



OFFICE OF INSPECTOR GENERAL

AUDIT OF USAID/CAMBODIA'S BETTER HEALTH SERVICES PROJECT

AUDIT REPORT NO. 5-442-13-002-P
DECEMBER 7, 2012

MANILA, PHILIPPINES



Office of Inspector General

December 7, 2012

MEMORANDUM

TO: USAID/Cambodia Mission Director, Flynn Fuller

FROM: Regional Inspector General/Manila, William S. Murphy /s/

SUBJECT: Audit of USAID/Cambodia's Better Health Services Project
(Report No. 5-442-13-002-P)

This memorandum transmits our final report on the subject audit. In finalizing the report, we considered your comments on the draft version and have included them in their entirety in Appendix II of this report.

This report contains eight recommendations to assist the mission in improving the efficiency and effectiveness of its program. On the basis of information provided by the mission in its response to the draft report, we determined that final action has been taken on recommendations 5 and 6. We acknowledge that management decisions have been reached on recommendations 1, 3, 4, 7, and 8. A management decision has not yet been reached on Recommendation 2. Please provide the Audit Performance and Compliance Division of USAID's Office of the Chief Financial Officer with evidence of final action to close the open recommendations.

I want to thank you and your staff for the cooperation and courtesies extended to us during this audit.

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Abbreviations

The following abbreviations appear in this report:

- ADS Automated Directives System
- AMSTL active management of the third stage of labor
- NGO nongovernmental organization
- NHCC New Hope for Cambodian Children
- PMP performance management plan
- URC University Research Co. LLC
- WHO World Health Organization

SUMMARY OF RESULTS

Cambodia fares poorly on numerous health indicators. According to the World Health Organization (WHO), the country's maternal mortality rate is five times higher than the regional average, and child mortality is also elevated. Domestically, too, there are disparities, with the poorest 20 percent of children three times more likely to die before turning 5 than those in the wealthiest 20 percent.¹ High incidences of communicable diseases such as tuberculosis, malaria, and dengue fever also reflect the lack of access to health care, especially among rural populations.

With international help, the Cambodian Government has begun to make some health improvements. It increased health spending from \$7 per capita in 2005 to \$17 in 2010, 143 percent in 5 years. Cambodia's Demographic and Health Survey 2010 reported that the proportion of births attended by skilled health personnel rose from 44 percent in 2005 to 71 percent in 2010; during the same period, according to the Inter-Agency Maternal Mortality Estimation Group led by WHO, maternal mortality decreased 26 percent from 340 to 250 per 100,000.

Continuing its assistance to the government, USAID awarded a \$33.6 million cooperative agreement to University Research Co. LLC (URC), covering a 5-year period from December 24, 2008, through December 30, 2013. This award is to implement the Better Health Services Project, a follow-on to the Health Systems Strengthening in Cambodia Project implemented by URC from January 2003 through December 2008. As of March 31, 2012, cumulative obligations and disbursements under the project totaled \$23 million and \$19 million, respectively.

The main goals of the Better Health Services Project are to strengthen health-care capacity at the provincial and operational district (health district) levels and to support health-care reform efforts aimed at improving the quality and efficacy of key programs. These programs relate to public and private health service delivery systems; the quality of maternal, neonatal, and infant and child health services and interventions; and the management and control of infectious diseases through surveillance, case identification, and consistency of data entry and coding.

The objective of the audit was to determine whether the program was achieving its main goals as described above.

The audit determined that the Better Health Services Project has strengthened health delivery systems and improved the quality of maternal and newborn health services at the provincial and operational district levels. However, the project has not yet demonstrated improved quality or efficacy in the management and control of infectious diseases.

The project helped strengthen health delivery systems by introducing a Web-based health management information system. Previously, using an offline version of the system, the Ministry of Health had to wait long periods to get data that were often unreliable or outdated. Now, 100 percent of public health facilities enter data into the new Web-based system, where they are immediately available to the ministry, and the quality of data in the system has increased, earning a score of 67 percent on a qualitative index in 2006 and 87 percent in 2012.

¹ WHO, Cambodia Health Profile, May 2012.

In addition, the project supported the expansion of services with health equity financing. This funding arrangement improves access to health services for the poor by covering their fees and related costs, such as transportation to receive treatment. It also increases the likelihood that doctors and other caregivers will provide treatment that is as good as that received by paying patients. Results have been positive. The numbers of hospitals and health centers covered by health equity financing increased from 21 and 42 in the beginning of the project to 32 and 232 at the end of the third year of implementation—52 percent and 452 percent, respectively. These third-year figures represent 37 percent and 23 percent of the total number of hospitals and health centers in the country.

The quality of care provided in health facilities supported by the project has also improved because of better hygiene, sterilization of medical equipment, and proper waste management. As a result of the implementer's training activities, a quality index measuring related hygiene standards increased from 11.7 percent in 2008 to 29.3 percent in 2011. Likewise, feedback has been very positive among health-care providers at health centers and hospitals regarding the project's efforts to improve maternal and newborn health services. These efforts included training midwives in pre- and postnatal care and in delivery techniques.

Despite these successes, the audit found some areas for improvement:

- A key project component was not being addressed (page 4). Disease surveillance—collecting, analyzing, and interpreting data to monitor the spread of infectious diseases, plan preventive measures, adjust staffing and other resources to correspond to health needs, and respond to outbreaks—started but shifted to focus exclusively on monitoring bird flu and then fell off altogether.
- Unauthorized changes were made to the project's scope (page 5). A subaward that the mission asked the implementer to make consisted of providing support services to HIV/AIDS patients and their families, activities that did not strengthen the health system.
- Performance monitoring was inadequate (page 6). Data quality was poor, yet assessments did not disclose deficiencies. In addition, performance indicators changed so frequently that measuring progress became nearly impossible.

Auditors also became aware that complaints from patients receiving hospital services were not formally monitored (page 10).

The report recommends that USAID/Cambodia:

1. Implement a strategy for disease surveillance and document the results (page 5).
2. Through the project's agreement officer, determine the allowability of and recover, as appropriate, questioned costs of \$699,559 (ineligible) in cumulative disbursements (page 6).
3. Through the project's agreement officer, ratify the addition of activities to provide food, day care, and other support to families affected by HIV, or disallow the changes in the project's scope. Whether the activities are ratified or disallowed, in whole or in part, the agreement officer should determine and document the appropriate corrective actions taken (page 6).

4. Clearly define each indicator in writing—including how it should be measured—so that reported results accurately reflect accomplishments (page 7).
5. Require the prime implementer to improve internal controls governing collecting, maintaining, and processing data (page 8).
6. After the implementer has improved internal controls in response to Recommendation 5, implement procedures for conducting data quality assessments that include (1) evaluating whether data for each indicator meet all five quality standards, (2) evaluating the implementer’s data collection, maintenance, and processing procedures, and (3) testing the data’s accuracy and consistency (page 8).
7. Update the project’s performance management plan (PMP) to include all performance indicators used to measure activities implemented since the start of the project, along with justifications for those that were cancelled or added (page 9).
8. Implement a formal process for documenting, tracking, and analyzing complaints within the health equity financing system (page 10).

Detailed findings follow. The audit scope and methodology are described in Appendix I. Our evaluation of management comments is included on page 11, and the full text of management comments appears in Appendix II.

AUDIT FINDINGS

A Key Project Component Was Not Addressed

According to the implementer, the two most prominent problems with disease surveillance in Cambodia are that health facilities identify and code cases differently, and district and provincial officials do not analyze data that facilities submit. In monitoring for influenza-like illnesses, some health centers report every episode of diarrhea, while others only report suspected cholera cases (e.g., severe diarrhea). By not analyzing facility data, district and provincial officials cannot detect inconsistent reporting and cannot protect against false alarms.

Consequently, one of the project's three components was to strengthen the management and control of infectious diseases. This component calls for strengthening disease surveillance to improve case identification, classification, and analysis and to make data entry and coding more consistent—for example, training health workers to differentiate coding for ordinary diarrhea and for suspected cholera. The project was also supposed to help develop action plans for responding to and containing disease outbreaks.

However, the project has made little headway on this component. During the first year, the implementer reportedly trained 51 health workers from 16 health centers in surveillance. While this training was said to have improved the health centers' reporting process and helped them diagnose cases of 12 diseases, it occurred in only one operational district; the project's 11 focus provinces have 44 operational districts.

Progress stalled in subsequent years. In the second year, attention shifted to monitoring avian influenza outbreaks. Accordingly, the project changed the indicator *Number of people trained in surveillance* to the *Number of people trained in surveillance for H5N1 or H1N1 [strains of bird flu] infections in humans*, deleting the former indicator and its reported results. The third annual progress report did not include any activities related to disease surveillance, and no such activities were being conducted at the time of the audit, during the fourth year of implementation.

The shift away from surveillance of the country's most prevalent diseases to focus on detecting bird flu, which is rare in people, was due in part to receipt of increased resources from the Global Fund² in 2009 to address this high-profile disease. When these resources dwindled in 2010, so did the project's surveillance efforts, despite continued funding from USAID. The mission was unable to explain satisfactorily why disease surveillance activities stopped, although the continually changing indicators (discussed in the next finding) seem to have played a part.

As a result, public health facilities do not have mechanisms to classify infectious diseases properly, identify outbreaks, or respond to them when they occur. Several health workers we interviewed asked for technical assistance in identifying the most common diseases and responding to them. Others said they were unprepared to deal with an outbreak. We therefore make the following recommendation.

² The Global Fund is a public-private partnership formed to channel resources to prevent and treat HIV/AIDS, tuberculosis, and malaria and to reduce infections, illness, and death.

***Recommendation 1.** We recommend that USAID/Cambodia work with the project staff to implement a strategy for disease surveillance and document the results.*

Unauthorized Changes Were Made to the Scope

The project's main goals were to improve health-care capacity at the provincial and operational district levels and to support health-care reform efforts aimed at improving the quality and efficacy of key programs. To achieve these goals, the project was to focus on strengthening health service delivery systems, for example by increasing access to health financing, improving data quality through the use of health information systems, and improving the quality of care provided (Component 1). The project was also to improve the quality of maternal, neonatal, and infant and child health services and interventions (Component 2) as well as to strengthen the management and control of infectious diseases largely through better disease surveillance, case identification, and classification (Component 3).

In December 2009, after approximately 1 year of implementation, the implementer complied with a verbal request from USAID/Cambodia to issue a subaward to New Hope for Cambodian Children (NHCC). The subaward to this local nongovernmental organization (NGO) would allow it to continue the work it was doing under an HIV/AIDS service delivery program that had ended. Specifically, the NGO had been (1) transporting HIV-positive children to health-care facilities and providing them with food, (2) providing day care for children of adults with HIV/AIDS, and (3) helping HIV widows generate income.

The mission justified this change in scope by citing passages from the project's cooperative agreement: "Efforts will . . . concentrate on improving access to and quality of health services" and "Through training and capacity development, support and collaborate with NGOs to increase client knowledge, awareness, optimal home practices, care seeking and improve client-provider interactions." Yet these excerpts are out of context and do not represent the project's intent. The sections of the agreement they were taken from clearly state that these efforts are meant to prioritize clinical midwifery development and improve prenatal and delivery care; they do not relate to HIV.

The mission also related the subaward to a section in the cooperative agreement calling for the building of public-private partnerships. One clause states:

Involve NGOs in each province in a more concerted effort to take on new roles in the health system. NGOs should not only work on community mobilization for health, but also exercise a stewardship role in providing oversight, accountability and representing client rights in the health care system.

The clause goes on to clarify that the project should strengthen the government's capacity to seek alliances and work with NGOs to strengthen the health-care system. The section mentions health financing and social insurance as important ways to involve private practitioners and facilities as service providers.

The implementer has advanced public-private partnerships by assisting the Cambodian Government in developing arrangements with community-based organizations in some of the project's focus provinces. Under these arrangements, the organizations provide independent

monitoring of health equity financing and follow up with patients regarding the quality of service provided. In these ways, local NGOs provide oversight of governmental health service provision.

However, the subaward does not satisfy the language in the cooperative agreement for the following reasons:

- It is not a public-private partnership involving the Cambodian Government, and it does not strengthen the government's capacity to seek such partnerships, as called for by the project.
- It does not further the government's health equity financing or provide oversight of its health services in support of the project's first component, strengthening health service delivery systems. Instead, the subaward's financing comes from USAID, through the project's prime implementer.
- The activities of the NHCC subaward do not conform to the objectives of the project. Rather, the subaward provides HIV-related services that neither strengthen health-care capacity at the provincial or operational district levels nor relate to health-care reform efforts.

This expansion of the project's scope would require express approval from the project's agreement officer through a modification to the award. The agreement officer's representative, who is designated to manage and monitor the implementation of the project, does not have the authority to make any changes to the project description or the terms and conditions of the award. Actions taken, or directions given, beyond the authorities designated to this representative may create unauthorized commitments under the award.

As of July 2012, \$699,559 had been spent under this subaward on activities outside the project's scope without an amendment to the agreement. We believe these expenditures represent an unauthorized commitment. As evidenced by implementer staff comments on the lack of resources to expand activities to more health facilities, these funds should have been spent in support of the project's objectives. We therefore make the following recommendations.

Recommendation 2. We recommend that USAID/Cambodia, through its agreement officer, determine the allowability of and recover, as appropriate, questioned costs of \$699,559 (ineligible) as identified in the finding above.

Recommendation 3. We recommend that USAID/Cambodia, through its agreement officer, ratify the addition of activities to provide food, day care, and other support to families affected by HIV, or disallow the changes in the project's scope. Whether the activities are ratified or disallowed, in whole or in part, the agreement officer should determine and document the appropriate corrective actions taken.

Performance Monitoring Was Inadequate

Information in the project's database did not reconcile with the results reported to the mission or with supporting records. In addition, data quality assessments meant to be conducted by the mission to provide reasonable assurance of data quality were not adequately performed, hindering the mission's ability to detect these problems. Further, the project's performance indicators in the PMP were regularly modified without explanation or justification. This made it

difficult to ascertain progress over the course of implementation. These problems are discussed below.

Quality of Reported Data Was Inadequate to Determine Progress. According to USAID's Automated Directives System (ADS), to be useful for performance management and credible for reporting, the data in the project's PMP should be valid, trustworthy, and timely. Data should also be sufficiently precise, with a suitable level of detail, to present a fair picture of performance and help managers make informed decisions.³

However, some performance indicators in the project's PMP did not clearly and adequately represent accomplishments.⁴ For example, the reported *Proportion of patients receiving triage* for fiscal year 2011 was an impressive 97 percent, although the denominator of this figure only recognized patients in the two hospitals where triage had been introduced, rather than acknowledging patients from all ten hospitals included in the end-of-project objective. Further, we found that triage record forms were on file for only 45 percent of the patients reportedly receiving triage. If all ten hospitals had treated the same number of patients, the reported result would have been 9 percent, not 97 percent.

Information in the project's database did not reconcile with results the implementer reported to the mission. For instance, the database indicated the *Number of medical and paramedical practitioners trained in evidence-based clinical guidelines*⁵ was 1,283 for fiscal year 2011, whereas the implementer reported 291. These same training figures were included in the project's database for another indicator—*Number of people trained in family planning and reproductive health*. Further, we found that the number of participants reported in the project's database for 21 of 35 training events—60 percent—did not match supporting documentation. Other training activities reportedly provided during project implementation were not documented. Several indicators, such as quality index measures, were also calculated erroneously.

According to the implementer's chief of party, each team in the implementer's office—the maternal and newborn health team, the hospital improvement team, and the health informatics team, for example—maintains its reported results. These teams interpreted the indicators slightly differently. In addition, because the project's finance team members were entering the training events into the project database, rather than those conducting the training, some significant errors in coding occurred.

Because of these weaknesses, a number of indicators do not present a true portrait of project achievements. Misleading results make it difficult for management to make appropriate decisions about project priorities and future activities. We therefore make the following recommendations.

Recommendation 4. We recommend that USAID/Cambodia work with the prime implementer to clearly define each indicator in writing—including how it should be measured—so that reported results accurately reflect accomplishments.

³ ADS 203.3.11.1, "Data Quality Standards."

⁴ For validation purposes, we used the PMP finalized in February 2012 because it included the most up-to-date results available.

⁵ This indicator was included in the September 2011 and February 2012 PMPs, though it first appeared in the August 2010 plan as the number of practitioners trained in *pediatric* clinical guidelines.

Recommendation 5. *We recommend that USAID/Cambodia require the prime implementer to implement improved internal controls governing collecting, maintaining, and processing data.*

Data Quality Assessment Did Not Disclose Deficiencies in Collecting, Maintaining, and Processing Data. USAID conducts data quality assessments to provide reasonable assurance that reported data meet five data quality standards: validity, precision, integrity, reliability, and timeliness. USAID should test data from secondary sources, like the project's implementing partner, for accuracy and consistency to ascertain their reliability.

The mission assessed the project's data quality in both 2009 and 2012, but both assessments were superficial and incomplete. In 2009 the assessment tested only for validity and integrity (not precision, reliability, or timeliness). In addition, follow-up was not documented when the integrity of reported data was found to be questionable: the number of people reportedly trained in a particular subject when they in fact were not. The 2012 assessment did not specifically acknowledge any of the five data quality standards.

Further, neither of the assessments sufficiently evaluated the implementer's data collection, maintenance, and processing procedures. The mission did not adequately verify that reported data were accurate and consistent. Had the mission done this, it could have found the deficiencies we found in the project's database, like the number of participants shown for 60 percent of the selected training events not matching with training records, as well as database results not reconciling with results reported to the mission. We were unable to determine why these steps had not taken place because the monitoring and evaluation officer responsible for conducting the assessments had recently departed post.

In another example, the latest assessment noted no concerns relating to the reported *Number of women receiving active management of the third stage of labor (AMSTL)*.⁶ The reported figure (96 percent) was derived from the percentage of total delivery records that correctly applied an AMSTL stamp during delivery to signify that AMSTL services had been provided. However, this figure reflects only the percentage of records with AMSTL stamps correctly applied, not the share of women correctly receiving AMSTL services, which was 83 percent. The difference in these calculations is the number of women who did not receive an AMSTL stamp at all during delivery. These figures were on the same spreadsheet maintained by the implementer.

Management's ability to make timely, informative decisions based on reported progress becomes compromised through poor data quality and the inability to recognize problems or inconsistencies in reported results. We therefore make the following recommendations.

Recommendation 6. *After the implementer has improved internal controls in response to Recommendation 5, we recommend that USAID/Cambodia implement procedures for conducting data quality assessments that include (1) evaluating whether data for each indicator meet all five quality standards, (2) evaluating the implementing partner's data collection, maintenance, and processing procedures, and (3) testing the data's accuracy and consistency.*

⁶ WHO defines AMSTL as use of a uterotonic drug immediately following delivery of the fetus, controlled cord traction, fundal massage immediately after delivery of the placenta, and early cord clamping and cutting. It prevents postpartum hemorrhage.

Project’s Performance Management Plans Suffered From Indicator Turnover. The PMP is a tool to plan and manage monitoring, evaluating, and reporting progress toward achieving a project’s objectives. A full set of performance indicators should be specified in the beginning, and indicators that are subsequently dropped should be retained for reference in PMP records. Missions are responsible for documenting these changes while updating their PMPs. The mission should note the reason for any change, along with final values for all old indicators and baseline values for any new indicators.⁷

Instead of using the PMP as a stand-alone tool to monitor project progress, however, the implementer updated it each year to measure the activities included in the project’s annual work plans. As a result, performance indicators were removed or added based on the planned activities of that year. During the last 3.5 years of implementation, the project went through five PMPs, giving rise to 179 unique performance indicators. Only six indicators were consistently measured through all five versions of the project’s PMP as shown in the fifth row of the table below.

Turnover of Indicators in the Project’s Performance Management Plans

Constancy	Number of Indicators	Percent of Total
Included in only one of the five PMPs	127	71
Included in two of the five PMPs	30	17
Included in three of the five PMPs	9	5
Included in four of the five PMPs	7	4
Included in all five of the PMPs	6	3
Total	179	100

Further, 65 percent of the original PMP’s 37 performance indicators are absent from the most current version, as are results previously reported for them. There is no documented justification for this significant shift in reporting.

According to one mission official, the significant changes made to the performance indicators reflected difficulties the implementer faced in developing a PMP at the beginning of the project. As government priorities shifted and new project needs were identified, the implementer had to change indicators. The mission official was not aware these changes had to be justified.

As a result, many earlier project achievements are no longer recognized, including all those relating to the project’s third component: strengthening the management and control of infectious diseases. This shifting from one indicator to another makes it increasingly difficult to determine the cumulative progress in achieving the project’s main goals. We therefore make the following recommendation.

Recommendation 7. *We recommend that USAID/Cambodia work with the prime implementer to update the project’s performance management plan to include all performance indicators used to measure activities implemented since the start of the project, along with justifications for those that were cancelled or added.*

⁷ ADS 203.3.10, “Changing Performance Indicators.”

OTHER MATTER

Patient Complaints Were Not Formally Monitored

During the course of the audit, the audit team became aware of a problem with the process for tracking patients' concerns with the services they receive from health facilities. The audit team found, and the mission and implementer agreed, that the current practice of informally tracking complaints could be improved.

To help improve the quality of care provided at health facilities, the project provides several opportunities for patients to provide feedback on the services they received. This feedback is actively solicited through random visits to patients' homes during quality control reviews and passively solicited through hotlines and personal conversations with local community leadership. When patients report problems, such as abusive care from health providers or illegal requests for under-the-table payments, local organizations address them by directly approaching the health provider at whom the complaint was directed. Later, the complaints are discussed at quarterly coordination meetings at the operational district level. However, these complaints are not formally acknowledged or tracked in any way.

The community-based organizations and health equity fund operators responsible for monitoring the quality of care do not have mechanisms to track patient complaints. In addition, the memorandums of understanding these organizations have with public health facilities merely require the organizations to discuss the issues informally with the health providers in an effort to resolve the problems.

Responding to patient complaints and preventing recurring problems are critical in improving public confidence in and strengthening public and private health services delivery systems. Documenting and tracking patient complaints could help operational districts and provincial health departments identify trends in patient complaints or other problems as they arise. When this matter was discussed with mission and implementer staff, both parties agreed that incorporating a formal process could help. We therefore make the following recommendation.

Recommendation 8. *We recommend that USAID/Cambodia work with the prime implementer to implement a formal process to document, track, and analyze complaints within the health equity financing system.*

EVALUATION OF MANAGEMENT COMMENTS

The Office of Inspector General has reviewed the mission's response to the draft report. On the basis of information provided by the mission in its response to the draft report, we determined that final action has been taken on recommendations 5 and 6. We acknowledge that management decisions have been reached on recommendations 1, 3, 4, 7, and 8. A management decision has not yet been reached on Recommendation 2. Our evaluation of comments is below.

In response to Recommendation 1, the mission has initiated collaboration with Cambodia's Ministry of Health and WHO to develop a training curriculum to help hospital staff identify and report on 12 reportable infectious diseases. Staff from 33 hospitals in seven provinces are expected to receive this training. Project staff will also work in these seven provinces to improve the investigation of outbreaks and response preparedness. Thus, a management decision has been reached. Final action will be taken when the aforementioned training occurs; the target date is June 30, 2013.

In response to Recommendation 2, the mission agreed that the project's agreement officer would review the costs associated with the subagreement in question and determine the allowability of the \$699,559 in cumulative disbursements. The determination, which will constitute a management decision, must specify the amount of questioned costs allowed or disallowed as well as a target date for collection of the disallowed amounts. The estimated date for making a determination is June 30, 2013. The agreement officer will subsequently recover, as appropriate, any disallowed amounts.

In response to Recommendation 3, the mission acknowledged that components of the NHCC subagreement could reasonably be interpreted as outside the scope of the Better Health Services Project, but disagreed that all the activities were. Accordingly, the mission requested a change in the recommendation's wording to allow the agreement officer to make a determination on each activity within the subagreement, rather than a blanket judgment on the entire effort. Furthermore, the mission also requested the recommendation be reworded to require only a modification to the agreement should the subagreement be retained under the Better Health Services Project. We revised the recommendation slightly in response. A management decision has been reached. Final action will be taken when the agreement officer ratifies or disallows the activities conducted under the subagreement, action that is expected to take place by June 30, 2013. However, if the subagreement is not retained, final action will consist in providing documentation that the subagreement has been ended. Amounts used to fund activities determined to be unallowable will be recovered under Recommendation 2.

In response to Recommendation 4, the mission incorporated improvements in indicator definition, collection, and measurement into the revised PMP. A management decision has been reached. Final action will be taken when the mission approves the PMP, which is expected to take place by June 30, 2013.

In response to Recommendation 5, the implementer developed a standard operating procedure to document how, when, and by whom information is collected to improve accountability and

control of data. In addition, the implementer's technical teams are now conducting data quality checks in the field to verify data, while the monitoring and evaluation team in the central office validates data after entry. The implementer also standardized monthly internal audits to ensure the accuracy of data reported to the mission. Final action has been taken on this recommendation.

In response to Recommendation 6, the mission issued a notice on September 20, 2012, requiring all contract and agreement officer representatives to ensure their programs' performance monitoring plans included comprehensive indicators covering the duration of the programs. The mission notice also provided guidance on conducting data quality assessments, including a template covering all five data quality standards. Final action has been taken on this recommendation.

In response to Recommendation 7, the implementer has revised the project's PMP, reexamining indicator definitions and methods of data collection, compilation, and analysis, as well as adjusting targets as necessary. This revised PMP also includes justifications for indicators that were dropped, modified, or introduced later in the project. A management decision has been reached. Final action will be taken when the mission approves the PMP, which it expects to do by June 30, 2013.

In response to Recommendation 8, Cambodia's Ministry of Health, local NGOs and the implementer of the Better Health Services Project signed a memorandum of understanding to establish a complaint mechanism and database to ensure feedback to relevant authorities. The development of this system to collect, document, analyze, and track progress on complaints by beneficiaries of the health equity financing system has been included in the fiscal year 2013 project work plan. A management decision has been reached. Final action will be taken when this system is operational and producing feedback to relevant authorities; the target date is June 30, 2013.

SCOPE AND METHODOLOGY

Scope

We 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 in accordance with our audit objective. We believe that the evidence obtained provides that reasonable basis.

The purpose of this audit was to determine whether USAID/Cambodia's Better Health Services Project was achieving its main goals of strengthening health-care capacity at the provincial or operational district levels and supporting health-care reform efforts aimed at improving the quality and efficacy of key programs. These key programs relate to public and private health service delivery systems; the quality of maternal, neonatal, and infant and child health services and interventions; and the management and control of infectious diseases through surveillance, case identification, and consistency of data entry and coding. To implement the project, USAID awarded a \$33.6 million cooperative agreement to URC, covering the 5-year period from December 24, 2008, through December 30, 2013. As of March 31, 2012, cumulative obligations and disbursements under the project totaled \$23 million and \$19 million, respectively. Because this was a performance audit, looking at project implementation rather than specific financial transactions, the audit team did not audit a specific portion of the \$19 million in disbursements.

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

- Project work plans for fiscal years 2009 through 2012
- Certification required under the Federal Managers' Financial Integrity Act of 1982⁸
- The agreement and modifications
- Reported results
- Financial reports
- Data quality assessments

The audit was performed in Cambodia from July 16 through August 7, 2012, and covered reported results from the inception of the project on December 24, 2008, through March 31, 2012. In that period, the audit team conducted site visits to observe project activities and interview project participants as well as implementer staff.

Methodology

To determine whether the project was achieving its main goals, we initially interviewed key staff at USAID/Cambodia and at the implementer's office in Phnom Penh to gain an understanding of the project, the key players and their roles and responsibilities, and the reporting procedures and controls for monitoring the project. Additional work to answer the audit objective entailed

⁸ Public Law 97-255, as codified in 31 U.S.C. 3512.

interviews with officials from Cambodia's Ministry of Health at the national, provincial, and district levels. We also conducted site visits to interview health providers and to observe project-sponsored activities.

The audit visited 5 of the 11 focus provinces—Prey Veng, Pursat, Battambang, Banteay Meanchey, and Siem Reap. These activities largely included interviews with training recipients as well as with other stakeholders engaged with the project on some level, like recipients of technical assistance. Recipients included health providers such as doctors and nurses, and government officials at the district, province and national level. The audit also performed limited testing to validate reported results for selected performance indicators through substantive testing and analytical procedures.

To determine the reliability of computer-processed data related to the project's reported activities contained in the implementer's database, we selected a judgmental sample of training events and outcome-related measurements within the database. These measurements were selected based on how effectively they represented the project's progress and perceived risk of manipulation of data. In light of the audit procedures performed, we considered the computer-processed data used during the audit reliable, though several of the reported results proved unreliable; they conflicted with documentation or were subject to errors in computing.

We established a materiality threshold of 85 percent to assess the test results. For example, if at least 85 percent of tested results data reported under a specific performance indicator were adequately supported, we concluded that the reported results were reasonably accurate.

MANAGEMENT COMMENTS



November 13, 2012

MEMORANDUM

TO: William S. Murphy
Regional Inspector General/Manila

FROM: Flynn Fuller /s/
Mission Director, USAID/Cambodia

SUBJECT: Audit of USAID/Cambodia's Better Health Services Project
(Report No. 5-442-13-00X-P)

REFERENCE: Draft Audit Report No. 5-442-13-00X-P (October 3, 2012)

The Mission would like to thank the Regional Inspector General (RIG)/Manila for its support and assistance during the performance audit of USAID/Cambodia's Better Health Services Project. In response to the referenced draft audit report No. 5-442-13-00X-P, we are hereby providing our response to the eight audit recommendations issued by the RIG under the subject Audit of USAID/Cambodia's Better Health Services Project (Report No. 5-442-13-00X-P).

Recommendation No. 1: We recommend that USAID/Cambodia work with the project staff to implement a strategy for disease surveillance.

The Mission concurs with this recommendation, and corrective actions have already begun to be put into place to address this recommendation. USAID/Cambodia and Better Health Services (BHS) project staff have worked together to incorporate activities to address this recommendation in the BHS fiscal year (FY) 2013 work plan, including the following:

- 1) At the national level, BHS has initiated collaboration with the Ministry of Health's (MOH) Communicable Disease Control (CDC) department and the World Health Organization (WHO) in order to assist in the development of training curriculum for referral hospital staff to identify and report on 12 reportable infectious diseases (in accordance with MOH classification guidelines).
- 2) At provincial and district levels, by June 2013, BHS will support training for staff from 33 referral hospitals in seven provinces, currently supported by BHS under the hospital improvement program, to identify and report suspect cases to the national level

through the MOH's infectious disease outbreak reporting system.

- 3) BHS will also work with the WHO, the MOH CDC department and Provincial Rapid Response Teams (RRT) in these same seven provinces to improve the investigation of outbreaks and response preparedness.

BHS will also develop an outbreak response and reporting Standard Operating Procedures (SOP) based on the lessons learned from the introduction of this activity, by the end of FY 2013. By the end of the project, BHS, with WHO, the MOH and other relevant partners, will adapt the training curriculum and SOPs for scale up and implementation nationwide. In addition, BHS will pilot test the integration of infectious disease surveillance into the Patient Management and Registration System which is being developed with the MOH Department of Planning and Health Information. During patient intake and triage at a large provincial hospital, the hospital will enter and track presenting symptoms of patients to increase the likelihood of quickly identifying spikes in symptoms, such as diarrhea or cough with fever, which may indicate an infectious disease outbreak and warrant further investigation.

The target completion date for this recommendation is June 30, 2013.

Recommendation 2: We recommend that USAID/Cambodia, through its agreement officer, determine the allowability of \$699,559 in cumulative disbursements and recover, as appropriate, the disallowed amounts.

USAID/Cambodia concurs with this recommendation to allow the agreement officer to determine the allowability of \$699,559, and recover, as appropriate, any disallowed amounts. The Agreement Officer will undertake an in-depth inquiry and review costs associated with the sub-agreement.

The target completion date for this recommendation is June 30, 2013.

Recommendation 3: We recommend that USAID/Cambodia, through its agreement officer, ratify the addition of activities to provide food, day care, and other support to families affected by HIV, or disallow the change in the project's scope. If the change in scope is ratified, the agreement should be modified; if disallowed, the agreement officer should determine the appropriate corrective action to take.

The Mission acknowledges that components of the New Hope for Cambodian Children (NHCC) sub-grant could reasonably be interpreted as being out of scope. The Mission disagrees, however, that all of NHCC's activities are out of scope and requests that Recommendation 3 be changed to permit the Agreement Officer to conduct an in-depth inquiry and make a thorough technical determination as to the matter of scope for each component of NHCC's sub-grant separately. As it stands currently, Recommendation 3 requires the Mission to address the entire sub-grant as being out of scope.

The report indicates NHCC's activities were out of scope because the arrangement was not a "public-private partnership with the Cambodian Government." However, it is possible that many of NHCC's activities were in scope. For example, the cooperative agreement states that University Research Company (URC) will "contribute...to *preparing*...private entities/NGOs for better partnership arrangements." (emphasis added) Moreover, this same section describes how NGOS are needed to play new roles in the health system, including "representing clients'

rights in the healthcare system," mobilizing "[h]ealth financing and social insurance," and "involv[ing] private practitioners and facilities as service providers." Thus, per the language of the agreement NGOs performing those functions are "play[ing] a role in the health system." Not only has URC's work with NHCC been one of preparing NHCC for more direct arrangements with the Cambodian Government, but it has supported activities that directly involve each of those roles: representing clients' rights, mobilizing health financing for clients and providing essential services that the government has explicitly requested, in official government standard operating procedures, that NGOs provide.

Because of this, while the Mission acknowledges that further examination by the AO is required to determine allowability of certain costs, as some portions of the agreement may not be allowable, the Mission's position is that there are substantive portions of NHCC's activities that are likely within the scope of the cooperative agreement, and that the decision to approve the sub-grant relationship was based on this technical perspective. It should be noted that the "commitment" to the sub-grant was actually made in regards to URC's work plan dated October 1, 2009, in which NHCC's activities were described in some detail. The sub-grant agreement itself was not signed by URC until nearly 60 days later, and there is no record of the sub-grant agreement receiving specific approval. Therefore, determinations as to whether NHCC's activities were in scope should come from the language of the work plan rather than the sub-grant agreement, as that was the basis of the technical officer's decision.

One example of how at least some of NHCC's activities appear to be within the scope of the agreement, as described in the work plan, is in its description of NHCC as a health service provider providing home and community-based care and support (HBC) to patients living with HIV. Such providers are considered part of the healthcare system that URC was tasked to improve. The Cambodian Government openly describes its integrated healthcare system as consisting of both public and private entities – especially non-governmental organizations (NGOs). As one of the central components of the Cambodian government's response to the HIV epidemic, the Cambodian Government has sought the inclusion of NGOs in the delivery of HBC, which is a central feature of the HIV Continuum of Care (CoC) service delivery model, as described in the Government of Cambodia's CoC standard operating procedure. The CoC model, and specifically HBC, is critical for supporting safe and effective treatment and in meeting the psycho-social needs of people living with HIV. HBC teams, which are run by NGOs, provide nutrition, transport and welfare support as well as drug adherence and referral support. NHCC provides all of these services. Further evidence that the Cambodian Government views NHCC's services as essential to the health care system in Cambodia can be found in the attached Memorandum of Understanding between the Kandal Province Health Department and NHCC which highlights NHCC's formal integration into the provincial healthcare delivery system.

When providing approval, the AOR did not see a technical issue with scope, so the Agreement Officer was not consulted. Because of this, the Agreement Officer has not had adequate opportunity to review the details of all of the components under the sub-agreement. As noted previously, the Mission acknowledges that a reasonable person may conclude that parts of NHCC's sub-grant activities may have been out of scope; so the Agreement Officer will focus on all aspects of the sub-grant in the proposed review. A change in the wording of the recommendation, as requested, would allow the Agreement Officer, whose job is to make scope determinations under agreements, to exercise appropriate judgment in making the final determinations on this issue.

Finally, if the RIG determines not to amend Recommendation 3 as requested, the Mission asks that Recommendation 3 be reworded to only require modification of the cooperative agreement if the Mission decides to retain NHCC as a sub-grantee under the agreement going forward. Ratification itself, if the Mission chooses this option, will address historical deviations from the agreement. There would be no need to retroactively modify the agreement to reflect ratified items solely for historical purposes.

The target completion date of the Agreement Officer inquiry is June 30, 2013.

Recommendation No. 4: We recommend that USAID/Cambodia work with the prime implementer to define each indicator clearly—including how it should be measured—so that reported results accurately reflect accomplishments.

USAID/Cambodia concurs and has already taken corrective actions to address this recommendation. BHS has conducted a review of all indicators collected within the project's database, including how indicators are defined, collected and reported. USAID/Cambodia and BHS staff have incorporated improvements in indicator definition, collection and measurement to ensure adequate data quality standards into the revised life-of-project Performance Management Plan (PMP). The review of each indicator included re-examining its precise definition; methods of data collection, compilation and analysis; and target setting for each year and for the life of the project. These adjustments corrected errors in how the indicator was calculated, eliminating possible double counting and avoiding over/under reporting of a particular program accomplishment.

One example is the project's revision of the indicator, "percentage of patients receiving triage". Previously, at the time of the audit, the definition of the denominator had not been clearly defined. The denominator that had been used was the number of patient records in two referral hospitals where the project initiated its support in 2011. The definition of the denominator has now been changed to include the total number of patients who use 12 referral hospitals, which is the number of referral hospitals that the project will cover over the life of the project.

Since completion of the audit, mistakes in data entry have been identified and corrective processes have been put in place, further contributing to improvements in the quality of data reported to USAID. In September, an internal audit of the data in the project database system was undertaken by the Monitoring and Evaluation (M&E) Unit; the results showed a substantial improvement from the original finding of the RIG. Monthly internal audits have now been standardized to ensure the accuracy of data (e.g., indicator definitions, how data is collected and calculated) and, ultimately, the results reported to USAID.

Based on actions described above, the Mission deems that appropriate actions have been taken to address the recommendation and therefore requests closure of the recommendation upon issuance of the final report.

Recommendation 5: We recommend that USAID/Cambodia require the prime implementer to implement improved internal controls governing collecting, maintaining, and processing data.

USAID/Cambodia agrees with the recommendation, and corrective action has been taken to address this finding. URC has initiated the development of improved controls to ensure the quality of data collected and to ensure that data gathered is valid, reliable, accurate, precise, and timely.

Accountability within the project for data quality: While the M&E team will remain responsible for entering the majority of the project's performance data (technical teams are responsible only for entering training data with the exception of the community-based health team which retains responsibility for entering some specific HEF and community-based health related data), the finance team and the M&E team will verify and conduct regular spot-checks on the information quality. The finance team will also provide details on training expenditures to technical teams for review on a regular basis, as a means of cross-verification with training attendance data. URC has already retroactively corrected the data reported for the previous project years and is now confident that the amended data is both accurate and reflective of the work that has been done. The updated data is also now included within the revised PMP.

URC staff have also now created a tracking log in the Project Database System to track and verify who conducted the data quality check as well as the date of the data quality check, adding another layer of accountability.

Procedures in place to improve data quality: URC has further developed data quality check lists which have been used for project data collection since August 2012. In addition, URC has developed a standard operating procedure for M&E as part of the revised PMP, which will document how, when, where and by whom data is collected to improve accountability and governance in its procedural approach and prevent any possible confusion or overlap in this important area.

BHS is now implementing data quality checks both in the field as well as in its Phnom Penh office. Technical teams review and verify data in the field after completing the data collection. The M&E team then verifies the data before and after entry. Results of the project data analysis are then reviewed and verified by the M&E Program Leader as an additional check.

Data quality extends beyond data reported by the project to include the government data systems: For the data collected through the MOH's Health Management Information System (HMIS), the BHS project M&E team assesses its quality using two mechanisms: 1) data quality tools, and 2) the HMIS index, which can be generated by a computerized system within the HMIS, by comparing results across different program areas and months to ensure its consistency. As an example of how the project uses data quality tools, in May 2012, the M&E team conducted a data quality audit in 18 health facilities for the period from January to March 2012. Data from these 18 health facilities was then analyzed; results indicated 83 percent accuracy, when aggregated data was compared between the patient registration and monthly report forms, and 97 percent accuracy when aggregated data was compared between the monthly report forms and monthly reports of the HMIS web-based database.

Another example of data quality checks undertaken using the data quality index was to compare HMIS results across different areas and months, which should be consistent if data is being entered correctly. The HMIS data quality report is generated for different levels of the health care system and by health facility.

Additionally, URC has been working closely with the Department of Planning and Health Information (DPHI) of the MOH to improve the HMIS data collection forms. Six maternal and child health registers have now been revised and recently approved by the MOH and the project, along with DPHI, are revising other registers such as the outpatient, surgery, medicines, and pediatric registers, etc. The roll out of updated register tools is expected to show better results with an improved quality of data.

National results suggest that the HMIS data quality index has increased from 67 percent in 2006 to 87 percent as of August 2012. Specifically, the hospital HMIS quality index has increased

from 17 percent (baseline 2008) to 20 percent in 2009, to 21 percent in 2010, to 60 percent in 2011 and finally to 78 percent in 2012. Note: This represents only hospitals (no health centers).

Based on actions described above, the Mission deems that appropriate actions have been taken to address the recommendation and therefore requests closure of the recommendation upon issuance of the final report.

Recommendation 6: After the implementer has improved internal controls in response to Recommendation 5, we recommend that USAID/Cambodia implement procedures for conducting data quality assessments that include (1) evaluating whether data for each indicator meet all five quality standards, (2) evaluating the implementing partner's data collection, maintenance, and processing procedures, and (3) testing the data's accuracy and consistency.

USAID/Cambodia concurs with the recommendation and has already instituted processes to improve data quality. A Mission Notice, issued on Sept. 30, 2012, required all COR/AORs to check/collect each mechanism's comprehensive PMP (now called a Monitoring & Evaluation Plan) to ensure that all indicators were in the plan for the Life of Project and that each indicator had an Indicator Reference Guide. The notice also provided guidance to conduct Data Quality Assessments (DQAs) for indicators that had not been done within the past three years, in accordance with USAID guidelines. The notice included a template for conducting DQAs, including specific points on validity, integrity, precision, reliability, and timeliness. These materials are reviewed by the Office Director, and then Program Office, for completeness and quality. Additionally, each office is developing (per the Mission Notice) their calendar of scheduled activities for monitoring, from the mission-wide Portfolio Review to scheduling routine office and site visits.

Based on actions described above, the Mission deems that appropriate actions have been taken to address the recommendation and therefore requests closure of the recommendation upon issuance of the final report.

Recommendation 7: We recommend that USAID/Cambodia work with the prime implementer to update the project's performance management plan to include all performance indicators used to measure activities implemented since the start of the project, along with justifications for those that were cancelled or added.

USAID/Cambodia agrees with this recommendation, and corrective action has already been taken. The work of the BHS project has evolved gradually since the project's inception to reflect the changing environment of health systems in Cambodia, however, the implementation of the project has remained focused on agreed overall project objectives.

URC project staff, with support from USAID/Cambodia, have revised the project's PMP to bring it into compliance with USAID's Automated Directives System (ADS) 203.3.3.5, and have submitted the revised PMP to the USAID Agreement Officer Representative for review and approval on October 19, 2012. In addition, URC developed a standard operating procedure, which is described in the Mission's response to recommendation five that clearly states the responsibilities of each team in data management and data quality control, which are an essential part of the BHS Project.

The revision of the PMP included the review of each indicator that is now being used or has been previously reported to USAID to ensure it meets minimal data quality standards. The review of each indicator included re-examining its definition; reviewing the methods of data collection, its compilation and analysis; as well as reviewing the annual targets set, the life of the project targets and making comparisons with actual targets achieved.

The revised PMP now includes the full set of performance indicators that the BHS project will use to assess progress over the life-of-project. The unique monitoring and evaluation indicators for the BHS project have been carefully reviewed by senior URC project staff. The revised PMP includes 65 indicators used since the first year of the project with justification for the reasons that some indicators were dropped or modified for reporting to USAID. Details on when the respective indicators were used can also be found in the revised PMP, as well as the discontinued indicators (when and why discontinued), newly introduced indicators (when and why introduced), and modified indicators (when and why modified).

As a note of clarification, the statement in the draft audit report that the project went through five PMPs during the last 3.5 years of implementation is not accurate. The actual number of PMPs was three; two PMPs were draft versions. We request that the RIG modify the audit report to reflect the actual number of PMPs and indicators.

Based on actions described above, the Mission deems that appropriate actions have been taken to address the recommendation and therefore requests closure of the recommendation upon issuance of the final report.

Recommendation 8: We recommend that USAID/Cambodia work with the prime implementer to implement a formal process to document, track, and analyze complaints within the health equity financing system.

USAID/Cambodia agrees with the audit recommendation, and actions are being taken to create a formalized system to collect, document, analyze and track progress on complaints by beneficiaries within the Health Equity Funds (HEF) system. As part of the formal “Multiple Party Memorandum of Understanding for Implementation of Health Equity Funds” signed between the MOH and the BHS project, a provision was included to “maintain the complaint mechanism and establish the complaint database to ensure feedback to relevant authorities and MOH.” This letter constitutes MOH approval for the development of the proposed system. Thus, this activity has been included in the FY 2013 BHS project work plan.

Key activities related to the patient complaint system which will be undertaken by BHS in FY 2013 include: 1) development of a standardized form which is simple and can be used to document a complaint from a HEF beneficiary or about the HEF system, 2) validation of the form through solicitation of feedback from key informants at all levels of the system, and 3) inclusion of complaint tracking mechanisms within the HMIS and Patient Medical Record System databases, as appropriate. In all areas where HEFs are being implemented and where the BHS project provides monitoring services to the MOH, the complaint system will be applied. Currently, many complaints are received and actions are taken by various actors in the HEF system, however, at present there is no formal tracking system in place. In addition to the formalization of complaints already being collected through the monitoring of HEFs, opportunities for local authorities, health providers, HEF operating staff, and patients to register complaints will be expanded.

Success of this initiative will be evident in the analysis of information collected, distribution of the summary of this analysis to key actors in the HEF system, and documented follow-up to individual cases or systemic changes made as a result of analyzing trends in complaints

received. Based on an analysis of HEF-related complaints received to date, there are a minority of complaints which document a specific individual or case which requires follow-up and resolution and a majority of complaints which are submitted anonymously and can be analyzed as evidence of systematic abuse patterns.

The target completion date for this recommendation is June 30, 2013.

Attachments:

- 1) Revised Performance Management Plan
- 2) Work plan for FY 2013
- 3) BHS Internal Data Quality Audit Checklist
- 4) BHS Training Checklist
- 5) Memorandum of Understanding – Kandal Province Health Department and NHCC

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