U.S. President's Malaria Initiative

MOZAMBIQUE INTEGRATED MALARIA PROGRAM

Annual Progress Report: Year 1 (October 2017 – September 2018)

Speech by Mr. Osvaldo Macossa, Head of the Namutangurine Health Committee, Nicoadala District, September 13. 2018. Source: IMaP.

October 12, 2018

This publication was produced for review by the United States Agency for International Development. It was prepared by Chemonics International Inc. for the Integrated Malaria Program, contract number 720-656-18C-00001.

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Contents

Acronyms

ANC	antenatal care
ADR	adverse drug reactions
AL	Artemether-Lumenfantrina APE
APE	elementary multipurpose agent (*agente polivalente elementar*)
DDM	district medical warehouse (*Depósito Distrital de Medicamentos*)
DDS	district health directorate
DFO	director of finance
DPS	provincial health directorate
DQA	data quality assessment
CBO	community-based organization
CSO	civil society organization
CMAM	Central Medical Store (*Central de Medicamentos e Artigos*)
GHSC-PSM	Global Health Supply Chain-Procurement and Supply Management Project
GUC	grants under contract
HMIS	health management information system
IMaP	Integrated Malaria Program in Mozambique
ITNs	insecticide treated nets
IPTp	intermittent preventive treatment in pregnancy women
M&E	monitoring and evaluation
MEL	monitoring, evaluation, and learning
MCSP	Maternal and Child Survival Program
MIP	malaria in pregnancy
MISAU	Ministry of Health
NED	nucleus of district statistics (*núcleo de estatística distrital*)
NMCP	National Malaria Control Program
MSP	Malaria Strategic Plan
PIRS	performance indicator reference sheets
PMI	President's Malaria Initiative
PNAPE	National Program of APE (*Programa Nacional de Agentes Polivalentes Elementares*)
RDT	rapid diagnostic tests
SBCC	social and behavior change communication
SDSMAS	District Women's Health and Social Action Services
SESP	education for public health sector (*sector de educação para a saúde*)
SIS-MA	Health Information Systems for Monitoring and Evaluation
SME	surveillance, monitoring, and evaluation
SMI	maternal and child health nurses (*enfermeiras de saúde materno infantil*)
SP	sulfadoxine-pyrimethamine
STA	senior technical advisor
TWG	technical working group
USAID	United States Agency for International Development

1. Program Overview

Program Duration: October 2017 – October 2022
Start Date: October 31, 2017
Life of Project Funding: $23,797,392.34
Geographic Focus: Zambézia, Nampula, Cabo Delgado, and Tete Provinces

Program purpose

The United States Agency for International Development's (USAID's) five-year Integrated Malaria Program (IMaP) in Mozambique is led by Chemonics International with support from Family Health International 360 and Vanderbilt University Medical Center – Friends in Global Health (VUMC-FGH). IMaP aims to strengthen implementation of the Malaria Strategic Plan (MSP), as aligned with global and Mozambican President's Malaria Initiative (PMI) strategies and the identified needs of the National Malaria Control Program (NMCP). IMaP builds on previous malaria investments and harnesses the potential of the Ministry of Health (*Ministério de Saúde*, MISAU), the NMCP, health directorates, communities, and other stakeholders to maximize its impact.

IMaP work side-by-side at the national, provincial, and district levels to strengthen capacity and facilitate systemic improvements for better decision-making, planning, and guidance. As part of this process, IMAP will use a systematic process for identifying ways to address challenges and opportunities for technical support. IMaP will also support civil society and community-based organizations (CSOs/CBOs) to improve individual health-seeking behaviors through social and behavior change communication (SBCC). IMaP has incorporated data collection into each objective, which feeds into our monitoring, evaluation, and learning (MEL) system and gives access to adequate, timely, and accurate information to monitor performance, evaluate progress, and make adjustments to generate continual improvements. We will promote sustainability by cultivating leadership skills and building ownership of malaria control efforts by health directorates and their partners.

Goals and Objectives

IMaP's overall goal is to contribute to reducing malaria-associated mortality, morbidity, and parasitemia in four high malaria burden provinces (Zambézia, Nampula, Cabo Delgado, and Tete). IMaP will achieve this goal through three objectives:

1. Support the implementation of proven malaria interventions at community and facility levels, in alignment with MSP.
2. Strengthen management capacity of the provincial and district MISAU personnel to provide oversight and supervision of malaria interventions.
3. Improve health management information system (HMIS) data reporting, analysis, and use at the provincial and district levels.

2. Summary of the Reporting Period

The Mozambique Integrated Malaria Program (IMaP) was awarded in October 2017. Upon award, the post award kickoff meeting with USAID and PMI team members, IMaP/Chemonics home office team members, the IMaP start-up specialist, and the IMaP director of finance was conducted on November 22, 2017. The IMaP team also initiated the onboarding of already-approved key personnel and other already-approved positions. The team began recruiting and onboarding vacant positions. The team also worked to register the project, per Mozambican law.

During the first and second quarters of Year 1, IMaP held work planning sessions at the central and provincial levels beginning in late January/early February 2018 and worked with the NMCP and the Zambézia and Nampula provincial health directorates (DPSs) to develop its Year 1 work plan and monitoring, evaluation, and learning (MEL) plan. NMCP director, and, PMI representative, led the work planning session in Maputo, which was attended by the NMCP team and partners. In Nampula and Zambézia, chief medical officers, respectively, and the NMCP Director led the sessions, which were attended by members of the Consultative Council of the two provincial directors. In Nampula, the USAID Contracts Office Representative for IMaP and PMI representative also participated. During each session, IMaP Chief of Party presented an overview of the program. The NMCP director and PMI representatives also presented on malaria priorities. Presentations were followed by a questions-and-answers period and an open-discussion period on four technical areas: case management, malaria in pregnancy (MIP), social and behavior change communication (SBCC), and SME. The best practices and needs discussed during each session were recorded and used to inform the development of IMaP's Year 1 work plan.

During the second and third quarters, the IMaP team finalized the Year 1 Work Plan and MEL plan. At the central level, the IMaP team participated in technical working groups (TWGs) on malaria case management, monitoring and evaluation (M&E), and communication. The IMaP team worked with the NMCP, National Program of *Agentes Polivalentes Elementares* (*Programa Nacional de Agentes Polivalentes Elementares*, PNAPE), and Department of Health Promotion (DEPROS) to collect materials for the APE refresher course to occur later in Year 1. At the provincial level, IMaP developed the CSOs/CBOs mapping and participated in malaria coordination meetings with the DPSs and implementing partners. In Zambézia, IMaP supported and participated in the provincial annual malaria meeting. IMaP Chief of Party and the SME STA participated in the case management training led by the NMCP, DPS, and Maternal and Child Survival Program (MCSP) in Quelimane. The team also coordinated SBCC activities for the Namarrói school-based bed net distribution pilot. In Nampula, IMaP presented the Year 1 Work Plan to the malaria program head in a joint meeting with PMI. IMaP's Nampula SME Specialist also participated in the same case management training noted above but in Nampula City. The SME STA trained IMaP's Nampula and Zambézia SME specialists based on the Year 1 Work Plan and MEL Plan. IMaP also worked with the DPSs, particularly the malaria programs, to develop Year 2 work plan activities by objective. Once finalized, the teams presented the province-specific activities to each provincial health director for feedback, approval, and support.

During Quarter 4, IMaP supported the Nampula DPS to create and coordinate a provincial level malaria TWG, which has been in operation since September 15, 2018. With DPS staff members,

IMaP conducted a two-day training-of-trainers (ToT) for the APE refresher training involving 36 participants. With the DPS, IMaP also conducted three-day APE refresher sequential trainings to a total of 492 APEs from 12 districts in Nampula. IMaP also conducted supervisory and mentoring site visits to 14 districts, which exceeded the 12 districts originally targeted. IMaP also worked with the Zambézia DPS to train 226 health personnel on malaria case management, MIP, and data collection to 181 maternal and child health nurses (enfermeiras de saúde materno infantile, SMIs), 10 nucleus of district statistics (núcleos distritais de saúde, NED)/M&E officers, 36 other health personnel (16 general nurses, 11 preventive medicines, and nine pharmacy technicians). IMaP also conducted supervisory and mentoring visits in 10 of the 13 districts planned, covering referral health facilities (e.g., health centers, district hospitals, and rural hospitals). In total, 34 health providers (two general practitioners, 18 SMIs, 12 laboratory technicians, two pharmacists) received on-the-job training.

Challenges

IMaP experienced a few challenges during its Year 1. Recruitment and finalization of the Year 1 Work Plan and MEL plan were the challenges with the greatest impact on project implementation. Garnering buy-in from the central and provincial levels on positions delayed completion of provincial teams and affected the project's ability to establish relationships at the provincial and district levels. IMaP team has learned to attain NMCP and DPS buy-in before moving forward with provincial level candidates. Delays in finalizing the Year 1 Work Plan and MEL Plan resulted in less time to implement activities and achieve goals and the need to shift Year 1 activities to Year 2. Learning from this experience, IMaP established a timeline for Year 2 work planning that provided time to work with each DPS and key provincial stakeholders and finalize the documents.

Objective 1: Support the implementation of proven malaria interventions at community and facility levels, in alignment with MSP

Activity 1.1. Strengthen national malaria policies, strategies, and guidelines.

During the second quarter of Year 1, IMaP Chief of Party and the SME STA participated in the NMCP and MCSP-led clinician malaria case management training in Quelimane, which covered the new malaria treatment standards in Mozambique. IMaP also began participating in case management and quantification TWGs, which encompasses laboratory and pharmacy, including commodity quantification. Participation in the TWG has helped the team align the IMaP Year 1 Work Plan with the NMCP's and other partners' case management and laboratory activities. For example, as a result of IMaP's participation in these TWGs, the team adjusted its initially-proposed trainings for laboratory technicians to supervisory and mentoring visits that were conducted in Quarter 3. IMaP also participated in the NMCP work planning meeting to support finalization of its work plan. Participation in the working groups during the meeting, particularly in the case management working group, provided the IMaP team members insight on how to align the project's case management activities to central and provincial level objectives. It also provided more insight on the development of the case management training that has been taking place throughout the country since the beginning of 2018 and have already been held in Zambézia.

In Quarter 3, IMaP team continued learning more about the activities currently implemented by other partners that would eventually transition to the project's oversight. As part of this process, SME Specialist Ismael participated in the case management training conducted by NMCP, DPS, and the USAID-funded MCSP in Nampula to better understand the guidelines for malaria treatment mandated by the NMCP and to identify ways to support the DPS and District Women's Health and Social Action Services (SDSMAS) after the training. Based on the training, IMaP identified ways to assess the capacity of health providers during supervisory and mentoring site visits.

During this same quarter, the IMaP team members continued to participate in the NMCP TWGs:

- **Case Management TWG Meetings:** IMaP's Clinical STA participated in discussions about the malaria case management training, specifically the intermittent preventive treatment in pregnancy (IPTp), indicator of malaria prophylaxis in pregnant women, and use of iron salts with folic acid as part of antenatal care (ANC). Of the topics discussed during the TWG, IMaP will be supporting the following:
  - **Intermittent Preventive Treatment to pregnant women (IPTp):** NMCP formally communicated with the Department of Health Information the need to change from three to four IPTp dosages in the data collection instruments used in ANC visits and to have IPTp coverage information monthly rather than bi-annually. Based on this decision, IMaP Clinical STA helped, NMCP's malaria case management focal point, write a letter to the central medical store (*Central de Medicamentos e Artigos* Médicos, CMAM) about the need to ensure availability of folic acid in ANC visits to avoid 400mcg ferrous salts interaction with Sulfadoxine-Pyrimethamine (SP). CMAM confirmed availability of folic acid in all provinces, including those targeted by IMaP. As a follow up, IMaP provincial teams will check IPTp administration and ferrous salts and folic acid administration to pregnant women during supervisory and mentoring site visits.
- **Communication TWG Meetings:** IMaP's SBCC Technical Advisor supported the Communications TWG by helping to draft the terms of reference (ToR) for contracting a consultant who will be selected to develop the NMCP's communication strategy. This activity will be continued in Year 2.

IMaP also participated in provincial level meetings in Quelimane, Zambézia:

- **Participation in the Provincial Pharmacy Meeting:** This meeting centered on analyzing the performance of provincial and district pharmacy warehouses from September 2017 to March 2018. The meeting was attended by the provincial director of health, clinical director of the central hospital, head of pharmacy, provincial head of medical stores, district medical officers, and district heads of medical stores. The results presented in the pharmacy are described below and guided the inclusion of topics during supervisory and mentoring site visits in malaria case management:
  - Information collected at the district medical warehouses and hospitals show a reduction in the rate of discrepancies between the number of positive cases reported and the number of prescription drugs administered. However, there are still districts with large discrepancies, including: Quelimane City with a discrepancy rate of 35%; Inhassunge (31%); Luabo (23%); Namarroi (50%); and Central Hospital of Quelimane (117%). During supervisory and mentoring visits in Quarter 3, IMaP started to prioritize districts

with the greatest data discrepancies and to analyze the data to determine the reasons for these discrepancies and see if they are linked to malaria case management.
- Information presented during Quarter 3 regarding medical stocks at the provincial medical warehouse showed that the last distribution of rapid diagnostic tests (RDTs) was made in May 2018. At that time, there was only stock for two months' supply of RDTs and AL 6X1 and 6X2; three months' supply of the 60mg injectable Artesunate; and four months' supply of the APE KIT (AL). In Quarter 3, Zambézia faced lack of Quinine 600mg/2 ml, which is an alternative treatment for severe malaria in Mozambique. It should be noted that this situation is countrywide the procurement process for quinine is still ongoing at the central level. Through the case management TWG, IMaP advised Global Health Supply Chain-Procurement and Supply Management Project (GHSC-PSM) to provide medicines to the province in a timely manner to prevent drug stock out.

- **Zambézia DPS Meeting:** IMaP's team met with the DPS, Head of Department for Public Health, Deputy Provincial Supervisor, and Provincial Malaria Program M&E Focal Point to analyze the status of malaria program activities at the provincial and district levels. During this meeting, it was jointly decided that the IMaP would conduct supervisory and mentoring site visits with the DPS beginning in the fourth quarter of Year 1.

- **Annual Provincial Malaria Meeting in Zambézia:** IMaP's Zambézia team participated in the annual meeting to analyze data from January to December 2016, January to December 2017, and January to May 2018 in order to identify strategies for improving delivery of the malaria program. At the meeting, it was noted that there was a discrepancy between the number of positive cases reported and the number of prescription drugs administered (as described above), possible duplication of notification of malaria cases and referral cases, low coverage of mosquito nets distributed to pregnant women at ANC visits, and low coverage of fourth IPTp dosage. Based on this information discussed during the meeting, the IMaP team and the DPS team decided to carry out the following activities starting in Quarter 4 during supervisory and mentoring site visits:
  - Continue to strengthen supervision of clinicians after the refresher training on malaria treatment standards to ensure that knowledge was appropriately transferred because of the training.
  - Provide on-the-job training in the districts and health facilities to ensure the quality of reported data.
  - Revitalize monthly and quarterly data analysis meetings at the provincial and district levels to emphasize the importance of correct registration and use of data for decision-making.

The details on these three activities are further described in Activity 1.2 below.

In Quarter 4, under suggestion of IMaP, the Nampula DPS created the provincial level malaria TWG on July 24, 2018 during the biannual malaria partner coordination meeting. The TWG was created to discuss and address Malaria Program needs and topics within the different program areas (e.g., malaria case management, MIP, laboratory, pharmacy, communication, M&E) and to discuss areas for research and data analysis and triangulation. The provincial health director or the chief medical officer will lead the malaria TWG meetings, which will initially take place

biweekly and will eventually transition to occur monthly. The provincial chief medical officer led the first meeting of this newly-created TWG in Nampula on September 15, 2018. The meeting agenda covered the following: indoor residual spraying, APEs approach, malaria case management, and malaria death cases. During the meeting, participants discussed the launching ceremony for the Nampula-based PIDOM campaign to take place on September 21 in the Nacala-Porto district and support needed from the implementing partners to cover mass media message dissemination to promote PIDOM; discrepancy between the malaria case-related data produced in the health facilities and SDSMAS and what is reported in SIS-MA; and, the need to have the case management team analyze, review, and address the discrepancy between the malaria death case-related data at the district level and SIS-MA. At the end of this first meeting, it was decided that the next meeting would be held in October, and that the Malaria case management and M&E team, with implementing partner support, should review and clean up data at the districts with the highest data discrepancy (Nampula, Mecuburi, Lalaua, Erati, and Angoche).

IMaP also supported the annual National Malaria Technical Meeting hosted by the NMCP. IMaP's Chief of Party Machatine participated in two preparatory meetings, which included the review of the meeting's terms of reference and agenda and discussion on the topics to be presented at the meeting. IMaP also provided logistical support by covering lodging for the meeting representatives from target provinces totaling 619,048 MZM. During the meeting, IMaP with the NMCP and other stakeholders presented the first draft of the Integrated Supervision Manual. The review and update of the manual is an ongoing activity and will be completed in Quarter 2 of Year 2.

Several project activities were not implemented during Year 1. For example, IMaP had proposed to become the secretariat for the NMCP and the TWGs (Year 1 Activity 1.1.1) to provide technical support to the NMCP and lead the coordination of the quarterly TWG meetings, including development of agendas, invitations, and meeting notes. IMaP also proposed integrating gender-sensitive topics into TWG meetings (Year 1 Activity 1.1.2) was removed at the request of NMCP because the current communication strategy already has a gender focus. In Year 1, there was no opportunity to discuss gender issues at TWGs meetings including SBCC TWG. IMaP also proposed to support NMCP to develop an effective distribution plan for disseminating electronic and printed versions of guidelines and other key documents to the provinces (Year 1 Activity 1.1.3). This included also logistically supporting the distribution (with transportation) of the printed versions of these same guidelines and documents during supervisory and mentoring visits. Per the request of the NMCP, IMaP removed these three activities. Due to approval delays within MISAU for the posters, IMaP also had to shift the distribution of algorithms and flowcharts to Quarter 2, Year 2.

Activity 1.2. Improve access to and quality of febrile case management at public health facilities and at the community level to ensure prompt and accurate diagnosis and appropriate treatment of malaria.

In Quarter 4, with the NMCP and PNAPEs, IMaP reviewed and updated the APE training materials and conducted a two-day ToT in Nampula City involving 36 participants, most of whom were existing provincial trainers, of which four were from the provincial level (APE focal

point, SESP focal point, malaria focal point, and provincial pharmacy focal point). Each of the 12 districts also sent three participants, namely the APE district supervisor, malaria focal point, and SESP focal point. The 36 participants were divided in two classes. The first ToT took place from August 29 to 30, 2018, with participants from the districts of Lalaua, Ilha de Moçambique, Memba, Nampula, and Rapale. The second ToT occurred from August 31 to September 1, with participants from Malema, Erate, Nacala Porto, Nacala Velha, Mossuril, Mecuburi, and Monapo. Among the 36 APE trainers from the districts, 13 were female and 23 were male. The ToT included the following topics: district trainers' experience in working with APEs and the community; medicine management; community level barriers to care seeking behaviors; how to conduct lectures; how the APEs should perceive local myths and beliefs which interfere in pregnant women's adherence to ANC; barriers to access to treatment and the use of mosquito nets; interpersonal communication (IPC) and counseling; management of patients with fever and with severe illness; gender (male engagement); and, how to complete the health information system forms and the registry book. Exhibit 1 above presents a photo about an IPC practice session that occurred during the ToT in Nampula. Knowledge of 36 participants was measured through pre-test and post-tests, showing a slight increase from 79% (pre-test) to 88% (post-test). In Nampula, IMaP trained 36 trainers out of the 43 projected for Year 1, resulting in a 83.7% training achievement rate in Nampula.

Exhibit 1. Participants at the ToT for the APE refresher training in Nampula practicing interpersonal communication skills to address myths, August 30, 2018. Source: IMaP.

Following the two ToTs, IMaP conducted two rounds of three-day APE refresher trainings sequentially alongside the DPS in the 12 selected districts for Year 1. The same topics covered in the ToTs were covered during these refresher trainings. Training in each district was led by the three SDSMAS who participated in the ToTs of APEs namely, district supervisor, malaria focal point, and SESP focal point. The IMaP team formed groups of two people with the DPS staff members who participated in the ToT (one IMaP and one DPS) and supervised training in each district for one day. The first round took place from September 10 to 13, 2018, in nine districts in Nampula province: Nampula City, Rapale (see Exhibit 2, left), Mecuburi, Lalaua, Mossuril, Nacala Velha, Nacala Porto, Memba, and Ilha de Moçambique. The second occurred in the remaining three districts (Malema, Erati, and Monapo) from September 26 to 29. Through the sequential trainings, IMaP trained 492 APEs in Nampula, exceeding

Exhibit 2. Participants at the APE refresher training session in Rapale District, September 10 to 13, 2018. Source: IMaP.

its target goal of training 340 APEs in Nampula in Year 1. Based on the request of the provincial health director, IMaP did not conduct the APE refresher ToT or the APE refresher training in Zambézia during Year 1. The team shifted the trainings to Year 2.

During supervisory and mentoring visits, Clinical Provincial Specialist Calavete and SME Specialist Ismael conducted on-the-job trainings alongside DPS pharmacy and laboratory technicians to 261 health providers from diverse categories (48 pharmacists, 61 SMIs, 38 laboratory technicians, 100 curative medicine agents/technicians, 14 M&E officers) in Nampula in malaria diagnosis and treatment, antimalarial management, and SP administration. Exhibit 3 below provides an overview of the health personnel, disaggregated by cadre and sex, who took part in these on-the-job trainings. The team also identified problems and made recommendations at the following health facilities: Rural Hospital of Ribáuè, Pital, Health Center of Iapala Monapo, Health Center of Malema, Health Center of Nacala Velha, Health Center of Mossuril, Health Center of Ilha de Moçambique, Health Center of Mecuburi and Health Center of Memba.

Exhibit 3. Nampula Health Facility Staff Who Received On-The-Job Training During Supervisory Site Visits

Districts	Cadre								
	Health Facility	Number of Clinicians/SMI		Number of Laboratory Technician		Number of Pharmacy Technician		Number of M&E Officers	
		M	F	M	F	M	F	M	F
Angoche	Rural Hospital Angoche	7	8	3	0	2	1	1	0
	Health Center Nametoria	3	4	1	0	1	0	1	0
Monapo	District Hospital Monapo	4	2	1	1	2	0	1	0
	Health Center Monapo Sede	8	5	1	1	2	1	1	0
	Health Center Carapira	6	3	2	0	0	1	1	0
Nacala P	District Hospital Nacala Porto	9	4	2	0	2	0	1	0
Nampula	General Hospital Marere	9	5	2	1	1	3	1	0
Lalaua	Health Center Lalaua Sede	3	2	2	0	2	2	1	0
Ribáuè	Rural Hospital Ribáuè	10	8	1	1	2	1	0	0
	Health Center de Lapala Monapo	2	2	2	0	0	1	0	0
Malema	Health Center Malema Sede	4	3	2	1	1	1	1	0
Nacala V	Health Center Nacala Velha	3	2	1	0	2	1	1	0
Mossuril	Health Center Mossuril	4	1	1	0	1	2	1	0

Districts	Cadre								
	Health Facility	Number of Clinicians/SMI		Number of Laboratory Technician		Number of Pharmacy Technician		Number of M&E Officers	
		M	F	M	F	M	F	M	F
Ilha de Moçambique	Health Center Ilha de Moçambique	6	2	2	0	1	1	1	0
Mecuburi	Health Center Mecuburi Sede	4	2	1	1	2	0	0	0
Rapale	Health Center Rapale	5	3	3	1	2	2	0	0
Memba	Health Center Memba	5	2	2	1	4	0	1	0
Erate	District Hospital Erate	8	3	2	0	3	1	1	0
	Total	100	61	31	8	30	18	14	0

The supervisory and mentoring visits covered reference health facilities (health centers, district hospitals, and rural hospitals), as shown in the Exhibit 4 below. This exhibit also provides an overview of the sequence of visits conducted in the 14 districts in Nampula (Malema, Lalaua, Memba, Erate, Ilha de Moçambique, Nacala a Velha, Mossuril, Monapo, Nacala-Porto, Mecuburi, Rapale, Nampula City, Angoche and Ribáuè). With the completion of the supervisory and mentoring visits to the 14 districts, IMaP exceeded its projected coverage of 12 districts in Nampula in Year 1. In discussions with the DPS, we agreed to include two additional districts, Angoche and Ribáuè.

Exhibit 4. Supervisory and Mentoring Site Visits Conducted in District Hospitals and Reference Health Facilities in Year 1 in Nampula

District	Period	Health Facilities
Monapo	July 9 to 10	Health Center of Monapo Sede
		Health Center of Carapira
		District Hospital of Monapo
Nacala Porto	July 11 to 13	District Hospital of Nacala
Angoche	July 16 to 20	Health Center of Nametoria
		Rural Hospital of Angoche
Nampula Distrito	July 23	General Hospital of Marere
Lalaua	August 6	Health Center of Lalaua
Malema	August 9	Health Center of Malema
Nacala Velha	August 13	Health Center of Nacala Velha
Mossuril	August 14	Health Center of Mossuril
Mecuburi	August 20	Health Center of Mecuburi
Rapale	August 22	Health Center of Rapale
Memba	August 23	Health Center of Memba
Erati	August 24	District Hospital of Erati

District	Period	Health Facilities
Ribáuè	August 7	Rural Hospital Ribáuè
Ilha de Moçambique	August 16	Health Center Ilha de Moçambique

In Zambézia, from August to September, IMaP conducted supervisory and mentoring site visits to10 districts (Mocuba, Milange, Nicoadala, Gurué, Mocubela, Maganja da Costa, Quelimane, Namacurra, Ile and Namarroi) alongside a DPS team composed of the Malaria Program deputy focal point, SESP provincial head, and three SDSMAS health personnel from the City of Quelimane (medical doctor, general nurse, SMIs). The supervisory and mentoring team was divided into two groups to cover the largest number of districts in a month. In total, 95 health providers (seven general practitioners, 32 SMIs, 12 laboratory technicians, 12 pharmacists, 13 general nurses, one preventive medicine technician, three preventive medicine agents, 13 curative medicine technicians) received on-the-job trainings, as shown in the Exhibit 5 below. For the supervisory and mentoring visits for Maganja da Costa, Mocubela, Ile, and Alto Molucué districts, three groups were formed. One group visited the two neighboring districts, Maganja da Costa and Mocubela, while the other two groups visited one district each, Alto Molucué and Ile, respectively. The four districts were visited from 17 to 21 September. The supervisory and mentoring visits covered reference health facilities (health centers, district hospitals, and rural hospitals), as shown in the Exhibit 6 below. This exhibit also provides an overview of the sequence of visits conducted.

Exhibit 5. Health Facility Staff Provided On-the-Job Training during Supervisory and Mentoring Site Visits during Year 1 in Zambézia

District	SMI	General Nurse	General Medicine Agent	General Medicine Technician	Lab Technician	Pharmacy Technician	Preventive Medicine Technician	General Practitioner
Alto Molócue	2	0	0	2	1	1	0	0
Gurué	3	0	0	1	1	1	0	1
Maganja da Costa	1	0	0	1	1	1	0	1
Milange	5	6	1	2	0	1	0	0
Mocuba	6	2	2	0	1	2	0	2
Mocubela	2	0	0	0	1	0	0	0
Namacurra	5	2	0	5	3	3	1	2
Nicoadala	2	2	0	0	1	2	0	0
Quelimane	4	0	0	2	2	0	0	0
Ile	2	1	0	0	1	1	0	1
Total	**32**	**13**	**3**	**13**	**12**	**12**	**1**	**7**

Exhibit 6. Supervisory and Mentoring Site Visits Conducted in District Hospitals and Reference Health Facilities during Year 1 in Zambézia

Districts	Period	Health Facilities
Mocuba	July 30 to August 4	Health Center Mocuba Sisal
		Health Center Mocuba Sede
		Hospital Rural de Mocuba
		Health Center Pedreira
		Health Center Namagoa
		Health Center Samora Machel
Nicoadala	August 6 to 10	District Health Center
Namacurra		Health Center de Macuse
		Health Center Furquia
		Health Center Muebele
Gurué	August 6 to 10	District Hospital de Gurué
		Health Center Invinha
		Health Center de Gurué- sede
Milange	August 6 to 10	Rural Hospital de Milange
		Health Center Urbano
		Health Centeer Tengua
Quelimane	August 20 to 24	Health Center 17 de Setembro
		Health Centerr Coalane
Alto Molócue	September 17 to 21	District Health Center de Alto Molócue
ILe	September 17 to 21	District Health Center de ILe
Mocubela	September 17 to 21	District Health Center de Mocubela
Maganja da Costa	September 17 to 21	District Health Center de Maganja da Costa

Activity 1.3. Increase delivery of the full course of IPTp using sulphadoxine-pyrimethamine as part of an integrated package of antenatal visits.

In Zambézia, per the request of the provincial health director, instead of training APEs as was planned for Year 1, IMaP worked alongside the DPS to conduct a four-hour MIP training to 226 of the 335 who should have been trained, as shown in Exhibit 7 below. The training was conducted in each district during supervisory visits mentioned above. The health personnel trained were: 181 SMIs, 10 NED/ M&E officers, 36 other health personnel (16 general nurses, 11 preventive medicines and 9 pharmacy technicians). Topics covered in this training included: MIP with a focus on diagnosis, treatment, prophylaxis with SP; strategies for improving IPTp coverage rates; and, correct completion of the IPTp data collection system. The planned number was not reached because almost all activities in Zambézia were occurring within a space of one month. As a result, IMaP was unable to conduct the trainings in three districts Gile, Lugela, and Morrumbala) during Year 1. Trainings for the remaining 109 health personnel (80 from the three districts plus 29 from each district who did not attend the initial training have been shifted to Year 2. Knowledge of the 226 participants trained was measured through pre- and post-tests, the results of the tests are in the Exhibit 8.

Exhibit 7. Health Personnel Trained in IPTp in Zambézia in Year 1

Districts	Total Health Personnel		Maternal and Child Health Nurses		NED/ M&E Officers		Other health personnel trained		
	Projected to be trained	Actually Trained	Projected to be trained	Actually Trained	Projected to be trained	Actually Trained	General Nurses	Preventive Medicine Personnel	Pharmacy Tech-nicians
Alto Molocue	25	19	24	17	1	1	1	0	0
Gile	25	0	24	0	1	0	0	0	0
Gurue	30	28	29	20	1	1	2	4	1
Ile	25	21	24	17	1	1	2	1	0
Lugela	25	0	24	0	1	0	0	0	0
Maganja da Costa	25	19	24	10	1	1	0	3	5
Milange	30	28	29	25	1	1	2	0	0
Mocuba	30	26	29	23	1	1	2	0	0
Mocubela	15	14	14	7	1	1	2	1	3
Morrumbala	30	0	29	0	1	0	0	0	0
Namacura	25	28	24	22	1	1	3	2	0
Nicuadala	20	18	19	15	1	1	2	0	0
Quelimane	30	25	29	24	1	1	0	0	0
Total	**335**	**226**	**322**	**181**	**13**	**10**	**16**	**11**	**9**

Exhibit 8. IPTp Training Participants' Change in Knowledge Based on Pre- and Post-Tests in Zambézia in Year 1

District	Average Pre-Test Score	Average Post-Test Score
Mocuba	70%	81%
Milange	73%	80%
Gurué	60%	72%
Namacura	68%	74%
Quelimane	78%	82%
Nicoadala	63%	70%
Maganja da Costa	73%	78%
Mocubela	61%	72%
Ile	71%	80%
Alto Molocué	65%	85%
Total	**68%**	**76%**

Activity 1.4. Strengthen SBCC implementation.

During the second and third quarters, IMaP supported the VectorWorks-led school-based bed net distribution pilot study in Zambézia. Around 30,000 bed nets were distributed to first, third, and fifth grade students in 134 primary schools in Namarrói District to reinforce and strengthen the universal coverage campaign of ITNs, which occurs every three years nationwide in Mozambique. IMaP was one of several implementing partners that participate in this pilot. Specifically, in line with the project's objectives, IMaP supported message dissemination and community mobilization activities to promote the activity and the importance of the bed net distribution. IMaP also led the community-based SBCC activities through a grant to a local CBO targeted at schoolchildren and the general population to promote the importance of the bed net distribution as well as the correct and consistent use of the bed net.

As part of this support, IMaP's Chief of Party and SBCC TA worked with CIHO and the NMCP's communications team to develop a communication plan that outlined the communication needs and activities for this pilot. In March, IMaP's Chief of Party and SBCC TA participated in the week-long microplanning meeting in Quelimane. The SBCC TA also participated in the ToT for health and education staff. Following the ToT, these staff members

trained the directors of the school teachers, who distributed the bed nets to the students in the classes.

IMaP also took the lead in the production of the information, education, and communication (IEC) materials (13,400 double flyers, 700 posters A2, 5,700 flyers in two faces, 1,340 laminated) that were used by the teachers and school council members during and after the bed net distribution, which took place on May 22. The package of IEC materials was distributed the week of April 16, 2018, during which a joint NMCP-IMaP team trained the head of Pedagogic Influence Zones (ZIP) and Director of Schools of Namarrói on the IEC tools to be used before, during, and after the bed net distribution. As part of the supervision team, IMaP was responsible for assuring the distribution of the IEC materials to the 134 schools and guaranteeing correct and appropriate use of the materials. In the week of May 21 to 25, the distribution of bed nets took place in all 134 primary schools in Namarrói. IMaP also identified and subtracted with a community radio station in Namarrói, Rádio Comunitária de Namarrói, to produce and broadcast radio spots, live educational programs and debates, and dramas before, during, and after the school-based bed net distribution. Messages used in the materials and the broadcasted through the radio station and disseminated through the CBO focused on providing details regarding the distribution activity as well as information about the correct and consistent bed net use, by the schoolchildren and the population in general. Exhibit 9 below provides an overview of the broadcasting planned and performed for this activity.

Exhibit 9. Namarrói Bed Net Distribution Pilot Study Community-Based SBCC Activities Performed by Community Radio

Activities	Duration	Frequency	Total Broadcasted Radio Spots and Programs
Before Bed Net Distribution			
20-second radio spots on the use and care of bed nets	May 19 to 21, 2018	8 times per day, 3 days	24
During Bed Net Distribution			
20-second radio spots on the use and care of bed nets	May 22 to 27, 2018	8 times per day, 6 days	48
Magazine (call-in educational program) with health and education authorities talking about importance of protecting school children from malaria interactive discussions (debates	May 22 to 23, 2018	1 magazine produced and broadcasted during 2 days	2
Interactive discussions (debates with community leaders, teachers, and public in general) on the importance of protecting school children from malaria	May 22 to 27, 2018	1 debate produced and broadcasted during 6 days	6
Radionovela (radio drama)	May 22 to 27, 2018	1 radio drama produced and broadcasted twice during 1 week	2
After Bed Net Distribution			
20-second radio spots	May 28 to June 24, 2018	8 times per day, 28 days	224
Broadcasted educational programs	May 28 to June 24, 2018	2 magazines produced and broadcasted 1 time per week for 4 weeks	8

Activities	Duration	Frequency	Total Broadcasted Radio Spots and Programs
Interactive discussions	May 28 to June 24, 2018	2 debates produced and broadcasted twice per week for 4 weeks (one debate per week)	16
Radionovela (radio drama)	May 28 to June 24, 2018	2 radio dramas produced and broadcasted once per week for 2 weeks	4

During the fourth quarter, IMaP also awarded a grant to PFUNA -Associação de Apoio à Criança to work at the community level to support the school-based bed net distribution pilot by mobilizing and educating community leaders and the general population in the correct and consistent use of bed nets. Beginning on September 10, 2018, the CBO, PFUNA, received a grant of MZN 150,000.00 to support the activity for three months. Through this grant, the local CBO trained 43 volunteers to conduct door-to-door visits of households with families of first, third, and fifth grade students who received mosquito nets under the pilot program in May and meetings in the local markets. A total of 43 volunteers were trained, but only 23 were selected and are engaged in the activities. At the district level, it is normal practice to train a larger number of volunteers to ensure coverage. The selected volunteers worked 34 Influential Pedagogic Zones (ZIP) where the 134 primary schools are established in Namarrói District. The Zambézia district and community engagement specialist supported the training of the volunteers and currently supervises the activities on a monthly basis through field visits. Exhibits 10 and 11 are photos taken in Namarroi during the PFUNA training.

Exhibit 10. PHUNA activists before the training in Namarroi, September 2018. Source: IMaP.

The stakeholders involved in the school-based bed net distribution pilot study agreed that the activity was a "success" in terms of organization. All partners involved in the process (radio, school and ZIP directors, school counsels mobilizing students and their communities) agreed that communication was key to the success of this pilot. The partners conducted a preliminary evaluation, including the costs, which determined total cost of the effort to be USD $107,563.57. The IMaP involvement was determined to be USD $12,371.00, of which $5,352 was used for communication products (IEC materials and radio production and broadcasting).

World Malaria Day: In collaboration with the NMCP, IMaP supported the World Malaria Day activities on April 25, 2018, in Maputo, Nampula, and Zambézia. In Maputo, the activities included a public exhibition for students and teachers at the Universidade Pedagógica. The exhibition consisted of a display of IEC materials developed and used to support SBCC activities promoting the prevention, testing, and treatment of malaria. IMaP participated by providing samples of the material produced for the Namarrói school-based bed net distribution pilot study.

Exhibit 11. PHUNA activists after the training in Namarroi, September 2018. Source: IMaP.

This public exhibition was considered the central activity for the day and was attended by senior government and state officials, including the Minister of Health of Mozambique and the United States Ambassador for Mozambique. IMaP supported part of the logistics for the public exposition. In Zambézia, where the celebrations were held in Milange, IMaP supported the logistics of the media, assuring the transportation, accommodation, and per diem for the journalists traveling from outside Milange. In Nampula, IMaP supported the commemorative event with the production of banners, t-shirts, and hats.

Malaria Forum: On June 28, 2018, the MISAU organized a Malaria Forum, which was attended by the President of Mozambique, Filipe Jacinto Nyusi. More than 500 attendees from different social and political sectors were present and it was an opportunity to embrace high-level advocacy for malaria. Delegations came from all provinces and the organization of the event was possible due the collaboration of private sector partners and donors. IMaP supported the event by providing branded banners, roll-ups, and capulanas (traditional cloths dressed by women in Mozambique) with malaria messages.

Exhibit 12. Religious and community leaders at the Malaria Forum in Zambézia, August 2018. Source: IMaP.

In Zambézia, the IMaP team worked alongside the DPS to conduct the Malaria Forum, which was held on August 17, 2018, and was led by his Excellency Governor of the Province of Zambézia Dr. Abdul Razaque Nurmamad, in compliance with the recommendation of the national forum led by His Excellency President of the Republic of Mozambique. The event's main objectives were to present the current state of malaria in the province and to discuss the roles of the different segments of society in the fight against malaria. Representatives from the provincial government, district governors of all districts, heads of administrative posts, SDSMAS directors, cooperation partners, DPS advisory members, political, community and religious leaders, traditional medical practitioners, implementing partners, and other stakeholders all participated in this event (see Exhibit 12, right). During the presentation on the state of malaria in the province, the increase in malaria cases in the province was highlighted, noting poor sanitation and inconsistent use of the mosquito nets as the main causes. It was also mentioned that the diagnostic capacity was improving and demand for health services was also increasing. The

participants discussed the increase of malaria cases and concluded that there was a need for coordination to control the increase of malaria cases in Zambézia. It was recommended that forums such as this one be replicated at the district level.

IMaP did not conduct focus groups of stakeholders to identify needed adaptations to the national malaria SBCC package and linked activities as these activities were directly linked to the selection of the GUC-funded CSOs/CBOs. Since the selection process of the GUC-funded CSOs/CBOs did not begin until the fourth quarter of Year 1 and will only be completed during the first quarter of Year 2, IMaP shifted the implementation of these focus groups to the first quarter of Year 2. IMaP also did not work with NMCP and DEPROS to design a branded SBC and to conduct the review of the existing messages and materials during Year 1. IMaP will implement these activities with support of SBCC STTA in Quarter 1 of Year 2. The development of SBCC platform communication strategy have been shifted to Year 2 and will be implemented after the finalization of SBCC package by the STTA.

Activity 1.5. Support CSO/CBOs to implement malaria control activities.

During the second and third quarters, IMaP developed the mapping document for Nampula and Zambézia. The team collected information from implementing partners and stakeholders, including the Nampula and Zambézia DPS, NMCP, and PMI. This document provides information on the population, APEs, health facilities, health committees, implementing partners, CSOs/CBOs, and community radio stations located in the districts in each of the two provinces. It also includes information on the different health SBCC interventions that are being implemented at the provincial and district levels in the provinces. The document also includes information on demography, malaria incidence, IPTp coverage, distance from health committee or school to the health facility, distance from the health committee or school to central village, implementing partners in the area of malaria, press geographic outreach, CBOs/CSOs interventions areas, local languages, and services rendered at each health facility. Although completed for Nampula and Zambézia, the document is a working document and will be updated as needed, especially as the project expands to other districts, health facilities, and communities. The document will also be updated to include information on Cabo Delgado and Tete by the end of the first quarter of Year 2.

IMaP also completed the preselection of nine CSOs/CBOs in Nampula and eight in Zambézia during Quarter 4 instead of earlier in Year 1. The delayed finalization and approval of the Year 1 Work Plan Year 1 resulted in a delayed release of the request for application (RFA). IMaP released the RFA during the last quarter of Year 1 and conducted a workshop for preselected CSOs/CBOs. IMaP plans to conduct the final selection of the CSOs/CBOs during Quarter 1 in Year 2. Soon after IMaP selects the CSOs/CBOs to be funded through the grants under contract (GUC), the team will conduct a capacity needs assessment and create a capacity building plan based on its findings. The team will also conduct training to ensure that all CSOs/CBOs implement activities that are consistent and support IMaP at the community level. Additionally, once the SBCC package has been finalized, IMaP will train the selected CSOs/CBOs based on the package. Throughout CSO/CBO implementation, the team will conduct monthly supervisory site visits to CSOs/CBOs to monitor progress.

Activity 1.6. Conduct operations research.

The prioritization of research topics and their submission to PMI was shifted to Year 2.

Objective 2: Strengthen management capacity of the provincial and district Ministry of Health personnel to provide oversight and supervision of malaria interventions

Activity 2.1. Determine malaria-related health systems constraints and appropriate solutions.

IMaP postponed all of the activities linked to the capacity maturity needs assessment tool until Year 2. IMaP submitted the instrument to PMI for review and feedback at the beginning of Year 2. The process of receiving inputs to make the instrument more appropriate to the Malaria Program at provincial and district level is already occurring. The team plans to conduct trainings on the use of the instrument and implement the needs assessment in Quarter 1 of Year 2.

Activity 2.2. Increase management capacity of provincial and district health systems.

Since the capacity needs assessment tool was not finalized in Year 1, IMaP shifted assessing the DPS and the SDSMAS and analyzing data collected to Quarter 1 of Year 2. IMaP was also unable to conduct the quarterly one-day courses on topics related to planning, budgeting, and managing malaria programs and professional development because implementation of the Year 1 work plan did not take place until the fourth quarter. At that time, the DPS staff who were to work alongside IMaP were already engaged in other activities and were therefore unavailable. Learning from this experience, IMaP engaged the DPSs earlier in the Year 2 work planning process and attained agreement that DPS representatives would be available to begin working Year 2 activities as soon as the work plan was approved by USAID and the respective provincial health directors, which took place in late October.

Activity 2.3. Enhance quality of programmatic implementation through strengthened monitoring and mentorship at the district and facility level.

IMaP worked with the DPS to conduct supervisory and mentoring site visits in Nampula and Zambézia during in Quarter 4 (see Activity 1.2 above). Per the request of the NMCP and the DPSs, IMaP removed the regular touch-base phone calls between chief district officers (CDOs), provincial and district malaria focal points, and other DPS-identified staff and their mentees/supervisees from the Year 1 work plan. Both the NMCP and the DPSs did not find these calls to be necessary during Year 1.

Activity 2.4. Facilitate provincial-level coordination.

As part of the Year 1 work planning process, the IMaP team held work planning sessions at the central and provincial levels in Maputo, Quelimane, and Nampula in late January/early February 2018. During each session, IMaP provided an overview of the program, including its objectives, results framework, and approach. Mozambique NMCP Director and PMI representatives also presented. Each work planning session also included a questions and answers period and an open discussion period on four technical areas: case management, MIP, SBCC, and surveillance,

monitoring, and evaluation (SME). Based on requests from the respective provincial directors, IMaP did not hold or support the execution of the biannual meetings. In Nampula, the IMaP provincial team presented the Year 1 work plan to the head of the provincial malaria program in a joint meeting with PMI. The provincial director of health approved the Year 1 work plan soon after, and IMaP began implementation in July. In Zambézia, the Year 1 plan was presented to the respective provincial health director and it was approved at the same meeting and with an indication from the provincial health director that its implementation should be immediate. Given the late start of Year 1 activities, IMaP did not develop the capacity development management plan template and shifted this activity to Quarter 2 of Year 2.

Objective 3: Improve HMIS data reporting, analysis, and use at the provincial and district levels

Activity 3.1. Strengthen quality of routine data.

In Quarter 2, the SME STA, along with the other IMaP technical team members, participated in NMCP's work planning meeting to help the NMCP finalize its work plan. Participation in this meeting, particularly the SME breakout working group, provided the IMaP team members insight on how to align the project's SME activities to those of the NMCP. Some insights gleaned from the SME breakout working group included data quality improvement activities that were carried out during Year 1 and monitoring and control data collection and analysis of Malaria Strategic Plan.

During the third quarter of this reporting period, SME specialist Fernando Baloi worked in Zambézia with the Department of Planning and Cooperation and with the head of provincial malaria program to detail the implementation schedule of activities for the fourth quarter, which were pending approval by DPS. Mr. Baloi participated in the DPS malaria TWG meeting, consisting of Malaria Program staff and partners, in which the SDSMAS and other implementing partners worked together to prepare a provincial M&E workshop to strengthen the capacity of the SDSMAS M&E officers and those in charge of the NEDs to carry out activities aimed at improving data quality. The TWG developed the ToR for the M&E workshop, which included a training on DQA, analysis, and use for decision making. The workshop took place from May 6 to 10 at the DPS and aimed to improve data quality in program areas through the use of a DQA tool and analysis and use of data for evidence-based decision-making, the latter linked to IMaP's Activity 3.3, noted below. To build on the training conducted during the workshop, per the request of the Zambézia DPS, the districts have been encouraged to assess data quality during the fourth quarter (July to September 2018) using the DQA tool adapted by IMaP from HIV activities while the districts wait for the DQA tool currently under development at the central level.

Additionally, SME Specialist Fernando Baloi, in coordination with the DPS, identified and trained eight DPS staff members that already were part of supervisory team to prepare them for the M&E supervisory visits. During Quarter 4, the SME Specialist joined the monitoring team and visited three districts. In these districts the supervisory team checked the completion of registry forms in preparation of the monthly summaries. During the visit, they also provided on-the-job training to the APEs, health facility clinicians, and SMIs on how to complete the forms and how to prepare the monthly summaries. In the health facilities visited in Zambézia, it was

found that the SMIs are incorrectly reporting the total number of doses of SP that pregnant women receive during their ANC visits by registering that the women have received all three doses even when they only attended two instead of three ANC visits.

In Quarter 3, Nampula SME Specialist Ismael, along with the DPS M&E team, developed an Excel spreadsheet for monitoring the usage of indicators at the DPS and SDSMAS levels. The schedule of implementation of IMaP Year 1 was also developed in conjunction with the DPS and SDSMASs. In Nampula, data analysis was interrupted in November 2017 when the MCSP technical assistance ended. As a follow up, in May 2018, IMaP supported a technical meeting to analyze the performance of malaria indicators in the DPS. This meeting was a major step for the DPS, since all the district chief doctors participated along with the district focal points. During the meeting, participants conducted a profile analysis of the indicators (achievement of goals or not), identified points for improvement, exchanged experiences and lessons learned, focused on poorly performing districts, and designed an action plan with next steps for follow-up.
During the fourth quarter the SME Specialist in coordination with DPS - Head of Malaria Program of Nampula identified and trained three DPS staff members to be M&E supervisors. Topics included in the training were: indicators to report sources and periodicity; targets; how to calculate Malaria Program Indicators; how to obtain periodic data; ways of interacting with SDSMAS; role of the M&E team in the activities of the Malaria Program; management of the SIS-MA and how to obtain the data; triangulation of data among different sources, (register book, monthly health facility summary, monthly district summary, SIS-MA). The three newly trained joint supervisory teams, described in Activity 1.2, and visited the Monapo, Nacala Porto, and Angoche districts. The main findings they found are presented in Exhibit 13 below. During the fourth quarter, Mr. Ismael also helped to prepare the APE refresher training content on how to complete the data registry and how to develop the monthly summaries.

Exhibit 13. Main findings found in M&E visits in Nampula 2018

Districts	Health Facilities Visited	Main Findings in the Register Books	Main findings on monthly data
Nacala Porto	District Hospital	• Well-filled registry books, visible calligraphy	• Availability of monthly summaries in health facilities and SDSMAS;
	Health center of Namitora	• Registry books with readable handwriting and complete in most cases	• Existence of monthly summaries in the health facilities • Level of discrepancy between primary source, monthly summary, and SISMA • 5% acceptable for total malaria cases in June
Monapo	Health center	• Well-filled registry books, visible calligraphy	•
	Health center Carapira	• Well-filled registry books, calligraphy visible in most registry books	• Availability of monthly summaries in the health facilities

Districts	Health Facilities Visited	Main Findings in the Register Books	Main findings on monthly data
		• Existence of tools for registry of outpatient consultations	
Angoche	Rural Hospital de Angoche	• Registry books with well readable handwriting and filled completely in most cases	• Level of discrepancy among primary source, monthly summary and SIS-MA • Acceptable 9% for total malaria cases of June

During the third and fourth quarters of this reporting period, the SME STA participated in discussions about the data quality assessment (DQA) tool and M&E activities that support the NMCP's Strategic Plan. During the first meeting, it was decided that the Malaria Consortium would lead development of the DQA instrument, including checking on the WHO-developed Malaria Service Quality Improvement Instrument, with support from a subgroup of the SME TWG in which IMaP is a part. It was also decided that the NMCP would share the working draft of the Strategic Plan with partners to facilitate the development of the DQA tool. In June, the SME STA and HMIS Specialist Salimone Nhancume participated in a meeting during which the first draft of the DQA tool was presented. In August, Chief of Party Machatine organized a meeting at the IMaP office with the Malaria Consortium and other members of the subgroup to discuss the need to integrate the DQA process and tool with other documents that are currently under development, such as the Integrated Supervisory Manual and the SME Manual. During this meeting, it was also agreed that IMaP would pilot the DQA tool in selected districts in the IMaP-supported provinces. During a follow-up meeting led by NMCP Director Candrinho, subgroup members agreed on who would be responsible for the development of these guiding documents (Integrated Supervisory Manual and the SME Manual) or sections of the documents. Based on this meeting, IMaP, led by SME Specialist Fernando Baloi, mapped and reviewed indicators of the Malaria Strategic Plan (primary source, periodicity, and availability of access) and determined which would be incorporated in the manual.

Activity 3.2. Support utilization of DHIS-2, in alignment with the Mozambican MISAU priorities.

In the second and third quarters, IMaP developed the capacity building needs assessment tool to be used at the provincial and district level. The IMaP SME team developed the tool based on IMaP's adaptation of the Capacity Maturity Model and USAID guidelines. In particular, the SME team revisited the capacity assessment guides used by USAID-funded organizations to develop the assessment tool.

During the last quarter of Year 1, Mr. Ismael, in coordination with the DPS staff members conducted a meeting in the DPS in preparation for the cascaded training on the use and management of SIS-MA for the M&E technical staff and the malaria program managers for the 24 districts in Nampula. Additionally, to strengthen the use of SIS-MA, IMaP supported the DPS to perform triangulations and quality checks between the Boletim Epidemiológico Semanal (BES) data sheets and the monthly malaria summary. This exercise was performed at the DPS where data discrepancies between SIS-MA and BES were identified (e.g., the number of cases

among sources are different for the same period). There was also a discrepancy between treated malaria cases and diagnosed cases. Based on this activity, IMaP will work with DPS to prioritize its supervisory and mentoring visits to districts with the highest data discrepancies.

Activity 3.3. Strengthen data-informed decision-making, including management and supervision.

During Quarters 2 and 3 in Zambézia**,** SME Specialist Fernando Baloi and District and Community Engagement Specialist Inok Chiposse participated in a provincial level pharmacy and malaria meeting. This meeting, held from June 22 to 23 in Mocuba, provided a platform for participants to analyze data from the malaria program from September 2017 to March 2018 and to outline strategies to raise the level of performance. One of the constraints identified was the discrepancies between the report of positive cases for malaria and the total prescribed drugs administered. The following recommendations were made: provide technical support at the districts and health facility levels to ensure the quality of reported data; and revitalize monthly and quarterly data analysis meetings in the districts and health facilities to ensure that the data is valid and of good quality before they are uploaded onto SIS-MA. Both recommendations were accepted and incorporated for Year 2.

IMaP also held a meeting with the DPS team – Head of Public Health Department at DPS-Zambézia Dr. Filipe Vicente, Deputy Supervisor of Malaria Program Mr. Antonio and with the M&E Focal Point for the Malaria Program Idalina Mazivila – to discuss data analysis and usage to guide planning and evidence-based decision-making and to identify districts and health facilities that require technical support and supervision to strengthen capacity. During this meeting, it was determined that there is a need to hold quarterly data discussion meetings in each district with the participation of chief medical officers of all peripheral health facilities for data sharing, analysis, and discussion. It was also decided that DPS would reactivate monthly discussion meetings of the program data to facilitate validation of the data sent by the districts at the DPS by the fifth day of each month. IMaP accepted to support data analysis at the provincial level and preparation of an action plan for follow-up of recommendations.

In Nampula, the provincial IMaP team participated in the monthly data analysis meeting at the provincial level with the DPS staff. The meeting discussed the need for analysis and use of data and information sharing for decision making. In order to strengthen data quality and use of SIS-MA functionalities, IMaP and DPS performed a data analysis workshop based on SIS-MA Pivot Table.

In Quarter 4, SME Specialist Ismael, alongside with the DPS team participated in the discussion of data in three districts – Nampula, Erati, and Memba. The data analyzed in these three districts were: increased malaria cases, malaria deaths, second and fourth IPTp doses coverage, and the data discrepancy among registry book, monthly summary, and SIS-MA. It was determined that duplication of data recorded at the health facility and community to justify the recorded consumption of AL is one of the causes of increased malaria cases in the three Nampula City health facilities. The Muhala Expansão health facility presented greater data discrepancies, despite data cleaning performed. During the monthly provincial data analysis meeting in Nampula, the DPS felt that the increased reporting of deaths due to malaria was often due to the fact that deaths caused by other pathologies were reported as deaths due to malaria. During Year

2, IMaP will work with the DPS and DDS to determine to what extent this misclassification or other factors explain the increase in deaths. The low coverage of IPTp was found to be caused by the lack of cross-data on the number of pregnant women who came to the second ANC visit and those who came and received the second dose of IPTp. It should be noted that after each discussion, an action plan was drawn up for each district.

During Year 1, IMaP provided technical support to the review and revision of two newsletters in Quarters 1 and 2. Due to the lengthy approval process within the NMCP, the other two newsletters were not produced in Year 1, IMaP also supported the review and revision of the annual report, which was disseminated at the Malaria Technical Meeting in September 2018.

3. Monitoring and Evaluation of the Activity

During the second quarter, the IMaP SME team based in Maputo, met with the NCMP M&E team to discuss NMCP's data sources and flow. As a result of this meeting, the SME team had a better idea of the data sources available for IMaP's indicators and the the performance indicator reference sheets (PIRS), which would be important to monitoring and evaluating the project's performance and impact. Following the meeting, the IMaP SME team worked with the NMCP M&E team to collect the SIS-MA data identified to be needed for the project. In reviewing the data reported, the SME team observed inconsistencies in the numbers reported, including the number of confirmed malaria cases was less than the number of malaria cases treated and there were health facilities with a number of patients tested for malaria above the number of outpatient visits. As a result, in the third quarter, IMaP started to work with the NMCP to ensure that all validation rules have been automated in the malaria data entry forms in SIS-MA. In order to increase the NMCP's responsiveness, IMaP onboarded Guidion Mathe as a seconded data manager and M&E officer within the NMCP during the fourth quarter of Year 1, which has helped with the NMCP's responsiveness to IMaP's data needs. IMaP also started working with DPS and SDSMAS staff to use SIS-MA's automatic data quality monitoring reports and share the same inconsistencies with the health facilities in order to improve the collection, compilation, and analysis of data.

During Quarter 2, IMaP also initiated the development of the baseline study protocol to support its household survey component. However, this activity was discontinued in the third quarter because it was determined that results from the 2018 Malaria Indicator Survey (MIS) would be released at the end of September and the survey results could be used in lieu of the baseline household survey. IMaP used discussion of the proposed household baseline study as a kickoff to establish a relationship with Mozambique's National Institutes of Health (Instituto Nacional de Saúde, INS) for studies that will take place during Year 2.

In the second and third quarters, the IMaP team developed the MEL Plan and made additional revisions based on the changes made to the Year 1 work plan, including the PIRS for each indicator. The MEL plan was submitted to USAID/PMI in Quarter 3 of 2018, which was approved and shared with the NMCP in early June. As part of the process of finalizing the plan, the SME team worked with Mozambique Monitoring and Evaluation Mechanism and Services and PMI to revise the indicators so that they align with PMI requirements and the Year 1 work

plan. This resulted in some of the original indicators to be reformulated or removed and new indicators added to the indicator table, which are presented in the MEL Plan.

Lastly, the outgoing SME STA started drafting the organizational capacity maturity needs assessment tool based on IMaP's adaptation of the Capacity Maturity Model, although it was not shared with USAID/PMI until the beginning of Year 2.

4. Challenges and Actions Taken to Meet Targets

- **Staffing:** During the first part of Year 1, IMaP focused on fully staffing its offices in Maputo, Quelimane, and Nampula. With a few candidates declining their proposed position in IMaP upon award, the IMaP team had to re-recruit for a few positions, including the clinical STA and the Zambézia provincial manager. For most of the year, the Maputo office was fully-staffed, with most of the central level staff beginning during the second quarter and the clinical STA beginning a little later in April. However, two of IMaP's key personnel (technical director and the SME STA) resigned in early September. Candidates for these two positions have since been identified and received USAID approval. The new technical director, Zulmira da Silva, will begin on October 22, 2108, while the new SME STA, Gilberto Muai, will begin in November 2018. Additionally, to further support the NMCP and provide IMaP access to SISMA, IMaP has placed a seconded staff member at the NMCP. Guidion Mathe, data manager and M&E officer, joined the team in August 2018.

  In the first two provinces, most provincial team members began during Quarter 3. Garnering buy-in from the central and provincial level governments on some of the positions, such as the provincial manager, resulting in a process that took longer than expected and caused delays in completing the provincial teams. For example, the Zambézia provincial manager was not identified until July. IMaP had to re-start the recruitment process once the DPS and NMCP did not provide their concurrence for the top candidate in the initial round. Their request was that IMaP recruit a doctor for the position with substantial malaria experience. Through this experience, the IMaP team has learned that we must attain the buy-in of the DPS and the NMCP before moving forward with the top candidates for any provincial level position. As such, for Cabo Delgado and Tete, we began the recruitment process earlier and allocated time for their review of the top candidates for each provincial manager and technical position as part of the recruitment process. This includes providing the candidates' profiles and CVs and awaiting feedback from the NMCP director and the provincial health director before completing the recruitment process. At the end of Year 1, IMaP had completed the recruitment of the provincial teams for the two new provinces, including presenting candidates to the NCMP director and the provincial health director for their review and concurrence. Other than the provincial manager for Cabo Delgado, all candidates received concurrence and will be presented to USAID for salary approval during the first month of Year 2.

- **Monitoring and Evaluation:** Some of IMaP's indicators are linked to the MISAU's SIS-MA, making the project dependent on the availability of data and the MISAU's staff member to provide this data. Unfortunately, initially, the focal person for providing the necessary data

was not been available to meet with the IMaP SME team. This resulted in our team having to work with others who do not have all of the necessary information. To address this challenge, the IMaP SME team worked with the NMCP SME team during the second and third quarters to attain this information for baseline. IMaP continued to work with the NMCP to facilitate access to needed data. The SME team intends to set up a data collection system so that the necessary data can be collected in the frequency described in the indicator table and the PIRS. Additionally, as mentioned above, in September, IMaP transitioned the MCSP data manager and M&E officer seconded to the NMCP to support the NCMP as well as to increase IMaP's access to data that is key to the project.

- **Implementation of Activities in Year:** Given the delays in finalizing the Year 1 Work Plan and MEL Plan, there was less time to implement the activities and achieve goals planned for the first year of the project. In Nampula, after presenting the Year I Work Plan to the DPS, we have begun to overcome this challenge by working with the DPS to develop a detailed implementation schedule of activities for the fourth quarter. In Zambézia, the process has been somewhat slower, and Year 1 Work Plan was only presented during the first half of July. This delay was due the Provincial Director of Health's availability. Learning from this experience, we have established a timeline for Year 2 work planning that will provide us time to work with each DPS and key provincial stakeholders to determine which activities will be implemented in Year 2 in each province based on IMaP's objectives, PMI's Malaria Operational Plan, the Malaria Strategic Plan, and each province's goals for malaria control. We have also allocated time for IMaP partners (FHI and VUMC-FGH) to review the documents alongside Chemonics to ensure that the work plan and the MEL plan are technically sound. Once the Year 2 Work Plan is approved by USAID, we will work quickly with each DPS to determine a month-by-month schedule for achieving each activity described in the work plan.

- **Use of SIS-MA**: The provinces do not have access to the SIS-MA to visualize malaria data, which limits IMaP's ability to support to DPSs. To overcome this situation, the provincial SME specialists will work alongside the DPS team to access and view the SIS-MA, whenever necessary. This working relationship will benefit IMaP and each DPS. Since MISAU does not provide SIS-MA credentials to implementing partners, IMaP must rely on the DPSs' access to the system. Although a possible implementation challenge since we will be dependent on the DPSs, working side-by-side with the DPSs will help to strengthen their capacity in using SIS-MA and analyzing and using the data in the system for improved decision-making. Additionally, IMaP will be working with MCSP to transition the M&E manager, Guidion Mathe, seconded to the NMCP from MCSP to IMaP. The M&E manager will continue to support the NMCP activities in HIS. His new relationship with IMaP will be beneficial as he will be able to support our need to have access to SIS-MA so that we can use the data to better provide technical assistance to the four provinces and NMCP.

5. Activities Planned Shifted to Year 2

As mentioned above, IMaP experienced a few delays in initiating implementation. As such, certain activities that had been planned for Year 1 were either removed based on feedback from

the NMCP and the two provinces (Nampula and Zambézia) or were not completed by the end of the first project year. Activities that were not completed by September 30 but are part of the activities that will continue in Year 2, have been already been incorporated into the Year 2 work plan and will be implemented during the first quarter of Year 2. Annex C provides an overview of which Year 1 activities were completed or not.

Annex A: Year 1 Updated Year 1 Activities Chart by Objective

The exhibit below presents an update of the Year 1 activities by objective.

Activities	Resources, person responsible	Status (Done, Ongoing, Not Done)
Objective 1: Support the implementation of proven malaria interventions at community and facility levels, in alignment with NMSP		
Activity 1.1. Strengthen national malaria policies, strategies, and guidelines.		
1.1.1. Support NMCP to coordinate malaria-related technical working groups (TWGs), particularly case management (medicines, lab), malaria in pregnancy, surveillance, monitoring, and evaluation (SME), and social and behavior change communications (SBCC)		
As secretariat, provide technical support to the NMCP and TWG leads to coordinate quarterly TWG meetings, including development of agendas, invitations, meeting notes	Chief of party, Technical director, Technical advisors	Activity removed during Year 1 Work Plan presentation to NMCP. NMCP did not find activity relevant to Year 1.
1.1.2. With NMCP, identify and review national malaria policies, strategies, and guidelines and gauge national policy progress, particularly in areas related to malaria case management, SBCC, and SME		
Support NMCP to review and update communication strategy and submit to coordination group led by Director NMCP and IPs of malaria	Chief of party, Technical director, Technical advisors	SBCC TA helped to develop the terms of reference for the recruitment of the consultant who will develop the communication strategy
Review and update integrated supervision manual and submit to coordination group		Clinical STA Rosalia Mutemba is developing the manual in coordination with CHAI and NMCP. The first draft was presented at the Malaria technical meeting on 29 September.
Reproduce 1,400 ANC/IPTp algorithms and flowchart for distribution to 440 health facilities in Zambézia and Nampula		Activity was shifted to be implemented in Quarter 2 of Year 2 because there was a delay in attaining MISAU approval for the posters.
Include gender equity as recurring topic in TWG meeting agendas at least once in SBCC TWG	SBCC STA	Activity removed at the request of NMCP because the current communication strategy already has a gender focus.
1.1.3. Support Zambézia and Nampula DPS and DDS to access guidelines available at NMCP level.		
Support NMCP to develop effective distribution plan for disseminating guidelines and other documents with provinces	Chief of party, Technical director, Clinical STA	Activity removed as the NMCP did not find relevance for Year 1

Activities	Resources, person responsible	Status (Done, Ongoing, Not Done)
Support distribution (with transport) of available printed guidelines and other documents during supervisory and mentoring visits.		Activity removed as the NMCP did not find relevance for Year 1
Support electronic distribution of available guidelines and other documents		Activity removed as the NMCP did not find relevance for Year 1
1.1.4. Support NMCP to hold annual malaria meeting		
Support NMCP and annual meeting secretariat to develop terms of reference for annual meeting and presentations in key thematic areas (case management, SBCC, and SME).	Technical director, Technical advisors, Provincial managers	COP Gertrudes Machatine participated in two preparatory meetings, one to review the TOR and the agenda and the second to discuss the topics before being presented at the meeting
Support Zambézia and Nampula DPS to prepare reports, presentations, and other documentation to be presented at the annual meeting		Activity removed, the provinces have not made presentations or participated in the technical discussions
Support participation of three representatives from each province at annual meeting		IMaP paid the accommodation of the participants from provinces to the value of 619,048 MZN
Activity 1.2. Improve access to and quality of febrile case management at public health facilities and at the community level to ensure prompt and accurate diagnosis and appropriate treatment of malaria.		
1.2.1. Support NMCP, National APE Program, and Zambézia and Nampula DPS to develop and conduct APE refresh training covering malaria integrated community case management, gender, SBCC, and quality data recording and reporting system.		
Work with NMCP and APE Program to review and update APES training materials	Clinical STA, SME STA, SBCC STA, Provincial teams	Completed
Conduct and facilitate provincial level two-day APE refresher training TOTs in Quelimane and Nampula (46 participants for Zambézia and 43 for Nampula – first round; 31 participants for Zambézia and 40 for Nampula – second round)		• The TOT was completed in Nampula. • In Zambézia, per the request of the provincial health director, the trainings will be completed in Year 2.
Conduct and supervise cascaded three-day APE refresher training in districts (417 APEs in Zambézia and 340 in Nampula – first round; 213 in Zambézia and 434 in Nampula – second round)		• The refresher training was completed in Nampula and the projected participant number was exceeded. • In Zambézia, per the request of the provincial health director, the trainings will be completed in Year 2.

Activities	Resources, person responsible	Status (Done, Ongoing, Not Done)
1.2.2. Support NMCP, DPS, and DDS to support capacity building of district and provincial APE focal points and clinicians who supervise APEs to strengthen supportive relationships with APEs, in coordination with other organizations supporting APEs		
With provincial and district APE, conduct quarterly visits to two health facilities and three APEs and their community and health committees in districts in Zambézia (13) and Nampula (12)	Provincial teams	Activity was shifted to Year 2 because work with the districts in Nampula began in July and in Zambézia in August, which did not give sufficient time to conduct quarterly visits.
With provincial and district APE, provide additional on-the-job training and mentoring on building supportive relationships with APEs to APE supervisors, including using monthly supply refill encounters to identify and address issues, distributing job aids, and use of multiple communication channels between face-to-face encounters		Activity was shifted to Year 2 because work with the districts in the Province of Nampula began in July and in Zambézia in August, which did not give sufficient time to conduct on-the-job trainings.
1.2.3. Work with NMCP and DPS to strengthen DDS through supervisory and mentoring visits to the health facilities and other case management related capacity building activities, based on capacity needs assessment findings and other data.		
Participate in NMCP, MCSP, and GFTAM-led cascaded malaria case management training for clinicians at provincial level (Zambézia and Nampula)	Chief of party, Clinical STA, SME STA	Completed. The IMaP technical team participated in the training that took place throughout Year 1.
With DPS and DDS, conduct quarterly supervisory and mentoring visits at district health facilities and hospitals in Zambézia and Nampula (on malaria diagnosis and treatment and pharmacy - in collaboration with GHSC-PSM)	Clinical STA, Provincial clinical specialists	• Carried out supervisory and mentoring visits in 10 of the 13 districts planned for Year 1 in Zambézia. • Exceeded in Nampula by carrying out supervisory and mentoring visits in 14 of the 12 planned districts.
Work with DPS and DDS to follow through with action plan developed at visits to address challenges and other issues encountered at health facility		Completed
With NMCP, GHSC-PSM, CMAM, participate in Commodity and Procurement TWG through the Case Management TWG	Chief of party, Clinical STA, Technical director	Completed
Activity 1.3. Increase delivery of the full course of IPTp using sulphadoxine-pyrimethamine as part of an integrated package of antenatal visits.		

Activities	Resources, person responsible	Status (Done, Ongoing, Not Done)
1.3.1. Work with DPS and DDS, to build capacity of health facility staff and APEs to address gender barriers in their work and encourage ANC visit to increase delivery of the full course of IPTp, as part of Activities		
Integrate and mainstream gender as well as best practiced community-based SBCC approaches, such as IPC and group meetings and discussions, into the APE refresher trainings	Clinical STA, SBCC STA, Provincial clinical specialists, District and community engagement specialists	Completed
Activity 1.4. Strengthen SBCC implementation.		
1.4.1. In coordination with NMCP, DEPROS, and DPS, design and harmonize SBCC package for health facilities and communities in Nampula and Zambézia in support of IMaP's branded SBC platform.		
Conduct focus groups of stakeholders to identify needed adaptations to SBCC package and complementary efforts.	SBCC STA, District and community engagement specialists	Activity to be implemented in Year 2, after the finalization of SBCC package by STTA in Quarter 1
With NMCP and DEPROS, design branded SBC platform		Activity to be implemented with STTA in Quarter 1 of Year 2
With NMCP and DEPROS, conduct inventory and any needed adaptations of existing messages and materials		Activity to be implemented with STTA in Quarter 1 of Year 2
With NMCP and DEPROS, develop SBCC platform communication strategy.		National Communication and Advocacy Strategy will be developed by a consultant hired by the NMCP with funds from Roll Back Malaria in Year 2, probably in Quarter 2
Participate in preparation activities in support of the school-based bed net distribution pilot study in Namarroi, including the microplanning, TOTs, and the cascaded trainings.	Chief of party, SBCC STA, District and community engagement specialist	Completed
Collaborate and participate in development, production, and distribution of materials in support of the school-based bed net distribution pilot study in Namarroi		Completed
Activity 1.5. Support CSO/CBOs to implement malaria control activities.		
1.5.1. Conduct mapping exercise of existing CSOs/CBOs in IMaP target areas, leveraging available mapping information collected by other stakeholders. Of IMaP intervention	Chief of party, Technical director	Completed

Activities	Resources, person responsible	Status (Done, Ongoing, Not Done)
1.5.2. Support selected CSOs/CBOs with GUCs and capacity building, enabling them to implement community-based SBCC interventions Zambézia and Nampula.		
Develop and finalize the Grants Manual to guide GUCs to be provided to support community-based malaria control activities.	Grants specialist STTA	Completed
Develop and release a GUC RFA announcing funding to support community-based SBCC malaria control activities	Subcontracts and grants manager, Guedes, SBCC STA	Completed
Conduct selection process and identify CSOs/CBOs (2 per province) to receive GUC to support community-based malaria control activities	Subcontracts and grants manager, Guedes, SBCC STA, district and community engagement specialists	• Completed the pre-selection of nine CSOs/CBOs in Nampula and seven in Zambézia. • Final selection of the initial six CSOs/CBOs in Nampula and Zambézia will take place during Quarter 1 of Year 2.
Assess the capacity of CSOs/CBOs with the UNDP CSO Capacity Assessment Tool to tailor capacity building as part of the GUCs	Provincial manager, provincial SME specialist, district and community engagement specialists	To be implemented after the final selection process of CSOs/CBOs
Create and implement a capacity building plan for CSOs/CBOs		To be implemented after the final selection process of CSOs/CBOs
Conduct monthly supervisory visits to grantee CSOs/CBOs to monitor implementation and progress	District and community engagement specialists	To be completed during the implementation of CSO/CBO GUC-funded activities in Year 2.
1.5.3. Support selected CSOs/CBOs with GUCs and capacity building, enabling them to implement community-based SBCC interventions in support of the school-based bed net distribution pilot study in Namarroi District in Zambézia province.		
Develop and release a GUC RFA announcing funding to support community-based SBCC malaria control activities	Chief of party, SBCC STA, Subcontracts and grants manager, Director of finance and operations	Completed
Conduct selection process and identify CSO/CBO to receive GUC to support community-based SBCC interventions in support of the school-based bed net distribution study in Namarroi		Completed

Activities	Resources, person responsible	Status (Done, Ongoing, Not Done)
Work with community radio station in Namarroi to produce and broadcast gender sensitive radio spots and programs in support of the school-based bed net distribution study	SBCC STA, Provincial manager, District and community engagement specialists	Completed
Activity 1.6. Conduct operations research.		
1.6.1. In collaboration with the NMCP and INS, update and prioritize the list of research topics for OR and submit them to PMI for approval	Chief of party, SME STA, HMIS specialist	Activity was shifted to be implemented in Year 2.
Objective 2: Strengthen management capacity of the provincial and district Ministry of Health personnel to provide oversight and supervision of malaria interventions		
Activity 2.1. Determine malaria-related health systems constraints and appropriate solutions.		
2.1.1. Develop and conduct the organizational capacity needs assessment based on the IMaP-adapted Capacity Maturity Model to determine the constraints and solutions faced at the provincial and district levels, including but not limited to health facility and laboratory.		
Develop and submit organizational capacity needs assessment instrument to NMCP and PMI for feedback and support	SME STA, HMIS specialist	Submitted to PMI for feedback and support in the beginning of Year 2. Still need to submit to NMCP for feedback and support.
Conduct needs assessment in Zambézia and Nampula DPS	SME STA, HMIS specialist, provincial teams	Activity was shifted to be implemented in Year 2.
Train six DPS officials in Zambézia and Nampula on how to use capacity needs assessment instrument and analyze data collected		
In coordination with Zambézia and Nampula DPS, conduct capacity needs assessment in four districts per month in 13 and 12 first round of districts		
Present capacity needs assessment findings and develop district action plans and solutions		
Activity 2.2. Increase management capacity of provincial and district health systems.		
2.2.1. With DPS and DDS, conduct needs assessments for key malaria interventions, gender, motivation, and enabling environment issues, as well as overall planning, budgeting, and management capacities.		
Assess DPS with SME focal point and lead DPS in self-assessment.	SME STA, Provincial SME specialists	Activity was shifted to be implemented in Year 2.

Activities	Resources, person responsible	Status (Done, Ongoing, Not Done)
Train DPS on DDS needs assessment and accompany them on first district/facility-level assessment.		
2.2.3. Support DPS M&E focal point with analysis of needs assessment results to develop responsive, evidence-based management capacity development plans for technical and operational capacity for DPS and their DDS. Conduct quarterly one-day courses on topics related to planning, budgeting, and managing malaria programs and professional development	Provincial teams	
Activity 2.3. Enhance quality of programmatic implementation through strengthened monitoring and mentorship at the district and facility level.		
2.3.1. Support DPS to develop the mentoring competencies of CDOs, provincial and district malaria focal points, and other DPS-identified key staff to foster a supportive environment for continued learning and professional development.		
Participate in DPS mentors' quarterly site visits to district center health facilities and central and general hospitals in the 13 and 12 first round of districts of Zambézia and Nampula, respectively to coaching them as they mentor and coach DDS officials and clinicians	Clinical provincial specialists	Completed
Participate in regular "touch base" phone calls between CDOs, provincial and district malaria focal points, and other DPS-identified key staff and their mentees/supervisees.		Activity removed NMCP and DPS did not find relevant for Year 1.
Develop management capacity development plan template to be use by DPS	Clinical STA, clinical provincial specialists	Activity was shifted to be implemented in Year 2.
Activity 2.4. Facilitate provincial-level coordination.		
2.4.1. Present IMaP's Year 1 Work Plan to NMCP and Zambézia and Nampula for review, feedback, and concurrence	Chief of party, Technical director, provincial managers	Completed
2.4.2. Hold launch event for IMaP in Zambézia and Nampula to present plan to MISAU, NMCP, and other malaria partners	Chief of party, Technical director, technical advisors	Completed
Activity 2.5. Support coordination of provincial and district malaria activities.		

Activities	Resources, person responsible	Status (Done, Ongoing, Not Done)
2.5.1. Support DPS to continue conducting semiannual planning and coordination meetings with malaria partners to develop work plans that delineate how partners work together to achieve improvements, how to add efficiency, and how key crosscutting issues are being incorporated.		
Support DPS to schedule and conduct biannual meeting	Provincial managers and teams	Per the provincial health directors, this activity was shifted to Year 2.
Work with DPS and malaria partners to develop the meeting		
Objective 3. Improve HMIS data reporting, analysis, and use at the provincial and district levels		
Activity 3.1. Strengthen quality of routine data.		
3.1.1. Support the NMCP in supervising and mentoring technicians responsible for the registration, elaboration of monthly summaries, and data entry.		
In coordination with DPS, identify four technicians per province (Zambézia and Nampula) to train as effective M&E supervisors	SME STA, provincial SME specialists, HMIS specialist	Completed
Quarterly, work with DPS to over M&E supervisors conducting supervisory and mentoring visits to DDS and health facilities.		
3.1.2. Provide technical assistance to NMCP to establish predetermined cut-offs for data deviations, indicating a good, moderate, and low quality based on the data quality standards set by USAID.	SME STA, HMIS specialist	Completed
Along with NMCP and Malaria Consortium, review and develop DQA tool	SME STA, HMIS specialist	First draft of DQA tool presented at National Malaria Technical meeting in September 29. The activity is ongoing.
Activity 3.2. Support utilization of DHIS-2, in alignment with the Mozambican MISAU priorities.		
3.2.1. With NMCP/DIS, identify current SIS-MA priorities	HMIS specialist	Completed
Activity 3.3. Strengthen data-informed decision-making, including management and supervision.		
3.3.1. Conduct the baseline study at provincial and district level		
Develop baseline study (household survey) protocol to be submitted to the National Health Bioethics Committee for IRB approval	Chief of party, SME STA, HMIS specialist	The household survey was developed based on the standard questions of the Malaria indicator survey (MIS). As the MIS data would be released in September 2018, the baseline activity was discontinued.
Develop baseline study terms of reference for local M&E organization		

Activities	Resources, person responsible	Status (Done, Ongoing, Not Done)
Through transparent, procurement process, identify independent local M&E organization to conduct the baseline (contest and hiring)		
Supervise implementation of baseline study in Zambézia and Nampula		
3.3.2. Assist technically four districts in Zambézia and Nampula quarterly in statistics of statistics to be presented at provincial data discussion meetings	SME provincial specialists	Completed
3.3.3. Participate with DPS in monthly data discussion in at least one district per quarter in each province (Zambézia and Nampula) Identify monthly, based on routine data, districts with largest data discrepancy	SME provincial specialists	Completed
3.3.4. With NMCP and other partners, develop Quarterly Malaria Newsletter	SBCC STA, SME STA, HMIS specialist	Supported the NMCP in the review and revision of two newsletters in Quarters 1 and 2. There was delay in approving the first two newsletters that were produced, which caused for them not to be disseminated. Additionally, the second two were not produced.
3.3.5. Provide technical assistance to NMCP to develop 2017 annual report	SME STA, HMIS specialist	Supported the NMCP in the review and revision of the annual report, which was disseminated at the Malaria Technical Meeting in September 2018.

Annex B: Measuring Performance

Project Goal: Reduce malaria-associated mortality, morbidity, and parasitemia in four targeted provinces of Mozambique										
Performance Indicators	**Baseline**	**FY 2018**				**LOP Total**	**LOP Target**	**% LOP**	**Annual Progress**	**LOP Analyses**
		Q1	**Q2**	**Q3**	**Q4**					
1. Percent of inpatient deaths in targeted provinces whose primary cause was malaria (Impact/Custom)	6%					8.5%	2%			
2. Incidence of malaria per 1000 persons in targeted provinces (Impact/Custom)	317.5					360	252			
Objective 1: Support implementation of proven malaria interventions in alignment with the NMSP										
IR 1.1: Strengthen national malaria policies, strategies, and guidelines										
3. Number of strategic planning meetings held with NMCP staff to prioritize malaria policies, strategies, and guidelines for review (Output/Custom)	0	0	0	0	2	2	20	10%		
4. Number of national malaria policies, strategies, and guidelines updated to meet international standards in concurrence with focal people within NMCP and MOH (Output/Custom)	0	0	0	0	0	0	10	0%		
5. Number of malaria policies, strategies, and guidelines distributed to DPS and SDSMAS as result of national coordination activities (Outcome/ Custom)	0	0	0	0	0	0	10	0%		
IR 1.2: Improve access to and quality of febrile case management at public health facilities and at the community level to ensure prompt and accurate diagnosis and appropriate treatment of malaria										
6. Percent of APEs in targeted district who have stock outs of malaria commodities at least once	TBD based on APEs report and included in	0	0	0	0	0	TBD	0%		

Project Goal: Reduce malaria-associated mortality, morbidity, and parasitemia in four targeted provinces of Mozambique										
Performance Indicators	**Baseline**	**FY 2018**				**LOP Total**	**LOP Target**	**% LOP**	**Annual Progress**	**LOP Analyses**
		Q1	**Q2**	**Q3**	**Q4**					
in the last 12 months (Output/Custom)	the MEL Plan Y2									
7. Percent of health facilities in targeted district with staff trained in malaria laboratory diagnostics practices (rapid diagnostic tests, RDTs, or microscopy) with USG funds in the last 12 months (Output/Custom)	0%	0	0	0	12.2%	12.2%	95%	0%		
8. Percent of health facilities in targeted district with staff trained in established malaria case management practices with USG funds in the last 12 months (Output/Custom)	0%	0	0	0	12.2%	12.2%	95%	0%		
9. Percent of clinicians in targeted district who received on the job training or supervision in malaria case management in the last three months (Outcome/ Custom)	0%	0	0	0	40%	40%	95%	45%		
10. Number of health workers in targeted districts trained in malaria laboratory diagnostics (rapid diagnostic tests, RDTs, or microscopy) with USG funds (Output/Contract)	0	0	0	0	226	226	16000	1.4%		
11. Percentage of children under five with fever who were tested for malaria (Outcome/ Custom)	TBD based on MIS 2018 report and included in the MEL Plan Y2	0	0	0	0	0	TBD	0%		

Project Goal: Reduce malaria-associated mortality, morbidity, and parasitemia in four targeted provinces of Mozambique										
Performance Indicators	**Baseline**	**FY 2018**				**LOP Total**	**LOP Target**	**% LOP**	**Annual Progress**	**LOP Analyses**
		Q1	**Q2**	**Q3**	**Q4**					
12. Percent of malaria test with positive result in targeted provinces (Outcome/ Custom)	59%	0	0	0	59.6%	59.6%	33%	-0.34%		
13. Percentage of children under five years of age who were tested positive for malaria and who received treatment (Outcome/ Custom)	97%	0	0	0	51%	51%	100%	-52%		
14. Percentage of health facilities in targeted district who reported stockout of at least one consumables, ACTs, SP, RDTs, or mosquito nets in ANC for a period greater than or equal to seven days in the last month (Outcome/ Custom)	TBD based on MIS 2018 report and included in the MEL Plan Y2	0	0	0	0	0	TBD	0%		
15. Percent of children receiving an ACT among children under five years old with fever in the last two weeks who received any antimalarial drugs (Outcome/ Contract)	TBD based on MIS 2018 report and included in the MEL Plan Y2	0	0	0	0	0	TBD	0%		
16. Percent of children under five years old with fever in the last two weeks who had a finger or heel stick (Outcome/ Contract)	TBD based on MIS 2018 report and included in the MEL Plan Y2	0	0	0	0	0	TBD	0%		
17. Number of health workers in targeted district trained in case management with artemisinin-based combination therapy (ACTs) with USG funds (Outcome/ Contract)	0%	0	0	0	513	513	16250	3.2%		

Project Goal: Reduce malaria-associated mortality, morbidity, and parasitemia in four targeted provinces of Mozambique										
Performance Indicators	**Baseline**	**FY 2018**				**LOP Total**	**LOP Target**	**% LOP**	**Annual Progress**	**LOP Analyses**
		Q1	**Q2**	**Q3**	**Q4**					
IR 1.3: Increased delivery of the full course of IPTp using sulfadoxine-pyrimethamine as part of an integrated package of antenatal services										
18. Percent of health facilities in targeted districts with at least one staff trained in preventive treatment in pregnancy (IPTp) with USG funds in the last 12 months (Output/Custom)	0%	0	0	0	16.9%	16.9%	100%	16.9%		
19. Percent of health workers in targeted district trained in IPTp with USG funds in the last 12 months (Output/Contract)	0%	0	0	0	16.3%	16.3%	100%	16.3%		
20. Percent of maternal and child health nurses in targeted district who received on-the-job training or supervision on IPTp in the last three months (Output/Custom)	0%	0	0	0	12.7%	12.7%	95%	12.7%		
21. Percent of women who received two or more doses of IPTp during their last pregnancy in in the last 12 months (Outcome/ Contract)	0%	0	0	0	0	0	100%	0%		
22. Percent of women who received three or more doses of IPTp during their last pregnancy in in the last 12 months (Outcome/ Custom)	0%	0	0	0	0	0	100%	0%		
IR 1.4: SBCC implementation strengthened										
23. Number of SBCC community-based events held to promote malaria care seeking/treatment held at district, health facility, community, and household levels in target provinces (Output/Custom)	0	0	0	0	0	0	4279	0%		

Project Goal: Reduce malaria-associated mortality, morbidity, and parasitemia in four targeted provinces of Mozambique										
Performance Indicators	**Baseline**	**FY 2018**				**LOP Total**	**LOP Target**	**% LOP**	**Annual Progress**	**LOP Analyses**
		Q1	**Q2**	**Q3**	**Q4**					
24. Percent of target population reached with malaria SBCC messaging (Output/Custom)	0%	0	0	0	0	0	100%	0%		
25. Percent of children under five years old with fever in the last two weeks for whom advice or treatment was sought (Outcome/ Contract)	0%	0	0	0	0	0	100%	0%		
26. Percent of children under five years old who slept under an ITN the previous night (Outcome/ Contract)	0%	0	0	0	0	0	100%	0%		
IR 1.5: Support to CSOs/CBOs to implement malaria control activities improved										
27. Number of CSOs/CBOs receiving financial support to implement malaria control activities and facilitate provincial and district coordination (Output/Contract)	0	0	0	0	1	1	24	4.2%		
28. Percent change in local organization capacity needs assessment score (Outcome/ Custom)	0%	0	0	0	0	0	80%	0%		
IR 1.6: Operations research conducted										
29. Number of studies conducted in collaboration with NMCP and PMI (Outcome/ Custom)	0	0	0	0	0	0	10	0%		
30. Number of policy briefs disseminated to government ministries, and national and international organizations (Outcome/ Custom)	0	0	0	0	0	0	10	0%		
Objective 2: Strengthen management capacity of the provincial and district MOH personnel to provide oversight and supervision of malaria interventions										
IR 2.1: Malaria-related health system constraints and appropriate solutions determined										

Project Goal: Reduce malaria-associated mortality, morbidity, and parasitemia in four targeted provinces of Mozambique										
Performance Indicators	**Baseline**	**FY 2018**				**LOP Total**	**LOP Target**	**% LOP**	**Annual Progress**	**LOP Analyses**
		Q1	**Q2**	**Q3**	**Q4**					
31. Percent of capacity development plans for malaria program developed (Outcome/ Custom)	0%	0	0	0	0	0	100%	0%		
32. Percent of targeted districts that implement management capacity development plans for malaria programming (Output/Contract)	0%	0	0	0	0	0	100%	0%		
IR 2.2: Increased management capacity of provincial and district health systems										
33. Percent of planned trainings on topics related to planning, budget, and managing malaria program and professional development conducted (Outcome/ Custom)	0%	0	0	0	0	0	100%	0%		
34. Percent change in capacity maturity as a result of supervisory and mentoring visits and trainings conducted (Outcome/ Custom)	0%	0	0	0	0	0	80%	0%		
IR 2.3: Enhance quality of programmatic implementation (e.g. CM, MIP, IRS) enhanced through strengthened monitoring and mentorship at district and facility level enhanced										
35. Percent of planned case management mentoring visits that are conducted at health facilities in all targeted districts (Output/ Contract)	0%	0	0	0	18.2%	18.2%	98%	18.6%		
36. Percent of follow-up actions determined during integrated mentoring visits of DPS to SDSMAS that are completed within 30 days of completion of visit (Outcome/ Contract)	0%	0	0	0	0	0	80%	0%		
IR 2.4: Provincial-level coordination facilitated and increased										

Project Goal: Reduce malaria-associated mortality, morbidity, and parasitemia in four targeted provinces of Mozambique										
Performance Indicators	**Baseline**	**FY 2018**				**LOP Total**	**LOP Target**	**% LOP**	**Annual Progress**	**LOP Analyses**
		Q1	**Q2**	**Q3**	**Q4**					
37. Number of report-out meetings conducted with U.S. government-funded malaria partners and MOH/DPS/SDSMAS staff (Output/Custom)	0	0	0	0	0	0	5	0%		
IR 2.5: Coordination of provincial and district malaria activities improved										
38. Number of provincial and district coordination meetings conducted with IMaP support (Outcome/ Custom)	0	0	0	0	0	0	10	0%		
Objective 3: Strengthen the HMIS at the provincial and district levels to improve data reporting, analysis, and use										
IR 3.1: Quality of routine data strengthened										
39. Percent of targeted districts that have at least quarterly data-use and supervision planning meetings (Outcome/Contract)	0%	0	0	0	3%	3%	98%	3.1%		
40. Proportion of health facilities that benefitted from at least one round of DQA in the last 12 months (Outcome/Custom)	0%	0	0	0	0	0	80%	0%		
41. Percent of health facilities in the targeted provinces that report complete data through DHIS2 (Outcome/ Custom)	0%	0	0	0	23%	23%	100%	23%		
42. Percent of health facilities in the targeted provinces that report on time HMIS data through DHIS2 (Outcome/Custom)	0%	0	0	0	23%	23%	100%	23%		
43. Percent of health facilities in the targeted districts where more than 80% of the data in the given year matches (Outcome/ Custom)	0%	0	0	0	0	0	90%	0%		

Project Goal: Reduce malaria-associated mortality, morbidity, and parasitemia in four targeted provinces of Mozambique										
Performance Indicators	**Baseline**	**FY 2018**				**LOP Total**	**LOP Target**	**% LOP**	**Annual Progress**	**LOP Analyses**
		Q1	**Q2**	**Q3**	**Q4**					
IR 3.2: Utilization of DHIS-2 increased in alignment with the Mozambican MOH priorities										
44. Percent of target districts that have malaria indicator analysis in the DHIS-2 (SIS-MA) dashboard (Outcome/ Custom)	0%	0	0	0	0	0	100%	0%		
IR 3.3: Data-informed decision-making strengthened, including management and supervision										
1. Percent of targeted districts that send feedback to the health facilities as a result of routinely collected HMIS data (Outcome/ Custom)	0%	0	0	0	0	0	100%	0%		
Crosscutting gender indicators										
2. Proportion of female participants in IMaP training (Outcome/ Contract)	0%	0	0	0	26%	26%	100%	26%		