OFFICE OF INSPECTOR GENERAL

AUDIT OF USAID/RWANDA'S HIV/AIDS TREATMENT ACTIVITIES

AUDIT REPORT NO. 4-696-10-002-P
March 24, 2010

PRETORIA, SOUTH AFRICA

Office of Inspector General

March 24, 2010

MEMORANDUM

TO: USAID/Rwanda, Mission Director, Dennis Weller

FROM: Regional Inspector General/Pretoria, Nathan S. Lokos /s/

SUBJECT: Audit of USAID/Rwanda's HIV/AIDS Treatment Activities (Report No. 4-696-10-002-P)

This memorandum transmits our final report on the subject audit. In finalizing our report, we considered your comments on our draft report and have included your response as appendix II (the supplementary tables attached to that response have been retained in our files).

The report includes nine recommendations for your action. On the basis of your comments, final action has been reached on recommendation nos. 4 and 9. In addition, corrective action plans have been developed addressing the remaining seven recommendations. Therefore, we consider that management decisions have been reached on the remaining seven recommendations. Please provide the Office of the Chief Financial Officer, Audit, Performance, and Compliance Division (M/CFO/APC), with the necessary documentation to achieve final action on recommendation nos. 1, 2, 3, 5, 6, 7, and 8.

I want to express my sincere appreciation for the cooperation and courtesy extended to my staff during the audit.

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SUMMARY OF RESULTS

USAID/Rwanda's support for the Government of Rwanda's treatment activities—including procuring, storing, and distributing related commodities through the government's system—are a critical part of the mission's implementation of the HIV/AIDS program.[1] The mission's fiscal year (FY) 2008 treatment program involved four major implementing partners, whom the mission reported as having received $23.6 million under a variety of agreements. The initial 5-year program began in FY 2003 and has subsequently been extended for a further 5 years (page 3).

The goal of HIV/AIDS treatment programs is to dramatically decrease the number and severity of illnesses associated with HIV infection, and significantly improve the duration and quality of life of HIV-positive individuals. Progress toward this goal is measured in terms of "life-years saved," a factor calculated by the U.S. Global AIDS Coordinator in the aggregate for all HIV/AIDS program focus countries. Audit tests determined that significant numbers of patients were receiving treatment services at the hospitals and health centers visited. For example, approximately 4,694[2] people were treated at the 11 hospitals or clinics visited during the audit. However, because of problems with data quality encountered during the audit tests, USAID/Rwanda was not able to provide valid and reliable information on the total number of persons on HIV/AIDS program-supported antiretroviral therapy—a fundamental input in calculating life-years saved (page 5).

The audit also found that USAID/Rwanda had provided technical assistance to the Government of Rwanda to procure, store, and distribute treatment commodities to help ensure that intended results for the treatment program were achieved. Although USAID/Rwanda did not have specific performance indicators for procuring, storing, and distributing treatment commodities, mission management contributed to the results reported for other treatment activities by supporting the Government of Rwanda in supplying the commodities necessary to accomplish those results. Without the commodities, treatment services could not have been provided (page 5).

Nevertheless, despite the positive effects of USAID/Rwanda's activities on Rwanda's national program to combat HIV/AIDS, the audit determined that actions could be taken to strengthen the mission's program. These include improving the quality of performance planning, reporting, and monitoring. This report recommends various actions to address these issues, including the following:

- Providing training to the staff of treatment service outlets

- Improving management of treatment commodities and laboratory equipment issued to treatment service outlets

[1] HIV/AIDS—human immunodeficiency virus/acquired immunodeficiency syndrome.

[2] This approximate number was drawn during the audit from patient registers. It has not, however, been reconciled to either the individual patient files or the drug-distribution registers. Specific examples of the results of audit tests from three health facilities visited during the audit are presented on page 6.

- Developing a complete performance management plan

- Requiring that mission staff perform and document adequate data quality assessments and site visits (pages 9–17).

In response to the draft report, USAID/Rwanda agreed with all nine recommendations. Management decisions were reached on those nine recommendations, of which final action was taken on two. USAID/Rwanda has been asked to provide written notice within 30 days regarding any additional information related to actions planned or taken to implement the remaining recommendations.

BACKGROUND

Combining $18.8 billion in funding and an integrated approach that includes prevention, treatment, and care, the U.S. Government's HIV/AIDS program has supported antiretroviral treatment for a reported 2.1 million people and care for more than a reported 10.1 million through September 2008. To build upon these achievements, legislation was passed in July 2008[3] extending the HIV/AIDS program and authorizing up to $48 billion over the next 5 years to continue the Government's global efforts against HIV/AIDS, tuberculosis, and malaria.

One of the 15 focus countries under the HIV/AIDS program,[4] Rwanda is one of the most densely populated countries in sub-Saharan Africa. Among the country's multiple health and development challenges, an estimated 3.1 percent of the adult population is infected with HIV/AIDS. The United Nations estimated that 160,000 adults and 27,000 children were living with HIV in Rwanda in 2008, with a continuing loss of approximately 21,000 persons to HIV-related illness each year.

The Government of Rwanda, in collaboration with its international donors and partners, has been implementing a nationwide plan to rapidly scale up HIV prevention and treatment services. The HIV/AIDS strategy in Rwanda is integrated into the National Treatment Plan, which was designed to rapidly increase access to HIV-related services for adults and children while working to improve the infrastructure and human resource capacities of the health care system to provide sustainable HIV-related services. The strategy called for a scale up of antiretroviral treatment by establishing HIV/AIDS program-supported sites, as well as improved geographic access by increasing services in satellite treatment sites so that patients could access a full range of treatment services near their homes. At the end of FY 2008, implementing partners reported that 131 sites directly supported by USAID were providing treatment.

At the central level, USAID/Rwanda's HIV/AIDS program continued support for a variety of Ministry of Health organizations. This support involved revisions to national guidelines, tools, curriculums, and the training of trainers for adult and pediatric HIV care and treatment. At the district level, partners continued to provide financial and technical support for strengthening linkages, referrals, transportation of patients and specimens, communications, forecasting, drugs and commodities distribution, and financial systems. At the site level, partners continued to provide a standardized package of antiretroviral services through support and development of a coordinated network of HIV/AIDS services linking antiretroviral treatment with other general health services.

[3] Tom Lantos and Henry J. Hyde United States Global Leadership Against HIV/AIDS, Tuberculosis, and Malaria Reauthorization Act of 2008 (Public Law 110–293).

[4] The 15 focus countries consist of 12 countries in Africa (Botswana, Côte d'Ivoire, Ethiopia, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, and Zambia) and three other countries (Guyana, Haiti, and Vietnam).

The mission reported planned funding of $23.6 million for HIV/AIDS treatment activities under its antiretroviral treatment program, as well as laboratory support, in FY 2008. The program was implemented by four major implementing partners under a variety of agreements.

AUDIT OBJECTIVE

The Office of Inspector General conducted this audit as part of its fiscal year 2009 audit plan to answer the following question:

- Did USAID/Rwanda's HIV/AIDS treatment program track and report on the number of persons on antiretroviral therapy supported by the HIV/AIDS program?

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

AUDIT FINDINGS

Did USAID/Rwanda's HIV/AIDS treatment program track and report on the number of persons on antiretroviral therapy supported by the HIV/AIDS program?

The goal of the U.S. Government's HIV/AIDS treatment program is to dramatically decrease the number and severity of illnesses associated with HIV infection, and significantly improve the duration and quality of life of HIV-positive individuals. Progress toward this goal is measured in terms of "life-years saved," a factor that is calculated by the U.S. Global AIDS Coordinator in the aggregate for all HIV/AIDS focus countries. At the individual country level, missions track the number of persons on antiretroviral therapy supported by the HIV/AIDS program,[5] which is the fundamental input in calculating life-years saved. Because of problems with data quality encountered during the audit and the limited number of audit tests performed, the audit could not determine whether USAID/Rwanda's treatment program had accurately tracked and reported on the number of persons on program-supported antiretroviral therapy. However, as detailed on page 8, audit tests did determine that significant numbers of patients had received treatment services at the hospitals and health centers visited.

USAID/Rwanda's treatment program began by establishing support systems for hospitals and health centers (also referred to as "service outlets" or "service providers") that furnish treatment services to patients. By the end of fiscal year (FY) 2008, implementing partners reported that 131 service outlets were providing treatment. This achievement was a crucial component of the overall treatment program, because without service outlets capable of offering treatment services, none of the other essential services could be provided. The service outlets supported by the mission also represent a significant contribution to the Government of Rwanda's National Treatment Plan.

In conjunction with the establishment of treatment service outlets, USAID/Rwanda also provided technical assistance to the Government of Rwanda to procure, store, and distribute commodities for the treatment program to achieve its main goals. Although USAID/Rwanda did not have specific performance indicators for the management of treatment commodities, mission management contributed to the results that were reported for other treatment activities by supporting the Government of Rwanda in supplying the commodities necessary to accomplish those results. Patients who had tested positive for HIV, and who had met other specific criteria, were subsequently provided antiretroviral treatment. Without the commodities, these services could not have been provided.

[5] The number of individuals receiving treatment by the end of the reporting period was a performance indicator in the mission's performance management plan (indicator 4) and was used to measure actual treatment services. Unfortunately, the audit could not determine whether the target had been met because of questions surrounding the validity and reliability of the data (page 6). Appendix III presents a table detailing the performance indicators for the treatment program.

Source: Nations Online Project

Although USAID/Rwanda's treatment program has made significant contributions to the national program to combat HIV, the mission can further strengthen its program in several areas: (1) improving the validity and reliability of reported results, (2) improving the management of treatment commodities, (3) preparing a complete performance management plan that includes all of its performance indicators and provides for data quality testing, (4) completing thorough data quality assessments, and (5) conducting thorough site visits. These areas are discussed below.

Patient Records Were Not Consistently Updated and Reconciled

Summary: Contrary to USAID guidance, patient records supporting one performance indicator were not consistently updated and reconciled. The principal causes were inadequate record-keeping and reporting systems, resulting from a lack of training, as well as weak internal control over monitoring program results. Consequently, USAID/Rwanda did not always have reasonable assurance that intended results were being achieved or that managers had reliable information upon which to make sound performance-based decisions.

USAID's results-oriented approach to management calls for its managers to consider performance information when making decisions. Sound decisions require accurate,

current, and reliable information, and the benefits of USAID's results-oriented approach depend on the quality of performance information available.[6]

Despite these provisions, the audit found that data quality and reporting could be strengthened considerably. For example, the data required for reporting on the single performance indicator that the mission used to measure actual treatment services (the number of individuals receiving treatment by the end of the reporting period) were drawn from patient registers at service outlets. However, staff at all but one of those service outlets did not consistently update the registers for patients who had transferred, died or failed to return for followup treatment (lost to followup). Furthermore, none of the providers routinely reconciled the patient registers to the drug disbursement registers or the individual patient files to confirm that the patient registers were accurate before reporting results. The following examples detail some of the results of audit testing.

- The patient registers at Kabgayi Hospital had not been updated to reflect the current status of all patients. The patient registers, which were the basis for reporting results, indicated that a total of 1,378 patients had been treated. However, the service-provider staff stated that the registers were not current. To confirm the accuracy of the registers, the audit team had to manually examine individual patient files to record patients' last appointment dates and confirm their status as of the reporting date. The examination indicated that 113 patients who had transferred and 16 patients who had been lost to followup had not been recorded in the registers. Moreover, 12 individual patient files were incomplete; consequently, the audit team was unable to determine the status of these patients.

- At Masaka Health Center, reported results had not been reconciled with either the drug distribution register or individual patient files prior to reporting results. The patient registers at the service outlet indicated that 440 patients had been treated against a reported total of 474—a difference of 37 patients. However, since the patient registers go back several years to the beginning of the treatment program, there was no reasonable assurance that the registers themselves had been updated to include all patients who had transferred or died or who were lost to followup. The September 2008 distribution registers indicated that 535 patients had been seen, for a difference of 61 patients. The distribution registers were not designed to easily identify patients who had multiple appointments in the month or patients who had missed their monthly appointments. Consequently, the audit team could not reconcile the figures without examining each individual patient file to ensure that the patient registers had been completely updated. Medical staff stated that they had not performed such reconciliations prior to reporting results.

- At Nyagatare Hospital, reported results had not been reconciled with either the drug-distribution register or individual patient files prior to reporting results. The patient registers at the service outlet indicated that 375 patients had been treated, compared with a reported total of 382, for a difference of 7 patients. However, since the patient registers go back several years to the beginning of the treatment program, the audit team had no reasonable assurance that the

[6] ADS 203.3.5.1.

registers themselves had been updated to include all patients who had transferred or died or who were lost to followup. The September 2008 distribution registers indicated that only 355 patients had been seen, for a difference of 27 patients. However, the distribution registers were not designed to identify patients who had multiple appointments in the month or had missed their monthly appointments. Therefore, the audit team could not reconcile the documentation without examining each individual patient file. Medical staff stated that they had not performed reconciliations prior to reporting results.

Rukoma Hospital in Rwanda is a service outlet providing antiretroviral treatment. (Photograph by an Office of Inspector General (OIG) auditor in August 2009.)

Although testing of the patient registers indicated that approximately 4,694[7] people had been treated at the 11 hospitals or clinics visited, the audit could not obtain reasonable assurance that the results reported by the three major treatment partners and their service outlets for actual treatment services were valid and reliable and met required data quality standards.

These data problems occurred because the staff at some of the service outlets, which consisted of hospitals and health centers, lacked sufficient training and were not aware of data quality, record-keeping, and reporting requirements. Because patient registers had not been updated or reconciled, the system of internal control for results reporting could not ensure that reported results were valid, reliable, and accurately reported to implementing partners and to the mission. Furthermore, an incomplete performance management plan, as well as incomplete data quality assessments and site visits

[7] This number is approximate and has not been reconciled to either the individual patient files or the drug distribution registers.

(discussed later in this report), also contributed to the weakness of the internal control system.

As indicated in the examples above, USAID/Rwanda did not always have reasonable assurance that reported data met standards of validity, reliability, and accuracy. Without reliable data, USAID managers are missing a key tool for making sound, performance-based decisions. This audit includes the following recommendation to strengthen the system of reporting results under the mission's HIV/AIDS treatment program.

Recommendation No. 1: We recommend that USAID/Rwanda develop and implement a plan, with milestones, to train all implementing partners and service outlets for treatment services on how to properly update patient records, maintain source documents, reconcile patient records at least once a year, and report program results.

Commodity Management Needed Improvement

Summary: Management of treatment commodities at the service outlet level needed improvement in several areas to meet the criteria established in applicable guidance. Several service outlets (1) did not organize commodities, (2) could not account for all commodities, (3) experienced shortages of testing reagents, (4) ran out of antiretroviral drugs and reported receiving short-filled orders, and (5) reported nonfunctioning laboratory equipment. These problems occurred because service providers were not trained sufficiently, the national drug procurement agency supplied inconsistent quantities of commodities, and equipment was not maintained adequately by the national maintenance unit. As a result, the service outlets lacked accountability for commodities and could not consistently provide necessary treatment services to patients.

Although the mission reported establishing support systems for 131 treatment service outlets in FY 2008, those outlets cannot provide essential services without a steady and reliable supply of commodities. To achieve service goals, the outlets need to manage the commodities properly and account for them accurately.

"Guidelines for the Storage of Essential Medicines and Other Health Commodities"[8] provides instructions on receiving and arranging commodities, keeping track of products in the storeroom, maintaining the quality of the products, and setting up a medical store. The importance of commodity management is further reflected in the Government Accountability Office's *Standards for Internal Control in the Federal Government*.[9] These standards require the establishment of physical controls to safeguard vulnerable assets such as inventory. Such assets should be counted periodically and reconciled to control records to help reduce the risk of errors, fraud, and misuse. Additionally, transactions should be recorded promptly and accurately. All documentation and

[8] Developed by John Snow Inc./DELIVER, in collaboration with the World Health Organization.
[9] GAO Report AIMD-00-21.3.1, November 1, 1999.

records should be properly managed and maintained.

When USAID-funded treatment commodities arrived in Rwanda, they were delivered immediately to the national pharmaceutical procurement agency, CAMERWA,[10] which procures and manages all drug commodities. They were stored there in well-maintained, secure facilities. Once the commodities had been received and inventoried, they were distributed to the various service outlets, consisting of private, faith-based hospitals and health centers as well as Government-run facilities. The procurement agency managed its commodities with a well-documented inventory system that was capable of tracking receipts and distributions and computing current stocks.

The service outlets generally furnished well-maintained and secure facilities for commodity storage. After receiving and inventorying the commodities, the pharmacy staff at the outlets dispensed the antiretroviral drugs as requested by the medical staff for patient treatment. Although the outlets reported substantial results for the treatment program indicators, as set forth in appendix III, each of the 11 outlets visited experienced one or more significant problems managing treatment commodities, such as the following:

- Some pharmacy stock rooms were disorganized. At the Nyagatare and Rukomo pharmacies, boxes of drugs were mislabeled and commingled with other essential drugs and not organized by type of drug. This disorder complicates the processes of taking physical inventories and ordering drugs, could also increase the risk of stockouts and expired drugs and could encourage pilferage.

- Although pharmacy stock cards were generally well maintained, sometimes the stock cards did not reconcile to physical inventory of antiretroviral drugs. At the Kibagabaga pharmacy, 32 bottles of Nevilast-30 were missing,[11] as were 210 bottles at the Kinihira pharmacy. A lack of accountability over essential drug stocks increases the risk of loss or theft of drugs.

- Some outlets reported shortages of laboratory reagents for hematology and biochemistry analysis. Kabgayi Hospital, Masaka Health Center, and Nzige Health Center reported shortages of laboratory reagents that lasted up to 2 months. In the absence of necessary laboratory reagents, the facilities could not perform the required tests to determine whether patients qualified for antiretroviral treatment.

- Although antiretroviral stock levels generally have been adequate, service-outlet pharmacies reported several stockouts:
  - Kibagabaga pharmacy reported a stockout of Lamivudine that lasted 1 week.
  - Gihara pharmacy reported stockouts of Efavirenz and Lamivudine for up to 5 days.

[10] Centrale d'Achats des Médicaments Essentiels Consommables et Equipements Médicaux du Rwanda (Rwanda Drug, Consumables, and Equipment Central Procurement Agency).

[11] Nevilast-30 is a combination of three antiretroviral drugs—Lamivudine, Stavudine, and Nevirapine—in one tablet. Each bottle of Nevilast-30 contains 60 tablets.

– Rukoma-Sake pharmacy reported stockouts of Lamivudine/Zidovudine[12] and Aluvia for an unspecified period.
– Nzige reported stockouts of Lamivudine and Zidovudine for an unspecified period.

Without these essential drugs, patients could not continue with their antiretroviral treatment.

- Service outlet pharmacies complained often that CAMERWA was short-filling commodity orders—that is, providing commodities in quantities less than the order had specified. As a result, the service outlets had to place numerous emergency orders and establish a borrowing and lending program with other service outlets to avoid stockouts. For example, Remera Rukoma Hospital was short 40 bottles of antiretroviral drugs at the time of the audit team's physical inventory because the hospital had lent them to another service outlet pharmacy that was experiencing a shortage.

Gihara Health Center in Rwanda is a service outlet providing antiretroviral treatment. (Photograph by an OIG auditor in August 2009.)

- Two service outlets reported that laboratory equipment was not functioning. Kabgayi Hospital and Masaka Health Center stated that equipment furnished by

[12] Lamivudine and Zidovudine are two antiretroviral drugs that have been approved individually for the treatment of HIV infections. Since these medicines are frequently prescribed together, they are also made available combined in one tablet. The Rukoma-Sake pharmacy experienced a stockout of the combined form of these drugs.

two USAID implementing partners was not working. The equipment was essential for performing hematology and biochemistry tests to determine patient eligibility for antiretroviral treatment. Without functioning equipment, the outlets could not perform the tests.

These problems occurred for several reasons. Regarding the disorganized and missing stock, the service outlet staff lacked training. Some service providers' pharmacy staffs were not trained to maintain basic inventory systems or manage inventory stocks and thus did not always practice good stock management techniques.

The stockouts and shortages of antiretroviral drugs and test reagents resulted from two separate causes. One cause was staff inexperience in maintaining adequate inventory records. A contributory cause arose from supply problems with CAMERWA. Many service outlets complained that CAMERWA frequently did not fill their orders completely, resulting in chronically low stock levels of required treatment commodities. Discussions with CAMERWA indicated that the agency had been forced to ration stocks and short-fill orders because it lacked inventory, and it ran short because it had underestimated the demand for antiretroviral drugs and test reagents. Since demand quantification is a complex process involving several partners, it needs to be thoroughly examined to determine the exact nature of the problem.

Finally, test equipment became inoperative because the national maintenance unit lacked an adequate plan to ensure that essential test equipment was functioning properly at all treatment service outlets. To help ensure that sufficient antiretroviral and laboratory commodities are available for required treatment services, this report makes the following recommendations.

Recommendation No. 2: We recommend that USAID/Rwanda develop and implement a plan, with milestones, to train all implementing partners and service outlets providing treatment services to maintain inventory records and manage stocks effectively.

Recommendation No. 3: We recommend that USAID/Rwanda develop and implement a plan, with milestones, to investigate and correct the problem of service outlets receiving insufficient quantities of treatment commodities from the national pharmaceutical procurement agency.

Recommendation No. 4: We recommend that USAID/Rwanda develop and implement a plan, with milestones, to investigate and correct the problem of inadequate maintenance of test equipment by the national maintenance unit.

Performance Management Plan Was Not Completed

Summary: Contrary to USAID guidance, the FY 2008 treatment program for the performance management plan did not include all five performance indicators or indicator reference sheets that should have addressed the quality of results data. The mission attributed this problem to the reliance on other tracking procedures that were outside of the plan. Without a complete plan to provide for adequate data quality, USAID/Rwanda could not ensure that it was maintaining the elements essential to the operation of a credible and useful performance-based management system.

The performance management plan for the FY 2008 treatment program did not contain all of the program performance indicators. The plan contained only indicator 4—the number of patients under treatment at the end of the period. It did not contain indicators 1, 2, 3, and 5, as set forth in appendix III of this report. An additional problem with the plan was the absence of performance indicator reference sheets for the indicators. The mission had relied on USAID reference sheet templates, which are very general, without completing sheets for its particular treatment program. Indicator reference sheets constitute the basic format for outlining the monitoring controls to manage the program's individual performance indicators. Reference sheets should also address the quality of data from implementing partners, which were the primary sources of program data. Without complete reference sheets, the performance management plan simply assumed that the data in partner reports were of adequate quality and made no provision for confirming data quality.

The Automated Directives System (ADS)[13] states that assistance objective teams must complete performance management plans for each assistance objective. In addition, ADS indicates that such plans must (1) identify the performance indicators that will be tracked; (2) specify the source, method of collection, and schedule of collection for all required data; and (3) assign responsibility for collection to a specific office, team, or individual.[14] Furthermore, USAID's "Performance Management Toolkit" states that a complete performance management plan contains a statement of all performance indicators that will be used to assess progress over the life of the strategic objective. Baseline values and performance targets for each indicator should also be included, with specifications for the various data sources and collection methods to be employed.

In addition to these requirements, the plan should include specifications for the schedule for data collection and a description of known data limitations. The goal of assessing data from implementing partners is for missions to be aware of data strengths and weaknesses and of the extent to which data can be trusted when reporting and making management decisions. For data from implementing partners, the primary source used by USAID/Rwanda, the Toolkit recommends that performance plans include periodically sampling and reviewing data for completeness, accuracy, and consistency. It also

[13] ADS 203.3.3.
[14] ADS 203.3.3.1.

recommends conducting field visits to compare central office records with field site records and visiting a broad range of sites.

The mission indicated that the omissions resulted from reliance on other performance indicator tracking procedures that were outside of the performance management plan. There ADS contains no provision, however, for excluding performance indicators from the performance management plan.

Without a complete performance management plan that provided for all performance indicators, indicator reference sheets, and data quality testing for all five program indicators, USAID/Rwanda did not have reasonable assurance that program data met acceptable standards of validity, reliability, and accuracy. Without such assurance, managers could lack the performance information needed to make sound decisions. Had the mission established and enacted procedures to maintain a complete plan that also provided for regular data quality testing, many of the data problems previously identified in the report could have been prevented or reduced. For these reasons, this report makes the following recommendations to strengthen the results reporting system under the mission's treatment program:

Recommendation No. 5: We recommend that USAID/Rwanda establish written procedures that require performance management plans to be complete, containing all performance indicators and reference sheets, and provide for data-quality testing.

Recommendation No. 6: We recommend that USAID/Rwanda revise its current performance management plan for the treatment program to include all five performance indicators.

Data Quality Assessments Were Not Completed

Summary: Contrary to USAID guidance, data quality assessments were not completed for the treatment program. This problem arose from weak internal control and staffing constraints. As a result, data quality problems were not identified, leaving USAID/Rwanda without reasonable assurance that officials had the high-quality data necessary for making sound, performance-based decisions.

USAID's ADS 203.3.5.2 states that the purpose of data quality assessments is to ensure that the USAID mission/office and assistance objective teams are aware of (1) the strengths and weaknesses of the data, as determined by applying appropriate quality standards, and (2) the extent to which data integrity can be trusted to influence management decisions. The ADS also states that data reported to USAID/Washington for reporting purposes in compliance with the Government Performance and Results Act of 1993 or for reporting externally on USAID performance must have had a data-quality assessment within 3 years before submission.

USAID's "Performance Management Toolkit" states that missions should determine whether there are procedures to (1) ensure that data are free of significant error or bias;

(2) periodically review data collection, maintenance, and processing; and (3) provide for periodic sampling and quality assessment of data. To assess the quality of partner data, the Toolkit, in conjunction with the ADS, recommends periodically sampling and reviewing partner data to ensure completeness, accuracy, and consistency and determining whether the partner appropriately addressed known data-quality problems. To monitor whether implementation is on track toward expected results, missions can use field visits, data from other sources, and independent surveys or evaluations to ensure acceptable data quality. According to the ADS, missions should assess whether reports accurately reflect actual performance in the field. All assessments should be documented and available.

USAID/Rwanda has not completed any data-quality assessments for the five performance indicators in its treatment program. For the program beginning in FY 2004, the mission had been reporting results for 4 years without performing the required assessments. As a result, data validity and reliability problems had not been identified and addressed before the mission reported results for its five treatment indicators.

The mission indicated that this problem had resulted from program staffing constraints and the program's rapid expansion. According to mission officials, they were unable to comply with all ADS requirements because the limited staff had responsibility for a large portfolio implemented at a national level. The mission has since hired new staff members and is requesting five additional staff positions for FY 2010. Additionally, an implementing partner has recently been added to the program to conduct data-quality assessments. Although none had been completed at the time of this audit, a mission official stated that the partner anticipated completing assessments next quarter.

Without adequate testing for data integrity, the mission did not have reasonable assurance that data used for performance-based decisionmaking and reporting were valid and reliable. Unreliable data can undermine the appropriateness of management decisions and managers' ability to evaluate the effectiveness and efficiency of their programs. Had procedures been in place to complete data-quality assessments in a timely manner and to address data-integrity problems identified in those assessments, the problems of data validity and reliability identified in this report could have been corrected. For these reasons, this report makes the following recommendations.

Recommendation No. 7: We recommend that USAID/Rwanda establish written procedures requiring that data-quality assessments be completed in a timely manner in accordance with applicable guidance.

Recommendation No. 8: We recommend that USAID/Rwanda complete data-quality assessments for the five treatment program indicators in accordance with Automated Directives System requirements.

Thorough Site Visits Were Not Conducted

Summary. Contrary to USAID guidance, USAID/Rwanda did not conduct thorough site visits at its implementing partner and service outlet locations. The mission attributed this problem to a staff shortage and the priority placed on program implementation and quality of service. However, without active monitoring and thorough site visits, the mission did not always have reasonable assurance that data used for performance-based decision making and reporting were valid and reliable.

USAID's ADS 202.3.4.6 states that assistance objective teams must ensure that they have adequate official documentation on agreements used to implement USAID-funded projects, as well as on the resources expended, issues identified, and corrective actions taken. Furthermore, ADS 202.3.6 states that monitoring the quality and timeliness of implementing partners' outputs is a major task of cognizant technical officers (now referred to as contracting officer's technical representatives) and assistance objective teams. It specifies that problems in output quality provide an early warning that results may not be achieved as planned and that early action in response to problems is essential in managing for results.

To assess the quality of partner data, USAID's "Performance Management Toolkit" recommends periodically sampling and reviewing partner data to ensure completeness, accuracy, and consistency and determining whether the partner appropriately addressed known data-quality problems. The Toolkit also recommends developing a simple site-visit guide, covering all topics of interest, to be used systematically by teams visiting all sites. Although the relevant USAID/Rwanda mission order[15] requires the preparation of site-visit reports and includes a standard site-visit report to be used by mission staff, that standard site-visit report does not contain specific requirements for data-quality testing.

Although the treatment team had conducted some site visits, it did not have documentation to show that data validity and reliability had been verified during those visits. This was a crucial omission for implementing partners and their service providers that had not updated or reconciled their patient records. According to mission officials, the absence of data-quality testing and the documentation thereof resulted from staffing constraints during FY 2008 and the program's rapid expansion. Site visits during that period focused exclusively on activity implementation and the examination of quality of services provided. The mission has since hired new staff members and is requesting five additional staff positions for FY 2010.

Without active monitoring through regular site visits and data verification, the mission did not always have reasonable assurance that data used for performance-based decision making and for reporting were valid and reliable. A program to monitor data quality with regular site visits could have identified documentation and reporting issues and prevented many of the problems of data reliability identified in this report. Therefore, this

[15] Mission Order 202-1, "Site Visit Documentation Requirements for USAID/Rwanda."

report makes the following recommendation to improve the data-monitoring capacity of site visits.

Recommendation No. 9: We recommend that USAID/Rwanda establish written procedures requiring that site visits provide for data-quality testing and adequate documentation of the test results.

EVALUATION OF MANAGEMENT COMMENTS

In its response to the draft report on USAID/Rwanda's HIV/AIDS treatment program, the mission concurred with all nine recommendations. The mission described the actions it plans to take to address the noted concerns. The mission's comments and the audit team's evaluation of those comments are summarized below.

In response to recommendation no. 1, concerning a plan to train all implementing partners and service outlets for treatment services in properly updating patient records, maintaining source documents, reconciling patient records, and reporting program results, the mission will train clinical implementing partners on data collection and validation at service delivery points by September 2010. In addition, USAID implementing partners will update the skills of the data managers at the service outlets by March 2011. Finally, the mission will share the audit findings with the Ministry of Health to emphasize the importance of patient record reconciliation as part of the national supervision strategy. As a result of these planned actions, a management decision has been reached on the recommendation.

In response to recommendation no. 2, concerning a plan, with milestones, to train all implementing partners and service outlets providing treatment services to maintain inventory records and manage stocks effectively, the mission will modify the work plans of clinical implementing partners by June 2010. This will be done to ensure that support for stock and inventory management at health facilities is part of their ongoing activities. As a result of these planned actions, a management decision has been reached on the recommendation.

In response to recommendation no. 3, concerning a plan, with milestones, to investigate and correct the problem of service outlets receiving insufficient quantities of treatment commodities from the national pharmaceutical procurement agency, the mission will support the development of a tracking system that will record order-fill rates for each facility to be presented to the government by September 2010. Additionally, a USAID partner will continue its ongoing support to build capacity in commodity management. As a result of these planned actions, a management decision has been reached on the recommendation.

In response to recommendation no. 4, concerning a plan, with milestones, to investigate and correct the problem of inadequate maintenance of test equipment by the national maintenance unit, the mission will participate in the Ministry of Health's national maintenance technical working group to help identify and resolve capacity gaps of the maintenance unit. However, given that the current plan provides for another U.S. Government partner to act as funding support for the maintenance unit in FY 2011 and not USAID/Rwanda, final action has been taken on this recommendation with the publication of this report.

In response to recommendation no. 5, concerning procedures that require performance management plans to be complete, containing all performance indicators and reference

sheets, and provide for data-quality testing, the mission will prepare a mission order on the required preparation of complete performance management plans, including provisions for data-quality testing, by September 2010. As a result of these planned actions, a management decision has been reached on the recommendation.

In response to recommendation no. 6, concerning a revision to its current performance management plan for the treatment program to include all five performance indicators, the mission will revise its plan to include all program indicators by March 2011. As a result of these planned actions, a management decision has been reached on the recommendation.

In response to recommendation no. 7, concerning procedures requiring that data-quality assessments be completed in a timely manner in accordance with applicable guidance, the mission will include the requirement for data-quality assessments as part of the mission order for performance management plans to be completed by September 2010. As a result of these planned actions, a management decision has been reached on the recommendation.

In response to recommendation no. 8, concerning data-quality assessments for the five treatment program indicators in accordance with Automated Directives System requirements, the mission will conduct data-quality assessments for the respective indicators by September 2010. As a result of these planned actions, a management decision has been reached on the recommendation.

In response to recommendation no. 9, concerning procedures requiring that site visits provide for data-quality testing and adequate documentation of the test results, the mission has amended a mission order to include a data-quality section in the site visit report. As a result of these actions, final action has been taken on this recommendation with the publication of this report.

SCOPE AND METHODOLOGY

Scope

The Office of Inspector General conducted this performance 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, based on our audit objective. We believe that the evidence obtained provides that reasonable basis for our findings and conclusions based on our audit objective. Audit fieldwork was conducted at USAID/Rwanda from August 24 to September 11, 2009, and covered fiscal year (FY) 2008.

In planning and performing the audit, the audit team assessed management controls related to management review, proper execution of transactions and events, and review of performance measures and indicators. Specifically, we studied and evaluated the following:

- FY 2007 and 2008 country operational plans
- FY 2008 performance management plan
- Annual Progress Report
- Certification required under the Federal Managers' Financial Integrity Act of 1982
- Implementing partner agreements
- Performance measures
- Actual performance results
- Site visit reports
- Implementing partner progress reports
- Service outlet patient registers and documents

We also interviewed key USAID/Rwanda personnel, implementing partners, service providers, and Rwandan Government officials. We conducted the audit at USAID/Rwanda and at the activity sites of four major implementing partners, as well as at Rwandan Government storage facilities.

As of September 30, 2008, USAID/Rwanda's treatment program had agreements with four major partners. We focused primarily on the four agreements through which most of the reported results were contributed. Reported obligations through the end of FY 2008 totaled $23.6 million for the four treatment agreements. The major partners were Family Health International, Elizabeth Glaser Pediatric AIDS Foundation, IntraHealth International Incorporated, and Partnership for Supply Chain Management.

Methodology

To answer the audit objective, we reviewed the targeted and actual results in the FY 2007 and 2008 operational plans. At USAID/Rwanda, the treatment program reported on five performance indicators in its operational plan. We did not audit four of the five indicators because of time constraints and the lesser significance of those indicators.

For the one remaining standard indicator, we validated performance results and compared reported information with documented results for a judgmentally selected sample of results submitted by the four major implementing partners for FY 2008. The sample consisted of 11 service outlets out of 131 reported outlets, and included representative sites that (1) constituted both large hospitals and smaller health centers, (2) were supported by all three of the major partners, and (3) were located in all of the major geographical areas. Because of the large number of patients and the extensive geographical dispersion of the sites, a statistical sample was not possible. Because of its judgmental nature, the results of the sample cannot be projected to the universe of all service outlets.

We reviewed the agreements, progress reports, and work plans of the major implementing partners and service providers that contributed results to the indicator we tested. We reviewed applicable laws and regulations—as well as USAID policies and procedures pertaining to USAID/Rwanda's treatment program—including the Federal Managers' Financial Integrity Act of 1982 certification,[16] Automated Directives System (ADS) chapters 202 and 203, and supplemental ADS guidance.

We also reviewed current reports for which the fieldwork took place. In the process of testing the results of the selected indicator at 11 service providers, we conducted site visits at numerous other offices of implementing partners and the Government of Rwanda's commodity management organization. These visits included interviews with USAID/Rwanda's treatment team members, implementing partners, service providers, and beneficiaries, as well as a review of relevant documentation.

[16] Public Law 97–255, as codified in 31 U.S.C. 3512.

MANAGEMENT COMMENTS

February 22, 2010

MEMORANDUM

To: Nathan S. Lokos, Regional Inspector General/Pretoria

From: Dennis Weller, Director USAID Rwanda /s/

Copy: Walter Hammond, Janean Davis, Nancy Godfrey

Re: USAID Rwanda management comments to "USAID/Rwanda's HIV/AIDS Treatment Activities" (Audit Report No.4-696-10-00X-P)

Please find attached USAID/Rwanda's Management Response Letter to the Regional Inspector General (RIG) Pretoria's Audit Report No. 4-696-10-00X-P.

Each of nine recommendations from the RIG report is copied below along with USAID/Rwanda's management response

USAID/Rwanda Response to "Audit of USAID/Rwanda's HIV/AIDS Treatment Activities" (Audit Report No. 4-696-10-00X-P)

USAID/Rwanda appreciates the work of the Regional Inspector General (RIG) to prepare the "Audit of USAID/Rwanda's HIV/AIDS Treatment Activities" (Report No. 4-696-10-00X-P). We acknowledge that the objective of the audit was changed from reviewing the achievement of USAID/Rwanda's treatment program's goals to focus on the tracking and reporting of number of person on antiretroviral therapy (ART).

Given USAID/Rwanda's goal to provide technical assistance to the Rwandan national coordinated procurement and distribution system, we are pleased with the audit team's finding that "the service outlets supported by the Mission represent a significant contribution to the Government of Rwanda's National Treatment Plan." We would like to emphasize this approach to support the national program to clarify the context in which USAID/Rwanda implements our PEPFAR program. In addition to the explanation below, specific clarifications for the draft audit report are included in Table 2 (attached).

Through the President's Emergency Plan for AIDS Relief (PEPFAR), the U.S. Government (USG) provides support to the Government of Rwanda (GOR) and their health facilities (hospitals, labs, health centers) and health systems (commodities and logistics, information). USAID and our implementing partners do not establish any facilities or health systems outside of the national Rwandan systems. In other words, there are no USAID or USAID-funded implementing partner health facilities. All facilities are under the direction and management of the GOR and receive support from USAID and our implementing partners. The rules, regulations and policies, including the reporting forms and reporting requirements, that are followed by the facilities are those that have been established by the Government of Rwanda (not by the USG or USAID). USAID did not begin by "establishing hospitals and health centers" as stated in the audit findings, but rather by providing additional support to existing hospitals and health centers following GOR policy to enable them to provide ART services.

Similarly, drug quantification, procurement, storage and distribution are all done using GOR systems. The USG participates in the Coordinated Procurement and Distribution System (CPDS), which is led by the GOR and includes all donors in the HIV/AIDS sector. The type and quantity of drugs needed, the procurement schedule, the storage facilities and organization, and the distribution of drugs are all decided, implemented and coordinated into this CPDS system. There is not a separate system by which USG PEPFAR commodities are brought into the country or managed once here. USAID/Rwanda did not procure, store and distribute commodities for the treatment program, as stated in the audit report, but rather supported the GOR's system to perform these functions.

The decision to support existing systems and not establish separate, parallel systems is a

deliberate one by the USG PEPFAR team, which includes USAID/Rwanda, as we see this as the most sustainable way to support the provision of quality HIV/AIDS services in Rwanda. This distinction is also important to understand when considering recommendations that are within our mandate to implement/improve.

The five main recommendations in the draft audit report are to: (1) improve the validity and reliability of reported results, (2) improve the management of treatment commodities, (3) prepare a complete performance management plan that includes all of the performance indicators and provides for data quality testing, (4) complete thorough data quality assessments, and (5) conduct thorough site visits.

The response to each finding and recommendation are included below, and summarized in Table 1. The table includes a summary of suggested action items to respond to the draft audit report findings, including both ongoing and one-time activities.

Recommendation 1: We recommend that USAID/Rwanda develop and implement a plan, with milestones, to train all implementing partners, and service outlets for treatment services, to properly update patient records, maintain source documents, reconcile patient records at least once a year, and report program results.

USAID/Rwanda agrees with the finding that patient records at Rwandan health centers are not consistently updated and reconciled, especially for FY 2008 data.

In response to the need for updated, validated patient records at service delivery sites, in 2009, USAID/Rwanda supported the recruitment and placement of data managers at all of the health facilities receiving USAID assistance. These data managers work with the management of each health facility to compile, review, and validate data. USAID's support for these data managers has helped to improve the validity and reliability of reported results. They have also played a critical role in the current transition to electronic medical records at health facilities.

In order to further respond to this need, USAID/Rwanda will train clinical implementing partners on data collection and validation at service delivery points by September 2010. This training will be conducted through the Monitoring & Evaluation Management Service (MEMS), a five-year USAID/Rwanda agreement designed to build capacity for USAID implementing partners to meet reporting obligations.

Following the training, USAID implementing partners will update the skills of the data managers at the service outlets by March 2011. Finally, USAID will share the audit findings with the Ministry of Health to emphasize the importance of patient record reconciliation as part of the national supervision strategy, which includes routine data quality audits across all health services.

Recommendation 2: We recommend that USAID/Rwanda develop and

implement a plan, with milestones, to train all implementing partners and service outlets providing treatment services to maintain inventory records and manage stocks effectively.

We agree with the finding that there is a need to improve the management of commodities at the service outlets. In response, USAID/Rwanda will modify the work plans of clinical implementing partners by June 2010 to ensure that support for stock and inventory management at health facilities is part of their ongoing activities.

Recommendation 3: We recommend that USAID/Rwanda develop and implement a plan, with milestones, to investigate and correct the problem of service outlets receiving insufficient quantities of treatment commodities from the national pharmaceutical procurement agency.

We agree with the finding that service outlets have challenges receiving complete order fills from CAMERWA. To address this issue, USAID/Rwanda will support the development of a tracking system that will record order fill rates for each facility to be presented to GOR by September 2010. This will help identify when and where gaps are occurring for requested commodities.

We appreciate the acknowledgement of the "well-maintained, secure facilities" and "well-documented inventory system" (p.9) of the national pharmaceutical procurement agency, CAMERWA, that is supported with USAID technical assistance. We also appreciate the recognition that "demand quantification is a complex process involving several partners" (p. 11). Perhaps unlike other PEPFAR countries, USAID/Rwanda does not procure commodities for USAID-supported health facilities. Rwanda utilizes a national Coordinated Procurement and Distribution System (CPDS) to forecast and manage health commodities for all health centers in the country.

In response to this audit finding, through the Partnership for Supply Chain Management Systems (SCMS), USAID/Rwanda will support the development of a national tracking system at health facilities to highlight low fill rates to be presented to CAMERWA. In addition, SCMS will continue its ongoing support to build capacity in quantification of commodities through the CPDS, generate up-to-date forecasting and supply plans, support the creation of a national Logistics Management Unit, and strengthen the existing reporting system for quantification, forecasting and supply planning for districts and health service delivery points.

Recommendation 4: We recommend that USAID/Rwanda develop and implement a plan, with milestones, to investigate and correct the problem of inadequate maintenance of test equipment by the national maintenance unit.

We agree with the finding that there is inadequate maintenance by the national maintenance unit. The national maintenance unit has been receiving support from the Belgian Technical Cooperation (BTC), and will start receiving PEPFAR support in

FY 2011 through CDC's cooperative agreement with the Ministry of Health. Therefore, USAID/Rwanda is not in a position to directly implement the recommendation.

In support of the issue, USAID/Rwanda participates in the Ministry of Health's national maintenance technical working group to help identify and resolve capacity gaps of the maintenance unit. We also ensure that our partners procure equipment according to GOR standards to guarantee that the maintenance can be performed by the national unit.

Recommendation 5: We recommend that USAID/Rwanda establish written procedures that require performance management plans to be complete, containing all performance indicators and reference sheets, and provide for data-quality testing.

We agree with the finding that USAID/Rwanda has not included indicator reference sheets as part of the USAID PMP. However, indicator definitions and collection information have been maintained as part of the USG PEPFAR program. The report finding that omissions from the PMP arose from a staff shortage and the program's rapid expansion is inaccurate. As in other PEPFAR countries, the Mission selected the seven main PEPFAR indicators as performance indicators for the PMP.

USAID/Rwanda agrees with the recommendation. In response to this finding, in addition to the existing written ADS guidance, USAID/Rwanda will prepare a Mission Order on the required preparation of complete performance management plans, including provisions for data quality testing by September 2010.

Recommendation 6: We recommend that USAID/Rwanda revise its current performance management plan for the treatment program to include all five performance indicators.

USAID/Rwanda agrees with the recommendation. The Mission will revise and update the current Performance Management Plan to include all PEPFAR indicators by March 2011. This is timely as new treatment indicators have been introduced. A complete list of PEPFAR indicators with their definitions will be added as an annex to the PMP.

Recommendation 7: We recommend that USAID/Rwanda establish written procedures requiring that data-quality assessments be completed in a timely manner in accordance with applicable guidance.

USAID/Rwanda agrees with the recommendation, and will include the requirement for data quality assessments as part of the Mission Order for the Performance Management Plan (see recommendation 5).

Recommendation 8: We recommend that USAID/Rwanda complete data-

quality assessments for the five treatment program indicators in accordance with Automated Directives System requirements.

USAID/Rwanda agrees with the recommendation. As stated in the audit report (p.14), USAID has increased the number of staff and added an implementing partner, MEMS, to conduct data quality assessments. Data quality assessments for the five treatment program indicators are planned to be conducted by September 2010.

Recommendation 9: We recommend that USAID/Rwanda establish written procedures requiring that site visits provide for data-quality testing and adequate documentation of the test results.

We agree with the finding that USAID/Rwanda did not conduct thorough site visits that included checks on data validity and reliability. A Mission Order was issued in 2009 (see attached) that includes data quality testing as part of the required site visits. Thus, written procedures have been established.

USAID/Rwanda
Directly Funded HIV/AIDS Treatment Program
Performance Indicators for Fiscal Year (FY) 2008

Indicator*	FY 2008 Directly Funded Target	FY 2008 Directly Funded Reported
1. Number of service outlets providing antiretroviral therapy	136	131**
2. Number of individuals newly initiating antiretroviral therapy during the reporting period	13,475	13,926**
3. Number of individuals who had ever received antiretroviral therapy by the end of the reporting period	37,710	46,000**
4. Number of individuals receiving antiretroviral therapy by the end of the reporting period	32,500	36,943***
5. Total number of health workers trained to deliver antiretroviral therapy services, according to national and/or international standards	1,749	1,766**

Sources: USAID/Rwanda's country operational plan, annual progress report, and performance management plan.

* The mission's performance management plan included only performance indicator 4.
** Not audited.
*** The audit was unable to confirm the validity and reliability of these results.

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