OFFICE OF INSPECTOR GENERAL

AUDIT OF USAID/SUDAN’S
MATERNAL AND CHILD HEALTH
ACTIVITIES

AUDIT REPORT NO. 4-650-11-010-P
JULY 28, 2011

PRETORIA, SOUTH AFRICA
July 28, 2011

MEMORANDUM

TO: USAID/Sudan Acting Mission Director, David Young

FROM: Regional Inspector General/Pretoria, Christine M. Byrne /s/

SUBJECT: Audit of USAID/Sudan’s Maternal and Child Health Activities (Report No. 4-650-11-010-P)

This memorandum transmits our final report on the subject audit. We have considered management’s comments on the draft report and have incorporated them into the final report as appropriate. As a result of these comments, we revised Recommendation 1, added an additional recommendation, and renumbered Recommendations 2 through 6 as 3 through 7 in the report. Management decisions have been reached on recommendations 1 and 3 through 7, and Recommendation 6 is closed upon issuance of this report. Management comments have been included in their entirety in appendix II (without attachments).

Please advise our office within 30 days of the actions planned or taken to implement Recommendation 2, with a target date for completion. Please provide the Office of Audit Performance and Compliance Division (M/CFO/APC) with the necessary documentation to achieve final action on Recommendations 1, 3, 4, 5, and 7.

I want to express my sincere appreciation for the cooperation and courtesy extended to my staff during the audit.
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Decades of civil war have significantly damaged the infrastructure and affected the people of Southern Sudan. Schools, health facilities, and roads are severely neglected, while the population suffers from extreme poverty, disease, and illiteracy. The signing of the Comprehensive Peace Agreement in 2005 established peace between north and south through wealth- and power-sharing agreements that included an autonomous Government of Southern Sudan. However, the Government of Southern Sudan lacks the institutional capacity and structures to respond fully to the needs of its citizens.

In this context, a young Sudanese woman is more likely to die of pregnancy-related causes than to finish school in Southern Sudan. USAID/Sudan’s fiscal year (FY) 2009 Full Performance Plan and Report states that Southern Sudan has the highest maternal mortality ratio in the world, at 2,054 maternal deaths for every 100,000 live births, and a high infant mortality rate—102 infant deaths per 1,000 live births. Multiple factors account for these high numbers, including low immunization coverage (17.3 percent) for common preventable childhood diseases and the low percentage of babies delivered by skilled health personnel (10 percent). In comparison, the World Bank estimates that the United States has a maternal mortality rate of 11 maternal deaths per 100,000 live births, and an infant mortality rate of 7 infant deaths per 1,000 live births.

USAID/Sudan initiated the Sudan Health Transformation Project to improve the overall health of people in Southern Sudan. Launched in 2004 before the signing of the Comprehensive Peace Agreement, Phase I of the project focused on rehabilitating health care infrastructure, providing basic equipment, and creating supply systems for materials and commodities. JSI Research and Training Institute implemented Phase I through a 5-year, $40 million cooperative agreement with USAID that ended on September 30, 2009.

The mission launched Phase II of the project to develop local capability to provide health services—specifically, seven services with the greatest impact on reducing disease and improving health in Southern Sudan (Appendix III). Maternal and child health are two of these services and overlap several others. For Phase II, USAID/Sudan entered into a 3-year, $44.3 million task order under an indefinite quantity contract with Management Sciences for Health (MSH) on February 11, 2009. Maternal and child health funds make up more than half of the task order’s funding, and the project currently implements most of the mission’s maternal and child health activities. As of September 30, 2010, USAID/Sudan reported having spent $47.5 million of the $55.1 million in cumulative obligations for maternal and child health activities, the vast majority of these carried out under the Sudan Health Transformation Project.

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1 The World Bank defines the infant mortality rate as the number of infants dying before reaching 1 year of age, per 1,000 live births in a given year.

2 Some maternal and child health funds are used to finance the Building Responsibility for the Delivery of Government Services Program (BRIDGE). Although BRIDGE contributes to results for infant immunizations and assisted deliveries (Table 1), the program focuses on strengthening government capacity. The mission reported obligating only $666,000 of FY 2009 maternal and child health funds to BRIDGE, compared with more than $7 million to Phase II of the Sudan Health Transformation Project. Accordingly, BRIDGE was not the focus of this audit.
The Regional Inspector General/Pretoria (RIG/Pretoria) conducted this audit to determine whether USAID/Sudan’s maternal and child health activities under the Sudan Health Transformation Project were improving the health of people in Southern Sudan.

The audit noted that USAID/Sudan’s interventions had expanded access to basic health services in Southern Sudan. Undoubtedly, many populations targeted by Phase II would have had no or severely limited access to maternal and child health care and other basic health services without USAID/Sudan’s support. However, the audit found that the mission had not delivered the quantity or quality of maternal and child health services planned.

The Results Framework for USAID/Sudan’s health portfolio, included as Appendix IV, outlines three indicators that USAID/Sudan uses to measure the progress of its health activities. USAID/Sudan’s maternal and child health activities contribute all of the results toward these three overall indicators. Table 1 presents these indicators, along with their fiscal year (FY) 2009 targets and reported results.

Table 1. USAID/Sudan’s Overall Indicators for Health—Targets and Reported Results for the year ended September 30, 2009

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Target (%)</th>
<th>Reported Result (%)</th>
<th>Verified Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Percentage of children less than 12 months of age who received DPT3*</td>
<td>16.8</td>
<td>33.0</td>
<td>Unverifiable</td>
</tr>
<tr>
<td>from U.S. Government-supported programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Percentage of deliveries assisted by trained health service providers</td>
<td>18.0</td>
<td>12.0</td>
<td>Unverifiable</td>
</tr>
<tr>
<td>3. Percentage of health facilities that provide at least 5 of the 7 high-impact services according to Ministry of Health-approved standards</td>
<td>75.6</td>
<td>85.0</td>
<td>Unverifiable</td>
</tr>
</tbody>
</table>

* DPT3 is the third and final dose of the vaccine against diphtheria, pertussis (whooping cough), and tetanus. According to UNICEF, the percentage of children receiving DPT3 is a key gauge of how well countries are providing immunization coverage for their children.

The audit identified several deficiencies:

- The mission reported achieving only 66 percent (only 12 percent of a target of 18 percent as noted in Indicator 2 of Table 1) of its target for assisted deliveries. Having births assisted by trained health service providers reduces maternal and neonatal mortality and improves overall community health (page 5).

- Frequent stock-outs of essential drugs and supplies at health-care facilities hindered project achievement (page 6).

- Performance data often lacked support (page 9). As shown in Table 1, the lack of supporting documentation prevented the audit team from verifying the mission’s reported results for its health activities.

- The contractor did not comply with USAID’s branding requirements (page 12).
In addition to the factors cited above, project underachievement was exacerbated by poor contractor performance and implementation delays. According to mission officials, MSH had not satisfactorily shifted the Sudan Health Transformation Project from an emergency relief intervention to a longer-term development effort as required by the task order, and many Phase II activities scheduled for FY 2010 had not started or were delayed.

These performance problems and delays had several causes, first among them staffing. The Government of Southern Sudan requested that Sudanese nationals fill the four key personnel positions identified in the contract—chief of party, technical director, monitoring and evaluation director, and director of finance and grants—leaving MSH with a small pool of qualified applicants. Ultimately, all personnel in key staff positions resigned or were replaced after the beginning of Phase II, precluding project continuity. Additional delays resulted when MSH proposed staff salaries that were inconsistent with previous salary histories. Tellingly, the contracting officer who awarded Phase II recalled interacting with only two individuals from the MSH team during the first 9 months of the project.

Furthermore, subcontracting difficulties arose during the 8-month transitional period between Phase I and Phase II. During this time, subgrants from the first phase were automatically extended to ensure continuity of services and to enable MSH to compete subcontracts. MSH ultimately entered into subcontracts with nine organizations (seven of which were also involved in Phase I) to implement activities in county health departments, health centers, and small health units, but MSH officials stated that disagreements with the wording of some subcontracts caused additional delays. Many Phase I grantees were reluctant to change to a contractual arrangement under Phase II because of the corresponding increased accountability to USAID and MSH after decades of working autonomously in Southern Sudan. Another issue affecting subcontracts under Phase II was payment of salaries of health facility workers. Contrary to USAID policy, the Government of Southern Sudan’s Ministry of Health wanted the project to support salaries of workers at government health facilities. MSH ultimately resolved the issue by allowing Phase II subcontractors to hire health facility workers and second them to the Ministry of Health. These multiple complications resulted in a lapse in quantity and quality of service delivery.

Because of these difficulties, one mission official stated that “twelve months of results [under Phase II] were lost.” However, a USAID official expressed optimism that future performance would improve. First, USAID/Sudan issued a letter of concern to MSH stipulating several immediate actions that must be undertaken to address the core performance shortcomings under Phase II. Second, although future activities may be slowed by the early delays, the causes of those delays—staffing and subcontracting complications—have been resolved. Subcontracts with implementing agencies have been finalized, and the mission has asked MSH to follow USAID regulations in its future salary requests to avoid delays in recruiting. Furthermore, MSH has expanded its monitoring and evaluation team.

To further strengthen USAID/Sudan’s maternal and child activities, the audit recommends that the mission:

1. Direct Management Sciences for Health to provide a training plan with benchmarks and timeframes to increase the number of deliveries attended by a skilled birth attendant (page 6).
2. Eliminate the following phrase from its task order with Management Sciences for Health: “assess the [trained traditional birth attendant] population and select among them a cadre that can be upgraded” (page 6).

3. Clearly agree in writing with MSH and the Government of Southern Sudan the roles and responsibilities for the procurement, transportation, and distribution of essential drugs and other supplies in Phase II of the Sudan Health Transformation Project (page 9).

4. Develop and implement procedures to document results reported to the Foreign Assistance Coordination and Tracking System (page 12).

5. Develop written employee exit procedures to minimize the effects of frequent staff turnover (page 12).

6. Develop and implement a plan to increase the verification of results reported by MSH for Phase II (page 12).

7. Develop and implement a plan for monitoring the implementation of the Phase II branding and marking plan in compliance with USAID branding requirements (page 13).

Detailed findings appear in the following section. The audit’s scope and methodology are described in Appendix I. Our evaluation of management comments is on page 14, and the full text of the comments is in Appendix II.
AUDIT FINDINGS

Mission Fell Short of Target for Assisted Deliveries

For FY 2009, USAID/Sudan established a target that 18 percent of all births would be assisted by trained health care service providers. According to the mission’s performance management plan and a mission official, in FY 2009 eligible providers included physicians, midwives with 18 months of training, maternal and child health care workers with 9 months of training, and trained traditional birth attendants. Despite efforts to reach this goal, however, the mission reported that only 12 percent of deliveries were assisted by such providers.3

The mission fell short of this key target because of two main factors. First, both mission and MSH officials stated that the supply of trained health service providers was not sufficient. For example, mission officials noted that there were only 44 midwives and 302 community-based midwives registered in Southern Sudan for a population of 8.26 million people.4 The audit team corroborated the shortage of trained health service providers during interviews with health care staff at five service delivery points and three subcontractors’ offices in Juba and Mundri Counties. The three subcontractors interviewed covered 43 health care service delivery points.

Second, in designing the Results Framework for its health portfolio, USAID/Sudan implicitly assumed that there was a sufficient pool of candidates capable of being trained to the level of midwife or maternal and child health care worker. However, high illiteracy levels in Southern Sudan contradicted this assumption. According to the 2006 Government of Southern Sudan Household Health Survey, 50 percent of the women in Southern Sudan were without any formal education, while a mission employee estimated that the illiteracy rate for women in Southern Sudan was about 90 percent. Consequently, a former MSH official said that expectations to train enough service providers in 3 years to realize any significant increase in assisted deliveries during that period were entirely unrealistic. Similarly, the mission’s health team leader estimated that it would take 10 to 15 years to build up a cadre of skilled health professionals.

The mission did, however, include training guidance in the contract. For example, USAID’s contract with MSH states that the contractor should consider activities that “assess the [trained traditional birth attendant] population and select among them a cadre that can be upgraded,” and “refocus the work of the remaining [trained traditional birth attendants] on health education . . . and recruitment for ANC [antenatal care] attendance.” As part of this effort, MSH should have recruited five to six midwives from outside Sudan for supervising upgraded cadres of trained traditional birth attendants. According to MSH officials, these midwives were not recruited because of a lack of funding, a reason disputed by mission officials.

One result of MSH’s failure to recruit these midwives was to deepen the mission’s reliance on trained Sudanese traditional birth attendants in its health strategy. While the shortage of

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3 During the third quarter of FY 2009, the mission revised “trained health service providers” in the performance management plan indicator to “trained birth attendant or child health worker.” In FY 2009, the two indicators captured the same information; the mission reported the same results for both and presented data for the latter in the FY 2009 Full Performance Plan and Report.

4 South Sudan Center for Census, Statistics, and Evaluation, 2008 Census.
doctors and midwives necessitated this emphasis in the short term, the use of trained traditional birth attendants is only marginally effective in improving maternal mortality rates and is not a particularly effective long-term strategy. An outcome evaluation of trained traditional birth attendants performed in Ghana and published in a peer-reviewed journal concluded that:

In circumstances where TBA [traditional birth attendant] training remains the intervention of choice, we counsel sponsors to be realistic about their expectations. Some moderate beneficial effects may be forthcoming, but it is unlikely that TBA training will result in large reductions in maternal and perinatal morbidity and mortality.\(^5\)

The assistance of trained health care service providers during childbirth is a key element of USAID’s strategy to reduce maternal mortality in Sudan. Failure to meet the target for this indicator, therefore, means that the mission’s efforts are not realizing their full potential. While the shortage of trained professionals, including health care professionals, is a feature of Southern Sudan and is insoluble in the near term, contractor performance must improve to ensure that the U.S. Government receives full value for its investment.

In their response to the draft audit report, mission officials stated that the Sudan Health Transformation Project Phase II is no longer training TBAs. Officials noted that neither the Government of Southern Sudan’s Ministry of Health nor the international community sanctions TBAs, trained or untrained, as able to provide safe deliveries. Therefore, the project has completed no further training of this type. The initial recommendation was to have USAID/Sudan direct MSH to develop a plan to upgrade a cadre of trained TBAs. The initial recommendation has been revised and another added based on the mission’s response.

**Recommendation 1.** We recommend that USAID/Sudan direct Management Sciences for Health to provide a training plan with benchmarks and timeframes to increase the number of deliveries attended by a skilled birth attendant.

**Recommendation 2.** We recommend that USAID/Sudan eliminate the following phrase from its task order with Management Sciences for Health: “assess the [trained traditional birth attendant] population and select among them a cadre that can be upgraded.”

**Stock-Outs Hindered Project Success**

In its technical proposal for Phase II, MSH stated that it would work very closely with the Government of Southern Sudan’s Ministry of Health and another project implemented by MSH, Strengthening Pharmaceutical Systems, to resolve all outstanding supply chain and drug management issues and eliminate stock-outs. Building on the proposal, the task order requires MSH to “improve the logistics system to allow a regular supply of drugs to stock health facilities for maternal health, including all basic requirements for antenatal care.”

Despite this requirement, all five health facilities the audit team visited reported experiencing stock-outs of at least one essential drug and shortages of some vaccines during the previous quarter. According to one subcontractor, of the three main health centers it supported, one was

almost completely out of essential drugs, and the most recent shipment of essential drug kits did not include supplies for this facility. Staff members at a facility supported by another subcontractor said that they had not treated patients in 2 months because of a lack of essential drugs and other medical supplies. These staff members believed it was safer for women to deliver at home than at their facility (pictured below) because of the lack of supplies, including sanitizers and disinfectants.

Furthermore, contrary to contractual requirements, no condoms were available at any of the five health facilities visited, even though family planning and HIV prevention are two of the seven high-impact health services targeted under Phase II. Subcontractors and health facility staff also stated that they were consistently out of clean-delivery kits and had never received HIV test kits required to prevent mother-to-child transmission of HIV. Although MSH had trained several health-care facility staff to provide these services, the lack of test kits stymied the staff.

Health-care workers at this facility in Mundri East County had not treated patients in 2 months at the time of auditor site visits because of stock-outs of essential drugs and other supplies. Mission officials were unaware of the situation at this facility. (Photo by RIG/Pretoria, September 2010)

At left delivery supplies are stored on top of the facility’s broken birthing table. At right stands the bed that would be used for facility-based deliveries. (Photos by RIG/Pretoria, September 2010)

Furthermore, two of the three subcontractors interviewed (that, together, were responsible for 31 facilities) stated that essential drug kits had arrived in-country only the week before the auditor site visits. However, both subcontractors stated that they had not yet delivered essential
drug kits to their facilities because of competing priorities. As a result, some facilities, such as the one shown in the photo above, continued to be out of essential commodities at the time of auditor site visits.

These stock-outs largely resulted from confusion among stakeholders regarding their responsibilities for procuring, storing, and delivering commodities to health facilities and end users. When asked which party was specifically responsible for procuring, transporting, and storing which items, officials from USAID/Sudan, MSH, subcontractors, and the Government of Southern Sudan gave confusing and sometimes contradictory responses.

Some mission officials stated that stock-outs of essential drugs and supplies were the fault of either MSH or the Government of Southern Sudan. They explained that the project relies on the Government of Southern Sudan’s Ministry of Health supply chain management system to deliver essential drugs to central and county medical storehouses, while MSH is responsible for delivering drugs from these storehouses to individual facilities. Apart from essential drugs, MSH is responsible for procuring all other health-care supplies, such as delivery kits.

However, another mission official stated that MSH’s responsibility for commodities was limited to providing technical assistance on logistics to health-care facilities. While this official agreed that procurement of essential drugs was the responsibility of the Ministry of Health, he said that procurement of Vitamin A supplements was UNICEF’s responsibility, not MSH’s.

The former MSH chief of party, who resigned shortly after audit fieldwork, corroborated this statement. He stated that the task order initially did not obligate MSH to procure, transport, store, or deliver commodities; rather, MSH was to provide technical assistance to facilities in commodity management. For example, MSH trained facility workers to complete stock cards and registers. However, this official also noted that the Ministry of Health’s supply chain management system was unreliable, and consequently MSH opted to deliver many items itself.

The lack of HIV test kits—which were available to MSH without charge from other U.S. Government sources—underscores the confusion between MSH and USAID/Sudan regarding responsibilities for commodity procurement and transportation. A mission official declared that it was MSH’s responsibility to transport HIV test kits from Nairobi, Kenya, where they were stored, to Juba, Sudan. Although MSH’s Phase II HIV coordinator also understood that it was MSH’s responsibility to transport the kits from Nairobi to Juba, he did not know who was supplying them. Meanwhile, subcontractors said they relied on MSH to deliver the test kits to their respective counties. At the time audit fieldwork ended at USAID/Sudan in September 2010, these kits were still not available at facilities.

Mission and MSH officials stated that they have recently taken steps to improve commodity monitoring and reduce stock-outs. For example, in 2010, MSH developed a new stock-out checklist for monitoring drug availability in supported facilities. MSH officials also stated that in the upcoming year they would increase coordination between the Sudan Health Transformation Project and the Strengthening Pharmaceutical Systems program. The latter will provide training to community health departments and subcontractors to improve the pharmaceutical management system at county and facility levels.

Despite these positive steps, chronic shortages of essential drugs and supplies have had a deleterious effect on USAID/Sudan’s maternal and child health activities. For example, two of the three subcontractors interviewed stated that they had missed nearly all of their quarterly targets partly because of these shortages. Mission officials agreed that stock-outs contributed
to not achieving goals in the seven high-impact areas. Although the mission and MSH have taken actions to address these issues, clearly defined responsibilities are vital to further improvements in commodity management. This audit makes the following recommendation:

**Recommendation 3.** We recommend that USAID/Sudan clearly agree in writing with Management Sciences for Health and the Government of Southern Sudan the roles and responsibilities for the procurement, transportation, and distribution of essential drugs and other supplies necessary for Phase II of the Sudan Health Transformation Project.

**Performance Data Often Lacked Support**

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. To this end, the USAID Automated Directives System (ADS) discusses the importance of reliable data. To be reliable, data should reflect stable and consistent data collection processes and analysis methods over time so that USAID managers can be confident that progress toward performance targets reflects real changes rather than variations in data collection methods (ADS 203.3.5.1d). Additionally, the U.S. Government Accountability Office’s *Standards for Internal Control in the Federal Government* requires accurate and timely recording of all transactions and significant events. These standards also require that transactions and significant events be clearly documented, with the documentation readily available. Despite this guidance, the audit found deficiencies in collecting, summarizing, and reporting performance data.

To measure the progress of its health activities, the mission created three overall indicators, shown in Table 1. The mission reported results for these indicators to the Foreign Assistance Coordination and Tracking System, a central U.S. Government data system that facilitates planning and monitoring of foreign assistance activities. However, neither mission staff nor MSH could substantiate these results for FY 2009. Furthermore, USAID and MSH officials confirmed that in FY 2009 subcontractors did not systematically collect information for the indicators *percentage of health facilities that provide at least 5 of the 7 high-impact services* and *number of U.S. Government-assisted facilities experiencing stock-outs of specific tracer drugs.*

Thus, the results the mission reported for these indicators lacked support. Table 2 shows instances in which documentation did not correspond with reported results.

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6 Indicators 3 and 2.5 from USAID/Sudan’s Results Framework for Health in Appendix IV.
Table 2. Reported Results for FY 2009 Phase II Activities

<table>
<thead>
<tr>
<th>Result</th>
<th>Mission Target</th>
<th>Mission Reported Result</th>
<th>MSH Quarterly Reported Result</th>
<th>MSH Database for FY 2009</th>
<th>Audited Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of children less than 12 months of age who received DPT3*</td>
<td>7,283</td>
<td>7,324</td>
<td>8,310</td>
<td>9,165</td>
<td>6,120</td>
</tr>
<tr>
<td>Number of assisted deliveries*</td>
<td>7,599</td>
<td>4,220</td>
<td>5,165</td>
<td>5,463</td>
<td>Not Tested</td>
</tr>
</tbody>
</table>

* The values for these indicators are the numerators in the corresponding overall indicators shown in Table 1.

For the DPT3 indicator, the audit team reviewed monthly vaccination registers provided by MSH and verified the number of DPT3 vaccinations attributed to project-assisted facilities. However, MSH was unable to provide facility registers for all subcontractors for the 6 months under review. As a result, 1,204 vaccinations, or 16 percent of USAID/Sudan’s reported results for FY 2009, were unsupported.

Other data quality problems existed as well. For example, at one of the five facilities visited, support only existed for four of the seven deliveries reported during the month under review because the facility had been mistakenly double-reporting home-based deliveries. At another facility, auditors could confirm only 8 of 49 DPT3 vaccinations reported the previous month because of missing records. Furthermore, in its monthly summary report, one subcontractor reported conflicting information on 22 home-based deliveries: one part of the report said all 22 deliveries resulted in live births; another part said those 22 deliveries resulted in 18 stillbirths.

Mission personnel cited weaknesses in the Government of Southern Sudan’s data management system as the underlying cause of poor data quality. When the mission’s health team moved to Juba in 2007, the Government of Southern Sudan did not have a well-established health information management system. Because one of the goals of Phase II was to strengthen host-country capacity, the mission determined it would be counterproductive to require the contractor or subcontractors to develop their own information management systems. Instead, the mission decided to work with the Government of Southern Sudan’s fledgling system to strengthen it, despite the known weaknesses in data quality. This task was compounded by the fact that data collection and use were, and continue to be, new concepts in the region. Facility officials routinely collect data without understanding its value, and thus minimize the importance of accurate and reliable information. In addition, many health facilities were without official Ministry of Health patient registers prior to May 2010, when MSH began printing and distributing them.

Understaffing and lack of training also affected the contractor and supported facilities. According to mission officials, MSH did not have a monitoring and evaluation team until over 1 year into Phase II; prior to that, MSH relied solely on the monitoring and evaluation director to ensure quality data. Mission officials asserted that one person alone could not accomplish much given the immense area served by the project and the poor roads and infrastructure in Southern Sudan. Similarly, contractor and subcontractor staff reported that project-supported facilities did not meet the Government of Southern Sudan’s recommended staffing structure. One health unit employed only one community health worker, a maternal and child health-care worker, and two support staff; this level of staffing fell short of the government’s health unit recommendation for two community health workers and three support staff. Because the
maternal and child health-care worker was illiterate, the community health worker was responsible for completing nine different types of records at the facility, including maternal delivery and antenatal care registers, for which he had never received training. Auditors noted that the community health worker had been completing these registers incorrectly.

Staffing problems at the mission also contributed to poor data quality. For example, the mission lacked consistent leadership in two key positions for health program monitoring and oversight—health team leader and the Phase II contracting officer's technical representative—after the individual filling both positions departed post in October 2009. Complications with the hiring process delayed the chosen successor from managing Phase II activities until March 2010, and the mission had difficulty finding a qualified interim replacement. Consequently, although data verification is part of the field report checklist, mission officials said that in FY 2009 they did not routinely verify reported data, as done during the audit, because of staff time constraints. Moreover, although the mission's November 2009 Data Quality Assessments for Phase II indicators recommended that the mission "rigorously assess data processes from the point of collection," the mission has not yet followed up on this recommendation because of staffing constraints.

These vacancies highlight a long-standing problem at USAID/Sudan. In its 2008, 2009, and 2010 self-assessments under the Federal Managers’ Financial Integrity Act, the mission identified understaffing as a “significant operational deficiency in internal control” and an impediment to achieving program objectives. USAID/Sudan and its implementing partners are faced with exceptionally high staff turnover, with few individuals staying longer than 1 year at post. Institutional knowledge leaves with the departing employees, and poor documentation practices exacerbate the effect of rapid turnover. Although current mission officials willingly searched for information from their predecessors’ archived e-mails and project folders, the officials who collected and reported FY 2009 data have since left Sudan without leaving any comprehensible record of how that information was processed.

According to mission and contractor staff members, they have taken steps since FY 2009 to improve data quality. First, the mission approved the Phase II monitoring and evaluation plan on June 30, 2010. Approved more than 16 months after the commencement of Phase II, the monitoring and evaluation plan reduces the number of required performance indicators from 38 to 20 to enable partners to focus on a smaller set of critical indicators. Second, MSH has developed new field monitoring tools to help subcontractors collect data specifically requested by USAID, including information on stock-outs and provision of the seven high-impact services. Third, MSH has expanded its monitoring and evaluation team and developed a data quality assurance plan to bolster field monitoring and supervision. The plan aims to provide data verification and on-the-job training at supported facilities in each of the 14 targeted counties each quarter.

Collecting and maintaining quality performance data are challenging in Southern Sudan. Nevertheless, substandard data can lead to wrong conclusions about activities and to inefficient resource allocation. For example, the data in the Foreign Assistance Coordination and Tracking System is used for formulating budgets; thus, it is vital that such data be valid and reliable. Because staffing issues at all levels are likely to continue, USAID/Sudan needs to take steps to minimize the effect of staff shortages and staff turnover on data quality. Accordingly, the audit makes the following recommendations:
**Recommendation 4.** We recommend that USAID/Sudan develop and implement procedures to document results reported to the Foreign Assistance Coordination and Tracking System.

**Recommendation 5.** We recommend that USAID/Sudan develop written employee exit procedures to minimize the effects of frequent staff turnover.

**Recommendation 6.** We recommend that USAID/Sudan develop and implement a plan to increase the verification of results reported by Management Sciences for Health for Phase II of the Sudan Health Transformation Project.

**Contractor Did Not Comply With USAID Branding Requirements**

Section 641 of USAID’s framework legislation, the Foreign Assistance Act of 1961, as amended, codified at 22 U.S.C. § 2401 requires that all programs under the Foreign Assistance Act be identified appropriately overseas as “American Aid.” To help ensure compliance with this requirement, ADS 320, “Branding and Marking,” contains USAID’s policy directives and required procedures for branding and marking USAID-funded programs, projects, activities, public communications, and commodities. Contracts and subcontracts exclusively funded by USAID, such as the Sudan Health Transformation Project, must use the USAID identity for branding and marking purposes. Where applicable, a host-country symbol or ministry logo or another U.S. Government logo may be added.

Despite these requirements, the audit found several instances of noncompliance with USAID’s branding policy. For example, health facilities were not prominently marked with the USAID logo as required, and patient service registers printed by MSH with project funds did not acknowledge U.S. Government support. In addition, MSH officials indicated they had only recently started stamping public communications and other printed materials with USAID’s logo.

MSH stated that the branding and marking plan had not been approved by USAID/Sudan until August 26, 2010, thereby precluding any branding efforts before that date. This statement, however, is inaccurate. The branding and marking plan is simply a strategy for implementing the legal requirements pertaining to branding. The contractor should have taken reasonable steps to comply with the branding requirements pending final approval of the plan.

As for the mission, the former contracting officer’s technical representative could not comment on the delay in approval before he assumed responsibility for Phase II in March 2010. Although he attributed delays since then to the extensive revisions necessary to make the branding and marking plan acceptable, the email correspondence showed that MSH and USAID officials only finalized the plan when they did because of the impending audit. This demonstrates that completing the plan was not a priority for MSH and USAID.
The sign for a project-supported health facility in Mundri does not display the required USAID branding. The sign displays the logo of the United Kingdom’s international aid agency, which provided earlier support to the facility. (Photo by OIG, September 2010)

Opportunities to increase the public diplomacy benefits of U.S. foreign assistance programs are missed with inadequate branding. To ensure that USAID’s branding and marking requirements are implemented and MSH adheres to the newly approved branding and marking plan, this audit makes the following recommendation.

**Recommendation 7.** We recommend that USAID/Sudan develop and implement a plan for monitoring the implementation of the Sudan Health Transformation Project’s Phase II branding and marking plan in compliance with USAID branding requirements.
EVALUATION OF MANAGEMENT COMMENTS

In its comments on the draft report, USAID/Sudan disagreed with Recommendation 1. We revised Recommendation 1 accordingly and added a second recommendation. The mission agreed with the remaining recommendations 2 through 6, which have now been renumbered 3 through 7. The mission provided documentation to demonstrate that final action on Recommendation 6 had been taken. Thus, management decisions have been reached on recommendations 1, and 3 through 7, with final action taken on Recommendation 6. Recommendation 2 remains without a management decision. Our detailed evaluation of management’s comments follows.

For Recommendation 1, the mission did not agree with our recommendation to direct Management Sciences for Health to develop and implement an action plan with benchmarks and timeframes to upgrade a cadre of trained traditional birth attendants in accordance with the task order for Phase II of the Sudan Health Transformation Project. The mission contended that the underlying assumption of this finding is inconsistent with the Government of Southern Sudan’s Ministry of Health policy that does not allow for the training of traditional birth attendants (TBAs). Therefore, the project has completed no further training of this type.

The mission has changed its emphasis on training TBAs to training skilled birth attendants, including midwives, doctors, and nurses with midwifery training. Therefore, the mission proposed that Recommendation 1 be changed to request MSH to provide a training plan with benchmarks and timeframes to increase the number of deliveries attended by a skilled birth attendant, which they stated could be completed by September 15, 2011.

In their reply, USAID/Sudan officials stated that 66 certified midwives are now on the project payroll and functioning in the facilities they support, with another 20 in various stages of the recruitment and hiring process. They also claimed that United Nations certified midwives had recently arrived to develop and train certified midwives.

Based on their response and management evaluation, Recommendation 1 has been revised, and a management decision has been reached. However, to further communicate the change in training emphasis, the added Recommendation 2 asks the mission to eliminate the requirement to train traditional birth attendants from its task order with MSH. The mission agreed in subsequent communications with this added recommendation but did not provide a target date for completion. As a result, a management decision has not been reached on Recommendation 2.

Recommendations 2 to 6 from the draft report have been renumbered 3 to 7.

For Recommendation 3, the mission agreed with the recommendation to clearly agree in writing with MSH and the Government of Southern Sudan the roles and responsibilities for the procurement, transportation, and distribution of essential drugs and other supplies necessary for Phase II of the Sudan Health Transformation Project. They claimed that MSH has made considerable progress in this area and that a Memorandum of Understanding with the
Government of Southern Sudan will be established by December 15, 2011. Thus, a management decision has been reached on Recommendation 3.

For Recommendation 4, the mission agreed with the recommendation to develop and implement procedures to document results reported to the Foreign Assistance Coordination and Tracking System by September 15, 2011. Thus, a management decision has been reached on Recommendation 4.

For Recommendation 5, the mission agreed with the recommendation to develop written employee exit procedures by August 1, 2011 in order to minimize the effects of frequent staff turnover. Thus, a management decision has been reached on Recommendation 5.

For Recommendation 6, the mission agreed with the recommendation to develop and implement a plan to increase the verification of results reported by MSH for Phase II. They also provided documentation to indicate that this recommendation has been implemented. Based on a review of this documentation, Recommendation 6 has been implemented and is closed upon issuance of this report.

For Recommendation 7, the mission agreed with the recommendation to develop and implement a plan for monitoring the implementation of the Phase II branding and marking plan in compliance with USAID branding requirements. The mission indicated that MSH would provide a plan for monitoring by September 15, 2011, which, as confirmed in subsequent communication, the mission would agreed to implement upon receipt. Thus, a management decision has been reached on Recommendation 7.
SCOPE AND METHODOLOGY

Scope
The Regional Inspector General/Pretoria conducted this performance audit in accordance with generally accepted government auditing standards, except for a limitation on the scope of the audit. This limitation was that neither USAID/Sudan nor MSH could produce or reconstruct accurate source documentation for FY 2009 data on the three overall indicators used to evaluate the mission’s health portfolio; the data was reported in the Foreign Assistance Coordination and Tracking System for Phase II of the Sudan Health Transformation Project. Government auditing 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. Aside from the limitation, we believe the evidence obtained provides that reasonable basis.

Because of the scope limitation, we based our conclusions on the items we tested and on other sources of information available to us during the audit—namely, field visits to observe MSH-supported activities; interviews with officials and staff from the mission and from MSH and their subcontractors; and program documentation such as the mission’s annual report, site visit reports, and program correspondence. In assessing the evidentiary value of these sources and materials, we considered the scope limitation and obtained corroborating information whenever possible.

The objective of the audit was to determine whether USAID/Sudan’s maternal and child health activities under the Sudan Health Transformation Project were improving the health of people in Southern Sudan. Audit fieldwork was conducted at USAID/Sudan, USAID/Southern Africa, and at selected offices and activity sites of MSH and its subcontractors in Sudan from August 30 to September 22, 2010. The audit covered the period from the program’s inception on February 11, 2009, to the end of the audit fieldwork on September 22, 2010.

As of September 30, 2010, USAID/Sudan reported having spent $47.5 million of the $55.1 million in cumulative obligations for maternal and child health activities, the vast majority of these carried out under the Sudan Health Transformation Project. MSH reported expenditures of $17.3 million under Phase II of the Sudan Health Transformation Project from its commencement through June 30, 2010.

In planning and performing the audit, we assessed USAID/Sudan’s management controls related to management review, proper execution of transactions and events, and review of performance measures and indicators. Specifically, we examined and evaluated documentation prepared by the mission, contractor, and subcontractors, including the following:

- Contracts and subcontracts
- Contractor’s technical proposal for Phase II
- Contractor’s support for reported performance indicators

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7 Government Auditing Standards, July 2007 Revision (GAO-07-731G).
Appendix I

- Quarterly reports from MSH, and monthly narratives and quarterly reports from subcontractors
- Target and actual performance results
- Site visit reports from mission staff and MSH
- Data quality assessments
- USAID/Sudan’s FY 2009 performance management plan for health activities and FY 2009 full performance plan and report
- USAID/Sudan’s Federal Managers’ Financial Integrity Act certifications from FYs 2008, 2009, and 2010
- Sudan Household Health Survey from 2006

We also interviewed key USAID/Sudan current and former personnel, MSH and subcontractor staff, officials of community health departments, and employees at service delivery points. Additionally, we interviewed Mercy Corps Scotland staff responsible for implementing the BRIDGE program mentioned in footnote 2 on page 1. We ultimately chose not to include BRIDGE in the scope of the audit because the project did not focus on health activities.

**Methodology**

To determine whether the activities were achieving their main goal, the audit team reviewed targets and reported results for the mission’s three overall performance indicators in the mission’s Results Framework for its health portfolio. For these indicators, we attempted to trace results reported by the mission to source documents from MSH. We judgmentally selected service delivery points to test the MSH’s reported performance results for DPT3 vaccinations and assisted deliveries by comparing reported information with source documents, including patient registers and immunization records. For DPT3 vaccinations, we used facility records provided by MSH to verify FY 2009 reported results. We judgmentally selected sites and sample sizes based on time, resources, U.S. embassy security policies, and geographic constraints; consequently, the results of these tests cannot be projected to the entire population.

We reviewed the task order, progress reports, and supplementary documents of the contractor, MSH, which reported the results on the tested indicators. We also reviewed applicable laws, regulations, and USAID policies and procedures pertaining to USAID/Sudan’s maternal and child health activities—including certification required under the Federal Managers’ Financial Integrity Act of 1982; 8 USAID’s ADS Chapters 202, 203, and 320; USAID’s Acquisition & Assistance Policy Directive 04–14, “Certification Regarding Terrorist Financing Implementing Executive Order 13224 (Revision 2)”); and supplemental ADS guidance.

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8 Public Law 97–255, as codified in 31 U.S.C. 1105, 1113, and 3512.
MEMORANDUM

TO: Regional Inspector General/Pretoria, Christine M. Byrne
FROM: USAID/Sudan Mission Director, William Hammink /s/
SUBJECT: Response to Draft Audit Report of USAID/Sudan’s Maternal and Child Health Activities (Report No. 4-650-11-00X-P)
DATE: June 22, 2011

USAID/Sudan appreciates the recommendations provided by the Audit Team to further strengthen USAID/Sudan’s maternal and child activities. We accept most of the findings and have provided additional substance and dates of completion in our responses, as well an attachment regarding the significant progress on monitoring and evaluation.

1) Direct MSH to develop and implement an action plan with benchmarks and timeframes to upgrade a cadre of trained traditional birth attendants in accordance with the task order for Phase II of the Sudan Health Transformation Project.

The underlying assumption of this finding is inconsistent with the Government of South Sudan (GoSS) Ministry of Health (MOH) policy with regards to traditional birth attendants. Therefore, USAID/Sudan would like to propose that we request the Management Sciences for Health (MSH) Sudan Health Transformation Project –Phase 2 (SHTP II) to provide a training plan with benchmarks and timeframes to increase the number of deliveries attended by a skilled birth attendant. Intended completion date is September 15, 2011.

A skilled birth attendant refers to a professional caregiver capable of providing safe and effective health care during childbirth to women and their infants. Skilled attendants include midwives, doctors and nurses with midwifery training. The MOH policy does not subscribe to traditional birth attendants (TBAs), trained or untrained, to support deliveries. Therefore, no further training of this type has been completed by SHTP II. Though often illiterate women, TBA’s tend to be respected in the community for the historical role they have played in assisting in deliveries. Though no longer sanctioned by the MOH or international community as able to provide safe deliveries, many SHTP II partners have been training this unofficial “cadre” to instead perform community outreach to mobilize women to visit facilities for antenatal care (ANC), safe delivery and reproductive health services, i.e., acting as health promoters. USAID believes training these women in this capacity will help in reducing maternal and child morbidity and mortality.

To improve access to skilled birth attendants, 66 certified midwives are now on the SHTP II payroll and functioning in the facilities they support, with another 20 in various stages of the recruitment and hiring process.
Reviewing the SHTP II workplan and budget and the recent arrival of UNFPA certified midwives to develop and train certified midwives, SHTP II did not hire trainer midwives though the midwives hired do act as mentors and trainers in non-birthing skills such as reproductive health education. Coordinating with other donors has allowed SHTP II to leverage UNFPA midwives in the following states: Central Equatoria, Western Equatoria, Northen Bahr el Gazal, Upper Nile, Jonglei, Western Bahr el-Gazal, and Eastern Equatoria to further develop the MNH program and plan joint trainings.

2) Clearly agree in writing with MSH and the Government of Southern Sudan the roles and responsibilities for the procurement, transportation, and distribution of essential drugs and other supplies in Phase II of the Sudan Health Transformation Project.

MSH has made considerable progress in this area and will pursue an MOU to be established between USAID and the Government of Southern Sudan by December 15, 2011 to address point two.

Of note, SHTP II has more closely worked in partnership with its sister project, Strengthening Pharmaceutical Supply (SPS), to supply essential medications and commodities to SHTP II facilities, and to prevent stock outs. Over the last year, the following activities have taken place. To improve procurement, transportation and distribution of needs drugs and supplies, the current steps being taken include:

- A five-day pharmaceutical management training for County Health Departments, sub-partners and key facility staff. This course provided practical knowledge and skills to improve pharmaceutical management in each focus county, and provided stock cards, quantification templates and order forms to ensure a continuous supply of essential medications and commodities.
- SHTP II and SPS worked together to ensure that all SHTP II facilities have adequate stocks of ACT in various dosages for effective case management of malaria.
- SPS arranged for USP laboratory analysis of USAID supplied contraceptive commodities which determined that the commodities were of acceptable levels of quality and potency. SHTP II then ensured distribution to all facilities with trained providers in reproductive health services.
- The MOH provides essential medication kits to all counties for distribution to all facilities. SHTP II facilitates transport of these kits to the counties, and the SCPs ensure distribution to the facilities. If a facility is missed, or the medication kit is not complete, then SHTP II works with the MOH pharmacy supply department to obtain additional medications to prevent interruption of services. Likewise, if a stock out occurs, SHTP II and SPS will work together to find the medications to alleviate the stock out and to deliver it to the county for distribution to the facility.
- SHTP II has worked closely with SPS immunization staff to ensure a continuous supply of all vaccines to the focus counties, including training on how to use the stock cards and order new vaccine stocks with enough anticipation to avoid stock outs. This has contributed to a continuous rise in achievement of our EPI targets—currently at 79% of the target for the FY ’11, even though we are only at the mid-point of the FY work plan.
- SHTP II has paid for the delivery of long lasting impregnated treated bed nets (LLITNs) to all 14 counties and has ensured that there are adequate supplies of LLITNs in all counties for distribution through the MCH services in each facility.
- SHTP II works closely with the Center for Disease Control to ensure a continuous and adequate supply of HIV test kits for the four designated prevention of mother-to-child-transmission sites, which USAID/Sudan receives gratis through CDC/Nairobi.
3) **USAID Sudan develop and implement procedures to document results reported to the Foreign Assistance Coordination and Tracking System.**

Significant investments of time have been made to develop a data matrix to track and interface with FACTS. USAID/Sudan will develop the procedures to document results by September 15, 2011.

4) **USAID Sudan develop written employee exit procedures to minimize the effects of frequent staff turnover.**

Agree and USAID/Sudan health team will work with EXO to complete by Aug 1, 2011.

5) **USAID Sudan develop and implement a plan to increase the verification of results reported by MSH for Phase II.**

Completed. To verify results, USAID/Sudan worked with MSH to incorporate steps outlined in Attachment 1.

6) **Develop and implement a plan for monitoring the implementation of the Phase II branding and marking plan in compliance with USAID branding requirements.**

Agree. MSH will provide USAID/Sudan a plan for monitoring the B&M Plan by September 15, 2011.
# USAID/Sudan’s Seven High-Impact Health Services

<table>
<thead>
<tr>
<th>High Impact Service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Health</td>
<td>Immunization (measles, DPT3, and polio) and treatment of acute respiratory infections and diarrheal diseases</td>
</tr>
<tr>
<td>Nutrition</td>
<td>Exclusive breast feeding, promotion of infant and young child feeding, twice yearly vitamin A supplementation</td>
</tr>
<tr>
<td>Malaria</td>
<td>Malaria control, including use of insecticide-treated bed nets and prompt treatment with an effective antimalarial</td>
</tr>
<tr>
<td>Hygiene and Sanitation Practice</td>
<td>Household water, sanitation, and hygiene</td>
</tr>
<tr>
<td>Maternal Health</td>
<td>Antenatal, safe delivery, and postnatal services</td>
</tr>
<tr>
<td>Family Planning</td>
<td>Child spacing and family planning information and services</td>
</tr>
<tr>
<td>Prevention of HIV/AIDS infection</td>
<td>Prevention of mother-to-child transmission, and behavior change to delay sexual debut and reduce multiple risk behaviors</td>
</tr>
</tbody>
</table>
USAID/Sudan Results Framework for Its Health Portfolio (July 2009)

USAID/Sudan
Results Framework for Health

Sustainable Use of Existing Health and Water Sanitation Services

**Overall Indicators**

- Ind 1.1: Number of children less than 12 months of age who received DPT3 from USG-supported programs
- Ind 1.2: Number of people in target areas with access to improved drinking water sanitation as a result of USG assistance
- Ind 1.3: Number of counseling visits for FP/RI
- Ind 1.4: Number of deliveries with a trained TBA or Maternal and Child Health Worker in USG-assisted programs
- Ind 1.5: Number of individuals trained in good health and hygiene practices
- Ind 2: The percentage of assisted deliveries by trained health service providers in USG-supported counties
- Ind 3: The percentage of health facilities that provide at least 5 of the 7 high-impact services

**Development Context:**
- 1 in 7 women who become pregnant will die from pregnancy-related complications
- 1 in 10 infants will die before their first birthday
- Only 1 in 10 children are fully vaccinated
- Only 99% of the population has access to safe water and sanitation
- Only 3% of the population live within a day’s walk of a health facility
- Polio has re-emerged and is spreading to border countries

**Risks to Programs:**
- Conflict and insecurity
- Under resourced (less than 15% of mission budget going to develop health and WASH services)
- No accepted GOSS policy for cost recovery in the current health system

**Intermediate Result 1**
Increased access of health, water and sanitation service

**Indicators:**
- Ind 1.1: Number of children less than 12 months of age who received DPT3 from USG-supported programs
- Ind 1.2: Number of people in target areas with access to improved drinking water/sanitation as a result of USG assistance
- Ind 1.3: Number of counseling visits for FP/RI
- Ind 1.4: Number of deliveries with a trained TBA or Maternal and Child Health Worker in USG-assisted programs
- Ind 1.5: Number of individuals trained in good health and hygiene practices

- Birth preparedness and maternal services are strengthened by competent service providers
- Drinking water is available to families through POE treatment
- Children are immunized against vaccine-preventable diseases

**Intermediate Result 2**
Increase capacity building of health staff and government institutions

**Indicators:**
- Ind 2.1: Number of improvements to labs, policies, regulations or guidelines
- Ind 2.2: Number of health personnel trained with USG support
- Ind 2.3: Number of people trained in malaria treatment or prevention with USG funds
- Ind 2.4: Number of people trained in DOTS with USG funding
- Ind 2.5: Number of USG-assisted service points experiencing stock-outs of specific tracer drugs
- Ind 2.6: Number of service delivery points providing FP counseling or services

- Case detection: TB and other communicable diseases are increased
- Sudan has increased strategic information capacity to strengthen health system
- Trained health care personnel are able to provide quality health care