



# OFFICE OF INSPECTOR GENERAL

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## AUDIT OF USAID/BENIN'S EFFORTS TO TREAT AND PREVENT MALARIA

AUDIT REPORT NO. 7-680-13-001-P  
NOVEMBER 9, 2012

DAKAR, SENEGAL



*Office of Inspector General*

November 9, 2012

**MEMORANDUM**

**TO:** USAID/Benin Mission Director, Kevin Armstrong

**FROM:** Regional Inspector General/Dakar, Gerard Custer /s/

**SUBJECT:** Audit of USAID/Benin's Efforts to Treat and Prevent Malaria  
(Report No. 7-680-13-001-P)

This memorandum transmits our final report on the subject audit. We have considered carefully your comments on the draft report and have included them in their entirety in Appendix II.

The report includes seven recommendations to strengthen USAID/Benin's implementation of the President's Malaria Initiative. Management decisions were reached on Recommendations 3, 4, and 7, and final action was taken on Recommendations 2, 5, and 6. No decision was reached for Recommendation 1. Please provide us with a written response within 30 days on actions planned or taken to implement Recommendation 1.

Please also provide the Office of Audit Performance and Compliance Division with the necessary documentation to achieve final action on Recommendations 3, 4, and 7. Recommendations 2, 5, and 6 are closed upon report issuance.

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

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**Abbreviations**

The following abbreviations appear in this report:

ACTs	artemisinin-based combination therapies (drugs known as ACTs)
ADS	Automated Directives System
ARM3	Accelerating the Reduction of Malaria Morbidity and Mortality Project
BASICS	Basic Support for Institutionalizing Child Survival
CDC	Centers for Disease Control and Prevention
COR	contracting officer’s representative
FY	fiscal year
MCDI	Medical Care Development International
MSH	Management Sciences for Health
NMCP	National Malaria Control Program
PISAF	Integrated Family Health Program
PMI	President’s Malaria Initiative
URC	University Research Co., LLC.
WHO	World Health Organization

# SUMMARY OF RESULTS

Malaria kills 1,500 to 2,000 children every year in the West African country of Benin, and it is the main cause of anemia in most children under 5. According to the World Bank, households in Benin spent about 25 percent of their annual income on preventing and treating malaria.<sup>1</sup> As a result, two-thirds of USAID/Benin's fiscal year (FY) 2011 funding for the health sector in Benin was allocated toward the elimination of malaria as a public health concern.

To combat the disease, the U.S. President's Malaria Initiative (PMI) began giving funds to Benin in 2008. Led by USAID missions and implemented with the Centers for Disease Control and Prevention (CDC), PMI aims to reduce the number of malaria-related deaths by 50 percent. USAID/Benin's projects seek to provide (1) bed nets to 90 percent of households with a child or pregnant woman, (2) preventive treatment to at least 85 percent of pregnant women, and (3) drugs to at least 85 percent of government health facilities so that they can treat uncomplicated cases of malaria. Two-thirds of USAID/Benin's FY 2011 funding was allocated toward eliminating malaria as a public health concern; the mission's PMI obligations during FY 2011 totaled \$19.4 million, of which the mission expended \$18.9 million.

USAID/Benin and other organizations worked with the country's National Malaria Control Program (NMCP) to focus on three major issues: prevention, diagnosis and treatment, and building the program's capacity. The audit reviewed three PMI awards, listed in Table 1, to evaluate the mission's efforts.

**Table 1. PMI Awards in Benin**

<b>Implementing Partner</b>	<b>Dates</b>	<b>Project/Program</b>	<b>Agreement/ Task Order Amount (million \$)</b>
John Snow Inc.	2008 to 2014	DELIVER procures bed nets, artemisinin-based combination therapies (drugs known as ACTs), sulfadoxine-pyrimethamine for pregnant women, rapid diagnostic tests, and laboratory reagents. It also delivers nets to health facilities.	41.6
Management Sciences for Health (MSH)	July 2009 to July 2012	Basic Support for Institutionalizing Child Survival (BASICS) supports implementing integrated community case management for children under 5 for malaria, diarrhea, and pneumonia. It also provides information on immunizations and nutrition through community organizations and health workers.	4.5
Medical Care Development International (MCDI)	October 2011 to October 2016	Through Accelerating the Reduction of Malaria Morbidity and Mortality (ARM3), MCDI and partners MSH, Johns Hopkins University Center for Communications Programs, and Africare seek to increase coverage and use of malaria interventions in support of the Benin National Malaria Strategy.	30.0

<sup>1</sup> [http://pmi.gov/countries/profiles/benin\\_profile.pdf](http://pmi.gov/countries/profiles/benin_profile.pdf).

The objective of the audit was to determine whether USAID/Benin's malaria program has achieved its goals of preventing and treating malaria.

The audit determined that the mission has met its goals of preventing and treating malaria for the following reasons. In FY 2011 the mission met its goals as defined in its performance plan report by purchasing 17,000 malaria treatment kits that were used by public and private hospitals and by more than 250 health workers. In support of comprehensive diagnostics, USAID/Benin contributed 600,000 rapid diagnostic tests toward the 3 million total national need, and 509,100 ACTs for uncomplicated malaria treatment to health facilities. (More information on the mission's 2011 results is in Appendix III.)

Additionally, results from Benin's 2011-2012 Demographic Health Survey confirmed that USAID and donor efforts in the fight against malaria are having a significant impact. The number of households that own a bed net has increased from 25 to 80 percent in 5 years. The number of children under 5 who reported having a fever dropped by more than two-thirds, from 29 to 9 percent, indicating that prevention activities are reducing the number of new infections among children effectively.

Although some of the specific quantitative accomplishments of the activities could not be verified because supporting documentation was not available, we concluded that their accomplishments had a significant impact on preventing and treating malaria in Benin. USAID/Benin's PMI program procured and distributed significant quantities of bed nets and malarial medications to the local population. Moreover, all testimonial evidence obtained during the audit from mission officials, implementing partners, Benin health officials, and beneficiaries supported our conclusion that USAID/Benin PMI activities had a significant impact.

While USAID/Benin's efforts to treat and prevent malaria are commendable, the mission's recent loss of several members of the health team—including the deputy team lead, commodities logistics specialist, and CDC's resident PMI adviser—has hampered its ability to manage the program. Although the mission is taking steps to address these vacancies and expects to fill these positions in the near future, not having these staff members will continue to have a negative impact on the program's success. This was especially obvious in terms of monitoring and oversight, and not having enough employees to carry out these duties has made the situation worse.

The audit also found that:

- MSH did not follow guidelines for diagnosing malaria (page 4). MSH's community health workers did not use tests recommended by the World Health Organization (WHO) and the Government of Benin to confirm whether patients had the disease prior to treatment.
- Results reported by MSH could not be verified because MSH and its subpartners did not maintain records (page 5).
- Inventory controls for antimalarial drugs and bed nets were weak (page 6).
- A project encountered implementation problems (page 9). USAID did not adequately manage the MCDI-led consortium's award, and as a result, activities either never started or began late, and beneficiaries could experience a break in services.

- Health centers were struggling with the adverse effects of the government’s free drug policy (page 12). Because the government was not reimbursing the centers for the drugs, some were unable to replenish stock—and treat people in need.

To address the weaknesses noted, the report recommends that USAID/Benin:

1. In coordination with the Ministry of Health, implement a distribution plan for the limited supply of rapid diagnostic tests that requires that community-level case management programs are provided with sufficient amounts of the tests to meet their needs in diagnosing and treating malaria (page 5).
2. Implement a monitoring plan for its President’s Malaria Initiative program that includes frequent site visits and data quality reviews, which are documented (page 6).
3. In collaboration with the National Malaria Control Program, implement procedures to improve the monitoring of antimalarial drugs and nets (page 9).
4. In collaboration with the National Malaria Control Program and other donors, identify ways or provide means for disposing of bed net bags safely and promptly from past, present, and future distributions, and document the results (page 9).
5. Work with Medical Care Development International to revise its agreement and work plan, adjust its targets, adjust its budget, and incorporate follow-on projects into its scope of work to reflect the late start and the current circumstances (page 11).
6. Work with Medical Care Development International and require that it collaborate with the National Malaria Control Program and partners from previous projects to confirm that there is no break in follow-on services and document their actions (page 11).
7. Support an evaluation of the Government of Benin’s policy for the free treatment of malaria and make recommendations in writing to the Government to make these services sustainable (page 12).

Detailed findings appear in the following section, and the audit scope and methodology appear in Appendix I. Management comments are in Appendix II, and our evaluation of management comments is on page 13.

# AUDIT FINDINGS

## **Implementer Did Not Follow Guidelines for Diagnosing Malaria**

The WHO's 2010 guidelines for treating malaria recommend testing all patients suspected of having the disease before treatment begins.<sup>2</sup> This policy change was made in part to reduce the spread of drug resistance and to help identify patients who do not have malaria so that alternative diagnoses can be made and appropriate treatment provided. The updated guidelines are geared toward improving the management of not only malaria, but also other childhood illnesses. Benin adopted the guidelines in February 2011, and anyone suspected of having malaria must now be tested before receiving treatment.

USAID/Benin's BASICS program implemented by MSH did not follow these guidelines. All of its 1,048 community health workers were trained to treat simple cases of malaria, diarrhea, and acute respiratory infections in children under 5. However, only 102 workers were taught how to use diagnostic tests. Community health workers use a step-by-step approach developed by program officials to diagnose patients through identifying symptoms of malaria, diarrhea, and acute respiratory infections. The community health workers then provide medications to the patients based on the symptoms. According to WHO, diagnosis based only on symptoms has very low specificity and results in overtreatment.

In 2011 none of the 39,259 suspected cases of malaria treated by the program's community health workers were confirmed through diagnostic tests before the administration of antimalarial medication. This is not surprising since the 102 workers who knew how to use the tests were trained in January 2012—only 5 months before the project ended.

MSH officials said they were aware of the guidelines but did not follow them because the program could not get enough tests for its community health workers to use. In FY 2011 USAID/Benin donated 600,000 tests to the Ministry of Health toward the 3 million total national need, but the country still experienced a shortage. Of the 50,000 tests needed per year for the BASICS program, the Beninese Government provided only 500, and MSH and mission officials have been unsuccessful at convincing it to provide more. For these reasons, MSH officials said it was pointless to conduct more training on how to use the diagnostic tests because the workers would not get a chance to use those skills before the end of the program, and resources and skills would have been wasted.

According to MSH officials, apart from the compliance problems the program faces by not complying with the Government of Benin's guidance for diagnosing suspected malaria patients prior to treatment, program beneficiaries also face other undesirable effects like building potential parasite resistance to antimalarial drugs. Additionally, not confirming malaria through appropriate diagnosis means that some people will receive treatments they don't need and that the number of malaria cases could be overstated. Although the program ends in July 2012, a similar program is scheduled to start through the mission's ARM3 project, which is being implemented by MCDI and other partners. Therefore, to avoid this problem in the future, we make the following recommendation.

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<sup>2</sup> WHO recommends diagnosing malaria by light microscopy or rapid diagnostic tests, which detect parasite-specific antigens or enzymes. Some tests have the ability to differentiate species.

**Recommendation 1.** We recommend that USAID/Benin in coordination with the Ministry of Health implement a distribution plan for the limited supply of rapid diagnostic tests that requires that community-level case management programs are provided with sufficient amounts of the tests to meet their needs in diagnosing and treating malaria.

## Reported Results Were Not Verifiable

Access to quality data is essential for missions to make informed decisions about development activities. To help manage for improved results, USAID provides extensive guidance, including Automated Directives System (ADS) 203.3.5.1, “Data Quality,” which states that performance data should meet data quality standards for validity, integrity, precision, reliability, and timeliness. Additionally, ADS 203.3.5.2 states that USAID missions, offices, and assistance objective teams should be aware of the strengths and weaknesses of their data and the extent to which the data’s integrity can be trusted to influence management decisions.

However, we were unable to verify any reported results for BASICS’ malaria-related activities because neither MSH nor its five subpartners maintained records.<sup>3</sup> We attempted to verify FY 2011 results reported by MSH for the following indicators:

- *Number of children treated by health workers for malaria*
- *Number of households visited by health workers and that received an awareness message*
- *Number of cases of fever treated in the project intervention health zones*

For the first indicator, MSH and its subpartners reported treating 39,259 patients, but we were unable to verify any of these results as detailed in Table 2.

**Table 2. Reported and Verified Results for Number of Children Treated by Health Workers in FY 2011 (Audited)**

Subpartner	Health Zone	Reported	Verified With Mission	Verified With Partner	Verified With Subpartner
GRADE	Bassila	4,017	0	0	0
DEDRAS	Tchaourou	8,332	0	0	0
CBBE	Banikoara	7,400	0	0	N/A*
HANDICAP-plus	Kandi-Gogonou-Segbana	5,865	0	0	N/A
COVADES	Djougou-Ouake-Capargo	13,645	0	0	N/A
<b>Total</b>		<b>39,259</b>	<b>0</b>	<b>0</b>	

\* Auditors did not visit subpartners CBBE, HANDICAP-plus, and COVADES, but MSH officials said results could not be verified for any of them because none of the subpartners kept records.

Subpartner officials informed us that verifying the reported results would be difficult to do because the data sheets supporting the data were not readily available. The sheets were maintained by the community health workers, who reported their monthly activities to their respective health centers, which then reported the results to MSH’s subpartners. The

<sup>3</sup> The MSH-led BASICS program represents 6 percent of total PMI-funded activities audited.

subpartners said they did not keep copies of the registers as proof of assistance to beneficiaries because they were never advised to do so by MSH or USAID. Moreover, neither USAID nor MSH officials verified the data from subpartners to confirm its reliability during the project.

According to MSH officials, records were not maintained because the program was not staffed with a monitoring and evaluation officer who could confirm the reliability of data. An official added that repeated requests for USAID/Benin to approve the position of a monitoring and evaluation officer were denied, and as a result, they had no choice but to assign the task of collecting, maintaining, and reporting data to a technical adviser who was not familiar with these tasks. The technical adviser said she noticed several inconsistencies in the data reported by the subpartners and asked the mission to do a data quality assessment, but USAID/Benin officials turned her down. The mission's contracting officer's representative (COR) disagreed and said resources would have been provided to address this problem if MSH officials had asked for them.

Nonetheless, timely monitoring of the project's reported data to USAID/Benin officials should have been performed to reveal the weaknesses in data quality so that appropriate, timely actions to address them could have been initiated.

Officials at the two subpartners visited said this problem was exacerbated by the fact that their organizations were not familiar with USAID's reporting requirements and did not know that they were supposed to maintain the data sheets used by the community health workers as evidence of service provided. One official said MSH turned down the subpartner's requests for help in managing the data, monitoring the project, and developing project evaluation skills.

Additionally, the mission provided the audit team with only one documented site visit report—for a project that had been in place for 3 years. During this site visit, several key problems were discussed by MSH, government and subpartner officials, and the project's COR; however, there was no evidence or documentation to suggest that they were followed up on and appropriately addressed. Although the COR informed us that additional site visits were performed, we determined them to be infrequent and undocumented.

ADS 203.3.3 states that performance monitoring reveals whether desired results are occurring and whether assistance efforts are on track to meet their objectives. Periodic verification of reported results helps confirm that consistent, reliable data are collected for reporting, management decision-making, and resource allocation. Therefore, we make the following recommendation.

***Recommendation 2.*** *We recommend that USAID/Benin implement a monitoring plan for its President's Malaria Initiative program that includes frequent site visits and data quality reviews, which are documented.*

## **Inventory Controls Were Weak**

ADS 596.3.1, "Establishing Internal Controls," requires USAID managers and staff to implement internal controls to safeguard assets against waste, loss, unauthorized use, or misappropriation. The Government Accountability Office's *Standards for Internal Control in the Federal Government* echoes this and states that an agency must establish physical controls to secure and safeguard vulnerable assets. The publication also states that transactions and significant events should be recorded promptly and clearly documented, and that documentation should be

available to support management in controlling operations and making decisions.

In addition, commodities—like the bags in which bed nets are packed—must be disposed of properly. According to Benin’s NMCP, the bags should be collected and disposed of to avoid environmental and health hazards.

USAID/Benin’s FY 2012 Malaria Operational Plan highlights the need for proper commodity management by stating:

PMI will continue to strengthen the pharmaceutical management of antimalarials; provide support to the overall improvement of the supply chain for essential medicines, with emphasis on the peripheral level, and provide support to the overall strengthening of the health system in Benin. PMI will work with other partners to improve transparency and governance of pharmaceutical management at the health zone depots.

The U.S. Government’s 2009-2014 Malaria Strategy also emphasizes the need to “improve forecasting, procurement, quality control, storage, and distribution of medicines.”

However, the audit team noted a number of inventory problems:

**Drug Tracking System.** Some health centers do not report their inventory and consumption levels as required when they ask for more drugs. Through a previous USAID project, NMCP introduced a tool in 2010 for centers to use when they record this information. Using this tool effectively would have addressed a finding in a previous audit report<sup>4</sup> that health centers requested more antimalarial drugs than they could justify using. The audit team recommended that the mission work with NMCP to strengthen controls to verify inventories and consumption levels before approving requests. However, due in part to a lack of monitoring and enforcement, the tool has not been used as intended.

Officials of the Regional Medical Store said that when employees from the regional depots come to get supplies, they are supposed to bring monthly reports about consumption levels based on the health centers they supply. However, depot employees occasionally arrive without the reports. Since some of them travel up to 8 hours to get to the store, employees there said they fill the order because they did not feel they can send the person back to the depot for the reports. As a result, inventory and consumption levels are not reviewed to determine whether the request is reasonable.

**Excessive Inventory of Bed Nets.** In July 2011 USAID supported NMCP’s campaign to distribute 4.5 million bed nets—enough to be sure that everyone in Benin had a bed net to sleep under. Immediately following the campaign, NMCP discontinued routine net distribution to pregnant women and children because it considered everyone to be covered. At the time of the audit, NMCP had not yet notified health centers to resume routine distribution of nets, yet USAID had delivered 705,000 nets—worth \$4.1 million—to 800 health centers across the country, where they had been sitting in storage for nearly 8 months. About 18,680 of them were in the 5 health centers the team visited in Cotonou and Parakou. At Sikecodji Health Center in Cotonou, the director said she did not understand why the mission continued to deliver bed nets if she and her staff could not distribute them to beneficiaries.

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<sup>4</sup> “Audit of USAID/Benin’s Implementation of the President’s Malaria Initiative,” Report No. 7-680-11-004-P, February 14, 2011.

**Stock Cards.** In some cases, stock cards were inaccurate. For example, Kpebie Health Center understated its total inventory by 1,250 bed nets because employees there did not know that the nets instead went to a health zone depot; the deliverer took the nets to the depot because he knew Kpebie did not have sufficient storage space, but he did inform the staff about the change in plans.

Sirarou Health Center did not record two deliveries of 1,550 nets on its stock card properly. Lastly, Cotonou 1 Health Center did not maintain a stock card and could provide supporting documentation for only 3,000 of the approximately 7,250 nets in storage.

**Waste Management.** The bags in which the bed nets were packed were not disposed of promptly; in fact, NMCP's last organized disposal was in 2007. During the 2011 campaign, 4.5 million nets from various donors were distributed across the country—including 200,000 from USAID—but the bags were never collected for disposal. Bags from the routine distribution to pregnant women and infants, an activity solely supported by USAID, were also seen at health centers awaiting proper disposal. Though NMCP has a waste management plan for the bags, officials said they didn't have funds for this activity. Until this problem is addressed, bags are collecting at health centers and could pose health and environmental risks.



**Empty bed net bags pile up at the Tchatchou Health Center in the Department of Borgou.  
(Photo by OIG, May 15, 2012)**

All of these conditions existed because USAID/Benin and NMCP did not monitor PMI activities adequately. In response to the February 2011 audit—which also discovered that nets were missing, diverted, or sold for profit—the mission was supposed to improve its monitoring and perform quarterly site visits. The former commodities logistics specialist reportedly visited the sites to monitor the project, but the mission could not provide documentation of these visits.

Without adequate monitoring, nets and antimalarial drugs may be handled or stored improperly and be stolen or misused, and communities may not be protected from the environmental and health hazards of improper, untimely disposal. To correct these inventory control weaknesses and lack of adequate monitoring, we make the following recommendations.

**Recommendation 3.** *We recommend that USAID/Benin, in collaboration with the National Malaria Control Program, implement procedures to improve the monitoring of antimalarial drugs and nets.*

**Recommendation 4.** *We recommend that USAID/Benin, in collaboration with the National Malaria Control Program and other donors, identify ways or provide means for disposing of bed net bags safely and promptly from past, present, and future distributions and document the results.*

## **Project Encountered Implementation Problems**

Per ADS 202.3.6, monitoring the quality and timeliness of outputs, which are usually described in contract statements of work and grant agreement program descriptions, is the responsibility of CORs and development objective teams. ADS further states that outputs are critical to achieving results, and delays in completing outputs or problems with output quality provide an early warning that results may not be achieved as planned; therefore, responding to the problems early is essential in managing for results. According to ADS 202.3.5, it is important to confirm that implementing partners have complete information about the development objectives their activities are expected to contribute to; the guidance also states that briefing new partners about what's expected of them may also be helpful. In addition, USAID strongly encourages development objective teams to share their planning documentation with partners within the guidelines and restrictions established.

However, we noted the following problems:

**Activities Either Started Late or Not at All.** Eight months after PMI activities began, the mission had not yet approved the ARM3 project's first-year work plan. According to the chief of party, the plan was submitted to the COR for approval in January 2012. The COR asked for clarification on some tasks outlined in the work plan before approving it. The chief of party said he had not been able to respond, however, and so he had not sent the updated work plan to the COR for final approval.

Assuming that the version of the work plan the mission provided to the audit team is approved, then many activities either never started or were late. For example, only 39 percent of 127 planned activities were completed. The other 61 percent either never started or were late.

There were also delays in hiring personnel. All key project personnel (including a monitoring and evaluation specialist, a finance and administration specialist, and a case management officer) were expected to be in place between November and December 2011. However, they did not assume their posts until mid-January 2012, 3 months after the project started. According to ARM3 officials, the delay happened because consortium partners (MSH, Johns Hopkins University Center for Communication Programs, and Africare) were unwilling to bring on new staff from their respective organizations because USAID had only obligated \$2.9 million of the \$6 million needed to run the project for the first year and because of local employment

laws. According to MCDI officials, these laws would make the partners liable for the entire amount promised in an employee's fixed-term contract if the contract were terminated early.

The officials said they told the COR and USAID/Benin's contracting officer about this problem several times, but there was little assistance from USAID in resolving this matter in a timely manner until mid-February 2012 when additional funding was made available to cover costs for the first year.

**Mission Did Not Communicate Expectations With Partners.** ARM3 is supposed to be a follow-on for several USAID/Benin PMI programs that are coming to an end, including BASICS and a component of the Integrated Family Health Program (PISAF) implemented by University Research Co., LLC (URC). According to the mission, ARM3 implementers should have met with PISAF and BASICS to learn about their activities and develop a strategy for taking them over. However, we found that insufficient collaboration and confusion might prevent ARM3 from being a true follow-on to the other projects.

ARM3 is expected to take over BASICS when the Agency's agreement with MSH ends in July 2012. However, during our meeting with ARM3 officials, they said this task is not in their current agreement with USAID, and a modification of the agreement and scope of work would be necessary if they are to take over BASICS. No plans were under way to confirm that ARM3 will take the program over without interruption to beneficiaries.

The chief of party for BASICS told the audit team he was surprised that he had not been contacted by MCDI or USAID/Benin about transferring the program to MCDI or to discuss the design of the follow-on. He added that it would be a shame if services were interrupted during this transition period because many communities have come to depend on BASICS for their health needs. Many of the community health workers and villagers visited echoed this sentiment. They knew BASICS was ending but had not been told whether the project would continue. They pleaded that the services provided by BASICS not be interrupted. BASIC's subpartners, which would be responsible for mobilizing the more than 1,000 community health workers for a follow-on, have also been left in the dark.

USAID also expects ARM3 to take over components of URC's PISAF, but ARM3 has had difficulty implementing one of the activities. Under PISAF, URC developed software to monitor inventory and drug consumption levels at the regional depots, and NMCP used this information to do country-level quantifications and forecasting. ARM3 officials want to upgrade the software to address a previous audit recommendation that the mission develop standards for the proper storage and management of drugs. The officials also want to avoid introducing new software that is not compatible with the programs the depots use. Upgrading the software requires URC, NMCP, and ARM3 to collaborate, but they had not worked together enough to make progress.

These problems described above occurred because USAID/Benin has not worked intensively with MCDI and partners from the other projects to ensure that there is adequate collaboration. USAID has also not defined ARM3's scope of work to include activities under the BASICS program. There has been limited oversight by USAID to ensure that activities are being implemented in a timely manner and that follow-on projects are transitioned seamlessly. Although the ARM3 project staff members said they have met with the COR several times, the mission was unable to provide us with any site visit reports documenting these meetings.<sup>5</sup>

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<sup>5</sup> This problem concerning the lack of monitoring is addressed in Recommendation 3.

As a result of the problems documented above, there has been limited encouragement for collaboration among partners to transfer information, lessons learned, and best practices in an effort to make sure that services to beneficiaries are not interrupted and activities are implemented on time. To correct these problems, we make the following recommendations.

***Recommendation 5.*** We recommend that USAID/Benin work with Medical Care Development International to revise its agreement and work plan, adjust its targets, adjust its budget, and incorporate follow-on projects into its scope of work to reflect the late start and the current circumstances.

***Recommendation 6.*** We recommend that USAID/Benin work with Medical Care Development International and require that it collaborate with the National Malaria Control Program and partners from previous projects to confirm that there is no break in follow-on services and document their actions.

# OTHER MATTER

## **Government Malaria Treatment Policy Was Not Effective**

During the audit, this matter came to our attention that could have a negative impact on the program's sustainability. In October 2011 the Government of Benin instituted a new policy that requires health centers to provide free antimalarial drugs to pregnant women and children under 5 who test positive for malaria. This policy, however, is having an adverse effect on health centers across the country. Before it went into effect, health centers sold antimalarial drugs at a subsidized rate and used the proceeds from the sales to replenish their stock through the Central or Regional Medical Stores. However, because the centers are now giving the drugs away, they have less money to replenish stock. The government was supposed to reimburse the centers for the free drugs, but at the time of this audit—7 months after the policy took effect—it had not done so.

Without reimbursement, some centers have had to reduce the quantity of antimalarial drugs purchased or choose between replenishing antimalarial drugs and other essential medicines because they did not have enough funds to meet all their needs. Nurses at three health centers visited said they expected to receive between \$400 and \$600 from the government for expenses incurred since the free drug policy was instituted, but they have not. At the Ouenou Health Center outside Parakou, the nurse said that because he did not have enough money to replenish both antibiotics and antimalarial drugs, he used the money for antimalarial drugs and referred patients who needed antibiotics to a pharmacy about 15 kilometers away.

According to the manager of the Regional Medical Store in Parakou, the delay in reimbursement has forced some health centers with good credit to buy other medicines on credit from the regional health zone depots, which then have to buy on credit from the medical stores.

The government's free drug policy has created administrative burdens also. To be reimbursed, employees at the centers must submit detailed information about each patient treated under the program, and this was a time-consuming process.

According to USAID/Benin, the government had not been able to reimburse health centers because it was still putting a system in place to verify that only expenses for legitimate malaria cases qualified for reimbursement. The mission was aware of the possible adverse effects of this policy before it took effect and advised government officials to first study its implications, but the government did not. Failure to address the reimbursement problem will hinder PMI goals and jeopardize the program's sustainability. Accordingly, we make the following recommendation.

***Recommendation 7.*** *We recommend that USAID/Benin support an evaluation of the Government of Benin's policy for the free treatment of malaria and make recommendations in writing to the Government to make these services sustainable.*

# EVALUATION OF MANAGEMENT COMMENTS

USAID agreed with six of seven recommendations in the draft report. Final action has been taken on Recommendations 2, 5, and 6, and management decisions have been reached on Recommendations 3, 4, and 7. Recommendation 1 remains without a management decision. Our evaluation of management comments is shown below.

**Recommendation 1.** The mission agreed to implement a distribution plan for the limited supply of tests. As part of its work plan, MCDI will work to improve malaria diagnosis and treatment activities by developing a plan to improve access to tests in support of the national policy requiring testing prior to treatment.

The mission disagreed with the part of the recommendation that “requires that community-level case management programs are provided with sufficient amounts of rapid diagnostic tests to meet their needs in diagnosing and treating malaria.” In its response, the mission stated that PMI Washington recommends that the use of tests be prioritized according to individual country policy.

In our view, this statement supports RIG/Dakar’s position that community-level case management programs be provided with sufficient amounts of tests because the Government of Benin adopted this policy in February 2011, and anyone suspected of having malaria must now be tested before receiving treatment. Because the mission disagreed, there is no management decision on this recommendation.

**Recommendation 2.** The mission agreed to develop a monitoring plan that requires quarterly site visits to each implementing partner. Additionally, the mission’s newly appointed CDC resident adviser has incorporated the use of data quality assessments into future site visits. These actions constitute final action on this recommendation.

**Recommendation 3.** The mission agreed to implement procedures, in collaboration with the NMCP, to improve the monitoring of antimalarial drugs and bed nets. A new commodities and logistics manager has joined the health team since the audit, and he will coordinate site visits with NMCP and the Central Medical Stores. Additionally, MCDI plans to develop a detailed plan for the monitoring of PMI commodities in Benin. The mission plans to complete these actions by March 31, 2012. Accordingly, a management decision has been reached on this recommendation.

**Recommendation 4.** The mission agreed that the donor community should identify ways to dispose of bed net bags properly. The mission highlighted the fact that USAID is only a minor supplier of bed nets in Benin and cannot control the practices of other donors. The current NMCP coordinator has assured the mission that future bed net distribution campaigns would use incinerators to dispose of the bags.

The mission intends to raise the impact of bed net bags on the environment at the next meeting of stakeholders and will also consult with the regional environmental officer in Accra about any additional steps PMI can take to further reduce the problem of undisposed bed net bags in

Benin. The mission plans to conclude these action steps by March 31, 2013. Accordingly, a management decision has been reached on this recommendation.

**Recommendation 5.** The mission agreed and has updated MCDI's work plan, adjusted its targets and budgets, and incorporated follow-on projects into its scope of work. These actions constitute final action on this recommendation.

**Recommendation 6.** The mission agreed with this recommendation and has adjusted the year two work plan of MDCI to incorporate tasks that ensure a smooth transitioning of projects to MCDI and one that ensures that there are no gaps in services. These actions constitute final action on this recommendation.

**Recommendation 7.** The mission agreed to provide assistance to the Ministry of Health through workshops and in writing to determine how the free treatment of Malaria can be made more sustainable by March 31, 2013. Accordingly, a management decision has been reached on this recommendation.

Last, regarding the mission's comments on the BASICS program implemented by MSH, RIG/Dakar disagrees with the mission and concurs with MSH that this program was expected to be fully implemented and functioning at the time the audit was performed. The implementer unsuccessfully tried to negotiate with the government for enough tests to cover its entire population of beneficiaries. According to Beninese officials we spoke with, the program was not in compliance with the Government's instituted policy on the diagnosis and treatment of malaria because malaria was not always confirmed through approved tests prior to treatment. Although the program was initially launched as a pilot, it was expected to be fully implemented and in full compliance with WHO and Beninese Government policies by the time of this audit.

# SCOPE AND METHODOLOGY

## Scope

We conducted this audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions 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/Benin's malaria program has achieved its goals of preventing and treating malaria. To implement the program, the mission worked with about eight prime partners. Those selected for audit are listed in Table 1 on page 1.

The audit focused on malaria-related activities occurring in fiscal years 2011 and 2012. During FY 2011, USAID/Benin obligated \$19.4 million and disbursed \$18.9 million for PMI activities. During FY 2012, as of July 11, USAID/Benin obligated \$7.9 million and disbursed \$7.6 million. Of those disbursements, the amount tested was \$7.5 million for FY 2011 and \$3.9 million for FY 2012.

In planning and performing the audit, the audit team assessed relevant controls the mission used to manage the program and confirm that its implementing partners were providing adequate oversight of program activities. We reviewed the following:

- Project work plans
- Project agreements and subagreements
- Partners' progress reports
- Performance monitoring plans
- Available USAID and partner trip reports
- Policies and procedures to safeguard program assets and resources
- FY 2011 certification required under the Federal Managers' Financial Integrity Act of 1982
- Recommendations from a previous audit of USAID/Benin's PMI activities

We conducted audit fieldwork from May 7 to May 25, 2012. We interviewed key mission personnel, implementing partner and subpartner staff members, Ministry of Health employees, and community health workers. We conducted the audit at USAID/Benin in Cotonou and at implementing partner and subpartner offices and activity sites in the Borgou, Donga, and Littoral Departments. Under MSH's BASICS, we met with two local subpartners GRADE and DEDRAS. Under DELIVER, we met with United Parcel Service regarding bed net distribution. To assess the adequacy of inventory controls for bed nets and antimalarial drugs, we visited six health centers, two medical stores, and one regional depot.

We only verified reported results for MSH's BASICS malaria activities because the ARM3 project was in its early stages of implementation and the mission could not provide all the necessary documentation for DELIVER. Complete assessments of DELIVER and the bed net and antimalarial drug component of USAID/Benin's malaria program were not possible because key personnel were absent, conflicting information was provided to auditors, and not all documentation was available for review.

## Methodology

To answer the audit objective, we evaluated the mission's management and oversight of PMI activities, the performance of implementing partners, and the effectiveness of the activities being implemented. We met with the PMI team in Benin to gain an understanding of the program activities. We selected three projects to audit and reviewed available agreements and subagreements, progress reports, performance management plans, work plans, site visit reports, and annual certification required by the Federal Managers' Financial Integrity Act. We reviewed applicable laws and regulations, ADS policies and procedures pertaining to USAID/Benin's PMI program, guidance from WHO, and the Government Accountability Office's *Standards for Internal Control in the Federal Government*.

We performed site visits in the Borgou, Donga, and Littoral Departments. During these visits, we interviewed staff members from implementing partners, health services, and medical stores, as well as community health workers and Ministry of Health officials. We also verified reported results (when possible), counted antimalarial drug and net commodities, and checked to see whether activities were being implemented and were monitored and evaluated as required. In selecting a sample of activities to visit, we chose activities that were in progress during our fieldwork, located in areas where other key program activities were being implemented, and representative of the mission's antimalarial efforts. The results and overall conclusions related to this testing were limited to the items tested and cannot be projected to the entire audit universe. However, we believe that our work provides a reasonable basis for our conclusions.

# MANAGEMENT COMMENTS



**To:** Gerard Custer, Regional Inspector General, Dakar, Senegal

**From:** /s/ Kevin Armstrong, Mission Director, USAID/Benin

**Date:** October 15, 2012

**Subject:** Audit of USAID/Benin's Implementation of the President's Malaria Initiative (Audit Report No. 7-680-12-00X-P) – June 2012

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This memorandum transmits USAID/Benin's management response on the subject audit report regarding USAID/Benin's malaria activities funded by the President's Malaria Initiative (PMI). We believe that the Government of Benin, through the National Malaria Control Program (NMCP) and its malaria control partners, has made significant progress toward reducing the malaria burden in Benin. Together, we have increased access to life-saving malaria drugs to hundreds of thousands of children and pregnant mothers: in the national campaign last year we distributed bed nets to millions of households; PMI has conducted indoor residual spraying to protect more than half a million people in the Atacora department; and we have been building Beninese capacity to manage and sustain activities in a transparent manner. The preliminary data from the Demographic and Health Survey that was just completed provide evidence that remarkable progress has been achieved in reducing malaria in Benin over the past few years. However we acknowledge there are significant challenges in implementing this type of program and will continue to work on improving the malaria information system, and the management of the supply chain of malaria drugs, commodities and other resources. USAID/Benin remains committed to achieving a quality program that saves lives and provides superior services. We appreciate the RIG's inputs towards the improvement of the implementation of PMI by USAID/Benin.

Our management responses to the recommendations are presented below:

**Recommendation 1.** *We recommend that USAID/Benin, in coordination with the Ministry of Health, develop and implement a distribution plan for the limited supply of Rapid Diagnostic Tests (RDT) that requires that community-level case management programs are provided with sufficient amounts of rapid diagnostic tests to meet their*

*needs in diagnosing and treating malaria.*

**Management Comments:** USAID/ Benin agrees with the first part of the recommendation and will develop and implement a distribution plan for the limited supply of RDTs. One of the priority tasks in Medical Care Development International's (MCDI) work plan is to improve malaria diagnosis and treatment activities. Part of this task is to develop a plan to improve access to RDTs in support of the policy of the Ministry of Health (MOH) requiring testing of all patients suspected of having malaria before any treatment is started. This plan will include expanding the training of community health workers (CHWs) in the use of RDTs to the extent RDTs can be made available.

The target closure date for this recommendation is December 31, 2012.

However, the Mission disagrees with the part that "requires that community-level case management programs are provided with sufficient amounts of rapid diagnostic tests to meet their needs in diagnosing and treating malaria." PMI Washington recommends that the use of limited RDTs be prioritized according to individual country policy. From the time the testing policy was adopted by the MOH in February 2011 to the present, the demand for RDTs has risen dramatically. There is now an acute shortage of RDTs, with just 600,000 (all from PMI this year) compared to the total need of more than three million. In light of this shortage, the MOH has determined that the most effective use of the limited supply of RDTs is to allocate them to health facilities that see large numbers of sick children and where there are sufficient numbers of experienced professionals who can properly administer the RDTs. Meanwhile, microscopy will continue to be used as an alternative means of diagnosing malaria until sufficient RDTs are available to cover needs nationwide.

The long term solution to the shortage is an expansion of the supply of RDTs but this may be difficult to achieve. PMI and the Global Fund are currently the only major donors funding RDTs in Benin and PMI's budget for FY 2013 has been reduced by \$2 million while the Global Fund will not have money to buy RDTs until 2014. The current country proposal to the Global Fund proposes to fund 750,000 RDT kits. To improve their availability, the Mission intends to request PMI/Washington to approve a re-programming of funds to increase the budget allocated for the purchase of RDTs for Benin.

**Recommendation 2.** *We recommend that USAID/Benin implement a monitoring plan for its President's Malaria Initiative program that includes frequent site visits and data quality reviews which are documented.*

**Management Comments:** USAID/Benin agrees with the recommendation and has developed a monitoring plan which requires a minimum of quarterly site visits to each implementing partner. The newly-appointed CDC Resident Advisor has begun site visits to perform data quality assessments; he will move to Benin in January 2013 for an initial two-year assignment.

The Mission wishes to comment that during the period covered by the audit, the Commodities and Logistics Specialist conducted four visits to health facilities and sales points but his site visit reports could not be located after he left USAID. In addition, site visits to the north of Benin normally take a full week, and maintaining a quarterly schedule of site visits was not possible because of extended periods of time when the Center for Disease Control Resident Advisor, the Program Manager and the Commodities and Logistics Specialist positions were

vacant due to staff turnover.

We have attached the schedule of site visits for FY 2013, and will forward the trip reports quarterly, if needed. We request closure of this recommendation on issuance of this report.

**Recommendation 3.** *We recommend that USAID/Benin, in collaboration with the National Malaria Control Program, implement procedures to improve monitoring of antimalarial drugs and nets.*

**Management Comments:** USAID/Benin agrees with the recommendation and will implement procedures, in collaboration with the National Malaria Control Program, to improve the monitoring of antimalarial drugs and nets. A new Commodities and Logistics Specialist has recently joined USAID/Benin's Family Health Team (FHT). He will soon start doing site visits in coordination with the National Malaria Control Program (NMCP) and the Central Medical Stores (CAME). In addition, MCDI will develop a detailed plan with specific procedures to monitor the availability and use of PMI commodities.

The target closure date for this recommendation is March 31, 2013.

**Recommendation 4.** *We recommend that USAID/Benin work with the National Malaria Control Program and other donors to identify ways or provide means for the proper and timely disposal of bed net bags from past, present and future distributions and document the results.*

**Management Comments:** USAID/Benin agrees with the recommendation that the donor community should identify ways to properly dispose bed net bags shortly after mass distributions because of the potential environmental damage caused by thousands of improperly disposed bed net bags. USAID is only a minor supplier of bed nets in Benin and cannot control the practices of other donors. For example, during the universal distribution campaign in July-August 2011, less than 5% of an estimated 4.5 million bed nets were financed through PMI. Thus, most bed net waste comes from other donors, including the large quantity of bed net bags featured in one of the photographs included in the draft PMI Audit Report, which were left over from an activity implemented by donors other than PMI. PMI-financed net distribution during this campaign was accompanied by a social mobilization campaign that included messages on the proper use of mosquito nets and the disposal of bed net bags.

Nonetheless, USAID/Benin has often raised the importance of proper bed net bag disposal with the three NMCP coordinators who occupied the position the last three years. The current coordinator has assured USAID/Benin that future campaigns will utilize already purchased incinerators for the disposal of bed net bags. In addition, the next bed net mass campaign will adopt more environmentally friendly packaging so that bed nets are no longer individually packaged but are packaged in large numbers, thereby reducing waste.

USAID/Benin will once more raise the environmental issue at the next meeting of Benin's Roll Back Malaria Partnership and will consult with the Regional Environmental Officer in Accra on any additional steps that can be taken by PMI to further reduce the problem of undisposed bed net bags.

The commitments of the NMCP and Benin's malaria donors on the proper disposal of bed net bags will be summarized and submitted to close the recommendation.

The target closure date for this recommendation is March 31, 2013.

**Recommendation 5.** *We recommend that USAID/Benin work with Medical Care Development International to revise its agreement and work plan, adjust its targets, adjust its budget, and incorporate follow-on projects into its Scope of Work to reflect the late start and the current circumstances.*

**Management Comments:** USAID/Benin agrees with the recommendation and has updated MCDI's work plan, adjusted its targets and budgets, and incorporated follow-on projects into its Scope of Work. The approved work plans for FY 2011 and 2012 are attached.

The Mission requests closure of this recommendation upon issuance of the audit report.

**Recommendation 6.** *We recommend that USAID/Benin work with Medical Care Development International to ensure that there is a coordinated and harmonized effort between Medical Care Development International, the National Malaria Control Program and the partners from previous projects to make sure that there is no gap in follow-on services.*

**Management Comments:** USAID/Benin agrees with the recommendation to the extent that there is a need to continue activities of previous projects into ARM3. MCDI's work plan for Year 2 is attached. It has been adjusted to incorporate tasks to ensure a smooth transition from the Strengthening Pharmaceutical Services, Improving Malaria Diagnostics, Treatment of Severe Malaria in Children, Malaria in Pregnancy and Community Case Management into ARM3. The Year 2 work plan is attached and represents the results of close consultations with the NMCP.

The Mission requests closure of this recommendation upon issuance of the audit report.

**Recommendation 7.** *We recommend that USAID/Benin support an evaluation of the Government of Benin's policy of free treatment of malaria and make recommendations in writing to the Government of Benin to make these services more sustainable.*

**Management Comments:** USAID/Benin agrees with the recommendation and will provide assistance to the Ministry of Health, through workshops and in writing, to determine how the free treatment of malaria can be made more sustainable. Those recommendations will be through workshops and in writing.

The monitoring of the free malaria treatment policy is already on the agenda of the Minister of Health and she recently took a week-long tour of northern Benin to observe first-hand how the new policy is being implemented. USAID/Benin will formally offer its support to the Minister to conduct an analysis of this new policy. In addition, PMI has included in the fiscal year 2012 Malaria Operating Plan funds to hold a workshop to assess progress in its implementation.

It is important to note that USAID/Benin has little control over or involvement in the implementation of the policy. This policy was an Executive Order from the President of Benin. We appreciate the importance of ownership by the Government of Benin of both the problems and the possible solutions and will assist where possible.

The target closure date of this recommendation is March 31, 2013.

Finally, the Mission wishes to comment on the auditors' observation that the implementing partner for the Integrated Community Case Management (iCCM) Project "did not follow guidelines for diagnosing malaria." When the project started in 2009, the national policy did not include the training of CHWs on RDT use. The MOH's RDT policy was adopted in 2011, but it took several months for the training to reach the community level. Hospital and health center workers needed to be trained first because it was planned that they would be the ones to eventually train and supervise the CHWs.

When the CHWs' RDT training begun by USAID's iCCM Project in January 2012, the activity was meant to be an initial pilot intended to generate a model that could be used to scale-up RDT use. It was not designed to train all CHWs on RDTs because there was, and continues to be, no assurance that sufficient amounts of RDTs would be available once the CHWs were trained. The pilot was valuable in highlighting the problems of insufficient supply of RDTs, both for training and for actual diagnosis. The caution exercised by both the project and the MOH in not rapidly expanding the use of RDTs by CHWs was appropriate in that there was a need to ensure that RDT performance is accurate in a cadre of health workers with primary education or less and no prior experience in diagnostic testing. This programmatic issue needed to be addressed before moving to a national scale-up of RDTs among CHWs.

Thank you for your efforts in helping improve the management of US Government resources used by the PMI program in Benin.

Attachments:

1. Recommendation 2 - Family Health Team Schedule of Site Visits FY 2012
2. Recommendation 5 - ARM3 Work Plan FY 2011 and ARM3 Work Plan FY 2012
3. Recommendation 6 - ARM3 Work Plan FY 2012

Table 3. Mission FY 2011 Results

Indicator	2011 Target	2011 Result	Difference (%)
<i>Number of artemisinin-based combination treatments (ACTs) purchased and distributed through USG-support*</i>	350,000	556,497	159
<i>Number of houses sprayed with IRS with USG support</i>	160,000	145,247	91
<i>Number of improvements to laws, policies, regulations, or guidelines related to improve access to and use of health services drafted with USG support</i>	2	3	150
<i>Number of insecticide-treated nets distributed or sold with USG funds</i>	1,087,982	1,081,549	99
<i>Number of insecticide-treated nets purchased with USG funds</i>	1,040,000	905,000	87
<i>Number of people covered by USG-supported health-financing arrangements</i>	13,000	36,700	282
<i>Number of people trained with USG funds in malaria treatment or prevention</i>	1,526	2,073	136
<i>Number of RDTs purchased or distributed through USG support</i>	937,500	600,000	64
<i>Number of USG-assisted service delivery points implementing quality assurance/improvement approaches in malaria</i>	164	163	99

\* U.S. Government.

**U.S. Agency for International Development**  
**Office of Inspector General**  
1300 Pennsylvania Avenue, NW  
Washington, DC 20523  
Tel: 202-712-1150  
Fax: 202-216-3047  
**<http://oig.usaid.gov>**