Nigeria Malaria Surveillance, Monitoring, and Evaluation Workshop
First National Workshop Activity Report
Akwanga, Nasarawa State, Nigeria
September 25–October 6, 2017
WS-17-40
Nigeria Malaria Surveillance, Monitoring, and Evaluation Workshop

First National Workshop Activity Report

Akwanga, Nasarawa State, Nigeria

September 25–October 6, 2017

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. WS-17-40
ACKNOWLEDGMENTS

MEASURE Evaluation is pleased to submit this activity report describing the first national Surveillance, Monitoring, and Evaluation Workshop in Nigeria. Ashley Garley was the lead author, with contributions from Yazoumé Yé, Perpetua Uhomoibhi, and Festus Okoh. The workshop curriculum was designed by MEASURE Evaluation staff in collaboration with a curriculum development committee comprising malaria stakeholders in Nigeria. The workshop was implemented under leadership of the Nigeria National Malaria Elimination Programme with technical support from MEASURE Evaluation and financial support from the United States Agency for International Development through the President’s Malaria Initiative Nigeria. The following individuals contributed to the workshop: Perpetua Uhomoibhi, Festus Okoh, Ibrahim Maikore, M.S. Ibrahim, Adewole Adefisoye, Olufemi Ajumobi, Olusegun Afolabi, Timothy Obot, Confidence Udeh, Geoffrey Namara, Uwem Inyang, Mark Maire, Ashley Garley, Jean-Marie N’Gbichi, and Yazoumé Yé.

We also thank Cindy Young-Turner and the Creative Services team of ICF and the knowledge management staff of MEASURE Evaluation for their support with editing, graphics, and formatting.

Cover photo: The long-lasting insecticide-treated net group reviews health facility data during a supportive supervision field visit in Akwanga.

Photo: Yazoumé Yé
# CONTENTS

Acknowledgments .......................................................................................................................... ii
Abbreviations ............................................................................................................................... v

1. Overview and Background ........................................................................................................ 1
2. Workshop Preparation .................................................................................................................. 2
   2.1 Stakeholders’ Consensus Meeting ....................................................................................... 2
   2.2 Venue Identification ............................................................................................................. 2
   2.3 Participant Selection ............................................................................................................. 2
   2.4 Facilitator Selection ............................................................................................................. 2
   2.5 Curriculum Development ..................................................................................................... 2
   2.6 Facilitators’ Meeting ............................................................................................................ 3

3. Workshop Implementation .......................................................................................................... 4
   3.1 Participants .......................................................................................................................... 4
   3.2 Content ............................................................................................................................... 4
   3.3 Group Project ...................................................................................................................... 5
   3.4 Field Work .......................................................................................................................... 7

4. Workshop Evaluation .................................................................................................................. 8

5. Conclusions ............................................................................................................................... 10
   5.1 Future Trainings .................................................................................................................. 10
   5.2 Course Content and Schedule ............................................................................................ 10
   5.3 Participant Selection Process .............................................................................................. 10
   5.3 Venue ................................................................................................................................ 11
   5.4 Alumni Follow-Up .............................................................................................................. 11

Appendix A. Workshop Schedule ................................................................................................. 12
Appendix B. Participant Album ...................................................................................................... 14
Appendix C. Overall Course and Module Evaluation Results ....................................................... 33
Appendix D. Quality of Content and Instruction Evaluation Scores by Module ................................ 35
Appendix E. Pretest and Posttest ................................................................................................. 36
Appendix F. Stakeholders’ Consultative Meeting Report .............................................................. 40
FIGURES

Figure 1. Group work by progress report.......................................................... 6
Figure 2. Total average score by group.............................................................. 6
Figure 3. Pretest and posttest scores by participant, 2017................................. 9

TABLES

Table 1. 2017 facilitation and support team................................................... 3
Table 2. Number of participants trained by program ....................................... 4
Table 3. Course modules and facilitators ......................................................... 4
Table 4. Group work on malaria control intervention..................................... 5
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABU</td>
<td>Ahmadu Bello University</td>
</tr>
<tr>
<td>AFENET</td>
<td>African Field Epidemiology Network</td>
</tr>
<tr>
<td>LGA</td>
<td>local government area</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>monitoring and evaluation</td>
</tr>
<tr>
<td>NMEP</td>
<td>National Malaria Elimination Programme</td>
</tr>
<tr>
<td>OAU</td>
<td>Obafemi Awolowo University</td>
</tr>
<tr>
<td>PMI</td>
<td>President’s Malaria Initiative</td>
</tr>
<tr>
<td>SME</td>
<td>surveillance, monitoring, and evaluation</td>
</tr>
<tr>
<td>SMEP</td>
<td>State Malaria Elimination Programme</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
1. OVERVIEW AND BACKGROUND

In recent years, the scale-up of key malaria interventions has resulted in a significant reduction of the malaria burden in most malaria endemic countries in sub-Saharan Africa. However, the disease burden remains high in some countries, including Nigeria. To further reduce the disease burden, the Nigeria National Malaria Elimination Programme (NMEP), in collaboration with partners, including the President’s Malaria Initiative (PMI), is scaling up prevention and treatment interventions in line with Nigeria’s National Malaria Strategic Plan (2014–2020). To succeed in these efforts, Nigeria needs a strong surveillance, monitoring, and evaluation (SME) system to generate high-quality data to guide implementation and measure achievements at all levels of the healthcare system. Building a strong SME system requires tools and skills adapted to the country context.

MEASURE Evaluation, funded by the United States Agency for International Development (USAID) and PMI, is contributing to strengthening SME systems by building technical skills through regional and country-specific workshops. Through this process, Nigeria’s NMEP, with technical support from MEASURE Evaluation, designed and implemented the first national SME malaria workshop. Thirty staff from the NMEP and various State Malaria Elimination Programmes (SMEPs) completed the training that was held from September 25 to October 6, 2017 at the Kini Country Guest Inn in Akwanga, Nasarawa State. The workshop objectives were as follows:

- Train participants in fundamental concepts and practical approaches to SME of malaria programs.
- Discuss programmatic applications of the main tools and data systems used to monitor and evaluate malaria programs.
- Provide a platform for participants to share and learn from other experiences to strengthen their SME systems.
- Provide participants with hands-on experience in developing operational SME plans.

This report describes the workshop preparation, implementation, and results and highlights next steps for future in-country trainings.

Participants from Kebbi and Taraba State Malaria Elimination Programmes review health facility data during a supportive supervision activity in Akwanga.

Photo: Ashley Garley

The indoor residual spraying group creates a logic model during the Frameworks session.

Photo: Ashley Garley
2. WORKSHOP PREPARATION

As a first session of the workshop, the preparation tasks included gathering stakeholders for consensus on workshop content, identifying a venue, selecting participants, assembling a team of facilitators, designing the curriculum content, and holding a facilitators’ meeting before the workshop.

2.1 Stakeholders’ Consensus Meeting

MEASURE Evaluation, in collaboration with NMEP, organized a consultative meeting with key stakeholders in malaria control in Abuja in June. In attendance were 38 participants from the following institutions: the African Field Epidemiology Network (AFENET); Ahmadu Bello University (ABU); Catholic Relief Services; the Community Health Practitioners Registration Board; the Federal Ministry of Health Epidemiology Division; the Health Communication Capacity Collaborative project; MEASURE Evaluation; NMEP; the Akwa Ibom, Oyo, and Zamfara SMEPs; the National Primary Health Care Development Agency; the Nigerian Institute of Medical Research; the Nigeria Centre for Disease Control; Obafemi Awolowo University (OAU); Society for Family Health; USAID PMI/Nigeria; and the World Health Organization (WHO).

The meeting provided a forum for key stakeholders to agree on needs and priorities for malaria SME in Nigeria and inform the training curriculum. The final output of the meeting was an action plan with a detailed timeline of the curriculum design and development process. For further details, see Appendix F.

2.2 Venue Identification

MEASURE Evaluation shared the criteria for selecting the training venue, which included potential full board, reliable power supply and Internet, ability to accommodate 30 participants and 10 facilitators and support staff, room space for group work, and high-quality audiovisual equipment. MEASURE Evaluation shortlisted three venues out of the 10 proposals received based on the criteria. The shortlist was shared with NMEP and PMI for final consideration, and the Kini Country Guest Inn in Akwanga, Nasarawa State was selected for the facilitators’ meeting and the SME malaria workshop.

2.3 Participant Selection

The NMEP and PMI Nigeria led the participant selection process. On request, the NMEP received 35 resumes of monitoring and evaluation (M&E) officers and malaria program managers from selected states. PMI-supported states were given priority for this first workshop.

2.4 Facilitator Selection

MEASURE Evaluation shared a scope of work for facilitators, which suggested one to two co-facilitators per module and one to three core facilitators available for the duration of the facilitators’ meeting and the SME malaria workshop. The NMEP and PMI reviewed and discussed potential facilitators. All facilitators contributed to curriculum development.

2.5 Curriculum Development

MEASURE Evaluation produced a first draft of the curriculum based on the outline developed during the stakeholders’ consensus meeting. Draft slides for 20 modules, which included practical exercises, were
shared with the curriculum development committee for feedback. New modules were developed on leadership, ethics, and gender of malaria SME. A group project and a proposed field work assignment were designed to provide participants with practical experience in the SME techniques covered in the workshop. All training materials were provided to participants on flash drives.

### 2.6 Facilitators’ Meeting

The facilitators’ meeting was held September 20–22, 2017 at the Kini Country Guest Inn in Akwanga. The purpose of the meeting was to finalize the training materials, confirm co-facilitator availability by module, practice co-facilitating modules, apply adult learning techniques, and develop the pretest and posttest for knowledge assessment. The facilitation and support team is listed in Table 1.

**Table 1. 2017 facilitation and support team**

<table>
<thead>
<tr>
<th>Organization</th>
<th>Facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABU</td>
<td>M.S. Ibrahim</td>
</tr>
<tr>
<td>AFENET</td>
<td>Adewole Adefisoye</td>
</tr>
<tr>
<td></td>
<td>Olufemi Ajumobi</td>
</tr>
<tr>
<td>MEASURE Evaluation</td>
<td>Ashley Garley</td>
</tr>
<tr>
<td></td>
<td>Jean-Marie N’Gbichi</td>
</tr>
<tr>
<td></td>
<td>Yazoumè Yé</td>
</tr>
<tr>
<td>NMEP</td>
<td>Perpetua Uhomoibhi</td>
</tr>
<tr>
<td></td>
<td>Festus Okoh</td>
</tr>
<tr>
<td></td>
<td>Timothy Obot</td>
</tr>
<tr>
<td></td>
<td>Ibrahim Maikore</td>
</tr>
<tr>
<td></td>
<td>Confidence Udoh</td>
</tr>
<tr>
<td>OAU</td>
<td>Olusegun Afolabi</td>
</tr>
<tr>
<td>USAID PMI/Nigeria</td>
<td>Uwem Inyang</td>
</tr>
<tr>
<td>WHO</td>
<td>Geoffrey Namara</td>
</tr>
</tbody>
</table>
3. WORKSHOP IMPLEMENTATION

3.1 Participants

Thirty professionals from the NMEP and 15 SMEPs completed the two-week workshop from September 25 to October 6, 2017. Sixty-seven percent of the participants were from PMI-supported states; nine participants were female. Table 2 lists the number of participants trained by program, and Appendix B provides an album of participants, facilitators, and support staff.

Table 2. Number of participants trained by program

<table>
<thead>
<tr>
<th>Program</th>
<th>Number trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMEP/Federal Capital Territory</td>
<td>4</td>
</tr>
<tr>
<td>Akwa Ibom SMEP</td>
<td>2</td>
</tr>
<tr>
<td>Bauchi SMEP</td>
<td>2</td>
</tr>
<tr>
<td>Benue SMEP</td>
<td>2</td>
</tr>
<tr>
<td>Borno SMEP</td>
<td>1</td>
</tr>
<tr>
<td>Cross River SMEP</td>
<td>2</td>
</tr>
<tr>
<td>Delta SMEP</td>
<td>1</td>
</tr>
<tr>
<td>Eboni SMEP</td>
<td>2</td>
</tr>
<tr>
<td>Kebbi SMEP</td>
<td>2</td>
</tr>
<tr>
<td>Lagos SMEP</td>
<td>1</td>
</tr>
<tr>
<td>Nasarawa SMEP</td>
<td>2</td>
</tr>
<tr>
<td>Oyo SMEP</td>
<td>2</td>
</tr>
<tr>
<td>Plateau SMEP</td>
<td>2</td>
</tr>
<tr>
<td>Sokoto SMEP</td>
<td>2</td>
</tr>
<tr>
<td>Taraba SMEP</td>
<td>1</td>
</tr>
<tr>
<td>Zamfara SMEP</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
</tr>
</tbody>
</table>

3.2 Content

Training modules were taught as didactic lessons, plenary sessions, and group discussions. Each module was co-facilitated with two facilitators to lead class, group, or individual exercises; hands-on data analysis; and data presentation exercises. The new SME modules on leadership, ethics, and gender were well received. The sampling design course was offered as an optional session on Saturday morning, and all participants attended. Table 3 lists the course modules and facilitators.

Table 3. Course modules and facilitators

<table>
<thead>
<tr>
<th>Course module</th>
<th>Facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria in Nigeria</td>
<td>Perpetua Uhomoibhi, NMEP</td>
</tr>
<tr>
<td></td>
<td>Festus Okoh, NMEP</td>
</tr>
<tr>
<td>Introduction to SME Concepts</td>
<td>Festus Okoh, NMEP</td>
</tr>
<tr>
<td>Role of Data in Decision Making</td>
<td>Perpetua Uhomoibhi, NMEP</td>
</tr>
<tr>
<td></td>
<td>Uwem Inyang, USAID PMI</td>
</tr>
<tr>
<td>Leadership for Malaria SME</td>
<td>Perpetua Uhomoibhi, NMEP</td>
</tr>
<tr>
<td></td>
<td>Festus Okoh, NMEP</td>
</tr>
<tr>
<td>Ethics of Malaria SME</td>
<td>Segun Afolabi, OAU</td>
</tr>
<tr>
<td>Designing and Implementing an M&amp;E Plan</td>
<td>Segun Afolabi, OAU</td>
</tr>
<tr>
<td></td>
<td>Uwem Inyang, USAID PMI</td>
</tr>
<tr>
<td>Introduction to Group Work</td>
<td>Festus Okoh, NMEP</td>
</tr>
<tr>
<td></td>
<td>Segun Afolabi, OAU</td>
</tr>
</tbody>
</table>
## Course module | Facilitators
---|---
Frameworks | Ibrahim Maikore, NMEP  
Ibrahim Maikore, NMEP  
Segun Afolabi, OAU
Indicators | Ibrahim Maikore, NMEP  
M.S. Ibrahim, ABU
Data Sources | Segun Afolabi, OAU  
Festus Okoh, NMEP
Data Management | Geoffrey Namara, WHO  
Adewole Adefisoye, AFENET
Data Quality | Ibrahim Maikore, NMEP  
Olufemi Ajumobi, AFENET
Gender in Malaria SME | Festus Okoh, NMEP  
Ashley Garley, MEASURE Evaluation
Sampling Design (optional) | Yazoumé Yé, MEASURE Evaluation
Malaria Surveillance | Festus Okoh, NMEP  
Olufemi Ajumobi, AFENET
Budgeting an SME Plan | Timothy Obot, NMEP
Data Analysis and Interpretation | Adewole Adefisoye, AFENET  
Ibrahim Maikore, NMEP
Data Demand and Use | Timothy Obot, NMEP  
Perpetua Uhomobhi, NMEP
Evaluation Methods for Malaria | Ibrahim Maikore, NMEP  
Yazoumé Yé, MEASURE Evaluation
Data Presentation and Dissemination | Olufemi Ajumobi, AFENET

### 3.3 Group Project

Participants were divided into five groups to complete a group work assignment that provided practical experience and reinforced SME techniques introduced during the workshop. Groups conducted a critical review of the NMEP’s Monitoring and Evaluation Plan 2014–2020 and developed an operational SME plan at the state level. Each group chose a state and a specific malaria control intervention (see Table 4).

![The malaria case management group works as a team.](image)

*Photo: Ashley Garley*

### Table 4. Group work on malaria control intervention

<table>
<thead>
<tr>
<th>Group</th>
<th>Intervention Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>Long-lasting insecticide-treated net access and use in Akwa Ibom State</td>
</tr>
<tr>
<td>Group 2</td>
<td>Intermittent preventive treatment in pregnancy for pregnant women in Zamfara State</td>
</tr>
<tr>
<td>Group 3</td>
<td>Seasonal malaria chemoprevention in Borno State</td>
</tr>
<tr>
<td>Group 4</td>
<td>Malaria case management in Ebonyi State</td>
</tr>
<tr>
<td>Group 5</td>
<td>Indoor residual spraying in Nasarawa State</td>
</tr>
</tbody>
</table>
The groups developed a problem statement, designed frameworks, set goals and objectives, selected relevant indicators and data sources specific to their interventions, developed a surveillance strategy, proposed an evaluation plan, and shared budget elements and dissemination and use ideas for their operational SME plans. The groups also completed a data analysis and interpretation exercise using an existing data set and presented their work.

Groups assessed the presentations on the quality of their form, content, presentation skills, responses to questions, teamwork, and group organization. Peers assessed the group work three times: after the first progress report, after the second progress report, and after the final presentation. Scores were weighted progressively, so that the first presentation was worth two, the second presentation was worth three, and the final presentation was worth five. The top two groups were recognized and awarded prizes from Akwanga. Figures 1 and 2 chart the results.

Figure 1. Group work by progress report  
Figure 2. Total average score by group

Seasonal malaria chemoprevention group participants celebrate their first place win.  
Photo: Iron Digital Photo
Seasonal malaria chemoprevention group participants received prizes for first place.
Photo: Iron Digital Photo

The case management group takes second place.
Photo: Iron Digital Photo

3.4 Field Work

The NMEP, in collaboration with the LGA M&E focal person, organized a field assignment to five health facilities in the Akwanga region to give participants the opportunity to appreciate how the SME works at the health facility level and how data are generated and reported to the local government area (LGA), state, and national levels.

Groups developed a field visit protocol that defined objectives and expected outputs for the activity. They also used existing supervision and data quality audit tools in their protocol. Each group visited a different health facility to conduct supportive supervision by reviewing appropriate registers for their specific intervention and reviewing data quality. Groups reported back in the plenary session with their findings, observations, and recommendations.
4. **WORKSHOP EVALUATION**

MEASURE Evaluation used several evaluation tools to assess the workshop and obtain feedback to improve future courses. Participants were asked to complete an overall workshop assessment that provided feedback on module content, quality of facilitation, workshop materials, workshop environment, relationships among participants, and group work. The overall mean score for the 2017 workshop was 8.61 on a scale of 1 (not satisfactory) to 10 (excellent) (see Appendix C).

Participants gave the following workshop ratings, on average: content, 8.72; quality of instruction, 8.27; and participant materials, 8.87. Lectures and presentations received an average rating of 8.67, and the field visit scored 8.83.

In terms of logistics and administration, participants gave the following ratings: classroom facilities, 8.72; meals, 6.82; and lodging, 8.21. Internet connection received the lowest score with 4.93. Participants and facilitators noted that the meals needed improvement and did not have enough variety. Concerns about lodging included too many mosquitos in rooms and poor room-keeping and services.

Overall, most participants said that the time was not sufficient for the amount of material to be covered. Some requested that the workshop be extended three to four weeks to cover everything and allow content to be absorbed.

Participants rated the group work experience at 8.40. When asked how they intended to apply what they had learned during the workshop to their work over the next six months, participants mentioned that they would share the new knowledge from the training with their coworkers, look into ways to cascade a similar training to the LGAs in their states, and develop state SME operational plans. Some had specific applications, such as reviewing or developing frameworks, developing a protocol, setting appropriate targets, and choosing indicators to meet goals and objectives. One participant wanted to review the NMEP’s current M&E plan in detail and contribute effectively to the future revision.

After each module, participants were asked to assess the quality of content and instruction to ensure that the workshop met participants’ expectations. Facilitators reviewed the evaluations at the end of the day and made adjustments to respond to suggestions. Participants also were asked for feedback on the usefulness of individual workshop sessions. The measurement scale was 1 (less useful) to
10 (very useful). Participants rated course content an average of 8.69 and facilitation at 8.58. Appendix D provides detailed results of the course evaluations.

A pretest and posttest measured the knowledge gained by participants. A pretest was given on the first day of the workshop and contained a series of 23 multiple choice, true/false, and short answer questions on malaria SME, based on content in the workshop modules. Participants could earn a total of 26 points for each test. The average score for participants at pretest was 14.0 (6–20), and the average score at posttest was 18.13 (10–24), resulting in a relative improvement of 29.5 percent. Comparing pretest and posttest scores, 27 participants improved their posttest scores, two participants received the same score for both pretest and posttest, and one participant received a slightly lower posttest score. Appendix E provides an example of the test.

Figure 3. Pretest and posttest scores by participant, 2017
5. CONCLUSIONS

5.1 Future Trainings

This workshop is a good start toward building a strong SME system for malaria in Nigeria. The workshop trained SME malaria professionals from 15 states; however, Nigeria has 36 states and the Federal Capital Territory, which all need trained SME staff to implement a strong SME system that generates high-quality data to guide implementation and measure achievements at all levels of the healthcare system. MEASURE Evaluation recommends continuing to identify SMEP M&E officers and program managers who could benefit from this workshop and involving other malaria stakeholders to support individuals from the states they are supporting. Maintaining the frequency of this training, once or twice per year, will also be essential to improving the SME system. After SMEP-level staff have been trained, they should also cascade an adapted training to the LGA level within their states.

The pool of facilitators created for this workshop should be maintained for future workshops. Selected alumni from this first workshop should also be considered as facilitators for future workshops. State-level collaboration among workshop alumni to facilitate and organize future trainings would foster a stronger SME system nationwide.

5.2 Course Content and Schedule

Feedback from participants and facilitators will be integrated to improve content and exercises for future workshops. The team will also review the workshop schedule to improve on the flow and timing of modules.

5.3 Participant Selection Process

MEASURE Evaluation recommends to the NMEP that participant selection criteria for future workshops needs to be made more robust. An application process needs to be developed that captures the SME experience of the applicant, computer skills, and skill level of data analysis and interpretation. Having this information for every participant before the workshop will help facilitators tailor training materials effectively.
5.3 Venue

A better-quality venue should be considered for future workshops. A venue with a stable Internet connection, a variety of food choices, and better-quality lodging will improve the overall morale of participants and facilitators.

5.4 Alumni Follow-Up

A strategy for follow up with alumni should be developed to track progress. This has several benefits, such as the following:

- It provides alumni with additional SME support in their daily activities.
- It gives the NMEP information from states on progress made and gaps to fill.
- It documents progress and improvements to Nigeria’s overall SME system.

MEASURE Evaluation will discuss future opportunities with NMEP and USAID PMI Nigeria to refine the curriculum based on participant and facilitator feedback and will provide technical assistance for future SME malaria workshops in Nigeria, as requested.

The long-lasting insecticide-treated net group races to match numerators and denominators with their corresponding indicators during the Indicators session.

Photo: Iron Digital Photo
# APPENDIX A. WORKSHOP SCHEDULE

## Week 1

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30–9 a.m. Registration</td>
<td>8:30–9:30 a.m. Leadership for Malaria SME [Perpetua Uhomoibhi, Festus Okoh]</td>
<td>8:30–10:30 a.m. Frameworks [Ibrahim Maikore, Segun Afolabi]</td>
<td>8:30–10:30 a.m. Indicators [Ibrahim Maikore, Segun Afolabi]</td>
<td>8:30–10:30 a.m. Data Sources [M.S. Ibrahim, Festus Okoh]</td>
<td>Optional Sampling Design [Yazoumé Yé]</td>
</tr>
<tr>
<td>9–10 a.m. Introductions, Overview of Workshop, and Pretest [Perpetua Uhomoibhi, Festus Okoh, Ashley Garley]</td>
<td>9:30–10:30 a.m. Ethics of Malaria SME [Segun Afolabi, Geoffrey Namara]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10–10:30 a.m. Opening Ceremony [Festus Okoh]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### BREAK

10:30–11 a.m. Break | 11 a.m.–1 p.m. Designing and Implementing an M&E Plan [Segun Afolabi, Uwem Inyang] | 11 a.m.–1 p.m. Frameworks (cont’d) [Ibrahim Maikore, Segun Afolabi] | 11 a.m.–1 p.m. Indicators (cont’d) [Ibrahim Maikore, Segun Afolabi] | 11 a.m.–12 p.m. Data Management [Geoffrey Namara, Adewole Adefisoye] | |

### LUNCH

12–1 p.m. LUNCH | 2–3 p.m. Intro to SME Concepts (cont’d) [Festus Okoh, Olufemi Ajumobi] | 2–5:30 p.m. Group Work [Festus Okoh, Ibrahim Maikore, Inyang Uwem Olufemi Ajumobi] | 2–4:30 p.m. Group Work [Festus Okoh, Ibrahim Maikore, Inyang Uwem, Olufemi Ajumobi] | 2–3 p.m. Gender in Malaria SME [Festus Okoh, Ashley Garley] | |
<p>| 1–2 p.m. | 2–3 p.m. Introduction to Group Work [Festus Okoh, Segun Afolabi, Inyang Uwem] | | | | |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30–10:30 a.m.</td>
<td><strong>Malaria Surveillance</strong> [Festus Okoh, Olufemi Ajumobi, Geoffrey Namara]</td>
<td>8:30–10:30 a.m. <strong>Data Analysis and Interpretation</strong> [Geoffrey Namara, Adewole Adefisoye, Ibrahim Maikore]</td>
<td>8:30–10:30 a.m. <strong>Field Work</strong> [Festus Okoh, Ibrahim Maikore, M.S. Ibrahim]</td>
<td>8:30–10:30 a.m. <strong>Evaluation Methods for Malaria</strong> [Ibrahim Maikore, M.S. Ibrahim, Yazoumé Yé]</td>
<td>8:30–10:30 a.m. <strong>Group Presentations</strong> [All facilitators]</td>
</tr>
<tr>
<td><strong>BREAK</strong></td>
<td>10:30–11 a.m.</td>
<td>11 a.m.–1 p.m. <strong>Malaria Surveillance (cont’d)</strong> [Festus Okoh, Olufemi Ajumobi, Geoffrey Namara]</td>
<td>11 a.m.–1 p.m. <strong>Field Work</strong> [Festus Okoh, Ibrahim Maikore, M.S. Ibrahim]</td>
<td>11 a.m.–1 p.m. <strong>Evaluation Methods for Malaria (cont’d)</strong> [Ibrahim Maikore, M.S. Ibrahim, Yazoumé Yé]</td>
<td>11 a.m.–1 p.m. <strong>Group Presentations</strong> [All facilitators]</td>
</tr>
<tr>
<td><strong>LUNCH</strong></td>
<td>1–2 p.m. <strong>Budgeting an SME Plan</strong> [Timothy Obot, Yazoumé Yé]</td>
<td>2–3 p.m. <strong>Data Demand and Use</strong> [Geoffrey Namara, Timothy Obot, Perpetua Uhomoibhi]</td>
<td>2–3 p.m. <strong>Field Work</strong> [Festus Okoh, Ibrahim Maikore, M.S. Ibrahim]</td>
<td>2–4 p.m. <strong>Data Presentation and Dissemination</strong> [Geoffrey Namara, M.S. Ibrahim]</td>
<td>2–2:30 p.m. <strong>Workshop Evaluation and Posttest</strong> [Festus, Okoh, Ashley Garley]</td>
</tr>
<tr>
<td></td>
<td>3–5:30 p.m. <strong>Group Work</strong> [Festus Okoh, Ibrahim Maikore, M.S. Ibrahim, Olufemi Ajumobi]</td>
<td>3–5:30 p.m. <strong>Group Work Progress Report</strong> [All facilitators]</td>
<td>2–5:30 p.m. <strong>Field Work</strong> [Festus Okoh, Ibrahim Maikore, M.S. Ibrahim]</td>
<td>4–5:30 p.m. <strong>Group Work</strong> [Festus Okoh, Ibrahim Maikore, M.S. Ibrahim, Olufemi Ajumobi]</td>
<td>2:30–3 p.m. <strong>Closing Ceremony</strong> [Perpetua Uhomoibhi]</td>
</tr>
</tbody>
</table>
APPENDIX B. PARTICIPANT ALBUM

Nigeria Malaria Surveillance, Monitoring, and Evaluation of Malaria Programs Workshop
September 25–October 6, 2017
Kini Country Guest Inn
Akwanga, Nasarawa State,
Nigeria

Album of Participants, Facilitators, and Support Staff
GROUP 1: LLIN

GROUP 2: IPTp
GROUP 3: SMC

GROUP 4: CASE MANAGEMENT
PARTICIPANTS

ALUMA OKWUDILI JOSEPH
Position: ASST M&E
Phone: 08064776586
Email address: okwyaluma@gmail.com

EBONYI

SULAIMAN USMAN KANYA
Position: M&E OFFICER
Phone: 08060202155
Email address: sulaimankanya@gmail.com

KEBBI

ODUNLAMI OLUWATOSIN
Position: M&E OFFICER
Phone: 08036441182
Email address: mailgirl@yahoo.com

FCT
SHUAIBU SANI
Position: M&E OFFICER
Phone: 07037422746
Email address: shuaibusani92@yahoo.com

KEBBI

IZZATU YAKUBU AKWE
Position: ACTING PROGRAMME MANAGER
Phone: 08032922811
Email address: izzy_ee@yahoo.com

NASARAWA

MATHEW A. OGBOK
Position: PROGRAMME MANAGER
Phone: 08035684734
Email address: matthewogbole@gmail.com

NASARAWA
TANKO KACHALLA
Position: PROGRAMME MANAGER
Phone: 08029153640
Email address: kachalla2012@gmail.com

TARABA

NAME: MUHAMMED. L. IBRAHIM
Position: M&E OFFICER
Phone: 08133266416
Email address: muhammadilawal@gmail.com

BAUCHI

NAME: JOHN OROK
Position: PROGRAMME MANAGER
Phone: 08023319138
Email address: john_orok@yahoo.com

AKWA IBOM
NWANKWO LAWRANCE O.
Position: PROGRAMME MANAGER
Phone: 08037727347
Email address: larry.eb4rbm@yahoo.com

EBONYI

CHRISTOPHER BEWA
Position: PROGRAMME MANAGER
Phone: 08039675767
Email address: krisewa@yahoo.com

PLATEAU

MUHD KABIR AUWD
Position: PROGRAMME MANAGER
Phone: 0803863576
Email address: bakuriyasis@gmail.com

ZAMFARA
AKAWE TERKURA  
Position: M&E OFFICER  
Phone: 07965553692  
Email address: akawajoseph@yahoo.com  

BENUE

ABDUL NASIR ABDULLAHI  
Position: IVM OFFICER  
Phone: 07036119616  
Email address: abdulnasirabdullahi5@gmail.com  

ZAMFARA

SOGBESAN ADEOLA TAWAKALITU  
Position: M&E OFFICER  
Phone: 08055843215  
Email address: adewolasogbesan25@gmail.com  

LAGOS
AHMED ABBA-KYARI
Position: M&E OFFICER
Phone: 08036016186
Email address: ahmed_kyari@yahoo.com

FCT

MALA .A. WAZIRI
Position: PROGRAMME OFFICER
Phone: 08036630997
Email address: wazirimala@gmail.com

BORNO

DAJUMA PAM
Position: M&E OFFICER
Phone: 08036179561
Email address: pamdamjuma@yahoo.com

PLATEAU
ASHIRU ADUKE MUJIDAT
Position: M&E OFFICER
Phone: 08143230880
Email address: mujiben84@gmail.com

FCT

SUSAN MWUESE ABEJE
Position: PROGRAMME MANAGER
Phone: 08061533274
Email address: susanabege@yahoo.com

BENUE

OLADIMEJI OLUBUNMI
Position: M&E OFFICER
Phone: 08061383620
Email address: iorladimejilorlaide@gmail.com

OYO
ADELEKE ELIZABETH EBELECHUKWU
Position: ACTING PROGRAMME MANAGER
Phone: 08077229718
Email address: elizadeadk77@yahoo.co.uk

OYO

BASSEY EFFIONG
Position: M&E OFFICER
Phone: 08038972858
Email address: basseyeffiong59@yahoo.com

CROSS RIVER

MOHD LEMA SANI
Position: M&E OFFICER
Phone: 07038979095
Email address: lemalaniol@gmail.com

SOKOTO
TAIWO ORIMOGUNJE
Position: M&E OFFICER
Phone: 08156937418
Email address: taiworis@yahoo.com

FCT

JOESPHINE .E. EJIM
Position: M&E OFFICER
Phone: 08053316926
Email address: joeshiejim@yahoo.com

STATE: CROSS RIVER

UMAR BABUGA ABUBAKAR
Position: PROGRAMME MANAGER
Phone: 08058622243
Email address: babuga66@gmail.com

STATE: BAUCHI
FRANK C. OKOH
Position: M&E OFFICER
Phone: 07039738901
Email address: okohfrank7367@gmail.com

DELTA

EKONG EKAETTE MONDAY
Position: M&E OFFICER
Phone: 08069704450
Email address: sweechyprincess@yahoo.com

AKWA IBOM

MUHD LADAN
Position: M&E OFFICER
Phone: 08038978958
Email address: murtalaskk@gmail.com

SOKOTO
FACILITATORS AND SUPPORT STAFF

UHOMOIBHI PERPETUA
Position: Director M&E
Institution: NMEP
Phone: 08059121416
Email address: puhomoibhi@yahoo.com
Abuja

FCT

OKOH FESTUS
Position: Deputy Director M&E
Institution: NMEP
Phone: 08059216883
Email address: festok2002@gmail.com
Abuja

FCT

TIMOTHY OBOT
Position: Assistant Director M&E
Institution: NMEP
Phone: 08059658072
Email address: timobot@gmail.com
Abuja

FCT
M.S. IBRAHIM  
Position: Director ABU  
Institution: ABU ZARIA  
Phone: 08037053845  
Email address:  
Kaduna  

ZARIA

OLUSEGUN AFOLABI  
Position: COORDINATOR M&E  
Institution: OAU IFE  
Phone: 08033885447  
Email address: temilopesegun@gmail.com  
Ife

IBADAN

YAZOUME YE  
Position: TECHNICAL DIRECTOR/SENIOR MALARIA ADVISOR  
Institution: ICF/MEASURE Evaluation  
Phone: +1301 572 0392  
Email address: yazoume.ye@icfi.com  
Rockville, Maryland  

USA
JEAN-MARIE N’Gbichi  
Position: SENIOR MONITORING AND EVALUATION SPECIALIST  
Institution: ICF/MEASURE Evaluation  
Phone: +1 (919) 445-0451  
Email address: jeanmariengbichi@icf.com  
Chapel Hill, North Carolina  
USA

IBRAHIM MAIKORE  
Position: SMO M&E  
Institution: NMEP  
Phone: 08036204750  
Email address: maikore54@yahoo.co.uk  
Abuja  
FCT

OLUFEMI AJUMOBI  
Position: FIELD COORDINATOR  
Institution: AFENET  
Phone: 08172331362  
Email address: oajumobi@afenet.net  
Abuja  
FCT
ADEWOLE ADEFISOYE
Position: FIELD COORDINATOR
Institution: AFENET
Phone: 08032072211
Email address: aadwole@afenet.net
Abuja
FCT

UWEM INYANG
Position: Program Manager Malaria
Institution: USAID President’s Malaria Initiative
Phone: +234 9 461 9388
Email address: uinyang@usaid.gov
Abuja
FCT

GEOFREY NAMARA
Position: M&E
Institution: WHO
Phone: 07031781773
Email address: namarag@who.int
Abuja
FCT
ASHLEY GARLEY
Position: SENIOR M&E ASSOCIATE
Institution: ICF/MEASURE Evaluation
Phone: +1.301.572.0397
Email address: Ashley.garley@icf.com
Rockville, MD
USA

CONFIDENCE IFEYINWA UDEH
Position: SECRETARIAT M&E
Phone: 08135718682
Email address: mpraise_nnenna@yahoo.com
Abuja
FCT
APPENDIX C. OVERALL COURSE AND MODULE EVALUATION RESULTS

<table>
<thead>
<tr>
<th>Overall Workshop Rating</th>
<th>Average</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.61</td>
<td>9.00</td>
<td>9.00</td>
</tr>
</tbody>
</table>

**Summary Ratings**

<table>
<thead>
<tr>
<th>Overall course content</th>
<th>Average</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of instruction</td>
<td>8.27</td>
<td>8.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Quality of participant materials</td>
<td>8.87</td>
<td>9.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Relationships between participants</td>
<td>8.63</td>
<td>9.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Group work</td>
<td>8.40</td>
<td>8.50</td>
<td>8.00</td>
</tr>
</tbody>
</table>

**Module Scores**

<table>
<thead>
<tr>
<th>Malaria in Nigeria</th>
<th>Average</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of content</td>
<td>8.41</td>
<td>8.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Quality of instruction</td>
<td>8.52</td>
<td>9.00</td>
<td>9.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Introduction to SME</th>
<th>Average</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of content</td>
<td>8.64</td>
<td>9.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Quality of instruction</td>
<td>8.50</td>
<td>9.00</td>
<td>9.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Role of Data in Decision Making</th>
<th>Average</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of content</td>
<td>8.70</td>
<td>9.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Quality of instruction</td>
<td>8.53</td>
<td>9.00</td>
<td>9.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leadership for Malaria SME</th>
<th>Average</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of content</td>
<td>8.70</td>
<td>9.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Quality of instruction</td>
<td>8.53</td>
<td>9.00</td>
<td>9.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethics of Malaria SME</th>
<th>Average</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of content</td>
<td>8.97</td>
<td>9.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Quality of instruction</td>
<td>8.97</td>
<td>9.00</td>
<td>10.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Developing an SME Plan</th>
<th>Average</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of content</td>
<td>8.97</td>
<td>9.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Quality of instruction</td>
<td>9.03</td>
<td>9.00</td>
<td>9.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frameworks</th>
<th>Average</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of content</td>
<td>9.07</td>
<td>9.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Quality of instruction</td>
<td>9.14</td>
<td>9.00</td>
<td>10.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Average</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of content</td>
<td>9.10</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Quality of instruction</td>
<td>9.00</td>
<td>9.00</td>
<td>10.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Sources</th>
<th>Average</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of content</td>
<td>8.27</td>
<td>8.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Quality of instruction</td>
<td>8.10</td>
<td>8.00</td>
<td>8.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Quality</th>
<th>Average</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of content</td>
<td>8.67</td>
<td>9.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Quality of instruction</td>
<td>8.60</td>
<td>9.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Topic</td>
<td>Average</td>
<td>Median</td>
<td>Mode</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------</td>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>Gender in Malaria SME</td>
<td>8.69</td>
<td>9.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Malaria Surveillance</td>
<td>8.55</td>
<td>9.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Sample Design (optional)</td>
<td>8.60</td>
<td>9.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Budgeting an SME Plan</td>
<td>8.87</td>
<td>9.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Data Management</td>
<td>8.71</td>
<td>9.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Data Analysis and Interpretation</td>
<td>8.59</td>
<td>9.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Data Demand and Use</td>
<td>8.59</td>
<td>9.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Evaluation Methods in Malaria</td>
<td>8.57</td>
<td>8.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Data Presentation and Dissemination</td>
<td>8.97</td>
<td>9.00</td>
<td>10.00</td>
</tr>
</tbody>
</table>

Nigeria Malaria Surveillance, Monitoring, and Evaluation Workshop
APPENDIX D. QUALITY OF CONTENT AND INSTRUCTION EVALUATION SCORES BY MODULE

Surveillance, Monitoring, and Evaluation, 2017

Mean - Quality of Content
Mean - Quality of Instruction
## APPENDIX E. PRETEST AND POSTTEST

Participants’ Knowledge Test

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant name</td>
<td></td>
<td>Initial</td>
</tr>
</tbody>
</table>

Please read the following questions and answer them. This knowledge test is to help the workshop organizer measure knowledge gained from the workshop, not to grade participants.

1. The following framework shows the causal relationship between activities and objectives:
   a. Conceptual framework
   b. Results framework
   c. Logical framework
   d. Logic model

2. Developing a framework focused on program results clarifies the points at which results can be:
   a. Monitored only
   b. Evaluated only
   c. Monitored and supervised
   d. Monitored and evaluated
   e. None of the above

3. The following are considered during interpreting data **EXCEPT**:
   a. Comparing findings against target
   b. Programmatic relevance of the findings
   c. Comparing with trends and group differences
   d. Describing data with tables and graphs
   e. Other potential reasons for the findings

4. Which of the following is a measure of central tendency?
   a. Variance
   b. Standard deviation
   c. Rate
   d. Mode
   e. Range

5. In establishing causality, the following are considered **EXCEPT one**:
   a. Intensity of association
   b. Dose-response relationship
   c. Changes in outcomes
   d. Specificity
   e. Reversibility
6. List three dimensions of data quality.
   1. _______________________________________________________________
   2. _______________________________________________________________
   3. _______________________________________________________________

7. Which of the following is NOT an objective of malaria surveillance in a burden reduction setting?
   a. Decrease malaria mortality
   b. Reduce malaria cases
   c. Detect all malaria infection (symptomatic or not)
   d. Generate information on malaria incidence and mortality

8. Which of the following are malaria-related HMIS data capturing tools used in Nigeria?
   a. OPD register
   b. Monthly summary form
   c. Antenatal/post-natal register
   d. Immunization register
   e. All of the above
   f. None of the above

9. Which one of these is NOT a reason why one should prepare a budget?
   a. It reduces strategic objectives into measurable activities, programs, and projects.
   b. It helps prevent unexpected shortages of resources.
   c. It facilitates allocation and resources.
   d. It allows prioritization.
   e. It makes all staff happy.
   f. It is used as a control mechanism for performance measurement.

10. A multicenter study will require approval from the local IRB alone.
    a. True
    b. False

11. Which one of these is NOT the correct way to ensure data use in your state program?
    a. Assess data use context
    b. Allocate 50 percent of health budget for data
    c. Identify and engage data producers and users
    d. Improve data availability
    e. Identify information need

12. Basic principles of ethics include all EXCEPT:
    a. Autonomy
    b. Justice
    c. Beneficence
    d. All of the above
    e. None of the above
13. The functions of a surveillance, monitoring, and evaluation (SME) plan include:
   a. Accountability
   b. Standardization
   c. Autonomy
   d. Coordination

14. What is the current malaria prevalence rate in children under five (2015 MIS)?
   a. 17%
   b. 27%
   c. 37%
   d. 47%

15. What is the malaria test (slide/RDT) positivity rate target for Nigeria in the NMSP by year 2020?
   a. 0%
   b. <5%
   c. 10-15%
   d. None of the above

16. The following is the best option of malaria data flow:
   a. Health facility → LGA M&E/HMIS unit → State HMIS unit → Federal HMIS unit
   b. Health facility → LGA M&E → State M&E → Federal M&E
   c. Health facility → LGA HMIS unit → State HMIS unit → Federal HMIS unit

17. Feedback processes regarding data flow from various levels of government in Nigeria are an effective way of dissemination.
   a. True
   b. False

18. Characteristics of a good indicator include:
   a. Valid
   b. Programmatic important
   c. Precise
   d. All of the above
   e. None of the above

19. Which of these are functions of effective leadership?
   a. Developing others
   b. Building trust
   c. Resolving conflict
   d. All of the above

20. Monitoring is a process of measuring progress towards program/project objectives through tracking activities conducted, resources utilized/used, and the output generated.
   a. True
   b. False
21. Which of the following is NOT a function of an effective surveillance system?
   a. Collecting relevant data
   b. Aggregating and tabulating data
   c. Analyzing and interpreting data
   d. Keeping data to yourself and not using them

22. Which of the following is NOT a routine data source?
   a. HMIS
   b. Census
   c. Sentinel surveillance
   d. Vital registration

23. In choosing an appropriate evaluation design, the following factors must be considered:
   a. A research question
   b. Amount of money available
   c. Indicators to be measured
   d. All of the above
   e. None of the above
APPENDIX F. STAKEHOLDERS’ CONSULTATIVE MEETING REPORT

MEASURE Evaluation
Nigeria Malaria Surveillance, Monitoring and Evaluation Training

Stakeholders’ Consultative Meeting
June 13 and 14, 2017, Abuja, Nigeria
Meeting Report

1. BACKGROUND

The Nigerian Malaria Elimination Program (NMEP), in collaboration with partners, including the U.S. President’s Malaria Initiative (PMI), is scaling up interventions in line with the National Malaria Strategic Plan (2014–2020). Nigeria needs a strong surveillance, monitoring, and evaluation (SME) system that will provide high-quality data to guide implementation and measure achievements at all levels of the healthcare system. Building a strong SME system requires tools and skills adapted to the country context.

In response to a request from the NMEP, MEASURE Evaluation (MEval), with support from PMI/Nigeria, will provide technical support to the NMEP to strengthen capacity in malaria SME through a Nigeria-specific workshop. The two-week workshop targets a maximum of 30 health personnel and will provide participants with malaria SME tools, techniques, and resources needed for planning, monitoring, and assessing achievement of malaria interventions at the state and national levels.

On June 13 and 14, 2017, MEval organized a consultative meeting with key stakeholders in malaria control at the Reiz Continental Hotel in Abuja. The purpose of the meeting was to provide a forum for key stakeholders in malaria control to discuss and agree on the content of the upcoming SME training, identify the target audience, and discuss the training approach.

2. MEETING OBJECTIVES

The objectives of the stakeholders’ meeting were as follows:

- To further understand the country-specific needs in capacity for malaria SME
- To share MEval experience in malaria SME trainings and discuss how this experience can be adapted to address Nigeria-specific needs
- To set the specific objectives and content of the Nigeria SME training
- To agree on the process and timeline for developing and validating the training materials

3. PARTICIPANTS

Thirty-eight participants attended the stakeholder’s meeting from the following institutions: African Field Epidemiology Network (AFENET), Ahmadu Bello University (ABU); Catholic Relief Services (CRS); Community Health Practitioners Registration Board (CHPRB); Federal Ministry of Health (FMOH) Epidemiology division; Health Communication Capacity Collaborative project; MEval; NMEP; Akwa

---

Ibom, Oyo, and Zamfara State Malaria Elimination Programmes (SMEPs); National Primary Health Care Development Agency (NPHCDA); Nigerian Institute of Medical Research (NIMR); Nigeria Centre for Disease Control (NCDC); Obafemi Awolowo University (OAU); Society for Family Health (SFH); United States Agency for International Development PMI/Nigeria, and the World Health Organization (WHO). A detailed list of participants and contact information is provided in Appendix 1.

4. STRUCTURE OF THE MEETING

The two-day meeting was organized as six plenary sessions and two breakout sessions. Participants engaged in group activities to identify specific SME malaria training needs for Nigeria, brainstorm training priorities and workshop content, map existing and related trainings, and produce an approved set of modules for the curriculum. See Appendix 2 for the detailed agenda.

5. ACHIEVEMENTS

5.1 Understanding Country-Specific Needs in Capacity for Malaria SME

Key challenges related to SME for malaria control were shared by the NMEP; SMEPs from Akwa Ibom, Oyo, and Zamfara States; and PMI/Nigeria. WHO Nigeria shared normative guidance. These presentations facilitated group discussion to identify Nigeria’s specific needs in capacity for malaria SME. Participants then split into groups to identify key SME malaria training priorities, which were used to establish the target audience and define the objectives and content of the training. A detailed list of key SME malaria training priorities is provided in Appendix 3.

5.2 MEval Experience and a Strategy to Address Nigeria-Specific Needs

MEval shared its experience in designing and implementing regional SME malaria workshops in Burkina Faso and Ghana and in-country SME malaria workshops in Democratic Republic of the Congo, Kenya, Madagascar, and Senegal. The step-by-step curriculum development process for specific country needs was highlighted, using Senegal’s malaria surveillance in pre-elimination workshop as an example. MEval also shared other components of the workshops, such as the teaching approach, workshop evaluation, funding, and additional activities for capacity building in malaria SME were also shared.

ABU, CHPRB, OAU, and NMEP identified and presented 10 existing trainings in Nigeria related to SME (see Table 1).

<table>
<thead>
<tr>
<th>s/n</th>
<th>Name of course/training</th>
<th>Target Audience</th>
<th>Lead Partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Capacity Building on Key Malaria Control Training Module</td>
<td>NMEP/SMEP</td>
<td>Support to National Malaria Programme/UK Department for International Development</td>
</tr>
<tr>
<td>2</td>
<td>Community Health Officers’ Preservice M&amp;E Training</td>
<td>Community health officer students</td>
<td>ABU</td>
</tr>
<tr>
<td>3</td>
<td>DHIS 2.0</td>
<td>National and state malaria program officers</td>
<td>NMEP Department of Planning and Research</td>
</tr>
<tr>
<td>4</td>
<td>High-Impact Research training</td>
<td>University researchers, state and local government area policy makers and researchers, partners</td>
<td>ABU</td>
</tr>
<tr>
<td>s/n</td>
<td>Name of course/training</td>
<td>Target Audience</td>
<td>Lead Partner</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>Health Management Information System Training</td>
<td>National and state malaria program officers</td>
<td>NMEP Department of Planning and Research</td>
</tr>
<tr>
<td>6</td>
<td>International Workshop on Monitoring and Evaluation of Public Health Programs</td>
<td>Public health professionals, program staff, academics, monitoring and evaluation officers, programmers, data collectors</td>
<td>OAU</td>
</tr>
<tr>
<td>7</td>
<td>Measurement and Evaluation</td>
<td>Primary health care student teachers</td>
<td>CHPRB</td>
</tr>
<tr>
<td>8</td>
<td>Monitoring and Evaluation of Public Health Programs</td>
<td>Monitoring and evaluation professionals and counterparts involved in planning, implementation, and evaluation of public health</td>
<td>ABU</td>
</tr>
<tr>
<td>9</td>
<td>Orientation in Malaria Parasite Surveillance sites</td>
<td>Laboratory scientists at sentinel sites</td>
<td>NMEP</td>
</tr>
<tr>
<td>10</td>
<td>Vector Surveillance</td>
<td>Malaria principal investigators</td>
<td>Africa Indoor Residual Spraying PMI</td>
</tr>
</tbody>
</table>

This sharing of knowledge and experience and existing courses and trainings related to malaria SME helped inform proposed content for the Nigeria-specific SME training.

### 5.3 Objectives and Content of the Nigeria SME Training

Participants formed groups and were asked to use the key priorities identified and proposed content to brainstorm training objectives and content. After rich and productive discussions, groups shared their recommendations. Recommendations for the objectives and content outline were synthesized and adopted, and a curriculum development committee was created to design the curriculum. Appendix 4 lists the adopted modules, objectives, and responsible committee members.

### 5.4 Process and Timeline for Developing and Validating the Training Materials

MEval presented the next steps for workshop implementation, including a detailed timeline for developing and validating the training materials and selecting participants, criteria for potential facilitators and venue options, and ideas for post-training evaluation and follow-up. The process and timeline are provided in Appendix 5.

### 6. FOLLOW-UP ACTIONS

Actions for follow-up were as follows:

- Curriculum development committee to develop training materials.
- NMEP and partners to implement the workshop according to the process and timeline in Appendix 5.
# APPENDIX 1. LIST OF PARTICIPANTS

<table>
<thead>
<tr>
<th>s/n</th>
<th>Name</th>
<th>Organization</th>
<th>Designation</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Okoh Festus</td>
<td>NMEP</td>
<td>Deputy Director (M&amp;E/Operations Research)</td>
<td>08059216883</td>
<td><a href="mailto:Festok2002@gmail.com">Festok2002@gmail.com</a></td>
</tr>
<tr>
<td>2.</td>
<td>Tim Obot</td>
<td>NMEP</td>
<td>Assistant Director M&amp;E</td>
<td>08059658072</td>
<td><a href="mailto:timobot@gmail.com">timobot@gmail.com</a></td>
</tr>
<tr>
<td>3.</td>
<td>Taiwo Orimogunje</td>
<td>NMEP</td>
<td>M&amp;E Officer</td>
<td>08124094644</td>
<td><a href="mailto:taiwaris@yahoo.com">taiwaris@yahoo.com</a></td>
</tr>
<tr>
<td>4.</td>
<td>Cyril Ademu</td>
<td>NMEP</td>
<td>M&amp;E Officer</td>
<td>08061205122</td>
<td><a href="mailto:dmcyril@yahoo.com">dmcyril@yahoo.com</a></td>
</tr>
<tr>
<td>5.</td>
<td>Mukhtar Ibrahim</td>
<td>NMEP</td>
<td>Database Manager</td>
<td>08065958503</td>
<td><a href="mailto:ibramukh@gmail.com">ibramukh@gmail.com</a></td>
</tr>
<tr>
<td>6.</td>
<td>Agbomola Adewumi</td>
<td>NMEP</td>
<td>M&amp;E Officer</td>
<td>08030455740</td>
<td><a href="mailto:wumiagbomola@gmail.com">wumiagbomola@gmail.com</a></td>
</tr>
<tr>
<td>7.</td>
<td>Ashiru Mujidat</td>
<td>NMEP</td>
<td>MLT M&amp;E</td>
<td>08143230880</td>
<td><a href="mailto:mujben84@gmail.com">mujben84@gmail.com</a></td>
</tr>
<tr>
<td>8.</td>
<td>Udeh Confidence</td>
<td>NMEP</td>
<td>CAO M&amp;E</td>
<td>08135718682</td>
<td><a href="mailto:aokechukwu@usa.gov">aokechukwu@usa.gov</a></td>
</tr>
<tr>
<td>9.</td>
<td>Adidemi Okecukwu</td>
<td>PMI/USAID</td>
<td>Malaria Program Manager</td>
<td>07085941996</td>
<td><a href="mailto:aokechukwu@usa.gov">aokechukwu@usa.gov</a></td>
</tr>
<tr>
<td>10.</td>
<td>John Orok</td>
<td>SREP Akwa Ibom SMOH</td>
<td>Malaria Program Manager</td>
<td>08023319138</td>
<td><a href="mailto:john_orok@yahoo.com">john_orok@yahoo.com</a></td>
</tr>
<tr>
<td>11.</td>
<td>Dr. Sola Aruna</td>
<td>NCDC MEval</td>
<td>Senior Technical Advisor</td>
<td>08050217125</td>
<td><a href="mailto:Sola.aruna@ncdc.gov.ng">Sola.aruna@ncdc.gov.ng</a></td>
</tr>
<tr>
<td>12.</td>
<td>Ifeanyi Udoye</td>
<td>SFH</td>
<td>M&amp;E Assistant Manager</td>
<td>08034639761</td>
<td><a href="mailto:ludoye@sfhnigeria.org">ludoye@sfhnigeria.org</a></td>
</tr>
<tr>
<td>13.</td>
<td>Dr. Oluwagbemiga Aina</td>
<td>NIMR</td>
<td>Senior Researcher Fellow</td>
<td>08033946735</td>
<td><a href="mailto:gbengaaina2003@yahoo.com">gbengaaina2003@yahoo.com</a></td>
</tr>
<tr>
<td>14.</td>
<td>Chinwe Obi</td>
<td>HC3</td>
<td>M&amp;E Advisor</td>
<td>08033525645</td>
<td><a href="mailto:chinwe@hc3nigeria.org">chinwe@hc3nigeria.org</a></td>
</tr>
<tr>
<td>15.</td>
<td>Ashley Garley</td>
<td>MEval</td>
<td>M&amp;E Associate</td>
<td>+14437394557</td>
<td><a href="mailto:Ashley.garley@icf.com">Ashley.garley@icf.com</a></td>
</tr>
<tr>
<td>16.</td>
<td>Geoffrey Namara</td>
<td>WHO</td>
<td>Malaria SME Advisor</td>
<td>07031781773</td>
<td><a href="mailto:namara@who.int">namara@who.int</a></td>
</tr>
<tr>
<td>17.</td>
<td>Dr. Jibril Yahya</td>
<td>NPHCDA</td>
<td>AD CHS</td>
<td>08037871593</td>
<td><a href="mailto:drjibril90@yahoo.com">drjibril90@yahoo.com</a></td>
</tr>
<tr>
<td>18.</td>
<td>Dr. Adewole Adefsoye</td>
<td>AFENET</td>
<td>Field Coordinator</td>
<td>08032072211</td>
<td><a href="mailto:gadeewole@afenet.net">gadeewole@afenet.net</a></td>
</tr>
<tr>
<td>19.</td>
<td>Gideon Ugbengyo</td>
<td>AFENET</td>
<td>Data Manager</td>
<td>08020203516</td>
<td><a href="mailto:gugbengyo@afenet.net">gugbengyo@afenet.net</a></td>
</tr>
<tr>
<td>20.</td>
<td>Olufemi Ajumobi</td>
<td>AFENET</td>
<td>Field Coordinator</td>
<td>08172331362</td>
<td><a href="mailto:Oajumobi@afenet.net">Oajumobi@afenet.net</a></td>
</tr>
<tr>
<td>21.</td>
<td>Edwin Simple</td>
<td>AFENET</td>
<td>Data Technical Officer</td>
<td>08093663590</td>
<td><a href="mailto:simples@afenet.net">simples@afenet.net</a></td>
</tr>
<tr>
<td>22.</td>
<td>Laura McGough</td>
<td>USAID</td>
<td>Health System Strengthening Team Lead</td>
<td>08149576013</td>
<td><a href="mailto:lmcgough@usaid.gov">lmcgough@usaid.gov</a></td>
</tr>
<tr>
<td>23.</td>
<td>Bosah Charles</td>
<td>FMOH/EPID</td>
<td>AD</td>
<td>08033272799</td>
<td><a href="mailto:charlesbosah@yahoo.com">charlesbosah@yahoo.com</a></td>
</tr>
<tr>
<td>24.</td>
<td>Wuda Goni Abubakar</td>
<td>CHPRBN</td>
<td>ZTO</td>
<td>08030548102</td>
<td><a href="mailto:wudabubakar@gmail.com">wudabubakar@gmail.com</a></td>
</tr>
<tr>
<td>25.</td>
<td>Munira M. Ismail</td>
<td>Zamfara SMEP</td>
<td>Deputy Program Manager</td>
<td>07034779926</td>
<td><a href="mailto:Munie87@hotmail.com">Munie87@hotmail.com</a></td>
</tr>
<tr>
<td>26.</td>
<td>Adeleke Elizabeth Ebelechukwu</td>
<td>Oyo SMEP</td>
<td>Ag. PM/Case Management Officer</td>
<td>08077229718</td>
<td><a href="mailto:Elizadeadek77@gmail.com">Elizadeadek77@gmail.com</a></td>
</tr>
<tr>
<td>27.</td>
<td>Dr. Usuimi Bala</td>
<td>AFENET/Malaria Zan</td>
<td>Field Coordinator Zamfara State</td>
<td>08065567318</td>
<td><a href="mailto:drhussainikzr@yahoo.co.uk">drhussainikzr@yahoo.co.uk</a></td>
</tr>
<tr>
<td>s/n</td>
<td>Name</td>
<td>Organization</td>
<td>Designation</td>
<td>Phone</td>
<td>Email</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------</td>
<td>--------------</td>
<td>----------------------------------</td>
<td>------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>28.</td>
<td>Dr. Amina A Umar</td>
<td>AFENET</td>
<td>Field Coordinator, Kano State</td>
<td>08065652777</td>
<td><a href="mailto:Amina7420@yahoo.com">Amina7420@yahoo.com</a></td>
</tr>
<tr>
<td>29.</td>
<td>Oluwatomi Adepoju</td>
<td>OAU</td>
<td>Program Officer</td>
<td>08157607601</td>
<td><a href="mailto:adepojutomi@gmail.com">adepojutomi@gmail.com</a></td>
</tr>
<tr>
<td>30.</td>
<td>Uwem Inyang</td>
<td>USAID/PMI</td>
<td>Malaria Program Manager</td>
<td>08068753442</td>
<td><a href="mailto:uinyang@usaid.gov">uinyang@usaid.gov</a></td>
</tr>
<tr>
<td>31.</td>
<td>Yazoumé Yé</td>
<td>MEval</td>
<td>Technical Advisor</td>
<td></td>
<td><a href="mailto:Yazoume.ye@icf.com">Yazoume.ye@icf.com</a></td>
</tr>
<tr>
<td>32.</td>
<td>Ikenyei Uche</td>
<td>USAID</td>
<td>M&amp;E Specialist</td>
<td>08102484508</td>
<td><a href="mailto:uikenyei@usaid.gov">uikenyei@usaid.gov</a></td>
</tr>
<tr>
<td>33.</td>
<td>Olubunmi Dili</td>
<td>USAID</td>
<td>Program Assistant</td>
<td>08145976066</td>
<td><a href="mailto:odili-ejinaka@usaid.gov">odili-ejinaka@usaid.gov</a></td>
</tr>
<tr>
<td>34.</td>
<td>Nnaemeka Onugu</td>
<td>CRS</td>
<td>Senior Manager M&amp;E</td>
<td>08138628644</td>
<td><a href="mailto:nnaemeka.onugu@crs.org">nnaemeka.onugu@crs.org</a></td>
</tr>
<tr>
<td>35.</td>
<td>Tanko Natasha W</td>
<td>NMEP</td>
<td>SMLS CM</td>
<td>07087955502</td>
<td><a href="mailto:natashatanko@yahoo.com">natashatanko@yahoo.com</a></td>
</tr>
<tr>
<td>36.</td>
<td>Ijezie N Simon</td>
<td>NMEP</td>
<td>ACMCS</td>
<td>08037053845</td>
<td><a href="mailto:ijeziesimon@yahoo.com">ijeziesimon@yahoo.com</a></td>
</tr>
<tr>
<td>37.</td>
<td>Muhammed Sani Ibrahim</td>
<td>ABU</td>
<td>Director/ Lecturer</td>
<td>08037053845</td>
<td><a href="mailto:firstmsibrahim@yahoo.com">firstmsibrahim@yahoo.com</a></td>
</tr>
<tr>
<td>38.</td>
<td>Ibrahim Maikore</td>
<td>NMEP</td>
<td>SMO/HSDM</td>
<td>08036204750</td>
<td><a href="mailto:Maikore54@yahoo.uk">Maikore54@yahoo.uk</a></td>
</tr>
</tbody>
</table>
## APPENDIX 2. STAKEHOLDERS’ CONSENSUS MEETING AGENDA

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 a.m.</td>
<td>Arrival and Registration</td>
<td>Secretariat</td>
</tr>
<tr>
<td>9:15–10:30am</td>
<td>Session 1—Plenary: Introduction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Opening remarks and introduction of participants</td>
<td>NMEP</td>
</tr>
<tr>
<td></td>
<td>Goodwill message</td>
<td>Partners</td>
</tr>
<tr>
<td></td>
<td>Presentation of the meeting objectives and expected outputs</td>
<td>MEval</td>
</tr>
<tr>
<td>10:30–11 a.m.</td>
<td>Tea break</td>
<td></td>
</tr>
<tr>
<td>9–10 a.m.</td>
<td>Session 2—Plenary: Country-specific needs in capacity for malaria SME</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 minute presentations followed by discussion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• NMEP: Malaria control context with focus on key challenges related to SM&amp;E</td>
<td>NMEP</td>
</tr>
<tr>
<td></td>
<td>• State level: Malaria control context with focus on key challenges related to SME (3 states/10 minutes each)</td>
<td>SMEP</td>
</tr>
<tr>
<td></td>
<td>• PMI/Nigeria: Needs and challenges in SME</td>
<td>PMI/Nigeria</td>
</tr>
<tr>
<td></td>
<td>• WHO Nigeria: Normative guidance for SME</td>
<td>WHO Nigeria</td>
</tr>
<tr>
<td>1–2 p.m.</td>
<td>Lunch break</td>
<td></td>
</tr>
<tr>
<td>2–3 p.m.</td>
<td>Session 3—Breakout: Brainstorming SME training priorities</td>
<td>MEval</td>
</tr>
<tr>
<td></td>
<td>Create two to three groups of not more than five persons per group. Each group will discuss and agree on key training priorities for SME.</td>
<td></td>
</tr>
<tr>
<td>3–4 p.m.</td>
<td>Session 4—Plenary: Group feedback</td>
<td>MEval</td>
</tr>
<tr>
<td></td>
<td>Each group will present key recommendations—not more than four slides</td>
<td></td>
</tr>
<tr>
<td>4–5 p.m.</td>
<td>Session 5—Plenary: Defining objectives and content of the training</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Presentation and discussion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• MEval experience: Regional and country-specific workshops</td>
<td>MEval</td>
</tr>
<tr>
<td></td>
<td>• Mapping existing trainings related to malaria SME</td>
<td>NMEP/Universities</td>
</tr>
<tr>
<td></td>
<td>• Proposed content of the Nigeria-specific SME training</td>
<td>MEval</td>
</tr>
<tr>
<td>5–5:15 p.m.</td>
<td>Wrap up and end of Day 1</td>
<td>NMEP</td>
</tr>
<tr>
<td>Time</td>
<td>Topic</td>
<td>Presenter</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>9–10 a.m.</td>
<td><strong>Session 6—Breakout: Brainstorming SME training outline</strong></td>
<td>MEval</td>
</tr>
<tr>
<td></td>
<td>Keep the same groups. Each group will discuss and agree on an outline of SME training content. Outline will include proposed modules, exercises, and group work activities.</td>
<td></td>
</tr>
<tr>
<td>10–10:30 a.m.</td>
<td><strong>Session 7—Plenary: Group feedback</strong></td>
<td>MEval</td>
</tr>
<tr>
<td></td>
<td>Each group will present key recommendations—not more than four slides</td>
<td></td>
</tr>
<tr>
<td>10:30–11 a.m.</td>
<td>Tea break</td>
<td></td>
</tr>
<tr>
<td>11–11:30 a.m.</td>
<td><strong>Session 8—Plenary: Discussion on feedback</strong></td>
<td>MEval</td>
</tr>
<tr>
<td></td>
<td>Synthesis of recommendations from groups on the objectives and content of the Nigeria SME—for adoption</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Schedule of the training—discuss and agree</td>
<td>NMEP/PMI Nigeria</td>
</tr>
<tr>
<td>11:30 a.m.–1 p.m.</td>
<td><strong>Session 9—Plenary: Process and timeline</strong></td>
<td>MEval</td>
</tr>
<tr>
<td></td>
<td><em>Presentation and discussion</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Presentation of the process and timeline—discussion and adoption</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Selection process of participants—discuss and agree on key criteria</td>
<td>NMEP/PMI Nigeria</td>
</tr>
<tr>
<td></td>
<td>• Potential facilitators—discuss and agree</td>
<td>NMEP/PMI Nigeria</td>
</tr>
<tr>
<td>1–2 p.m.</td>
<td>Lunch break</td>
<td></td>
</tr>
<tr>
<td>2–3 p.m.</td>
<td><strong>Session 10—Plenary: Logistics</strong></td>
<td>MEval and PMI Nigeria</td>
</tr>
<tr>
<td></td>
<td><em>Presentation and discussion</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Venue, participant travel, other</td>
<td></td>
</tr>
<tr>
<td>3–4 p.m.</td>
<td><strong>Session 11—Plenary: Any other issues related to the training</strong></td>
<td>PMI/Nigeria</td>
</tr>
<tr>
<td></td>
<td><em>Discussion</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Post-workshop follow-up</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Future training</td>
<td></td>
</tr>
<tr>
<td>4–5 p.m.</td>
<td><strong>Session 12—Plenary: Way forward</strong></td>
<td>MEval</td>
</tr>
<tr>
<td></td>
<td>Synthesis of all discussion and recommendations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop action plan and next steps</td>
<td>MEval</td>
</tr>
<tr>
<td></td>
<td>Closing remarks from PMI</td>
<td>PMI/Nigeria</td>
</tr>
<tr>
<td></td>
<td>Closing remarks from NMEP</td>
<td>NMEP</td>
</tr>
</tbody>
</table>
## APPENDIX 3. KEY SME MALARIA TRAINING PRIORITIES

<table>
<thead>
<tr>
<th>Key priority</th>
<th>Why It Is a Priority</th>
<th>Expected Gain</th>
</tr>
</thead>
</table>
| Data collection | • Understand the need for data  
                   • Knowledge of type of data to be collected  
                   • Knowledge of data collection tools  
                   • Knowledge of use of DHIS for data transmission | • Ensure availability of quality data at every level for decision making  
                                                                 • Timely and quality reporting |
| Data analysis, interpretation, and feedback | • Monitor malaria trends  
                                              • Generate inference  
                                              • Improve reporting from health facilities  
                                              • Promote coordination  
                                              • Basic concepts of data analysis  
                                              • Improve practical skills in data analysis | • Guide supportive supervision and inform decision making  
                                                                 • Use data for decision making  
                                                                 • Strengthen routine reporting systems |
| Data use (at every level) | • Ensure informed decision making | • Strategic plan (resource allocation, etc.) |
| Supportive supervision | • Ensure adherence to standard practice  
                          • Support, mentor, and provide on-the-job training | • Improvement in data quality  
                                                                 • Enhanced skills |
| Reporting | • Ensure completeness, consistence, correctness, and timely reporting | • Accountability and informed decision making |
| Data quality assessment | • Address data quality issues before onward transmission | • Complete and accurate data for decision making at all levels  
                                              • Success of interventions |
| Indicators | • Adequate knowledge of the data elements being captured  
             • Helps in data analysis processing | • Improved tracking of program objectives and goals |
| Basic concepts of SME | • Better understanding of program processes | • Improved performance  
                                              • Increased knowledge on basic SME principles |
| Data sources (routine and non-routine) and types of data (primary and secondary) | • Enable participants to better understand where data come from | • Participants will identify which type and which source of data they need for their use |
| SME officer training: Roles and responsibilities from service provision to data use | • Defines specific roles | • A better understanding of their job expectations |
| Surveillance | • Global Technical Strategy and World Health Organization recommendation | • Better measurement of success |
| Understanding frameworks | • Enable participants to better design frameworks for SME plans | • Practical work on each framework |
| Data presentation and interpretation | • Engaging with stakeholders (at all levels) | • Guide supportive supervision and inform decision making |
| DHIS platform training | • National reporting tool  
                          • Data entry takes place at local government area level | • Improved use of routine data  
                                                                 • Increase output to the DHIS |
| Research methods | • Important for evaluation of programs and projects | • Appropriate interpretation of evidence |
| Minimal analysis (at service delivery point) | • Informs data demand and use | • Increases data demand and use |
## APPENDIX 4. APPROVED MODULES, OBJECTIVES, AND RESPONSIBLE COMMITTEE MEMBERS

<table>
<thead>
<tr>
<th>Module</th>
<th>Objectives</th>
<th>Committee member responsible</th>
</tr>
</thead>
</table>
| Malaria in Nigeria                         | • Defines World Health Organization concepts for malaria control, pre-elimination, elimination, and reintroduction of malaria  
• Describes the evolution of the different malaria control strategies in Nigeria according to the current national strategic plan  
• Defines the National Malaria Elimination Programme’s (NMEP) morbidity and mortality targets by 2020 | Jibril Yahya  
Oluwagbemiga Aina  
Taiwo Orimogunje  
Uwem Inyang  
Lynda Ozor |
| Introduction to Surveillance, Monitoring, and Evaluation (SME) Concepts | • Defines program components, key concepts, and purpose of surveillance, monitoring, and evaluation | Okoh Festus  
Tim Obot  
Uwem Inyang  
Geofrey Namara |
| Role of Data in Decision Making             | • Raises awareness of the importance of using data to inform decisions  
• Discusses strategies for overcoming barriers in decision making  
• Teaches strategies for using data in program implementation and decision making | Agbomola Adewumi  
Adeleke Elizabeth Ebelechukwu  
Sola Oresanya |
| Leadership for SME                          | • Identifies leadership challenges for various program roles  
• Builds leadership skills at various levels of the health information system | Cyril Ademu  
Adeleke Elizabeth Ebelechukwu  
Muhammed Sani Ibrahim |
| Ethics of SME                               | • Presents legal framework for how malaria SME builds on research ethics  
• Discusses principles of research ethics for malaria programs (data ownership, informed consent, confidentiality, etc.) | Wuda Goni Abubakar  
Oluwagbemiga Aina |
| Designing and Implementing an SME Plan      | • Describes functions and main elements of an M&E plan  
• Describes the process and implementation of a plan and discusses well-known challenges  
• Discusses current NMEP M&E plan | Adeleke Elizabeth Ebelechukwu |
| Frameworks                                  | • Identifies conceptual, results, and logical frameworks, and logic models  
• Defines goals and objectives for specific intervention programs  
• Designs frameworks and discusses how they are used | Ibrahim Maikore  
Uwem Inyang  
Abidemi Okechukwu |
| Indicators                                  | • Discusses design of good quality indicators  
• Teaches how to critique indicators  
• Links indicators to frameworks  
• Introduces indicator reference sheets | Ibrahim Maikore  
Okoh Festus  
Taiwo Orimogunje  
Mukhtar Ibrahim  
Afolabi Segun |
| Data Sources—Overview                      | • Identifies various types of data sources, including routine and non-routine sources  
• Discusses strengths and weaknesses of data sources, linking sources, and recognizing appropriate sources for measuring malaria intervention coverage and impact | Ibrahim Maikore  
Taiwo Orimogunje  
Agbomola Adewumi  
Mukhtar Ibrahim  
Okoh Festus  
Munira M Ismail  
Tim Obot  
Adewole Adesoye |
<table>
<thead>
<tr>
<th>Module</th>
<th>Objectives</th>
<th>Committee member responsible</th>
</tr>
</thead>
</table>
| Surveillance Response system, sentinel     | • Identifies data quality issues at each step of a data management system  
• Highlights key criteria used to assess data quality and identifies steps for ensuring data quality at all levels of the data management system  
• Discusses key elements of a data quality assessment                                                                                                           | Gideon Ugbenyo  
Olufemi Ajumobi  
Edwin Simple  
Usuimi Bala  
Amina A Umar |
| • Survey (population and facility)          |                                                                                                                                                                                                          |                                                                     |
| • Operational research                     |                                                                                                                                                                                                          |                                                                     |
| Sampling Design                            | • Discusses sample size estimation  
• Discusses sampling strategy                                                                                                                                      | Ibrahim Maikore  
Uwem Inyang                                                   |
| Evaluation Design                          | • Describes evaluation terminology, causality, and internal and external validity  
• Teaches various types of evaluations and discusses strengths and limitations of study designs  
• Teaches how to develop an evaluation framework and select a study design that fits the purpose of a given evaluation  
• Includes current examples of evaluations conducted by facilitators                                                                                      | Ibrahim Maikore  
Muhammed Sani Ibrahim  
Afolabi Segun  
Uwem Inyang                                                  |
| Data Management                            | • Identifies general rules of data management  
• Defines roles and responsibilities and uses information to implement a system for good data management                                                                                           | Mukhtar Ibrahim  
Agbomola Adewumi  
Bosah Charles  
Adewole Adesoye  
Gideon Ugbenyo  
Olufemi Ajumobi  
Edwin Simple  
Usuimi Bala  
Amina A umar |
| Data Analysis and Interpretation           | • Introduces data analysis concepts at various levels  
• Discusses how to interpret results                                                                                                                                  | John Orok  
Chinwe Obi  
Adewole Adesoye  
Gideon Ugbenyo  
Olufemi Ajumobi  
Edwin Simple  
Usuimi Bala  
Amina A umar |
| Data Presentation and Dissemination        | • Discusses different ways to summarize data and choose the best graphic for the audience  
• Focuses on ensuring graphics are self-explanatory, clear, concise, and attractive, so data are easily interpreted and used  
• Includes how to disseminate data effectively  
• Potential submodule: Effective presentation skills                                                                                                             | Jibril Yahya  
Muhammed Sani Ibrahim  
Adewole Adesoye  
Gideon Ugbenyo  
Olufemi Ajumobi  
Edwin Simple  
Usuimi Bala  
Amina A umar |
| Data Demand and Use                        | • Includes how to use data effectively                                                                                                                          | Adeleke Elizabeth Ebelechukwu  
Munira M Ismail                                      |
<table>
<thead>
<tr>
<th>Module</th>
<th>Objectives</th>
<th>Committee member responsible</th>
</tr>
</thead>
</table>
| Malaria Surveillance   | • Presents concepts, principles, and functionality  
• Focuses on malaria control in high, moderate, and low transmission settings  
• Includes a surveillance system adapted to each stage of the continuum  
• Teaches how to evaluate a malaria surveillance system  
• Includes potential field work | Ibrahim Maikore  
Taiwo Orimogunje  
Agbomola Adewumi  
Adewole Adefoye  
Gideon Ugbenyo  
Olufemi Ajumobi  
Edwin Simple  
Usuimi Bala  
Amina A umar  
Abidemi Okechukwu  
Mark Maire |

Nigeria Malaria Surveillance, Monitoring, and Evaluation Workshop
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 AID-OAA-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. WS-17-40