

MEASURE Evaluation's Strategy to Respond to National Malaria Control Program Needs in Surveillance, Monitoring, and Evaluation

April 2019





U.S. President's Malaria Initiative





MEASURE Evaluation's Strategy to Respond to National Malaria Control Program Needs in Surveillance, Monitoring, and Evaluation

April 2019

MEASURE Evaluation University of North Carolina at Chapel Hill 123 West Franklin Street, Suite 330 Chapel Hill, NC 27516 USA Phone: +1-919-445-9359 measure@unc.edu www.measureevaluation.org

This research has been supported by the President's Malaria Initiative (PMI) through the United States Agency for International Development (USAID) under the terms of MEASURE Evaluation cooperative agreement AIDOAA-L-14-00004. MEASURE Evaluation is implemented by the Carolina Population Center at the University of North Carolina at Chapel Hill, in partnership with ICF International; John Snow, Inc.; Management Sciences for Health; Palladium; and Tulane University. Views expressed are not necessarily those of PMI, USAID, or the United States government. TR-19-337

ISBN: 978-1-64232-133-3









ACKNOWLEDGMENTS

The United States Agency for International Development-funded MEASURE Evaluation project thanks the President's Malaria Initiative for its support of this work.

This document draws its content from a 2017 meeting, "MEASURE Evaluation's Malaria Technical Area: Transitioning to effective NMCP leadership in generating and using malaria information," which was held in Kinshasa, Democratic Republic of the Congo. Meeting participants were Ramine Bahrambegi, Diadier Diallo, Eric Diboulo, Olivier Kakesa, Johanna Kamerere, Madina Konate, Jean-Marie N'Gbichi, Solo Harimala Rajaobary, Irene Hanitra Ranaivoarison, Koko Victor Senkelo, Jui Shah, Ignace Traore, Maurice Ye, and Yazoumé Yé. This report was developed by Andrew Andrada, Irene Primmer, Jui Shah, and Yazoumé Yé. The authors thank all meeting participants for their valuable input and for sharing their experiences in providing support to national malaria control programs.

Special thanks to Cindy Young-Turner of ICF for editing and proofreading this document and to the knowledge management staff of MEASURE Evaluation for editorial, design, and production services.

Cover photo: © 2012 Akintunde Akinleye/Nigerian Urban Reproductive Health Initiative, courtesy of Photoshare

Suggested citation:

MEASURE Evaluation. (2019). MEASURE Evaluation Strategy to Respond to National Malaria Control Program Needs in Surveillance, Monitoring, and Evaluation. Chapel Hill, NC, USA: MEASURE Evaluation, University of North Carolina.

CONTENTS

Acknowledgments	i
Abbreviations	iv
Background	1
Overview of the Malaria Technical Area	2
Strategic Approach	2
Direct In-Country Support (as of April 2019)	4
Overview of MEASURE Evaluation Direct In-Country Support	4
Key Activities Across MEASURE Evaluation Countries	4
Achievements	4
Challenges	5
Approach to Implementing Activities	6
Country Start-Up Package	7
NMCP Needs and Gaps	7
Landscape Analysis and Understanding Malaria Epidemiology and SME	
Stakeholder Engagement	8
Potential Activities to Respond to Needs	8
Implementation Process	11
Staffing Requirements	11
Office Space	11
Communication Structure	11
Budget	11
Timeline	11
Strategic Implementation of the MTA	12
Coordination and Communication	12
Staff Engagement	12
Growth Management	12
Progress Monitoring	12
Indicators and Measurement Approach	12
Data Dissemination and Use	
Conclusion	14
Appendix A. MEASURE Evaluation Activities	
Appendix B. Country Surveillance, Monitoring, and Evaluation Needs	16
Appendix C. Potential Work for MEASURE Evaluation	17

Figures

Figure 1. Expansion of MEASURE Evaluation's MTA from 2014 (Year 1) to 2019 (Year 5)	4
Tables	
Table 1. Potential key MTA activities: benchmarks, deliverables, and outcomes	9
Table B1. Core activities as of October 2017	15
Table B2. Field activities as of October 2017	15

ABBREVIATIONS

COE center of excellence

DRC Democratic Republic of the Congo

HMIS health management information system

MOH Ministry of Health

MRA Malaria Resident Advisor

MTA Malaria Technical Area

NMCP National Malaria Control Program

PMI President's Malaria Initiative

SME surveillance, monitoring, and evaluation

TWG technical working group

BACKGROUND

The Malaria Technical Area (MTA) of the United States Agency for International Development-funded MEASURE Evaluation project—with support from the President's Malaria Initiative (PMI)—has increased its country presence in priority countries to provide direct technical support to national malaria control programs (NMCPs). This support is provided through a MEASURE Evaluation-appointed malaria resident advisor (MRA). MRAs have extensive experience in malaria surveillance, monitoring, and evaluation (SME), and their responsibilities consist of overseeing MEASURE Evaluation's in-country work, developing close relationships with the NMCP, and liaising with the MTA headquarters staff. Depending on the scope of the country's portfolio, additional SME staff may provide support to the MRA and form the rest of the incountry team.

Each MRA has a tailored set of duties and challenges related to the needs of his or her assigned country's NMCP. Although each MRA works to achieve the same goal of supporting the NMCP, there is limited direct interaction across countries. To promote the exchange of MRA experiences and lessons learned, MEASURE Evaluation hosted a meeting in October 2017 under the theme, "MEASURE Evaluation's Malaria Technical Area: Transitioning to effective NMCP leadership in generating and using malaria information." This four-day "cross-fertilization" meeting brought together MRAs and NMCP staff from the Democratic Republic of the Congo (DRC), Liberia, Madagascar, and Mali to discuss approaches and experiences in providing effective support to NMCPs. The meeting objectives were as follows:

- Understand MTA in-country activities and how they link with NMCP needs in SME
- Review country strategies to support NMCPs and identify best practices
- Develop a platform to optimize and utilize team expertise across countries

This report summarizes the meeting, synthesizes best practices and lessons learned from providing technical support to NMCPs and collaborating with stakeholders, and presents a strategy for continued cross-country exchange of expertise and experience.

OVERVIEW OF THE MALARIA TECHNICAL AREA

Strategic Approach

MEASURE Evaluation's MTA focuses on achieving several goals in line with the larger MEASURE Evaluation project: strengthening the collection, analysis, and use of routine health data from routine health information systems; improving country-level capacity to manage health information systems, resources, and staff; improving methods, tools, and approaches and applying them to address health information challenges and gaps; and increasing capacity for rigorous evaluations.

To achieve these goals, the MTA strategy encompasses technical, support, and communications approaches. The four technical approaches focus on the implementation of NMCP activities:

- 1. Coordinating global malaria SME efforts to ensure that country needs and priorities are taken into consideration
 - MEASURE Evaluation's MTA provides technical leadership in Roll Back Malaria-Monitoring and Evaluation Reference Group and works with partners to harmonize efforts and collaborate on new initiatives to support endemic countries in malaria SME. Country needs are identified and verified by MRAs.
- 2. Adapting and developing methods and tools for malaria information systems to provide relevant quality data
 - MEASURE Evaluation has collaborated with multiple partners to develop new and updated resources for NMCPs. These resources are a result of MEASURE Evaluation's technical leadership and ability to build consensus across several partners. The tools are widely used to improve malaria information systems and data use.
- 3. Providing technical leadership and conducting research in priority areas to better inform malaria control programs at the country and global levels
 - MEASURE Evaluation has led numerous research efforts, including multiagency impact evaluations. These evaluations have been conducted in countries across sub-Saharan Africa to assess the impact of the scale-up of key malaria interventions on under-five mortality. The MTA provided technical inputs throughout the entire process. MEASURE Evaluation also contributed to global evidence on diverse topics in SME of malaria through peer-reviewed articles in renowned journals and engaged with the scientific community by presenting at international conferences.
- 4. Equipping countries with the tools, methods, and technical skills needed to assess progress and achievements in malaria control efforts
 - MEASURE Evaluation has partnered with local universities to conduct annual regional SME of malaria workshops for anglophone and francophone countries. In addition to these regional trainings, MEASURE Evaluation also conducts country-specific trainings in DRC, Nigeria, and Senegal. To reach more SME professionals, MEASURE Evaluation developed an SME of malaria online course. These courses have helped professionals in endemic countries build their capacity in

SME of malaria control programs. The process has also developed organizational capacity in partner institutions, who are now equipped to deliver training in SME of malaria independent of the project.

The two support approaches create an enabling environment for the successful implementation of the technical approaches:

- 1. Coordinating with other technical areas to ensure that the strategic direction of the malaria portfolio feeds into the project results
- 2. Building a strong team to successfully implement the MTA strategic approaches and respond effectively to any malaria SME-related work

The communications approach works to disseminate and exchange information within a country and MTA headquarters and globally, through peer-reviewed journals, international conferences, bulletins, technical working groups (TWGs), and other information exchanges.

DIRECT IN-COUNTRY SUPPORT (AS OF APRIL 2019)

Overview of MEASURE Evaluation Direct In-Country Support

MEASURE Evaluation began providing direct in-country support in 2013, first to DRC and then expanding direct support to Mali, Madagascar, and Liberia. The timeline and benchmarks of support provided in these countries are summarized in Appendix A. The MTA has recently expanded into Cameroon, Côte d'Ivoire, Kenya, Niger, Nigeria, Senegal, and Sierra Leone (Figure 1).

Figure 1. Expansion of MEASURE Evaluation's MTA from 2014 (Year 1) to 2019 (Year 5)

Year 5 (11 Countries) Year 1 (3 Countries)

Key Activities Across MEASURE Evaluation Countries

Achievements

MEASURE Evaluation has made great strides in its continued support of NMCPs, and these successes fall under several categories: training and capacity building, assessment of data quality and use, development of technical documents and guidelines, enabling collaboration, and dissemination of knowledge.

Through MEASURE Evaluation's SME regional workshops and online course, hundreds of SME professionals have been trained throughout sub-Saharan Africa as well as in other parts of the world. These workshops have been conducted both in anglophone and francophone countries: the DRC, Liberia, Madagascar, Mali, Nigeria, and Senegal. As workshop participants gain experience and build their capacity, they are encouraged to share what they have learned. MRAs also supported SME staff through workshops focused on developing technical documents. In addition to these workshops, MRAs were successful in using Monitoring and Evaluation Capacity Assessment Toolkit and other tools to assess and improve NMCP SME capacity through the collaborative development of capacity-building plans and continuous supervision.

MRAs were successful in conducting data quality assessments using routine data quality assessment tools and monthly malaria data quality review meetings in Madagascar. Data improvement plans were developed based on the review to ensure the collection of relevant, high-quality data. MRAs have been integral to the implementation of DHIS 2 in the DRC and Mali. To further inform NMCPs, the MTA has led impact evaluations of malaria control interventions on child mortality in the DRC and Liberia and continues to promote data demand and use.

The MTA has worked closely with NMCPs in the DRC, Madagascar, and Mali on the development of national malaria strategic plans, SME plans, and SME standard operating procedures. The MTA also contributed to updating and validating the Integrated Disease Surveillance and Response Strategic 2018–2022 Malaria Plan in Madagascar. In addition, the MRA in Madagascar developed the integrated disease surveillance and response curriculum and conducted a training of trainers with central staff. The MTA has also contributed to global guidelines, such as producing the updated Household Survey Indicators for Malaria Control and Guidance for Evaluating the Impact of National Malaria Control Programs in Highly Endemic Countries.

The pinnacle of SME activities is reflected in the establishment of centers of excellence (COEs) at specified health facilities to promote best practices and exhibit the benefits of specific SME. The COE model incorporates all of the aspects of MTA direct support. COEs were implemented in the DRC and Madagascar and have been expanded throughout those countries. The MTA implemented the package of interventions at the COEs, provided ongoing monitoring to demonstrate improved capacity in SME, and developed a plan to share knowledge.

Knowledge exchange and dissemination of data was a key achievement for the MTA, with the establishment of monthly malaria bulletins and SME TWGs in Madagascar and Liberia. The MTA also published scientific manuscripts in journals such as Malaria Journal and the American Journal of Tropical Medicine and Hygiene and presented results at international conferences such as the Multilateral Initiative on Malaria Pan-African Conference and the annual meeting of the American Society for Tropical Medicine and Hygiene.

Challenges

MRAs providing direct in-country support also faced these challenges: a lack of resources, navigating different processes, low capacity, and issues with data quality and data use. The lack of resources and tools encompasses low availability of information technology equipment, limited Internet connection with difficulty accessing DHIS 2, and out-of-stock data management tools. An absence of a centralized platform limits the ability to disseminate documents, scientific publications, and other information. Other challenges are an initial reluctance to switch to DHIS 2 and a lack of harmonized data collection tools.

Process challenges are coordination of SME interventions across SME units for each partner organization, reforms in the ministries of health (MOHs), coordination across the NMCP, coordination between the NMCP and the health management information system (HMIS) unit, and suboptimal functionality of DHIS 2 to fully address NMCP reporting needs.

Approach to Implementing Activities

Implementing MTA activities requires a multilevel approach to ensure comprehensiveness and efficiency.

In-country approaches: A start-up package for a new MTA country will be developed to properly assess capabilities, identify gaps, and strategize about best activities to meet country needs in malaria SME. The start-up package will be facilitated by the MRA, who will also rely on knowledge from previous malaria partners and lessons learned. Other in-country approaches are brown bags to disseminate knowledge in the NMCP and mentoring across the country on demand.

Inter-NMCP approaches: The MTA works to harmonize global SME efforts and use lessons learned from other countries. To implement knowledge sharing among NMCPs, a cross-fertilization meeting should occur annually. Other methods are inter-NMCP exchange visits and a document repository across countries. A new structure that includes MTA regional hubs may also facilitate cross-country learning.

Global approaches: To disseminate data globally, the MTA will continue to generate scientific publications and facilitate SME workshops and TWGs. Other platforms for data dissemination are the Internet, local and international media, and global conferences.

COUNTRY START-UP PACKAGE

The following elements were discussed during the cross-fertilization meeting as necessary for informing the start-up package for a new MTA country.

NMCP Needs and Gaps

NMCP members participating in the meeting identified needs and gaps in the following areas: data issues (use, analysis, and assessment); SME processes; and knowledge dissemination. A full list of needs is provided in Appendix B.

The most common needs for NMCPs were data-related, such as the need for appropriate tools and guidelines for data management, analysis, and visualization. NMCP staff cited a lack of training to assess data quality and better use data to inform decisions regarding malaria control interventions. Other gaps were better knowledge of conducting in-depth data analysis, ability to interpret results, and data validation.

NMCPs identified the need to increase staff capacity in SME processes to appropriately respond to emerging threats. Other needs were quarterly SME supportive supervision at all levels of the health system and country-specific SME workshops.

All NMCPs indicated the need for a platform to disseminate data properly. Gaps were scientific publications, epidemiological bulletins, conferences, and an integrated monitoring newsletter. Another need was to develop stronger relationships among the NMCP, its stakeholders, and malaria-specific SME TWGs. Participants also voiced the need for stronger leadership and strengthened communication at the NMCP level and the technical support to incorporate monitoring of other activities.

Landscape Analysis and Understanding Malaria Epidemiology and SME

The MTA in-country presence supports SME needs based on the country's portfolio. Understanding these SME needs requires a basic analysis of the country's context. To understand a new country's malaria epidemiology, an important early step is to liaise with the country's NMCP to conduct a landscape analysis and identify malaria risk zones. The MTA has conducted several activities to better assess a country's malaria endemicity and transmission setting, including collaboration with the NMCP in conducting nationally representative surveys (e.g., Malaria Indicator Surveys and Demographic and Health Surveys). These surveys, coupled with routine health information, lead to a better comprehension of the epidemiological setting and provide data on the number of malaria cases and all-cause or malaria-specific deaths across all ages and for children under five years of age. For a better understanding of the epidemiological and clinical manifestations of malaria in the country, the MRA may collect data regarding the behavior and level of acquired immunity of the exposed human populations, the distribution and efficiency of mosquito vectors, specific species of malaria parasites that occur in the country, the susceptibility of parasites to commonly used or available antimalarial drugs, and current malaria control interventions.

In collaboration with stakeholders, an understanding of the country context and thus SME is achieved through a landscape analysis: the collection of data and information from ministry of health departments, hospitals, health centers, communities, and related documents. Additional analysis consists of reviewing data

from service delivery points. Information collected during the landscape analysis will provide a strong understanding of the current need for SME support in a country.

Stakeholder Engagement

Stakeholder engagement is necessary to the MEASURE Evaluation MTA in-country presence; it helps to establish need, promote ownership, set realistic targets, and create an informed work plan. Stakeholders are government entities, consumers, institutions, and organizations that have an interest in the scope of the country's portfolio. Stakeholder identification is initiated by the MRA (in coordination with PMI, the MOH, and the NMCP) through the mapping of key stakeholders that contribute to, influence, or benefit from the scope of the country's portfolio. Because of their leadership roles, the NMCP and MOH are important in convening identified stakeholders. Identified key stakeholders are engaged throughout the process; engagement consists of pre-project briefings, project design, project execution, and follow-up activities. Mechanisms for facilitating stakeholder engagement may be consensus meetings or already developed mechanisms such as steering committees or working groups.

Potential Activities to Respond to Needs

Table 1 provides examples of key activities, with selected accompanying benchmarks and deliverables, that MEASURE Evaluation can offer to a country. A full list of potential activities can be found in Appendix C.

Table 1. Potential key MTA activities: benchmarks, deliverables, and outcomes

Activity	Benchmarks	Deliverables	Outcome
Conduct malaria	Malaria SME workshop	Curriculum for workshop on SME of malaria	The malaria SME workshop is designed
SME workshop	conducted	programs	specifically for malaria SME
		In-country workshop on SME of malaria	professionals. These workshops are
		programs	conducted in collaboration with
			partners to provide an SME
			fundamentals course along with two
			tracks focusing on (1) malaria
			surveillance and (2) evaluation
			methods for malaria. These workshops provide an opportunity for SME
			professionals to learn from leaders in
			the field, exchange experiences, and
			build capacity.
Establish and	Selection of health facilities to	Activity report documenting COE selection	Establishing COEs as an SME model in
support COEs for	be new COEs	process	selected health zones will improve data
SME in select		Database report from selected health	quality and use. It will also strengthen
health facilities		facilities	capacity of health providers in data
	Implementation of COE	COE data analysis meeting reports	management and use and facilitate
	intervention package	COE supervision reports	the sharing of knowledge and best
		Development of data use plan	practices across other health facilities.
		Workshops for providers	_
	Best practices and lessons	Action plan for disseminating COE	
	learned on the implementation of COEs (including success	monitoring and evaluation lessons learned and best practices	
	stories) developed and shared	 Abstract on COEs in SME 	
	siones, developed and shared	Report on lessons learned and best	
		practices	
Conduct	HMIS TWG and key surveillance	Hosting of a TWG meeting or other	Stakeholder engagement works to
stakeholder	stakeholders engaged	collaborative group	establish need, promote ownership, set
engagement and	Situational assessment and	HMIS situational assessment protocol and	realistic targets, and create an
situational analysis	action planning for	data collection tools	informed work plan.
and assessment	strengthening disease		
	surveillance conducted		

Activity	Benchmarks	Deliverables	Outcome
Provide technical support to NMCP	Capacity building and technical support plan for the NMCP developed	 NMCP capacity building and technical support plan Training for NMCP SME officers on literature review 	Overall technical support by the MRA will help build NMCP capacity in SME, strengthen HMIS systems, and inform malaria control strategies.
	Technical support provided to conduct a Malaria Indicator Survey	Workshop on HMIS malaria data analysis, representation, interpretation, and use	
	Technical support provided to conduct a post-campaign evaluation of net distribution campaigns	Post-campaign evaluation tools	

Implementation Process

Staffing Requirements

The staffing requirements for MEASURE Evaluation MTA in-country presence depend on the scope of each country's portfolio. The basic staffing requirements include an MRA and potentially may require subnational-level malaria SME advisors. The MRA leads MTA activities and provides direct technical assistance to the country's NMCP. The MRA will be responsible for developing work plans in collaboration with MTA headquarters. An administrative and financial assistant may be needed to support the MRA on project administration.

Office Space

The physical office space for MEASURE Evaluation MTA country presence depends on the scope of each country's portfolio, the availability of in-country partnerships, and the number of in-country staff. Previous options for physical office space have been sharing an office within an existing office (NMCP, PMI, or a partner), an office in a rented room, and an office building.

Communication Structure

All MEASURE Evaluation MTA country staff are provided with the resources to communicate: a computer with Internet capability, company e-mail, and calling and messaging capabilities. Most communication is completed through e-mail, messaging, and calling on an as-needed basis. Weekly meetings are organized with all staff members to review business operations and technical activities. Additional platforms for communication are available that provide applications for document sharing, document storing, and activity planning and tracking.

Budget

The budget for in-country field presence is developed in each country's work plan, which is based on each country's portfolio. In most cases, work plans are prepared on a yearly basis and project the activities for the following year's work. A work plan provides detailed information on the country, the country's NMCP, specific intended activities, a timeline, deliverables, annual targets, a budget, and the staffing and management plan. After a work plan is submitted, each item is reviewed, and funding is allocated based on the agreed-on revisions.

Timeline

After a country has been assigned an MRA, direct technical support may begin. Prior to establishing the MRA in-country, scoping visits and discussions with the country's NMCP may begin, to assess needs and develop work plans. This process may require three to six months. Depending on the country's needs, additional staff may be recruited, and the MTA may be fully implemented within the year.

STRATEGIC IMPLEMENTATION OF THE MTA

Coordination and Communication

The MTA will hold monthly hour-long meetings to share progress on activities and discuss issues arising during the implementation of activities. At each meeting, general updates will be presented, and one activity lead will present his or her activity and highlight challenges and successes that will be discussed and may benefit from inputs from team members. In addition to the monthly meetings, meetings will be held as needed, such as to discuss new project requests, changing staffing needs, or logistics issues.

The MTA will regularly communicate with the MEASURE Evaluation Results team and technical area leads, to share experiences, identify potential areas of collaboration, and facilitate alignment. The MTA will engage with PMI headquarters to remain updated on any changing priorities. By participating in the University of North Carolina's series of technical webinars, the MTA will ensure that its work is understood and highlighted across the project while also allowing for feedback and input from experts throughout MEASURE Evaluation.

Staff Engagement

The MTA has a strong team of professionals with expertise in malaria SME, research, routine health information systems, disease surveillance, and capacity building. To promote professional development, the MTA will continue to provide mentorship to junior staff and create opportunities to present their work through peer-reviewed journals and at international conferences and meetings. To prepare and support staff in this work, the MTA will organize manuscript writing clubs and provide opportunities for presentations at team meetings, webinars, and short courses.

Growth Management

As the MTA builds capacity in-country and individuals garner more responsibility, the MRAs will continue to provide support on an ad hoc basis. The MRA and the in-country team will continue to work with the NMCP and manage growth through the development of work plans, identification of milestones, and transfer of tasks.

Progress Monitoring

Indicators and Measurement Approach

The implementation of MTA activities will be monitored and assessed for achievements using the following key indicators and benchmarks:

- Landscape analysis
- Capacity assessment
- Development of a capacity strengthening plan
- Existing data review

- Data quality assessment
- Analysis

Data Dissemination and Use

Data will be disseminated through communication with MTA headquarters, development of an online platform, bulletins, and conferences. The MRAs will contribute to the development of journal articles to disseminate in-country work.

CONCLUSION

MEASURE Evaluation's MTA has successfully expanded its in-country presence from three countries in 2014 to 11 countries in 2019. Each MRA placed in-country has faced unique challenges and has helped build NMCP SME capacity. The four-day cross-fertilization meeting provided an opportunity for MRAs and NMCP staff members to discuss experiences and exchange lessons learned. Our successes in the countries we have supported can guide the support we provide to new countries interested in the MEASURE Evaluation mechanism. Transferring these lessons learned to new countries will help us to standardize our malaria SME support everywhere.

The start-up package outlined in this document provides the basis for installing an MRA in-country and expanding the MTA to other NMCPs. Continued data and information exchange through annual MRA and NMCP meetings, bulletins, and document repositories will provide a supportive environment to increase success when supporting NMCPs. This document is meant to streamline and standardize technical support to NMCP under MEASURE Evaluation, which ends in September 2019. However, it is timely and will help with transition of the project's malaria work to USAID's Malaria Surveillance, Monitoring and Evaluation Associate Award.

APPENDIX A. MEASURE EVALUATION ACTIVITIES

Table A1. Core activities as of October 2017

Code	Description
4Mal-1	Support Roll Back Malaria-Monitoring and Evaluation Reference Group at global level
4Mal-2	Evaluating the impact of the scale-up of malaria control interventions
4Mal-3	Technical support to PMI headquarters
4Mal-4	Evaluation of functional surveillance systems
4Mal-5	Technical assistance to PMI: Further analyses for impact evaluations
4Mal-6	Malaria SME regional workshops
4Mal-7	Improving measurement of malaria-specific mortality
4Mal-8	Strengthening malaria information systems in PMI priority countries
4Mal-9	Improving measurement of case management and MIP indicators
4Mal-10	Beyond the DHIS 2 dashboard to a decision support tool
4Mal-11	Guidance document for evaluation in low-transmission setting

Table A2. Field activities as of October 2017

Country	Description
Democratic Republic of the Congo	Strengthen information systems to provide good-quality health information for decision making at all levels
Kenya	Maintain capacity for the National Malaria Control Program (NMCP) to identify and respond to monitoring and evaluation needs
Mali	Strengthen malaria surveillance, monitoring, and evaluation (SME) systems to provide quality data to support implementation of malaria control interventions
Nigeria	Conduct malaria intervention assessment
	Provide technical support to organize a Nigeria-specific SME workshop
Senegal	Provide technical support to the NMCP to organize a country-specific malaria surveillance/SME workshop
Madagascar	Strengthen the routine health information system and integrated disease surveillance and response in Madagascar
Liberia	Strengthen the NMCP to generate quality malaria data to inform the implementation of malaria control interventions

APPENDIX B. COUNTRY SURVEILLANCE, MONITORING, AND **EVALUATION NEEDS**

Mali

- Entering data on the DHIS 2 platform
- Advanced data analysis software
- National Malaria Control Program (NMCP) data and product archiving system
- Information technology equipment
- Data management manual
- Annual national monitoring and evaluation (M&E) course organization
- Training managers in the use of data
- Training managers to audit data quality
- Regular supervision
- Audit of data quality at the health district level
- Critical mass of trained M&E agents
- Data management and analysis
- Real-time decision making based on produced data
- Timely production of reports, static directories
- Production of dashboards at peripheral level
- Determination of the epidemic alert threshold

Democratic Republic of the Congo

- Low availability of information technology equipment
- Limited coverage of Internet connection
- Out-of-stock data management tools
- Absence of a platform for dissemination
- Inadequate infrastructures at the NMCP
- Staff training in specific topics (routine data quality audit, DHIS 2, geographic information system)
- Coordination of M&E interventions
- Current reform of the Ministry with integration of coordination of NMCP in the provincial health divisions
- Scientific publication
- Participation in conferences and working groups
- Data analysis meetings at all levels
- Staff capabilities in data management
- Quality of the data produced
- Protocols on demand and use of data

Liberia

- Quarterly surveillance, monitoring, and evaluation (SME) supportive supervision at all levels
- Liberia-specific malaria SME workshop
- Strengthened relationship between the NMCP and its stakeholders
- Malaria-specific SME technical working group
- Publication in peer-reviewed journal
- Capacity to conduct in-depth data analysis
- Monitoring of the Private Sector Artemisininbased Combination Therapy Project and integrated community case management activities
- Operational research (designing and analyzing data)
- Data use and interpretation
- Malaria-specific bulletin
- Strengthening NMCP leadership and communication

Madaaascar

- Elaboration and dissemination of epidemiological bulletins
- Operationalize the establishment of centers of excellence
- Organization of monthly data analysis and validation meetings
- Strengthened capacity of key actors in malaria monitoring, evaluation, surveillance, and data management
- Participation of the NMCP in scientific conferences
- Writing and publishing scientific articles
- Support training on the integrated disease surveillance and response system
- Support for the production of the quarterly integrated monitoring newsletter

APPENDIX C. POTENTIAL WORK FOR MEASURE EVALUATION

Mali

- Support for capacity building for analysis and use of data at all levels
- Support for the organization of data quality audits and supervisions
- Capacity building in surveillance, monitoring, and evaluation
- Development of a specific manual on data management procedures
- Establishment of a system for archiving National Malaria Control Program (NMCP) data and products
- Training of health district officers on the calculation of the epidemic alert threshold
- Documentation of experiments

Democratic Republic of the Congo

- Increase the budget allocated for NMCP support
- Continuing training of staff in various themes
- Creation of information-sharing networks (Sharepoint, website)
- Staff participation in international meetings and conferences
- Support for the publication of articles
- Sharing exchanges with other NMCPs

Liberia

- Technical support in the conduct of in-depth data analysis (survey data)
- Technical support in monitoring of the Private Sector Artemisinin-based Combination Therapy Project and integrated community case management activities
- Training workshop in research
- Technical support in designing malaria-specific quarterly bulletin
- Internal workshops on data use and interpretation
- Strengthening communication at the NMCP level

Madagascar

- Support in terms of resources (technical, material, human, financial, operations)
- Support in program impact evaluations
- Support in the documentation of good practices

MEASURE Evaluation University of North Carolina at Chapel Hill 123 West Franklin Street, Suite 330 Chapel Hill, North Carolina 27516

Phone: +1-919-445-9359 • measure@unc.edu

www.measureevaluation.org

This research has been supported by the President's Malaria Initiative (PMI) through the United States Agency for International Development (USAID) under the terms of MEASURE Evaluation cooperative agreement AIDOAA-L-14-00004. MEASURE Evaluation is implemented by the Carolina Population Center at the University of North Carolina at Chapel Hill, in partnership with ICF International; John Snow, Inc.; Management Sciences for Health; Palladium; and Tulane University. Views expressed are not necessarily those of PMI, USAID, or the United States government. TR-19-337

ISBN: 978-1-64232-133-3



