MEETING REPORT

Thirty-second Virtual Meeting of the RBM Partnership to End Malaria
Surveillance, Monitoring, and Evaluation Reference Group (SMERG)
18–20 May 2021

Main Theme

Streamlining SMERG to fully play its role of coordinating and acting as an advisory body to guide actions aimed at improving the malaria surveillance, monitoring, and evaluation system in endemic countries.

Acronyms

ACT	Artemisinin-Based Combination Therapy
CCM	Country Coordinating Mechanism
CHAI	Clinton Health Access Initiative
COVID-19	Coronavirus Disease 2019
DHIS2	District Health Information Software, Version 2
DHS	Demographic and Health Surveys'
GMP	Global Malaria Programme
HMIS	Health Management Information System
iMISS	Integrated Malaria Information Storage System
IRS	Indoor Residual Spraying
ITN	Insecticide-Treated Net
LLIN	Long-Lasting Insecticide-Treated Net
M&E	Monitoring and Evaluation
MiP	Malaria in Pregnancy
MIS	Malaria Indicator Survey
NMEP	National Malaria Elimination Program
NMCP	National Malaria Control Program
OPD	Out-Patient Department
PMI	President's Malaria Initiative
PPE	Personal Protective Equipment
SBC	Social and Behavior Change
SMC	Seasonal Malaria Chemoprevention
SME	Surveillance, Monitoring, and Evaluation
SMERG	Surveillance, Monitoring, and Evaluation Reference Group
SOP	Standard Operating Procedure
SP&DQ	Surveillance Practice and Data Quality
TB	Tuberculosis
WHO	World Health Organization

Meeting Objectives

1. Discuss and define SMERG technical role in coordinating and harmonizing partners' efforts and supporting countries in the context of public health emergency.
2. Define actions to streamline and better coordinate monitoring and evaluation efforts for malaria control and elimination.
3. Discuss and agree on the best strategy to better coordinate and document efforts aimed at improving malaria surveillance and use of the information.
4. Provide updates on SMERG affairs and that of the other RBM working groups.

Meeting Notes – Link

Objective 1: Discuss and define SMERG technical role in coordinating and harmonizing partners' efforts and supporting countries in the context of public health emergency.

Overview

One of the innovations that came with the recent pandemic is working and networking remotely. Zoom conferencing and webinars have become the new normal, with many companies organizing conferences virtually. Although we are in the endemic, many companies are yet to roll out this phase and return to the physical workplace. Based on this premise, the RBM Partnership Surveillance, Monitoring, and Evaluation Reference Group (SMERG) organized its 32nd SMERG meeting virtually from 18 to 20 May 2021. Unlike the usual traditional presentations during SMERG Conferences, the meeting had the uniqueness of opening the event with a panel discussion.

Panel Discussion

Arnaud Le Menach (Clinton Health Access Initiative [CHAI]) was the moderator of this session, which focused on *lessons learned from coronavirus disease 2019 (COVID-19) and the prerequisite from the perspective of SME identified to respond to public health emergency.*

The moderator led the discussions with key questions, and it was also opened to participants for questions. The five panelists were three National Malaria Control Program (NMCP) country representatives (Mozambique, Nigeria, and Zanzibar), who shared country perspectives, and two partner representatives (Global Fund and President's Malaria Initiative [PMI]), who shared partner perspectives.

Questions to Countries' Representatives—NMCP Perspectives

Mozambique (Candrinho Baltazar, NMCP)
Nigeria (Cyril Ademu, National Malaria Elimination Program [NMEP], Nigeria)
Zanzibar (Mohammed Ali, Zanzibar Malaria Elimination Program [ZAMEP])

Did you see any decreases in out-patient department (OPD) attendance and what did you do to mitigate this?

From the discussion, the following trends were observed across all the countries:

- An existing surveillance system was critical to be able to monitor the impact of COVID-19 on malaria. This was accessed through trend analysis of available data (e.g., access to District Health Information Software, version 2 [DHIS2] platforms).
- Most countries observed decreases in OPD attendance and a general decrease trend in testing, with regional differences.
- Most decreases observed were at the beginning of the pandemic (March–June 2020) and were mostly due to fear in the community to attend facilities, lockdown, and other COVID-19 restrictive measures.

- There was a general trend of a shift in seeking care in health facilities to seeking care in the community observed in a few countries (e.g., Senegal), even though reporting was lower in community sectors.

Mozambique

The trend was almost the same, with a drop in OPD attendance observed from March to June 2020. This decrease could be attributed to the government's restrictive measures on traveling imposed at the onset of the pandemic.

Mitigation Strategy:
- Sensitization messages to create public awareness on the need to go to health facilities.
- Government bought more personal protective equipment (PPE), which encouraged health facility workers and the population to go back to health facilities.
- Health facilities were ready to accept patients while respecting social distancing, observing hand washing rules, and disseminating the right information to debunk the generally accepted fact that COVID-19 increases contamination in health facilities during consultation visits.
- Monthly checks were done through DHIS2 to confirm patients' accessibility to health facilities.

Nigeria

Generally, COVID-19 greatly affected surveillance, monitoring, and evaluation (SME) in Nigeria because critical components of malaria SME activities regressed in 2020 and 2021. SME is a critical pillar in tailoring malaria interventions during COVID-19. In line with the World Health Organization (WHO) recommendation that countries deploy innovative solutions to ensure continuation of the delivery of critical services in a COVID-19 situation, around the restrictions and limitations, the NMEP and partners developed a business continuity plan and a Surveillance, Monitoring and Evaluation and Operational Research (SMEOR) contingency plan. Routine reporting through the health management information system (HMIS), state-level trainings, data validation, and data quality assessments were continued by implementers, with modification of approaches to implementation.

The OPD report indicated a decrease in ODP attendance by 20% at the national level on average when compared to 2019 reporting from the HMIS/DHIS2 platform, with major regional differences. The highest point of this OPD decrease coincided with the period of national lockdowns and restriction of movement. States were grouped into bands to analyze the impact of COVID-19 on OPD attendance and other malaria services. Band A states had the highest number of COVID-19 cases and longest period of lockdowns/restriction of movement, and showed significant decrease in OPD attendance in Lagos (~160%), FCT (~130%), and Ogun (~105%), but no decrease was reported in Kaduna State. The highest points of decrease in disruption of services coincided with the lockdown in Lagos and coincided with the peak of COVID-19 cases in FCT. For Band B states, with the second-highest number of COVID-19 cases and period of lockdowns/restriction of movements, there was noticeable decrease in OPD attendance, with 70% in Oyo and Edo, and 40% in Rivers, but no change was observed in Plateau State. There was a 30% reduction in OPD attendance when compared to 2019 for all B states.

Mitigation Strategy:
- Conducted trend analysis to see the impact of COVID-19 on malaria service delivery, and the outcome of the analysis was used to inform interventions and an appropriate engagement approach.

- Set up coordinated leadership at all levels, with different stakeholders playing a key role in the COVID-19 response. The malaria team was part of the state emergency operations centers.
- Developed a contingency plan to guide implementers of different interventions across all levels to ensure business continuity during COVID-19, such as modification of the long-lasting insecticide-treated nets (LLINs) and seasonal malaria chemoprevention (SMC) campaigns.
- Engaged with states to receive updates on the status of lockdowns to ensure that health care workers have the required movement passes so that last-mile commodity and service delivery is not disrupted.
- Used the opportunities presented by different COVID-19 awareness campaigns to incorporate messaging on malaria.
- Used the LLIN mass campaigns and SMC implementation to give households health talks on key malaria and integrated COVID-19 messages on the need for sick clients to visit health facilities for proper consultation.
- Leveraged on programs/entities procuring PPE to ensure that health care workers were adequately protected from contracting COVID-19 and can provide the required services to clients who seek care.

Zanzibar

During the first wave of COVID 19 in Zanzibar between March and May 2020, OPD attendance declined, from 209,653 in February to 142,357 in May 2020. The number of patients tested for malaria decreased, from 65,149 in February to 39,018 in May 2020.

Mitigation Strategy:
- Health education on COVID 19 and malaria provided to health care workers and the community.
- Distributed PPE to health care workers and the community.
- Re-distributed essential commodities, such as malaria rapid diagnostic tests and artemisinin-based combination therapy (ACT) to health facilities.

Did COVID-19 increase malaria mortality? How was this handled?

Monitoring malaria mortality remains a challenge. Any observed pattern needs to be investigated.

Nigeria

In Nigeria, the HMIS data collected during the COVID-19 pandemic showed an increase in maternal mortality but not among under-5, which is being further investigated.

Disclaimer: We (Nigeria) do not have sufficient information to corroborate this increase; however, data obtained for July–November 2019 and similar period in 2020 from the HMIS/DHIS2 platform showed an increase in maternal mortality due to malaria. The under-5 mortalities due to malaria showed no increase.

The country interprets these data with caution due to the many factors surrounding their documentation.

The 2020 World Malaria Report, when available, can be used to show whether COVID-19 increased malaria mortality in Nigeria.

Zanzibar

No increase in malaria mortality observed during the COVID-19, although the country reported more malaria deaths in 2020 (20) compared to 2019 (13). It is unclear whether this increase in malaria mortality was due to COVID-19.

Do we have any clear steps that can help mitigate measurement challenges of any future public health emergency? That is, what adjustments have taken place that have helped to define these step-by-step approaches?

Mozambique

- Involvement of civil society—activists established the work at the community level with community leaders.
- The government restrictive/lockdown measures in main cities are a great step in limiting the spread of disease in future emergencies.
- Development of national guidelines about epidemic preparedness and provision of services (e.g., checklist to verify whether health facilities can safely receive patients).

Nigeria

In answering this question, Cyril Ademu confirmed that there are clear step-by-step approaches that have been implemented to curb future public health emergencies.

- The presence of molecular testing labs in every state of the federation will now allow for early and timely identification of cases, with subsequent isolation of confirmed cases of COVID-19.
- The surveillance system has been further strengthened with more training and capacity building for personnel across all levels on COVID-19 and malaria.
- The presence of a strong political will and government-led coordination team at the highest level was helpful in coordinating as well as ensuring the timely release of funds and easy implementation of activities.
  - o Active engagement of government with private sector key players also leads to the release of funds for procurement of PPE and set up of emergency isolation and treatment centers.
- Training more health workers in health emergencies and expanding health facility care and services to prepare for health emergencies will help mitigate any future public health emergency.

Zanzibar

- There is a guideline for health care workers and council malaria surveillance officers on the provision of malaria case management services in the context of the COVID-19 pandemic in Zanzibar.
- Multi-sectoral task force established to ensure that they deal with existing sectoral issues during pandemic.
- Establishment of patient triage in health facilities.
- Setting of sentinel sites for COVID-19 sample collection for the community.
- Strengthening of case management for COVID-19 patients.

Any other best practices and lessons learnt?

Mozambique

- Availability of ACTs, no stock-outs during pandemic.
- Strengthening of the surveillance system.
- The health facilities were ready to accept patients again (OPD) after assuring patients and health workers of the safety of the health facilities.

Nigeria

- Presence of handwashing facilities and use of thermometer to check temperatures of clients before entry into health facilities.
- Health facilities also interact with all clients presenting for care on the essential COVID-19 questions and if there is information suggesting exposure, such clients are referred to the nearest COVID-19 center for appropriate testing.
- Amidst the movement restrictions and lockdowns, leadership across all levels prioritized health care workers with the required movement pass to always ensure rendering of critical services.
- There was resilience of health workers in the face of public health challenges.
- Coordinated leadership at all levels with regular press briefings at the emergency operations center on the status of the pandemic made a great difference in the creation of awareness.
- NMEP and partners used the implementation of SMC and LLIN mass campaign to integrate COVID-19 and malaria messaging to households.
- Most of the SME meetings/trainings that required physical contact were done virtually, and in situations in which an in-person approach was required, the number of participations was limited with provisions made for more halls to ensure appropriate physical distancing.

Zanzibar

- Robust surveillance system exists in Zanzibar, helped the country with testing, community engagement.

Questions to Partners—Partners' Perspectives

Misun Choi, PMI Measure Malaria
Estifanos Shargie, Global Fund

What kind of activities occurred at PMI and Global Fund to understand the impact of COVID-19 on malaria? Integration of COVID-19 surveillance activities into those of malaria SME.

Global Fund

To understand the impact of COVID-19 on malaria activities, the Global Fund carried out monitoring surveys on the level of disruption on malaria services. The biweekly Global Fund COVID-19 country monitoring surveys are perception-based. The surveys were conducted through phone calls to relevant in-country stakeholders asking a consistent list of questions about their perception of the situation in 106 countries. Through quarterly programmatic spot-checks, recording information from 502 health facilities in 32 countries in Africa and Asia between April and September 2020, the Global Fund assembled a snapshot of the extent of the disruption to health services for HIV, tuberculosis (TB), and malaria, and of how health facilities

have responded. In addition, triangulating this with data from monthly and quarterly indicator reporting submitted directly by the principal recipients in 38 high-burden countries was helpful in gauging the scale of the changes. The data collected show that from April to September 2020, compared to the same six-month period in 2019:

- Malaria diagnosis fell by 31%, and antenatal care visits fell by 43%. The main reason patients were no longer coming to health facilities was due to their fear of catching COVID-19 (85% of facilities surveyed).
- Patients were also no longer able to reach health facilities because of disruption to public transportation services, as well as lockdown and stay-at-home orders.
- A critical lack of tests, treatments, and PPE needed to fight COVID-19, particularly in Africa. Only 45% of health facilities had enough essential PPE items for health workers, including masks, disinfectant, gloves, and hand sanitizer. Across the 24 countries in Africa that were surveyed, only 11% of health facilities could conduct COVID-19 antigen rapid diagnostic tests, and only 8% could conduct PCR tests. Consequently, in 2020, 50% of the facilities surveyed across Africa and 37% of facilities surveyed across seven countries in Asia recorded COVID-19 infections among their staff.

What was the process from the shift of finances to COVID-19? How did malaria benefit?

The Global Fund set up a COVID-19 Response Mechanism (C19RM) through which it could support countries to respond to the pandemic and contribute to the targets of the ACT-Accelerator—the global collaboration to ensure the accelerated development and equitable deployment of tools to fight COVID-19. The Global Fund made resources available to countries to combat the pandemic. Total funds approved so far to support country response stand at US$990 million. About 106 countries and 14 multi-country programs are currently receiving support for COVID-19 from the Global Fund. In 2021, funds raised to date stand at US$3.7 billion—the 2021 fundraising target is US$10 billion. So far, countries have used this support from Global Fund for the following:

- Reinforcing the national COVID-19 response, including purchasing critical tests, treatments, oxygen, and medical supplies; protecting front-line health workers with training and PPE such as gloves and masks; and supporting control and containment interventions, including test, trace, and treat/isolate.
- Mitigating the COVID-19 impact on HIV, TB, and malaria programs, including by delivering medicines, mosquito nets, and critical supplies door to door; protecting community health workers; and providing support and prevention services through digital platforms.
- Making urgent improvements to health and community systems to help fight COVID-19 and malaria, including by reinforcing surveillance capacity, supply chains, laboratory networks, and community-led response systems

Have any further guidelines been developed so countries may take advantage of?

The Global Fund developed a lot of guidelines in the fight against COVID-19 and also developed a monitoring and evaluation (M&E) framework and technical guidelines. The Global Fund has an operational two-stage application process to facilitate countries requesting support:

- C19RM Fast-track Funding Request
  This is an accelerated urgent support for COVID-19 health products (including PPE, diagnostics, and therapeutics) and costs relating to the effective deployment of such health products, including technical assistance.

- C19RM Full Funding Request
  Following a fast-track submission, applicants can take further time to develop and submit the remainder of their C19RM funding request, which includes additional interventions as needed under the three eligible investment categories.

Both request processes require full country coordinating mechanism (CCM) endorsement as well as the endorsement by the national COVID-19 response coordinating body. For guidelines for expedited fund request, see resources below:

- **COVID-19 Response Mechanism Guidelines:** Cover the end-to-end process for C19RM from funding request stage until grant closure
- **C19RM Technical Guidance Notes:** Comprehensive list of technical guidance and briefing notes, including on mitigation of COVID-19 effects on HIV, TB, and malaria services and programs
- **C19RM M&E Framework:** Includes the modular framework, core list of indicators, and measurement approaches and data sources. This includes the evaluation of the impact of COVID-19 on malaria, HIV, and TB services.

PMI

Pharmacies in the private sector and PMI are collaborating with Global Fund during the COVID-19 pandemic. Guidelines in terms of interpretation of malaria data in the time of COVID-19 according to WHO/GMP.

Many trackers have been established not only for malaria but also across many other diseases. There is need for centralization in the future. This is an opportunity for collaboration around the formulation of SMERG guidelines for the interpretation of malaria surveillance data in 2020. There has been a roll-out of multiple tackers and access to country malaria websites (e.g., Nigeria dashboard).

PMI's support in countries continued through Measure Malaria and its resident advisors (e.g., support for PPE delivery, further household surveys to be implemented this year). PMI supports countries/NMCPs in establishing a step-by-step approach when retrieving information on malaria routine data.

PMI is working closely with the Global Fund and has been increasing funding on malaria surveillance systems and opportunities to leverage Global Fund investments. Some surveys are in progress and hopefully will be implemented this year.

COVID-19 is a challenge and an opportunity with potential to integrating COVID-19 surveillance activities into those of malaria SME.

DISCUSSION

Molly's question: any lessons learned of malaria measurement during COVID pandemic?

Mozambique: Because of conflicts in north of Mozambique, people were more afraid of the conflicts than COVID-19. So, most often, deaths are not reported. Also, serious ceremonies take place after death occur in Mozambique and other countries in Africa, making impact measurement of malaria difficult.

Lolade: Did any of the countries observe an increase in community testing for malaria (by community health workers) given the reduced OPD attendance due to fear of contracting COVID-19 in health facilities?

Nigeria: Testing in the community is not everywhere in Nigeria, only in UNICEF-supported areas.

Zanzibar: There is no system for testing in the community. Every 5 km there is one health facility. There is no mortality and case follow-up at the community level.

Médoune: During pandemics, people tend to run away from health facilities in Senegal. Reports show increased people going to community-level health facilities—COVID-19, Ebola etc.

Ghana: Decreasing death is consistent. 2019/20 OPD decrease by 14%. However, as mortality at OPD decreased, "testing" increased. Health system preparedness in an emergency that sets "confidence" at the health facility is key to convince people to go health facilities.

<div align="center">

Objective 2: Define actions to streamline and better coordinate monitoring and evaluation effort for malaria control and elimination.

</div>

Chair of session: Amin Abdinasir, PMI Measure Malaria

WHO Updates on Malaria M&E Activities
Gausi Khoti, WHO/AFRO

Gausi Khoti (WHO/AFRO) gave updates on the SME reference manual that was launched in March 2018 and to be updated in 2021. WHO will communicate soon with partners on the process; the main contact persons are Abdisalan Noor and Khoti Gausi.

Master list of indicators
To harmonize all indicators across all WHO documents, a master file of indicators has been developed by WHO.

Several partners have already contributed to the process. WHO will communicate soon with SMERG for feedback. Also, WHO is working with other RBM working groups (e.g., Malaria in Pregnancy [MiP] and SMC) to improve indicators for intervention coverage. The main contact person is Laura Anderson.

Surveillance as intervention
WHO, in collaboration with CHAI and other partners, are in the process of finalizing a surveillance assessment toolkit for all malaria endemic settings. The toolkit and field materials will be posted online by end of Q2 2021. The main contact person is Laura Anderson.

DSME modules
WHO, in collaboration with CHAI and other partners, have finalized digital modules for malaria surveillance in elimination settings. Relevant support documents are now being completed and will be posted in Q2 2021. The main contact person is Mwalenga Nghipumbwa.

National malaria integrated data repositories
As part of the high burden high impact response, WHO and partners have been supporting countries to launch data repositories (Nigeria and Uganda); discussions with Cameroon and Burkina Faso are ongoing.

WHO has developed a generic DHIS2 (including links with DHIS2 climate module) for use by countries. The main contact persons are Ryan Williams and Steve Kubenga.

Vector control and entomology DHIS2 module
WHO VCIR unit in collaboration with partners have developed a DHIS2 entomology module to support field and national assembly of VC and IR data and is in a close working relationship with PMI VectorLink. Several countries have already installed the module. This module also captures

programmatic and survey information required to measure intervention coverage. The main contact person in WHO is Lucia Fernandez.

Main tools and resources to support implementation
Several tools have been developed to support the installation, integration, and maintenance of DHIS2 modules; these include the D2-Docker that customizes of standard modules to country context, MetaData Sync App that imports metadata packages and exchange of data and metadata between different DHIS2 instances, Training App for interactive training provided in DHIS2, and a bulk Load App that generates Excel templates and imports data from Excel. The main contact persons are Ryan Williams, Lucia Fernandez, and Steve Kubenda.

Monitoring the Quality of Malaria Interventions (Looking Beyond Coverage and Impact)
Luigi Nuñez, PSI USA

PSI has explicitly implemented and supported the supervision and assessment of malaria interventions in vector control and case management in both the public and private sectors.

Quality of continuous distribution of insecticide-treated nets (ITNs)
Using the DHIS2 Android Capture app, PSI supported NMCPs and subnational teams to continuously assess the quality of continuous distribution channels (mostly health facilities and recently schools). Although supervision has been a routine activity under these channels for many years, performance, strengths, and gaps have not been quantified. Now, teams have automated and customizable dashboards to monitor these results.

Quality of malaria service delivery
In 14 countries, through use of the DHIS2-based app Health Network Quality Improvement System, national and subnational malaria staff quickly identified low-quality services and intervened in the appropriate geographical areas with the appropriate tailored support.

Adapting to the COVID-19 pandemic
Delivering typically in-person trainings through digital platforms:

- DHIS2: Conducted quizzes by events or trackers to capture knowledge retention and other existing help desk articles that would serve as provision of information (e.g., presentations).
- Moodle: Online learning platform that is customizable and open source; curriculum, in-person, and pre-recorded classes, quizzes; opportunity to leverage a system built for teaching and learning environments.
- WhatsApp: Online, less connectivity needed, customizable, quizzes; opportunity to leverage a system already familiar to training participants.

Using basic digital solutions to adapt activities in complex operating environments
- Supervision visits to assess ITN distribution through health facilities.
    - Originally in-person
    - Considering (a) remote interviews by phone calls to capture qualitative data and (b) pictures to assess variance between reporting forms and HMIS data
    - Challenge is measuring HMIS data against registers (large amount to review)

This has proven in some instances to be simple and best for quicker and more sustainable adaptation.

Lessons learned
Assessing the quality of interventions is important and can highlight areas to improve for optimal delivery of the intervention. The only challenge here is to respond and tailor how to adapt based on the data.

Leverage existing tools and ready-to-deploy tools (e.g., WHO DHIS2 packages) to expedite implementation of these quality assurance systems. These tools are likely packaged using learnings to avoid facing problems. Many tools exist for DHIS2 (including those presented here).

Be ready to adapt and implement (and iterate) fast.

Publicize these tools! Put them on GitHub or on the company website. Share on the DHIS2 Community of Practice. Promote open-source tools and giving back to the global community.

Malaria Surveillance System Assessment Toolkit, a Standardized Approach for Supporting Surveillance System Strengthening
Anderson, Laura, WHO

Laura Anderson (WHO) presented on three objectives:

- To provide an overview of the scope of work for the malaria surveillance assessment toolkit
- To provide a status update on development of the toolkit
- To outline next steps and timelines for the toolkit

A malaria surveillance assessment is a systematic approach to measuring the performance of malaria surveillance systems and identifying and evaluating the determinants of that performance in all malaria endemic countries by national malaria programs and partners interested in malaria surveillance strengthening, which can be undertaken at any time but is recommended as part of key NMP planning milestones.

The malaria surveillance assessment toolkit is single, standardized framework and set of tools that can be adapted to any context for malaria surveillance assessments aimed at the identification of key actionable gaps in malaria surveillance.

The toolkit has an adaptable assessment framework:

- User can define the assessment scope, by choosing the surveillance strategies and the indicators to be covered by the assessment.
- The data collection tools within the toolkit can be selected and filtered accordingly.
- The assessment framework has been developed to assess surveillance in burden reduction and elimination settings.

It also has a standardized package of tools:

- Any malaria surveillance assessment conducted using the toolkit will include a minimum set of priority indicators and generate common and consistent expected outputs.
- This ensures that findings are comparable across countries and between assessments within a country over time.

Evaluating the Impact of Malaria Interventions: Are the Current Metrics and Methods Still Relevant?

Molly Robertson, PATH, SMERG Co-Chair

Molly Robertson (PATH) presented on the evaluation cycle.
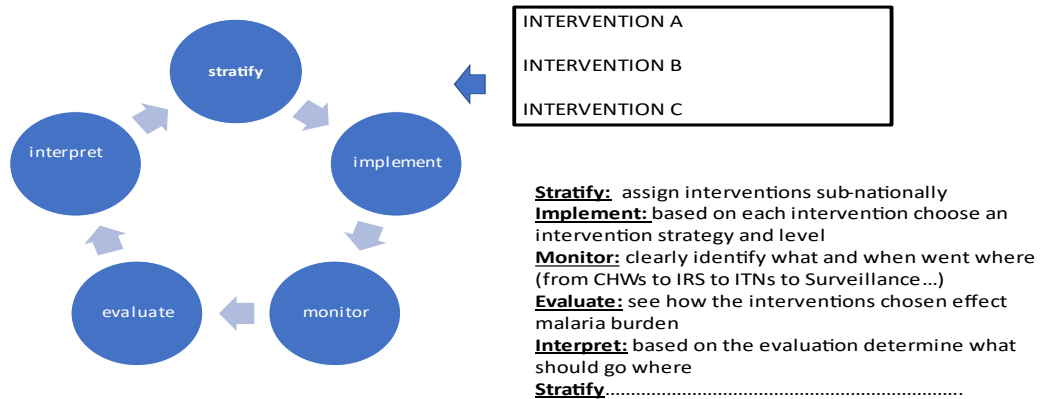
Stratify (assign interventions subrationally), Implement (based on each intervention choose an intervention strategy and level), Monitor (clearly identify what and when went where (from community health workers to indoor residual spraying [IRS] to ITNs to surveillance…), Evaluate (see how the interventions chosen effect malaria burden), Interpret (based on the evaluation determine what should go where), and the cycle continues.

Talking on the current evaluation methodologies, Molly cited the Demographic and Health Survey (DHS)/Malaria Indicator Survey (MIS) method used for prevalence and HMIS/DHIS2/DIMS routine data method used for incidence.

Newer methodologies comprise malaria incidence estimations, malaria test positivity rate, antenatal care first visit surveillance, impact modeling methods, and systematic qualitative methodologies.

Manuals and publications that have been released include the following:

- GMP: Malaria Program Review
- Monitoring and Evaluation Reference Group: Framework for Evaluating National Malaria Programs in (Moderate and Low) (High) Transmission Settings
- GMP: High Burden to High Impact: A Targeted Malaria Response
- MEASURE Evaluation: A Practical Guide to Using Routine Data in Evaluation
- Implementing Impact Evaluations of Malaria Control Interventions: Process, Lessons Learned, and Recommendations

Recommendations and Next Steps
- Create a committee to review the current evaluation documentation and understand current evaluation frameworks in countries.
- Determine how implementation optimization and impact evaluation can fit together.
- Create a framework that incorporates current recommendations and delineates areas for growth.

- Review new(er) methodologies and determine where/when they can be used based on implementation programs.

Objective 3: Discuss and agree on the best strategy to better coordinate and document efforts aimed at improving malaria surveillance and use of the information.

Chair of the session: Lia Florey, PMI USA

Updates on the RBM SMERG SP&DQ Committee/Gaps and Emerging Priority to Address, and the Main Recommendation and Mission Assigned to the SP&DQ Committee
Arantxa Roca-Feltrer, Malaria Consortium
Molly Robertson, PATH, SMERG Co-Chair

Molly Robertson gave an update of the Surveillance Practice and Data Quality (SP&DQ) committee, introducing Dr. Arantxa Roca-Feltrer from Malaria Consortium and Dr. Candrinho Baltazar from NMCP Mozambique as the co-leads. They both have a lot of experience in the fight to end malaria. Candrinho has been the director of the NMCP and the Mozambican Ministry of Health since 2014, and Arantxa is a malaria epidemiologist and currently works as the head of SME at Malaria Consortium. Molly confirmed that the idea of having such a committee developed from the outcome of the 31st SMERG meeting in September 2020. After a brief presentation of the committee by Molly, Arantxa then expounded on the gaps and emerging priority to address, and the main recommendation and mission assigned to the SP&DQ committee. The aim of the committee is to improve the visibility of surveillance and data quality improvement initiatives and streamline global coordination of surveillance-related efforts. It has four main objectives: communicating and disseminating surveillance news and updates, establishing systematic tracking mechanisms, sharing lessons learned from implementing surveillance and data quality tools, and establishing tracking systems for NMCPs' operational surveillance needs and priorities.

The committee is made up of 32 members from 5 continents, 18 countries, 22 organizations, and 5 malaria control programs. NMCP members were encouraged to consider joining the committee to bring in more expertise in capacity building, SMC data, quality data, visualization, implementation, research and innovation, surveillance, assessments, surveillance tools, and many other components that can be harnessed to move surveillance forward. There has been a series of webinars and meetings ranging from an informative webinar on 27 January that went over the aim, objectives, and next steps. The terms of reference were developed and disseminated for feedback from members, and the final version was published as of 2 April. An NMCP needs assessment webinar took place on 2 March, and outcomes from that webinar led to the assignment of more deep analysis and data collection, data quality tools for the SP&DQ committee. A decision was taken to do a mapping exercise on the pros and cons of all the different kinds of tools, that can be published and worked on. So, March to April was a general call for membership, and it is a volunteer process and an open and continuing process. Members are therefore greatly encouraged to join the committee.

Success Stories, Lessons Learned, and Best Practices from Cameroon
Jean Fosso, NMCP Cameroon

Lessons learned and best practices
Jean Fosso elaborated on the two main lessons learned, which comprise good collaboration with key stakeholders from the Ministry of Public Health and other implementing partners and also technical assistance from the Ministry of Health.

Success stories recorded included the following:

- Self-assessment of capacities
- Good coordination with the SME working group.
- Recruitment and deployment of a data manager at the central and regional levels
- Well-equipped health districts and health facilities with computers for data management
- Development and dissemination of documents and monitoring tools at all levels (surveillance guide, standard operating procedure [SOP] for data analysis, DHIS2)
- Motivation for timely entry and transmission of quality data (data entry costs, Internet connection, etc.)
- Routine data quality review meetings at all levels
- Data quality audit (severe malaria and deaths linked to malaria)
- Development and dissemination of an Excel tool to help with the review and analysis of data at the operational level (health district)
- Development of dashboards in DHIS2 to facilitate the monitoring of key performance indicators by program managers at all levels
- Collaboration with technical partners

Success Stories, Lessons Learned, and Best Practices from Mozambique
Candrinho Baltazar, NMCP Mozambique

Candrinho elaborated on the background of the Integrated Malaria Information Storage System (iMISS) Malaria Repository. The iMISS has been a key priority in the NMCP's National Strategic Plan that started in 2017.

Emphasizing the importance of the iMISS project, Candrinho explained that, to accelerate malaria elimination in Mozambique, a functional and responsive malaria surveillance system is needed to provide the required intelligence to allocate resources and target interventions effectively in all transmission strata. The iMISS Phase 1 is now complete, and users have been trained down to district level. Provincial and district trainings have been conducted and tablets distributed.

Four key lessons learned from deploying an integrated malaria information system are as follows:

- Conducting extensive user testing and developing interim data visualization tools can generate important insights into data entry forms, dashboard design, and key monitoring indicators.
- It is important for all relevant stakeholders to review training packages to guarantee clarity and trainers' preparedness to deliver standardized training.
- Building trainees' basic IT literacy skills, ensuring a rapid rollout, and conducting regular supportive supervision visits is key to facilitating platform uptake.
- Creating effective coordination mechanisms, such as a task force led by the NMCP, can help identify operational challenges.

Success Stories, Lessons Learned, and Best Practices from a Partner (RTI)
Jui Shah, RTI—Thailand

Jui Shah presented *on Best Practices In Strategic Information for Malaria.* Some of the intermediate results of this system consist of the following:

- Strengthened malaria surveillance systems in Thailand and Lao PDR.

- Evaluated strategies and tools for implementation and scale up for malaria elimination.
- Strengthened capacity of national malaria programs to generate, analyze, and use strategic information.

Elaborating on the best practices, Jui categorized these into three distinct groupings (best practices for surveillance strengthening, for partners, and for the SMERG).

Best practices for surveillance strengthening.
- Tailor strategies to suit the available budget.
- Focus on the benefits of malaria elimination for the development of the country for high-level support.
- A regional approach can empower several countries together.
- An enabling environment accelerates malaria elimination.

Best practices for partners
- Set priorities with the national malaria program.
- Embrace adaptive management.
- Develop materials in local languages.
- Participate in semiannual partners meetings.
- Link programs with global resources

Best practices for SMERG
- Develop and disseminate guidance, templates, data analysis cheat sheets.
- Coordinate symposia for scientific conferences.
- Connect writers at HQ with field programs to package results or develop publications.
- Share strategic information examples.
- Other ideas?

Discussion: Questions and Answers   Lia Florey. PMI USA

Recap of day 2 Molly Robertson, PATH

Objective 4: Provide update on SMERG affairs and the other RBM working groups.

Discuss and Define the General Role and Structure to Optimize SMERG Operation
Molly Robertson, PATH, SMERG Co-Chair

Molly Robertson, Co-chair of SMERG, began by stating the goal of SMERG: The purpose of the Surveillance, Monitoring and Evaluation Working Group is to facilitate alignment of partners on strategies and best practices for developing effective systems to monitor and evaluate M&E malaria control programs.

It also identifies emerging research questions and needs related to the implementation of M&E initiatives and communicates these to appropriate partners. It has as objectives to :

- Convene: Individuals and partners well versed on SME for to advise and advocate.
- Coordinate: Harmonize, prioritize, identify bottlenecks, propose recommendations, develop consensus, monitor changing needs.
- Promote evidence-based, efficient program implementation and use of tools.
- Communicate: Advise RBM Partnership, keep partners informed, dissemination.
- Membership: Assembly of all interested parties with particular emphasis on NMCPs
- Structure: Two co-chairs, elected from the SMERG membership.

- Strategic and technical direction: Chairing meetings; communication and liaison to other groups
- Secretariat: Coordination of meetings/taskforce meetings and minutes; quarterly updates; website and resource maintenance; maintenance of momentum; liaise with other working groups

New proposal: (Putting the S the M and the E in the SMERG)

Proposal: Creating new committees like SP&DQ, which are:

- Program and Implementation and Monitoring (PRIM)
- Evaluation and Burden Assessment (EVAB)
- Dissemination and Coordination (DAC)

New structure proposed as:

- Co-chairs: As exist today.
- Co-leads: (like Arantxa and Dr Candrinho) Create and update the strategy/approvals with co-chairs.
- Secretariats: SMERG Secretariat and Committee Secretariat (like supportive secretariat).

DISCUSSION

Misun questioned what priorities have been identified for the SMERG as the proposed structure seems to suggest too many committees with a lot of different priorities.

Responding to this question, Molly reiterated that surveillance had been more neglected; however, the SP&DQ committee has been created, but the other aspects, especially "monitoring" are also neglected, likewise evaluation. She decried the fact that surveillance needs attention although it should not be treated in isolation. With these new committees, we can be more systematic, she emphasized.

Reacting to this presentation, co-chair Médoune advised on the importance of working together and being on the same page so that decision making should consider the realities and challenges of NMCP members. He clarified the need for more brainstorming when challenges are encountered and not starting afresh. In the process of brainstorming, new task forces may be created. In the process of brainstorming, the organization may be restructured but the fundamentals remain. He cautioned on creating conflicting ideas and disagreed on the idea of creating new task forces. He stressed that SP&DQ and Monitoring & Evaluation exist already and caution should be applied in creating new committees.

Arantxa Roca concurred with this idea, stating that in some cases, there are other working groups with M&E components (e.g., SMC Alliance) that could also be explored. Those working groups could be supported without creating new committees. Duplication should be avoided, she cautioned.

A comment from the chat made allusion to the fact that surveillance and evaluation are the connecting points between all working groups and questioned what working groups are doing to ensure that the work of SMERG is taken into account.

In response, Molly said; "It is up to us to create and shape these committees and not to create any overlapping."

It was agreed that Molly should send the proposal for the proposed new structure to members for their input.

Yazoume Ye clarified that the gap to be addressed (M&E gaps) need to be defined first. Task forces are there to address specific issues.

A question in the chat box from Sarah reads, "I wonder if the reason some task forces are successful is because they are funded to complete a task? Was the survey manual funded? Is SPDQ funded? Is the IRS task force funded?" David Larsen responded that IRS task force was not funded.

Update from Active SMERG Task Forces
Surveys: Cameron Taylor, DHS Program, ICF

13 surveys in 2021, malaria testing: majority **of them DHS and MIS.**

HMIS Taskforce: Michael Hainsworth, PATH, USA

The last focus was on tools with an objective for countries adopting it.

WHO Surveillance Toolkit has been developed and, in the process, finalizing pilot phase.

Data visualization tools are never discussed enough. SP&DQ committee can address on data visualization and dashboards.

Operational guidelines: We never really progressed with that task force, but this probably needs to be addressed. This is a potential area for a potential task force.

SMC Taskforce: Arantxa Roca-Feltrer, Malaria Consortium

HMIS and SOP task forces fit nicely with SP&DQ committee in data tools and data visualization tools. SMC task force was set up couple of years ago to harmonize SMC indicators; terms of reference had been defined, methodological approach. There is the SMC Alliance working group on M&E. This group is formally set up and perhaps there is no need to maintain this task force because SMERG is already linking that with SMC Alliance.

IRS Taskforce: David Larsen, Syracuse University, USA

There is a lot of overlap with SMC. We can share feedback on that at the end.

The IRS taskforce has been inactive, maybe needs to be relaunched.

Sarah commented on the chat box that, "As Arantxa says, would be good to know what's going in the new WHO SME guide."

Discuss How the SMERG Can Work in Synergy and Leverage Other RBM Working Groups
Molly Robertson, PATH, SMERG Co-Chair Moderator

Elizabeth Juma, WHO/AFRO

Presented on behalf of the case management group.

Synergy with SMERG can be on case management indicators:

- Facility-based performance indicators including quality of care indicators are available—same for community case management and integrated community case management.
- Challenge is with indicators that measure access to case management and quality of care in MIS/DHS surveys.

- Proposal: A need for all stakeholders to undertake a critical evaluation of the current and potential new indicators, as is better guidance for countries on the collection and use of case management indicators for action.

Charlotte Eddis, PSI

Purpose:
- Share the challenges and best practices in M&E.
- Discuss, collectively develop and harmonize tools.

Activities:
- Standardized indicators for SMC: Input, output, and outcome and impact indicators defined separately.

Next month's activities:
- Continue with SMC M&E Toolkit.
- Support NMCP and WHO on World Malaria Report chapter on SMC.
- Continue to exchange ideas, outputs and gather feedback from a group of peers.

Albaster Graham, UN Habitat Switzerland

Multisectoral working group top activities:
- MS Action Framework
- Action Guide to end Malaria
- Action guide to end Malaria Zambia
- Organized information dissemination events
- Many new activities upcoming

Bolanle Olapeju, JHU, USA

Social and Behavior Change (SBC) Working Group

2020 achievement:
- Virtual Forum (Oct 2020)
- Welcomed Reginal/Linguistic Ambassadors
- Released new technical resources
- Malaria SBC Program Guidance in the context of the COVID-19 pandemic
- SBC Strategy Workshop package
- MIS Social and Behavior Change Communication Module, Interviewer's Manual, Interpretation Guidance

Working group activities
- Community health worker toolkit for malaria SBC
- Guidance for SBC strategies across different malaria transmission settings
- Standardized malaria SBC module for MIS
- SBC & Zero Malaria Starts with me
- Malaria SBC during COVID-19

Keziah Malm, NMCP Ghana

Vector control group. The oldest working group of RBM. Under restructuring.

Prof. Richard Maude, APMEN

Main objectives: advocacy

Working group activities
- Vector control
- Vivax
- Surveillance and response

Key themes: Data quality and integrated health systems

Activities:
- Support and capacity development
- Research priorities and evidence
- Communication
- Potential synergies with RBM SMERG: tech talks, training, resources website, global surveys, Asia-Africa supportive partnerships

Daddi Wayessa, CRSP-RBM

Triangle mechanism:
- RBM partners look existing capacity in countries
- Support countries in collaboration with WHO in conducting Malaria Programme Reviews, develop national malaria strategic plans
- Best practices on new tools and approaches

Synergies with SMERG:
- Looks at the possibility to synchronize the time of dissemination of its works, especially country-specific ones during NSP revisions.
- Synchronize the time of dissemination of its works during Global Fund funding request development (Global Malaria dashboard)
- Dissemination of its works during the meetings: Annual sub-region meeting, peer reviews, CRSPC tracker (mitigate the impact of COVID-19 on malaria interventions)

Julie Gutman (presented by Molly Robertson on her behalf)

MiP working group

Coverage of interventions is still low.

Align RBM partners on best practices and lessons learned in MiP programming to help achieve higher coverage in MiP interventions globally.

Promote and support WHO strategy.

Advocacy through the development of key tolls and products targeting policy makers and program managers.

Support research and documentation of best practices and lessons learned.

Promote partnership between reproductive health and malaria control.

2020-21 Call to action campaign (Speed up Intermittent Preventive Treatment in Pregnancy Scale Up)

Médoune's request: At the level of SMERG, we do not see your announcement publications. We think it is especially important that we receive your work and to have a place in your meetings too. This is a general request from all other working groups from the secretariat since collaboration is crucial for all of us.

32nd SMERG Meeting Action Items

A list of action items derived from the various discussions was presented to the participants. After deliberations, participants agreed for the action items to be shared with participants for review. The following table is a concise list of action Items arrived at after feedback from participants. The SMERG will focus on the five most prioritized action items. Members are therefore called upon to indicate their interest in participating in any of the highly prioritized action items. See table below.

Action Items

Yazoume, Ye, PMI Measure Malaria/ICF

Issues		Suggested SMERG action
Objective 1: Define SMERG technical role in coordinating and harmonizing partners' efforts and supporting countries in the context of public health emergency.		
1.1	Measuring malaria mortality remains a challenge for most countries. This may require a clear guidance on assessing quality of data, analyzing and interpreting trends.	Develop a guidance document on measuring mortality, including assessing quality data, analyzing and interpreting trends.
1.2	Optimizing the role of community health workers in rollout of malaria service delivery and malaria surveillance	Create a task force on community health or assign this to the SP&DQ committee to develop a guidance document.
1.3	Multiple tackers have been rolled out, including country specifics (e.g., Nigeria dashboard); however, these are not always widely accessible to the malaria community.	Create a list of trackers and determine their level of dissemination and any recommendations for further dissemination. This could be included in the COVID-19 guidance where possible.
1.4	Cross-border/country collaboration may help streamline malaria surveillance and indicators, especially in the context of public health emergency—it has not been prominent in the current pandemic.	Develop a cross-border surveillance framework that includes data sharing, interpretation, and periodicity.
1.5	Integrating COVID-19 surveillance activities into those of malaria SME: • COVID-19 vaccine being rolled out, there may be opportunities for malaria service delivery and metrics—this has not been mentioned in current mitigation strategy for most countries. • Need for clear guidelines for interpretating malaria surveillance data in 2020.	Update the COVID-19 guidance to include the presence of vaccines and new diagnostics.
Objective 2: Define actions to streamline and better coordinate monitoring and evaluation effort for malaria control and elimination.		

Issues		Suggested SMERG action
2.1	Toolkit for assessing malaria surveillance in country—role of SMERG and rolling out the tool and documenting data/information generated from the assessments	Gather best practices, challenges, etc., from the rollout of the WHO malaria surveillance toolkit and, based on these, develop a technical assistance model for the SMERG.
2.2	Coordinating with WHO/GMP: • WHO malaria surveillance reference document is undergoing, revision—coordinate SMERG contribution to the revision. • Rollout of WHO malaria data repositories in countries—any roles for SMERG: supporting use, assessing value added?	SMERG co-chairs to follow up WHO/GMP
2.3	Adapting monitoring approaches/methods to respond to emerging needs, different level of transmission, use of surveillance data	Review current SMERG and WHO guidance and determine if there are transmission zones/endemicity not covered by current guidance.
2.4	Innovation for remote supervision, data review, analysis, and capacity building—how can the SMERG contribute?	• Synthesize current practice in remote supervision. Engage with CRSPC and APMEN about their technical assistance models.
2.5	Adapting evaluation approaches/methods to respond to emerging needs, different level of transmission, use of surveillance data	Link with the Humanitarian Emergency working group.
Objective 3: Discuss and agree on the best strategy to better coordinate and document efforts aimed at improving malaria surveillance and use of the information.		
3.1	Need for streamlining and coordinating efforts toward standardizing the collation of information and ensuring communication across all partners and countries	Ensure that collation of information and information sharing is part of the SP&DQ workplan.
3.2	Regular production of malaria bulletins has been identified as priority for NMCP. However, these bulletins vary by country. Standardizing of the process and content across countries is needed.	Determine if/how/when malaria bulletins should be standardized and shared and what the use cases would be.
3.3	Need for an operational framework (surveillance) for countries for moving through the malaria transmission continuum	Ensure that the SP&DQ committee workplan includes action items for elimination, low, medium, and high settings.
3.4	Use of strategic information to guide progress—how to better tap into evidence generated through peer-review publications	Form a task force to review models of literature and new research sharing that work and determine how this could be incorporated into the SMERG structure.
Objective 4: Provide update on SMERG affairs and the other RBM working groups.		

Issues		Suggested SMERG action
4.1	**SMC Alliance:** Producing a list of standard indicators, and a manual for SMC evaluation—potential contribution from SMERG?	Review and incorporate SMC measurement into an implementation measurement document with reference to SMC Alliance.
4.1	Way forward to ensure effective functioning of SMERG task forces	Circulate a proposal for re-structuring
4.3	**HMIS Task Force:** Development of SOP for malaria surveillance data visualization—SP&DQ committee could take this on.	Disband the HMIS Task Force—and SP&DQ takes on the development of the SOP.
4.2	**SMC Task Force:** Consider disbanding the Task Force because SME Alliance is already developing the list of indicators	Review and incorporate SMC measurement into a implementation measurement document with reference to SMC Alliance. Keep the task for a liaison with SMC Alliance.
4.5	**Case Management Working Group:** Challenge in measuring access to malaria case management and quality of care using MIS/DHS surveys—need for a refine/alternative indicator and approach	Develop a task force, within the broader group of implementation measurement, to meet with the Case Management Working Group and determine steps forward for recommendations.
4.4	**IRS Task Force:** Finalizing the indicator reference document, which will be share with SMERG members, and the task force could be disbanded	Add reference document to a broader list of implementation indicator document.
4.7	**APMEN Surveillance and Response Working Group:** Potential for involving SMERG in the series of TED talks	SMERG co-chairs to engage with APMEN to discuss potential collaboration.

List of Participants

	Name	Organization	Email
	32nd SMERG Virtual Meeting (18th -20th May 2021)		
	Co-chairs		
1.	MEDOUNE Ndoip	NMCP SENEGAL SMERG co-chair	
2.	Molly Robertson	PATH SMERG Co-chair	
	SMERG Secretariat		
3.	Yazoume, Ye	ICF/ PMI Measure Malaria	
4.	Patricia Mbah Nchamukong	Measure Malaria	patricia.nchamukong@icf.com
5.	Jimeka Jones Setzer	ICF/ PMI Measure Malaria	jimekakjonessetzer@gmail.com
6.	Abdinasir Amin		
7.	Adam Preston	RTI	apreston@rti.org
8.	Adilson DePINA		
9.	Albert Ikonje		
10.	Alison Winstead		
11.	Almoayed Khaled	Surveillance D.G Yemen MoH	
12.	Andrew		
13.	Anja.Terlouw		
14.	Anna Bowen		
15.	Anne Linn		
16.	Annie Ciceron		
17.	Ann-Sophie Stratil		
18.	Arantxa Roca		
19.	Arnaud Le Menach		
20.	Austin Gumbo		ilovejesus42008@gmail.com
21.	BalkissaJ (50020)		
22.	Baltazar Candrinho		
23.	Bolanle Olapeju	JHU	bolanle.olapeju@jhu.edu
24.	Bridget shandukani		bshandukani@gmail.com
25.	Brittany Iskarpatyoti		bschriv@email.unc.edu
26.	Cameron Taylor-	DHS Program	
27.	Charlotte Eddis		
28.	Chris Lourenco	PSI	
29.	Cyril Ademu -	NMEP Nigeria	
30.	Daddi Wayessa	RBM CRSPC	
31.	Danny Kasongo		
32.	David A Larsen		dalarsen@syr.edu
33.	Dr Damian Rutazaana/MOH		

34.	Debra Prosnitz	PMI Measure Malaria	debra.prosnitz@icf.com
35.	Dr Donnie Mategula		
36.	Dr Graham Alabaster	UN-Habitat	
37.	Dr. DIBOULO		
38.	Eline Korenromp		ekorenromp@avenirhealth.org
39.	Elizabeth Juma -	WHO-IST/ESA	
40.	Erik Reaves# PMI		
41.	Estifanos B Shargie		
42.	FOSSO Jean		
43.	Grace Ikahu-Muchangi		muchangigrace@gmail.com
44.	Hannah Koenker		hkoenker@gmail.com
45.	HelenC		
46.	Judith Device B (Espérance Tsémo)		judith.nkouete@gmail.com
47.	Jui Shah		juishah@rti.org
48.	Julia Dunn		julia.dunn@clintonhealthaccess.org
49.	Julie Gutman		
50.	Katelyn Woolheater	CHAI	
51.	Kemi T		
52.	Khoti Gausi_	WHO IST ESA	
53.	Kusiaku Theo		
54.	Laura Anderson		
55.	Lia Florey		
56.	Lolade Oseni		lolade.oseni@jhpiego.org
57.	Lucien Beraha		
58.	Mark Maire		
59.	Marsha.Deda		
60.	Massaya		
61.	Matt Murphy		
62.	Maya Tholandi		
63.	mcisse		
64.	Melanie		
65.	Methaq Assada		
66.	Michael Hainsworth		mhainsworth@path.org
67.	Misun Choi	PMI/USAID	
68.	Mohamed alkitwasi		
69.	Moustapha Cisse		
70.	Nicole Carbone		
71.	Niparueradee		
72.	Olivier Kakesa		olikamus@yahoo.com
73.	Olusola Oresanya		

74.	PNLP BF		pnlp.bf@gmail.com
75.	Prudence Wafo		billingadvisor@gmail.com
76.	Punam Amratia		punam.amratia@ufl.edu
77.	RBM Secretariat		info@endmalaria.org
78.	Richard Maude	APMEN/MORU	
79.	Ruth Ashton		rashton@tulane.edu
80.	Samantha		
81.	Samson Katikiti		
82.	Sarah Burnett		nshamsiyev@path.org
83.	Selgün Kayaalpli		
84.	Sergio Lopes		sergiooolopes@gmail.com
85.	Sherrera		
86.	SIMONE TROULA		simone.t@globo.com
87.	Stephen Poyer	PSI	malaria@psi.org
88.	Sumaiyya Thawer		sumaiyya.thawer@swisstph.ch
89.	Susan Rumisha		
90.	Tabitha Kibuka	PSI	
91.	Thierno Ba		
92.	Thom Eisele		teisele@tulane.edu
93.	Wahjib Mohammed		wahjibm@gmail.com