



# OFFICE OF INSPECTOR GENERAL

---

## AUDIT OF USAID/LIBERIA'S MALARIA INTERVENTIONS

AUDIT REPORT NO. 7-669-13-002-P  
May 14, 2013

DAKAR, SENEGAL



*Office of Inspector General*

May 14, 2013

**MEMORANDUM**

**TO:** USAID/Liberia Mission Director, Patricia Rader

**FROM:** Regional Inspector General/Dakar, Abdoulaye Gueye /S/

**SUBJECT:** Audit of USAID/Liberia's Malaria Interventions (Report No. 7-669-13-002-P)

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

The report contains four recommendations to help USAID strengthen its malaria interventions in Liberia. We acknowledge management decisions on all recommendations. Our evaluation of management comments begins on page 8.

Please provide the Audit Performance and Compliance Division in the USAID Office of the Chief Financial Officer with the necessary documentation to achieve final action on all four recommendations.

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

# CONTENTS

<b>Summary of Results</b> .....	1
<b>Audit Findings</b> .....	4
Drug Distribution Program Did Not Produce Results .....	4
Some Survey Results Were Not Implemented.....	6
USAID/Liberia’s Branding and Marking Efforts Were Not Adequate.....	6
<b>Evaluation of Management Comments</b> .....	8
<b>Appendix I—Scope and Methodology</b> .....	9
<b>Appendix II—Management Comments</b> .....	11

## Abbreviations

The following abbreviations appear in this report:

ACT	artemisinin-based combination therapy (drug known as ACT)
ADS	Automated Directives System
CDCS	Country Development Cooperation Strategy
COR	contracting officer’s representative
FY	fiscal year
MSH	Management Sciences for Health Inc.
NMCP	National Malaria Control Program
PMI	President’s Malaria Initiative
RDT	rapid diagnostic test
WHO	World Health Organization

# SUMMARY OF RESULTS

Malaria is the leading cause of hospital deaths and outpatient visits in Liberia; 33 percent of all inpatient deaths and 41 percent of those of children under five are attributable to the disease. This problem is exacerbated by the 15 years of civil conflict that displaced the population and damaged the nation's health systems.

Although curable and preventable, malaria remains a major public health concern in Liberia, according to the 2011 Malaria Indicator Survey, with children and pregnant women being the most vulnerable. To combat the disease, the U.S. President's Malaria Initiative (PMI) began giving funds to Liberia in 2008. Led by USAID missions and implemented with the Centers for Disease Control and Prevention, PMI aims to reduce the number of malaria-related deaths in 15 countries by 70 percent by the end of 2015. USAID/Liberia's goals are to reduce the malaria mortality rate and reach vulnerable groups with life-saving services, supplies, and medicines. To achieve them, the mission's malaria operational plan for 2012 established the following intermediate goals for the end of 2014:

- At least 90 percent of households with a pregnant woman and/or children under five will own at least one insecticide-treated net.
- At least 85 percent of children under five will have slept under a bed net the previous night.
- At least 85 percent of pregnant women will have slept under a bed net the previous night.
- At least 85 percent of homes in geographic areas targeted for indoor residual spraying will have been sprayed.
- At least 85 percent of pregnant women and children under five will have slept under a bed net the previous night or in a house that has been sprayed in the past 6 months.
- At least 85 percent of women who have completed a pregnancy in the past 2 years will have received at least two doses of antimalarial drugs while they were pregnant.
- At least 85 percent of government health facilities have artemisinin-based combination therapies (drugs called ACTs) available for treatment of uncomplicated malaria.
- At least 85 percent of children under five with suspected malaria will have received treatment with ACTs within 24 hours of the onset of their symptoms.

USAID/Liberia and other stakeholders like the Global Fund work with the Ministry of Health and Social Welfare's National Malaria Control Program (NMCP) to implement PMI-related activities in Liberia to achieve the goals listed above. Since 2005, they have reduced prevalence among children from 66 percent to 28 percent in 2011. The audit reviewed two awards listed in the table on the next page to assess the mission's efforts in preventing and treating this disease.

### PMI Awards in Liberia

Implementing Partner	Dates	Project/Program	Amount (Million \$)
Abt Associates Inc.	August 2011 to August 2014	The key objectives of the spraying project in Liberia are to reduce malaria-associated morbidity and mortality in 14 districts located in 5 counties and build upon previous achievements.	7.47
Management Sciences for Health Inc. (MSH)	September 2011 to September 2016	The objectives of the Systems for Improved Access to Pharmaceuticals and Services program are to improve governance, build capacity for pharmaceutical management and services, address information needed for decision-making in the pharmaceutical sector, strengthen financing strategies and mechanisms to improve access to medicine, and increase quality pharmaceutical services.	1.03

The objective of the audit was to determine whether USAID/Liberia's malaria interventions had achieved the mission's goals of reducing the malaria mortality rate and reaching vulnerable groups with life-saving services, supplies, and medicines.

The audit determined that the spraying program was on track to meet its goals and had sprayed more than 96,000 structures. MSH's program was not on track to meet its goals because its drug distribution program had been delayed, and recommendations from its surveys of Liberia's health systems had not been fully implemented. Particularly, the audit found that:

- MSH spent \$70,000 training pharmacy technicians several times to diagnose and treat malaria (page 4). Yet the drugs and tests they were trained to use never arrived at the pharmacies.
- Liberia's malaria control program did not implement recommendations from MSH surveys of Liberia's health systems due to lack of resources (page 6).
- The mission's branding and marking efforts were not adequate (page 6). Some items that USAID paid for did not bear its logo, and several beneficiaries interviewed said they did not know that the American people funded the program.

Results from Liberia's 2011 Malaria Indicator Survey confirmed that malaria continues to be a major health problem in the country. For example, while half of all households own at least one insecticide-treated bed net, only 17.7 percent reportedly had at least one net for every two people who stayed in the household the night before. Only 8.6 percent of households were sprayed in the past 12 months. Moreover, only 50.3 percent of pregnant women aged 15 to 49 received two or more doses of antimalarial drugs during their pregnancy. Only 24.5 percent of children under five took ACTs within 24 hours of the onset of a fever. The results of the Liberia Malaria Indicator Survey are relevant because USAID/Liberia is a major donor to Liberia's antimalarial activities and mission officials contributed to the survey.

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

1. Work with the National Malaria Control Program and Management Sciences for Health Inc. to address all outstanding issues related to the private pharmacy program, document the resolution, and implement a plan for pharmacies to be provided with sufficient amounts of rapid diagnostic tests and artemisinin-based combination therapies to meet their needs in diagnosing and treating malaria patients (page 5).
2. Work with Management Sciences for Health Inc. to implement a plan to update private pharmacies periodically on progress that the organization has made to provide them with rapid diagnostic tests and artemisinin-based combination therapies (page 5).
3. Work with the National Malaria Control Program to follow up and address the remaining findings in writing from the Management for Science Health Inc.'s quarterly surveys (page 6).
4. Require partners to take the necessary steps to confirm adherence to branding and marking guidelines, and document the results (page 7).

Detailed results appear in the following section, and the scope and methodology appear in Appendix I. Management comments appear in their entirety in Appendix II, and our evaluation of management comments is included on page 8 of the report.

# AUDIT FINDINGS

## Drug Distribution Program Did Not Produce Results

Per Automated Directives System (ADS) 203.3.2, performance monitoring is the ongoing, routine collection of performance indicator data to determine whether expected results are being achieved and whether the program will achieve its objectives. Missions should use this analysis and knowledge to approve or contest assumptions and hypotheses, and to adapt projects and objectives as necessary. ADS further states:

Performance monitoring bridges and informs all aspects of the Program Cycle, from the [Country Development Cooperation Strategy] to Project Design and implementation and evaluation. Project managers and Development Objective (DO) teams analyze performance by comparing actual results achieved against the targets initially set at the beginning of a project, activity, DO, etc. This analysis is critical in determining the progress made in achieving the impacts and outcomes identified in the CDCS results framework.

However, we noted that lack of adequate oversight caused the following problems.

**Project Encountered Delays.** According to a 2011 data quality assessment performed for the MSH program, 46 percent of Liberians have access to antimalarial drugs through the private sector. To increase access to ACTs, MSH was asked to implement a pilot project that would train pharmacy technicians at private pharmacies to treat malaria with ACTs. The pharmacies would then be stocked with ACTs below cost that they could then sell at a profit to the public. If the pilot succeeded, NMCP would then roll it out nationally.

MSH trained 176 pharmacy technicians to use ACTs in July 2010. However, it could not stock the pharmacies with the drugs then because they were late. When the ACTs did arrive, they were packaged just like those that were distributed to public health facilities to be given to beneficiaries for free (also with assistance from PMI). MSH officials said the labeling was a problem because the drugs would be considered stolen commodities from public health facilities since they were packaged identically; so stickers were placed on the packages to differentiate them from those distributed at public health facilities.

Once the ACT packages were relabeled, MSH decided to retrain all the pharmacy technicians because almost 2 years had elapsed since the first training. The retraining was done in March 2012. But NMCP officials abruptly halted the program, citing lack of compliance with Liberia's new policy on treating malaria. According to that policy, ACTs can be given only to people who have tested positive for malaria, and MSH's training did not cover testing methods.

Six months later MSH conducted a third training for pharmacy technicians and also taught them how to use rapid diagnostic tests (RDTs) for diagnosing malaria. However, at the time of this audit, the ACTs still had not been distributed to the pharmacies, and about \$70,000 has been spent on the three trainings.

Mission officials attributed some of these problems to delays MSH had in getting the necessary approvals from the Liberian Government.

**Private Pharmacies Were Not Kept Informed.** Some of the training participants said MSH employees told them that RDTs and ACTs would be made available to their pharmacies shortly after the third training session in September 2012. At the time of this audit, however, that had not yet happened. Although mission officials said MSH had been communicating with pharmacy officials via telephone regarding the status of the tests and drugs, we could not confirm this through MSH's quarterly reports.

This has hurt the competitiveness and profitability of some pharmacies associated with the program. Since the pharmacies had not heard from MSH, they did not know how to proceed with treating malaria patients. Some discarded their stocks of chloroquine<sup>1</sup> in anticipation of receiving ACTs from MSH, and they now have to turn patients away because they do not have anything for them.

This problem happened because MSH's leadership in Liberia did not implement and monitor the program well. The chief of party for the program was placed on a performance improvement plan due to unsatisfactory performance, and he resigned in August 2012. The position has not been filled; at the time of the audit, the program's staff consisted of two associates and a financial officer. Although the auditors were informed that MSH officials based in the United States provided technical support to the team in Liberia and occasionally visited, these activities were not adequate enough to make sure the program succeeded.

Additionally, the lack of communication between MSH and the pharmacies, and the fact that USAID/Liberia did not monitor the program carefully contributed to the problems. Although mission officials said they met with MSH and NMCP to discuss the problems several times, the meetings were not documented.

As a result, about \$70,000 in program resources has been wasted on training pharmacy technicians several times. This money could have been used for other aspects of Liberia's PMI program. Moreover, the people of Liberia have been deprived of the opportunity to benefit from MSH's implementation of activities. Mission officials have said they do not intend to continue funding this activity beyond FY 2013 due to MSH's nonperformance. Since this program only has 10 more months to go, it might be best to end it immediately.

Therefore, we make the following recommendations.

***Recommendation 1.*** We recommend that USAID/Liberia work with the National Malaria Control Program and Management Sciences for Health Inc. to address all outstanding issues related to the private pharmacy program, document the resolution, and implement a plan for pharmacies to be provided with sufficient amounts of rapid diagnostic tests and artemisinin-based combination therapies to meet their needs in diagnosing and treating malaria patients.

***Recommendation 2.*** We recommend that USAID/Liberia work with Management Sciences for Health Inc. to implement a plan to update private pharmacies periodically on progress that the organization has made to provide them with rapid diagnostic tests and artemisinin-based combination therapies.

---

<sup>1</sup> This was the drug most Liberians used to treat malaria before ACTs.

## Some Survey Results Were Not Implemented

According to USAID's Policy Framework 2011-2015, the Agency must "invest resources in countries, sub-national regions, or sectors where they are likely to have the greatest impact on a particular development objective at the country and/or global level." According to ADS 201, missions should apply aid effectiveness principles by linking country development cooperation strategy goals and development objectives/intermediate results to a host country's priorities.

MSH conducts quarterly surveys of Liberia's health systems to assess the availability of ACTs and other PMI commodities that health facilities need to treat patients. The surveys also include assessing the availability of malaria medicines and commodities in Liberia (per NMCPs guidelines) and providing baseline pharmaceutical management data for the program. Once the surveys are completed, MSH gives the results and observations to NMCP so any weaknesses and challenges can be addressed, thereby improving patient access to health care. At the time of this audit, nearly \$80,000 had been spent on these surveys so far.

Of the five quarterly surveys that MSH has performed since the program started, the mission addressed 50 percent of the recommendations; mission officials said implementation of the rest of the recommendations is the responsibility of the Liberian Government. However, Ministry of Health officials said they do not have the resources to address weaknesses and challenges identified through the surveys. In their view, the resources dedicated to the surveys could have been better used elsewhere in the fight against malaria in Liberia.

While mission officials said the NMCP was fully involved in designing and approving the malaria operational plan project work plans, they acknowledged that the follow-up from the survey could have been better. NMCP officials said they were never consulted during the design phase on how best to use resources. To address this situation, we make the following recommendation.

***Recommendation 3.*** *We recommend that USAID/Liberia work with the National Malaria Control Program to follow up and address the remaining findings in writing from the Management for Science Health Inc.'s quarterly surveys.*

## USAID/Liberia's Branding and Marking Efforts Were Not Adequate

Section 641 of the Foreign Assistance Act of 1961 as amended<sup>2</sup> states that all programs under the act should be identified appropriately overseas as American aid. Per ADS 320, programs, projects, activities, public communications, or commodities implemented or delivered under contracts and subcontracts exclusively funded by the Agency should be marked exclusively with its logo, and that activities financed by USAID contracts must prominently display the logo as well.

USAID and its PMI partners in Liberia have not complied with those requirements. For example, none of the furniture or computers in MSH's Monrovia office bore the appropriate USAID logo.

---

<sup>2</sup> Foreign Assistance Act of 1961, as amended. 22 U.S.C. 2401.

An MSH official there said he was not sure what the branding policy was for the program and had always wondered whether they were doing the right thing by marking property supplied by USAID with MSH logos.

Only one of the eight pharmacy technicians interviewed who took part in the training knew that the American people sponsored the program. Only 1 of the 14 households interviewed about the spraying program knew that it was sponsored by the American people. Abt officials said they would improve their promoting of the Agency's efforts in Liberia.

NMCP uses Global Fund systems to distribute PMI-funded commodities to various warehouses in the country. According to mission officials, these vehicles are branded with Global Fund logos, not USAID's. Therefore, USAID may not receive full credit because many people assume the delivered commodities are from the Global Fund.

Based on interviews conducted with beneficiaries and selected pharmacy technicians of the programs audited, these branding and marking issues can be attributed to the lack of awareness of USAID's branding and marking policies and the mission's failure to address it. The risk exists that the American people might not receive credit for providing this needed assistance to Liberia. To improve that awareness, we make the following recommendation.

***Recommendation 4.*** *We recommend that USAID/Liberia require partners to take the necessary steps to confirm adherence to branding and marking guidelines, and document the results.*

# EVALUATION OF MANAGEMENT COMMENTS

In its comments on the draft report, USAID/Liberia agreed with the audit findings, and management decisions have been reached on all recommendations. Our detailed evaluation of management comments follows.

**Recommendation 1.** USAID/Liberia agreed to engage with NMCP, the Global Fund, and the National Private Sector Working Group to attempt to address all outstanding issues related to the private pharmacy program, which would be based on global best practices, within the next 60 days. Therefore, we acknowledge that a management decision has been reached on Recommendation 1.

**Recommendation 2.** USAID/Liberia agreed to ask MSH to issue letters within the next 30 days to private pharmacies to reinforce transmission of the information. We acknowledge that a management decision has been reached on Recommendation 2.

**Recommendation 3.** USAID/Liberia agreed to work with NMCP to address findings in writing from previous surveys within the next 90 days. We acknowledge that a management decision has been reached on Recommendation 3.

**Recommendation 4.** USAID/Liberia agreed to review its adherence to USAID's branding and marking guidelines, and follow up with implementing partners within the next 3 to 6 months, depending on when a development outreach communication officer is hired. We acknowledge that a management decision has been reached on Recommendation 4.

# 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/Liberia's malaria interventions had achieved the mission's goals to reduce the malaria mortality rate and reach vulnerable groups with life-saving services, supplies, and medicines. To implement the program, the mission worked with several partners. Those selected for audit are listed in the table on page 2.

The audit focused on malaria-related activities occurring in FYs 2011 and 2012. USAID/Liberia obligated \$18 million and disbursed \$17.6 million for PMI activities implemented in FY 2011, of which \$0.83 million was audited. It obligated \$13.3 million and disbursed \$7.1 million for activities implemented in FY 2012, of which \$1.3 million was audited.

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

- Program work plans
- Program agreements
- Available partner reports
- Policies and procedures to safeguard program assets and resources
- FY 2011 certification required under the Federal Managers' Financial Integrity Act of 1982
- Liberia 2011 Malaria Indicator Survey

The assessment included controls related to whether USAID had (1) reviewed progress and financial reports submitted by the implementing partners, (2) conducted and documented periodic meetings with the implementing partners and related Liberian Government officials, (3) performed documented visits to the activity sites, and (4) developed and implemented policies and procedures to safeguard the assets and resources of the activities. Additionally, the auditors examined the mission's FY 2011 and 2012 annual self-assessments of management controls, which the mission is required to perform to comply with the Federal Managers' Financial Integrity Act of 1982, to determine whether the assessment cited any relevant weaknesses.

We conducted audit fieldwork from September 24 to October 11, 2012. We interviewed key employees of the mission, implementing partners, Ministry of Health and Social Welfare, and National Drug Service. We conducted the audit at USAID/Liberia in Monrovia and at implementing partners' offices and activity sites in the Monrovia, Careysberg, and Mamba Kaba Districts.

## 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 Liberia to gain an understanding of the program activities. We selected two projects to audit, and reviewed available agreements, progress reports, work plans, partner 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/Liberia's PMI program, guidance from WHO, and the Government Accounting Office's *Standards for Internal Control in the Federal Government*.

We performed site visits in the Monrovia, Careysberg, and Mamba Kaba Districts. During them, we interviewed staff members from implementing partners, spraying beneficiaries, pharmacy technicians, National Drug Service officials, and sprayers. We also verified reported results, performed inventory counts on spraying commodities, and checked to see whether activities were being implemented, 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 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



April 15, 2013

## MEMORANDUM

**TO:** Abdoulaye Geye /S/, Regional Inspector General/Dakar

**FROM:** Patricia Rader, Mission Director

**SUBJECT:** Audit of USAID/Liberia's Malaria Interventions (Report No. 7-669-13-00X-P)

We value the important contribution of audits to improving Mission programs and appreciate the opportunity to provide comments on the draft report.

We thank the audit team for working collaboratively with the Mission in reaching agreement on findings and appropriate corrective actions.

We are attaching Management Comments which include additional clarifications on the report and the Mission's plans to address audit recommendations.

## MANAGEMENT COMMENTS

### SUMMARY OF RESULTS

#### Management Comment

The dates in the report include both Fiscal Years (FY) and Calendar Years (CY) which may confuse the reader. For clarity, PMI started in Liberia with FY2008 resources which funded activities in CY2009. Similarly, the Lantos-Hyde Act has extended PMI through FY2014 which would fund activities through CY2015. Therefore, the intermediate goals listed in the report, which are in fact the global targets set by PMI, are for FY2014 which is equivalent programmatically to CY2015.

### AUDIT FINDINGS

#### Drug Distribution Program Did Not Produce Results

**Private Pharmacies Were Not Kept Informed.** Some of the training participants said MSH employees told them that RDTs and ACTs would be made available to their pharmacies shortly after the third training session in September 2012. At the time of this audit, that had not yet happened. Although mission officials stated that MSH had been communicating with pharmacy officials via telephone regarding the status of RDTs and ACTs, we were unable to verify this statement through quarterly reports on activities performed by MSH.

This has negatively affected the competitiveness and profitability of some pharmacies associated with this program. Since the pharmacies had not heard from MSH, they did not know how to proceed with treating malaria patients. Some discarded their stocks of chloroquine in anticipation of receiving ACTs from MSH. They now have to turn patients away because they do not have anything to offer them.

#### Management Comment

It is unfortunate the program has not been successfully implemented. Nonetheless, the training provided to pharmacies included the importance of referrals to health facilities where appropriate treatment could be obtained. There is widespread resistance to chloroquine in Liberia which is the reason for the introduction of ACTs. Moreover, the Ministry has updated the national standard treatment guidelines which reinforced the use of ACTs as the first-line treatment for uncomplicated malaria instead of chloroquine. Whether pharmacies received subsidized ACTs or not, they have the professional and ethical duty to provide appropriate treatment to their clients/patients and should not be selling an ineffective product which is not in line with national treatment guidelines.

**Recommendation 1.** *We recommend that USAID/Liberia work with the National Malaria Control Program and Management Sciences for Health Inc. to address all outstanding issues related to the private pharmacy program and document the resolution and implement a plan for pharmacies to be provided with sufficient amounts of rapid diagnostic tests and artemisinin-based combination therapies to meet their needs in diagnosing and treating malaria patients.*

## Management Comment

Mission agrees to engage with NMCP, the Global Fund, and the national Private Sector Working Group to attempt to address all outstanding issues related to the private pharmacy program which would be based on global best practices.

**Recommendation 2.** *We recommend that USAID/Liberia work with Management Sciences for Health Inc. to implement a plan to update private pharmacies periodically on progress to provide them with rapid diagnostic tests and artemisinin-based combination therapies.*

## Management Comment

Mission will request MSH to also issue letters within the next 30 days to reinforce transmission of the information.

## Some Survey Results Were Not Implemented

**Recommendation 3.** *We recommend that USAID/Liberia work with the National Malaria Control Program to follow up and address the findings in writing from the Management for Science Health Inc.'s quarterly surveys.*

## Management Comment

Mission agrees to work with NMCP and the Supply Chain Management Unit of the Ministry to improve the timeliness and the percentage of findings from the surveys that are addressed. Mission will work with NMCP to address findings in writing from previous surveys within the next 90 days.

## USAID/Liberia's Branding and Marking Efforts Were Not Adequate

**Recommendation 4.** *We recommend that USAID/Liberia require partners to take the necessary steps to confirm adherence to branding and marking plans and document the results.*

## Management Comment

Mission agrees to review adherence and follow-up with implementing partners within the next three to six months depending on the start of duty of a new Development Outreach Communication Officer being recruited.

**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>