Mission Director

Date: January 7, 2010

Subject: Response to the Audit of USAID/Nigeria's PEPFAR-Funded Activities and Commodities for the Prevention of Mother-to-Child Transmission (PMTCT) of HIV (Report No. 7-620-10-00X-P)

This memorandum serves as USAID/Nigeria's formal written response to the subject audit report, expanding on your requests for additional clarifications for management decisions to the recommendations. We would like to thank the RIG auditors for their time, patience and flexibility in working in the challenging environment that Nigeria can be. We appreciate and value your observations and recommendations.

Comments on Audit Objective 1

USAID/Nigeria is pleased that the audit report concurs that USAID activities have achieved significant results over and above the required targets. We agree with the audit findings that the identified weaknesses are unlikely to have any significant affect on the results reported for PMTCT in FY 2008. We also concur with the RIG Audit Team that the findings from a small sample cannot be generalized onto the entire program, and that there are normal data quality challenges for most projects.

The RIG Audit Team correctly identified the data collection challenges faced by implementing partners in Nigeria as: 1) misinterpretation of the indicator being reported; 2) high staff turnover; and 3) insufficient capacity to train staff in data collection that matches the rate of staff turnover. These are challenges that have affected the USAID PEPFAR-funded activities and PEPFAR/Nigeria programs as a whole. USAID and the USG PEPFAR Nigeria team are working to address these problems.

The audit report states that "the Office of the U.S. Global AIDS Coordinator and USAID management relied on inaccurate data to make funding and programmatic decisions, such as the

funding level for the PEPFAR activities and the overall assessment of PEPFAR's achievements in Nigeria." We feel this statement may be overly general if this conclusion is drawn from the audit's sample. We are concerned about drawing conclusions based on a sample size that represents less than 5% of the USAID PMTCT programming and less than 2% of PEPFAR/Nigeria's PMTCT programming, and where the shortcomings did not affect the overall achievement of PEPFAR Nigeria targets.

The RIG Audit Team visited 9 USAID PMTCT sites out of a total of 190 PMTCT sites implemented nationwide by three different USAID implementing mechanisms during FY 2008. This represents less than 5% of USAID PMTCT programming in Nigeria and less than 2% of the total 472 PMTCT sites that were implemented through PEPFAR/Nigeria during FY 2008.

Response to Recommendation 1 and 2

Both Recommendation 1 and Recommendation 2 are related to data quality and are closely intertwined. The following response is applicable to the two recommendations:

USAID/Nigeria is in agreement with both Recommendations 1 and 2. Actions have in fact been taken in support of both recommendations since the beginning of FY 2009 and are on-going. USAID/Nigeria will request the implementing partners FHI and SCMS to conduct appropriate refresher training over the next 120 days by April 3, 2010, for all administrative staff and health workers responsible for collecting, compiling and reporting site data. USAID/Nigeria will conduct refresher brownbags for USAID technical team staff, including key AOTR/COTRs, on appropriate data quality oversight and management responsibilities. USAID/Nigeria will also share data quality concerns arising from the RIG PMTCT audit with the interagency PEPFAR management team and develop an action plan for further complementary steps with partner USG agencies within six weeks, by February 12, 2010.

It is worth noting that USAID/Nigeria has already expanded rigorous efforts to ensure the quality of data in USAID/Nigeria HIV/AIDS sites broadly. In FY 2009, the HIV/AIDS & TB Team conducted regular, systematic data quality assurance (DQA) assessments of 12 USAID/Nigeria HIV/AIDS sites, including 2 of the 3 PMTCT partners visited by the RGI auditors PMTCT sites. DQAs were also conducted in 2007, including at PMTCT sites. DQA visits are on-going and part of USAID/Nigeria's normal mode of doing business as specified in the ADS.

USAID/Nigeria will procure an external agent to conduct DQAs including data verification (cross-checking); to provide assistance to USAID HIV/AIDS partners with performance monitoring and reporting; and to provide added technical assistance in monitoring and evaluation. The agent will focus on implementers with weaknesses in the data collection and reporting systems. It is anticipated that this new mechanism will be in place by July 30, 2010.

Over the course of the last year, when USAID/Nigeria discovered persistent data quality weaknesses during DQA assessments, USAID provided direct and immediate technical assistance to Axios, a sub-recipient, to improve the situation, in coordination with the principal recipient. In June 2009, a USAID/Nigeria partner provided Monitoring and Evaluation training

for all USAID/Nigeria HIV/AIDS partners, including PMTCT partners, to help upgrade their skills in monitoring and evaluation to better equip them to collect accurately data for reporting purposes as well as data for decision making. The USAID/Nigeria partner that specializes in capacity building, the Leadership, Management and Sustainability (LMS) program, is providing ongoing technical assistance to all HIV/AIDS partners to help implement the lessons learned in the Monitoring and Evaluation training.

USAID/Nigeria and the USG PEPFAR Nigeria team are working diligently to strengthen the capacity of Nigeria to produce sound data. Host country counterparts from the Nigerian government are routinely included in all monitoring and evaluation efforts and in many of our DQA visits to facilitate transfer of knowledge and empower our Government of Nigeria counterparts to ensure the collection of quality data at service delivery points and the use of that data to make solid programmatic decisions.

Comments on Audit Objective 2

USAID/Nigeria and PEPFAR/Nigeria work in an extremely challenging environment as related to commodities and logistics efforts. Nigeria's size, its decentralized governance structures as a federation of relatively autonomous states and a legacy of poor investment in the social sector over the last two decades make Nigeria a more difficult environment than other countries. Prior to PEPFAR, all Nigerian public sector warehouses were deemed to be substandard by international guidelines for appropriate warehousing of ARV commodities. Significant efforts have taken place to improve the in-country capacity and to ensure that USG funded commodities are managed appropriately.

Response to Recommendation 3

The USG PEPFAR Logistics Team in Nigeria has already taken and plans to take additional concrete steps to address inventory management and control problems. The following measures are being taken. Starting February 2010, USAID/Nigeria as part of PEPFAR/Nigeria together with a USAID implementer, the Supply Chain Management Systems (SCMS) program, will jointly forecast, procure, import and store at the central level all the ARV drugs, Rapid Test Kit (RTK) and PMTCT commodities. A warehouse in Abuja that is compliant with national and international pharmaceutical norms has been selected and outfitted. This warehouse will be managed by SCMS. Checks and balances have been built in to ensure quality logistic practices are in place including, but not limited to, the following:

- Data verification (cross-checking).
- End of month records reconciliation (physical count).
- USG Logistics Group / SCMS co-management of the entire logistics cycle.
- Temperature mapping. Eight automated loggers are strategically placed (high and low) to monitor if any "hot spots" are identified. These are read and recorded monthly.
- 36 a/c units on the perimeter walls and in the receiving and dispatch bays.
- Pest control.
- Electric forklift (the only kind feasible due to fumes from others).
- The warehouse is a hard hat facility.

- The warehouse has limited access, which is controlled through a keypad access control with periodic code changes.
- Separate receiving and dispatch areas.
- A separate quarantine cage for expired commodities.
- Fire extinguishers and detectors.
- Closed Circuit Television.
- 24 hour guard service.
- Medium gauge storage racks to optimize space utilization.

USAID/Nigeria partners will continue working with their respective distribution agents to deliver goods to their sites. Increased emphasis on quality logistics and the example provided by the USG/SCMS team will be a good start to improving logistics practices around the country. Furthermore, USAID/Nigeria will institute by March 31, 2010 a plan to visit warehouse and facility-based pharmacies on a quarterly basis on a rotational schedule to ensure a good sampling of implementing mechanisms and types (levels) of service delivery points. Increased monitoring will ensure increased vigilance on the part of USAID/Nigeria partners to ensure that their sub-partners are complying with expected standards.

Furthermore, USAID/Nigeria and the USG PEPFAR Nigeria team are taking steps to increase control of expired commodities to ensure appropriate, environmental compliant destruction of said commodities. This effort will allow PEPFAR/Nigeria to identify wastage by drug category and implementing mechanism to better target interventions to reduce potential wastage and ensure that expired commodities are not a target for pilferage. A plan for this effort is currently in development and is expected to be in place by February 2010.

In addition, USAID/Nigeria has already communicated the deficiencies noted by the RIG to the two prime recipients who have sub-agreements with Axios as their commodities distribution agent. We will have a plan of action to investigate and rectify the weaknesses outlined in the report from the two prime partners no later than January 31, 2010.

Response to Recommendation 4

USAID/Nigeria takes very seriously the concerns expressed by the auditors as related to the unsecured expired and unexpired commodities. There is full agreement that no commodities should be exposed to the elements in an insecure environment. The finding highlights a weakness in the warehousing practices in Nigeria and will receive immediate attention.

USAID/Nigeria will more fully investigate the situation at the warehouse in question by January 30, 2010 and determine whether problems continue to exist. If the findings of the RIG auditors are still in evidence we will develop a plan of action to ensure that the commodities are either disposed of properly or redistributed to beneficiaries. USAID/Nigeria will address the unsecured items with the USAID and CDC implementing partners using the warehouse by January 30, 2010, develop an action plan to reduce these practices, and monitor through spot checks the practices of the principal sub-grantee responsible for the unsecured pharmaceutical products.

USAID/Nigeria is taking measures to ensure that these practices are reduced. As seen in the response to Recommendation 3, starting February 2010, USAID/Nigeria together with other agencies on the USG PEPFAR Nigeria team, together with the SCMS team, will jointly forecast, procure, import and store at the central level all the ARV drugs, Rapid Test Kit (RTK) and PMTCT commodities. A warehouse in Abuja that is compliant with national and international pharmaceutical norms has been selected and outfitted. This warehouse will be managed by SCMS. Checks and balances have been built in to ensure quality logistics practices are in place.

This effort will include a separate quarantine cage for expired commodities. USAID/Nigeria and the USG PEPFAR team are taking steps to increase control of expired commodities to ensure appropriate, environmental compliant destruction of said commodities. This effort will allow PEPFAR/Nigeria to identify wastage by drug category and implementing mechanism to better target interventions to reduce potential wastage and ensure that expired commodities are not a target for pilferage. A plan for this effort is currently in development and is expected to be in place by February 2010.

By March 2010, USAID/Nigeria and the USG PEPFAR team will increase monitoring visits to the central warehouses to ensure compliance with expected warehousing standards by making quarterly rotational visits to warehousing facilities in Nigeria. This practice will also be extended to facility-based pharmacies.

Response to Recommendation 5

USAID/Nigeria agrees with Recommendation 5. USAID/Nigeria's Office of Financial Management and the Office of Acquisition and Assistance will undertake a joint review with the technical team by March 31, 2010 to address the allowability of the \$39,720 in unsupported questioned costs. This will include the development of remediation steps to prevent co-mingling of drugs from different funding sources and implementing partners, and will incorporate regular rigorous cross-checking and data verification to reconcile physical and inventory counts.

USAID fully supports the practice of proper records keeping in logistics management. The RIG team's findings could be an example of lapses in such practices. However, based on information provided, it remains difficult to ascertain if the differences between physical and paper-based stock are an example of stock missing or stock relocated to other dispensing facilities or sites. For example, on clinic days, a pharmacy may issue stock to dispensing units and may not keep track of what's gone out to a building next door. The stock may still be at the hospital but not physically in the pharmacy. While certainly not best practice, these inventories are often reconciled on a monthly basis. In part this practice is a result of insufficient manpower and the lack of appropriately trained staff that results from a rapid turnover seen in many health care facilities in Nigeria. USAID/Nigeria will review the current practices and establish an action plan for improved records keeping by March 31, 2010.

In addition, partners often borrow from each other and the differences are settled in between the reporting periods. Thus, at the end of the month the stock levels are matched physically

and on paper but in a given day they may not be equal. USAID does not support such laxity in records keeping and will ensure improved documentation in the event of commodity shifts from one partner to another. However, program management in the field suggests that we need to avoid overly restrictive controls that block the flexibility and fluidity of commodity exchanges that sometimes take place between service delivery sites. This flexibility for exchange allows USG PEPFAR Nigeria partners to move short dated drugs from one partner to another and thereby avoid wastage and expiration before use. However USAID will develop appropriate management tracking controls by March 31, 2010 that will mitigate this potential vulnerability, and to document any commodity exchange.

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