PMI | U.S. PRESIDENT'S MALARIA INITIATIVE

LED BY USAID FROM THE AMERICAN PEOPLE

U.S. PRESIDENT'S MALARIA INITIATIVE

Togo

Malaria Operational Plan

FY 2023 and FY 2024

Suggested Citation: U.S. President's Malaria Initiative Togo Malaria Operational Plan FY 2024. Retrieved from www.pmi.gov

This combined fiscal (FY) 2023 and FY 2024 Malaria Operational Plan has been approved by the U.S. Global Malaria Coordinator and reflects collaborative discussions with national malaria control programs and other partners. Funding available to support outlined plans relies on the final FY 2024 appropriation from U.S. Congress. Any updates will be reflected in revised postings.

CONTENTS

ABBREVIATIONS

ACT	Artemisinin-based combination therapy
AL	Artemether-lumefantrine
AMF	Against Malaria Foundation
ANC	Antenatal care
CAMEG	Central Medical Stores
CHW	Community health worker
DHS	Demographic and Health Survey
DHA-PPQ	Dihydroartemisinin-piperaquine
EDCTP	European & Developing Countries Clinical Trials Partnership
FY	Fiscal year
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
IPTp	Intermittent preventive treatment for pregnant women
IRS	Indoor residual spraying
ITN	Insecticide-treated net
LSM	Larval source management
MIP	Malaria in pregnancy
MIS	Malaria indicator survey
MM	Millimeters
MOP	Malaria Operational Plan
NMCP	National Malaria Control Program
NSP	National Malaria Strategic Plan
OR	Operational research
PMC	Perennial malaria chemoprevention
PBO	Piperonyl-butoxide
PE	Program evaluation
PMI	U.S. President's Malaria Initiative
RDT	Rapid diagnostic test
SPA	Small Projects Assistance Program
SBC	Social and behavior change
SM&E	Surveillance, monitoring, and evaluation
SMC	Seasonal malaria chemoprevention
SP	Sulfadoxine-pyrimethamine
SPAQ	Sulfadoxine-pyrimethamine and amodiaquine
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

To review specific country context for Togo, please refer to the country malaria profile located on PMI's country team landing page at PMI.gov, which provides an overview of the country malaria situation, key indicators, the National Malaria Strategic Plan (NSP) 2023–2026, and the partner landscape.

U.S. President's Malaria Initiative

Launched in 2005, the U.S. President's Malaria Initiative (PMI) supports implementation of malaria prevention and treatment measures as well as cross-cutting interventions. PMI's 2021–2026 strategy, *End Malaria Faster*, envisions a world free of malaria within our generation with the goal of preventing malaria cases, reducing malaria deaths and illness, and eliminating malaria in PMI partner countries. PMI currently supports 27 countries in Sub-Saharan Africa and 3 programs across the Greater Mekong Subregion (GMS) in Southeast Asia to control and eliminate malaria. Togo began implementation as a PMI partner country in fiscal year (FY) 2023.

Rationale for PMI's Approach in Togo

Togo continues to face a heavy burden of malaria, which remains a major public health problem despite the decline in incidence by 34 percent between 2015 and 2021 and a decline in mortality by nearly 38 percent, according to the 2022 Global Malaria Report. The 2020 malaria indicator survey (MIS) shows malaria prevalence of 36 percent among children aged 6–59 months. In 2022, according to the National Malaria Control Program (NMCP) annual report, the percentage of confirmed malaria cases (test positivity rate) was 65 percent in children under the age of five, 63 percent in children older than the age of five, and 44 percent in pregnant women, for an overall average of 63 percent. PMI will closely collaborate with the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) to support the government of Togo and other partners to implement Togo's new NSP for 2023–2026.

Overview of Planned Interventions

The FY 2023 PMI funding for Togo is $12 million; FY 2024 planned PMI funding is $11M. PMI will support the following intervention areas with these funds.

1. Vector Monitoring and Control

The NSP 2023–2026 promotes vector control activities, including the use of insecticide-treated nets (ITNs), geographically targeted indoor residual spraying (IRS), larval source management (LSM), and entomology surveillance. PMI/Togo will support ITN procurement and entomological surveillance. The Global Fund and Against Malaria Foundation (AMF) supports mass campaigns every three years, PMI will support the next mass campaign in 2026. In FY 2023 and 2024, PMI will strengthen entomology surveillance and the Togo national plan for monitoring and managing insecticide resistance with a strategy to foster synergies with Global

Fund sites for a national resistance surveillance system in the country. Activities will include vector bionomics at three sites and insecticide resistance monitoring at six sites that will also be used as surveillance sites of the invasive malaria vector *Anopheles stephensi*. PMI will also strengthen laboratory research capacity per the request of NMCP and its collaborating partner.

2. Malaria in Pregnancy

PMI will support the national malaria in pregnancy (MIP) strategy, which includes providing ITNs at the first antenatal care (ANC) visit and facilitating their effective use, ensuring pregnant women have access to a minimum of three doses of intermittent preventive treatment for pregnant women (IPTp) in malaria endemic areas starting at 13 weeks gestational age, and ensuring prompt access to quality case management of malaria per World Health Organization (WHO) guidelines.

All sulfadoxine-pyrimethamine (SP) and ITN needs for MIP are covered through the Global Fund grant. PMI will support NMCP to strengthen the implementation of MIP activities, including training, monitoring, and improving the quality of care. PMI will encourage NMCP to continue to work closely with the Directorate of Maternal and Child Health and Family Planning to ensure consistent and complementary ANC and MIP services. Support for outreach services by community health workers (CHW) to encourage ANC attendance and IPTp awareness implemented under the current Global Fund grant will continue. A special emphasis will be placed on working with providers to capitalize on the missed opportunities for increasing IPTp3.

3. Drug-Based Prevention

NMCP adopted seasonal malaria chemoprevention (SMC) in 2013 and continues to include SMC within the NSP. Over the years, SMC has been supported by various partners with coverage for eligible children ranging from two to four cycles per year. Partners include the United Nations Children's Fund (UNICEF), Malaria Consortium (with philanthropic funding), and the Global Fund. Currently, NMCP implements SMC for children 3–59 months of age in 19 districts in the northern three regions of the country (Savanes, Kara, and Centrale). The Global Fund supports implementation and commodity needs in Kara and Centrale regions; and the Malaria Consortium implements in Savanes using medications procured by UNICEF. NMCP plans to expand SMC to include geographic expansion to four new districts in Plateaux Region and to add a fifth cycle in all but two districts (for a total of five cycles in 21 districts, and four cycles in 2 districts). PMI support is requested for implementation in the four new districts starting in CY 2024 and for commodity procurement, warehouse management, and distribution of SP and amodiaquine (SPAQ) to Savanes and Plateaux regions (9 districts) starting in CY 2025.

4. Case Management

Diagnosis and treatment of malaria in Togo are carried out in an integrated manner. Confirmation of suspected cases is systematic by either rapid diagnostic test (RDT) or microscopy; only confirmed cases should be given antimalarial treatment. At the community level, diagnosis of all suspected cases is done with an RDT, and positive cases are treated by a CHW. Severe malaria is treated at referral health facilities (*Centre hospitalier universitaire*, *Centre hospitalier régional*, and *Centre hospitalier préfectoral*). Togo does not currently support prereferral for severe malaria at the community level. Since 2013, treatment of uncomplicated malaria for all age groups in Togo has been free. This was extended to cover severe malaria in 2019. Consultation fees, however, are chargeable.

PMI will strengthen the implementation of case management activities at the facility and community level, including training, monitoring, and quality of care. To this end, PMI will support the implementation of a pool of trainers of health care providers (CHWs, service providers, and other key personnel) on the guidelines for the management of malaria. PMI will also support strengthening capacity to improve the correct diagnosis of malaria, including support for microscopy. Furthermore, PMI will fund a therapeutic efficacy study at two sites per year.

5. Health Supply Chain and Pharmaceutical Management

A robust in-country supply chain system combined with effective management of malaria commodities is critical to achieving the goals set for the malaria program in Togo. PMI will complement the ongoing investments undertaken by the Global Fund to ensure uninterrupted availability of malaria commodities at service delivery points.

PMI investments will also be used to strengthen the in-country supply chain system for malaria commodities. The interventions in this area will include the provision of support to NMCP and the Central Medical Stores (CAMEG) to improve the quality of needs forecasting for commodities and ensure rigorous supply plan monitoring. PMI-funded interventions will address the logistics data visibility gap that exists between the regional medical stores and health facilities. These efforts will lead to the establishment of a routine logistic system at the last mile (both health facility and community level), and increased capacity of actors at the subnational level of the systems to analyze data and inform decision making around inventory management and re-supply of malaria commodities.

PMI will support NMCP's strategy is to continue to use different supply management tools, including the logistics management information system and joint supervision visits. During FY 2024, PMI will work with NMCP to introduce an end-use verification survey to monitor the effective use of commodities and use the findings to improve supply chain management.

6. Malaria Vaccine

PMI is not currently supporting Togo's malaria vaccine deployment but will consider doing so in the future. The country is preparing a Gavi draft application for the RTS,S vaccine targeted to protect vulnerable children from malaria. Given limited global supply and planned prioritization of deployments, PMI support is unlikely to be relevant until a later time frame.

7. Social and Behavior Change

PMI will strengthen the capacity of NMCP to strategically plan, implement, monitor, and evaluate targeted social and behavior change (SBC) interventions in support of the objectives of the NSP 2023–2026. Initially, PMI will support an evaluation of the expiring communications plan and the development of a new SBC plan derived from the new NSP. Based on the new plan, PMI will support the development and distribution of SBC materials for all levels, including in schools and the community. To address the issue of outdated behavioral data, PMI will support a survey of malaria knowledge, attitudes, and practices in the first year of implementation. The results of this survey will allow for a refinement of the new SBC plan.

8. Surveillance, Monitoring, and Evaluation

NMCP prioritizes surveillance, monitoring and evaluation as a key pillar to malaria control as recommended by WHO. PMI funding will be used to support surveillance and data activities in alignment with the NSP. PMI will support improved surveillance data reporting and use, with a focus on capacity strengthening and systems assessment. PMI will contribute funding to a nationally representative household survey, either a Demographic and Health Survey (DHS) or an MIS.

9. Operational Research and Program Evaluation

Operational research (OR) is a part of Togo's NSP 2023–2026. However, the research portfolio remains under-resourced. Discussions identifying OR and program evaluation (PE) needs are ongoing. No OR/PE activities are proposed with FY 2023 or FY 2024 PMI funding.

10. Capacity Strengthening

One of the goals of the new NSP 2023–2026 is to strengthen the management and logistical capacities of NMCP to better coordinate malaria control in Togo at all levels. PMI's objective is to support NMCP's management and technical capacity development needs to meet the objectives of the NSP. This will be accomplished through support to NMCP staff through participation in conferences and workshops, continued assistance to technical working groups through logistical and operational support, and purchase of necessary office and information technology equipment.

PMI will provide support to the Peace Corps through the Small Project Assistance Program.

11. Staffing and Administration

The PMI program in Togo will be led by the United States Agency for International Development (USAID) Mission Director/West Africa Regional Office or their designee and overseen on a day-to-day basis by a USAID malaria resident advisor and two or more locally-hired specialists who will oversee the technical and administrative aspects of the PMI program. A short-term consultant will also be hired to help with start-up activities until permanent staff are on board.

I. CONTEXT & STRATEGY

1. Introduction

Togo began implementation as a PMI partner country in fiscal (FY) 2023. This FY 2023 and FY 2024 Malaria Operational Plan (MOP) presents a detailed implementation plan for Togo, based on the strategies of PMI and the National Malaria Control Program (NMCP). It was developed in consultation with NMCP and with the participation of national and international partners. The activities that PMI is proposing build on investments made by partners to improve and expand malaria-related services, including the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund). This document provides an overview of the strategies and interventions in Togo, describes progress to date, identifies challenges and relevant contextual factors, and provides a description of activities that are planned with FY 2023 and FY 2024 funding. For more detailed information on the country context, please refer to the Country Malaria Profile located on PMI.gov], which provides an overview of the country's malaria situation, key indicators, NMCP's strategic plan, and the partner landscape.

2. U.S. President's Malaria Initiative (PMI)

PMI is led by the United States Agency for International Development (USAID) and implemented with the U.S. Centers for Disease Control and Prevention. Launched in 2005, PMI supports the implementation of malaria prevention and treatment measures such as insecticide-treated mosquito nets (ITNs), indoor residual spraying, accurate diagnosis and prompt treatment with artemisinin-based combination therapies (ACTs), intermittent preventive treatment for pregnant women (IPTp), and drug-based prevention, as well as cross-cutting interventions such as surveillance, monitoring, and evaluation; social and behavior change (SBC); and capacity strengthening. PMI's 2021–2026 strategy, *End Malaria Faster*, envisions a world free of malaria in our generation, with the goal of preventing malaria cases, reducing malaria deaths and illness, and eliminating malaria in PMI partner countries. PMI currently supports 27 countries in Sub-Saharan Africa and 3 programs in the Greater Mekong Subregion (GMS) in Southeast Asia to control and eliminate malaria. Over the next five years, PMI aims to save lives, reduce health inequities, and improve disease surveillance and global health security.

Under the strategy, and building on progress already made in PMI-supported countries, PMI will work with national malaria control programs and partners to accomplish the following objectives by 2026:

1. Reduce malaria mortality by 33 percent from 2015 levels in high-burden PMI partner countries, achieving a greater than 80 percent reduction from 2000.
2. Reduce malaria morbidity by 40 percent from 2015 levels in PMI partner countries with high and moderate malaria burden.
3. Bring at least 10 PMI partner countries toward national or subnational elimination and assist at least one country in the Greater Mekong Subregion to eliminate malaria.

These objectives will be accomplished by emphasizing five core areas of strategic focus:

1. **Reach the unreached:** Achieve, sustain, and tailor deployment and uptake of high-quality, proven interventions with a focus on hard-to-reach populations.
2. **Strengthen community health systems:** Transform and extend community and frontline health systems to end malaria.
3. **Keep malaria services resilient:** Adapt malaria services to increase resilience against shocks, including COVID-19 and emerging biological threats, conflict, and climate change.
4. **Invest locally:** Partner with countries and communities to lead, implement, and fund malaria programs.
5. **Innovate and lead:** Leverage new tools, optimize existing tools, and shape global priorities to end malaria faster.

3. Rationale for PMI's Approach in Togo

3.1. Malaria Overview for Togo

In Togo, malaria is endemic in all the health regions of the country with year-round transmission and an upsurge in the rainy seasons. Togo has two types of climates:

- The Guinean tropical climate south of the seventh parallel (south of Notse), characterized by two dry seasons and two rainy seasons. The annual rainfall varies from 1,000 to 2,000 millimeters (mm); and
- The Sudanian tropical climate extends from the eighth parallel (the Central Region) to the north with a rainy season from May to October marked by annual rainfall ranging from 850 to 1,600 mm.

Togo continues to face a heavy burden of malaria, which remains a major public health problem despite the decline in incidence by 34 percent between 2015 and 2021 and a decline in mortality by nearly 38 percent, according to the 2022 Global Malaria Report. The 2020 malaria indicator survey (MIS) shows a malaria prevalence of 36 percent among children aged 6–59 months. In 2022, according to NMCP's annual report, the percentage of confirmed malaria cases (test positivity rate) was 65 percent in children under the age of five, 63 percent in children above the age of five, and 44 percent in pregnant women, for an overall average of 63 percent.

Togo is in the first year of its fifth National Malaria Strategic Plan (NSP) covering the period of 2023–2026. A review of the implementation of its previous strategy identified a number of weaknesses that are addressed in the new strategy:

- Lack of ownership of malaria control interventions by the community;
- Nonoptimal collaboration with the private sector;
- Low data quality for influencing decision making;

- Low accountability of actors, such as district management staff, heads of health facilities, and frontline workers, at the operational level; and
- Inadequate communication and monitoring of malaria control interventions.

For more detailed information on malaria indicators, refer to the country malaria profile.

3.2. Key Challenges and Contextual Factors

Togo has a number of positive factors that contribute to a positive enabling environment for malaria control. Malaria treatment has been free for both uncomplicated (since 2013) and severe malaria (since 2019) for all ages. Furthermore, Togo has a robust community health worker (CHW) program that diagnoses and treats 32 percent of all uncomplicated cases of malaria reported to the health system. NMCP recently undertook a malaria program review and developed a new NSP to address some of the challenges identified. Togo has a strong relationship with the Global Fund and has a good history of successfully implementing its previous grants. The country is currently negotiating its new Global Fund grant (GC7) to support the new NSP. This will allow PMI to tailor its program to effectively complement the Global Fund-supported activities.

There are a number of issues that hinder successful implementation of the malaria program in Togo. There is an identified lack of confidence in routine malaria data at all levels and across the program, including service delivery and logistics data. Although it is widely assumed that there is widespread resistance to pyrethroid insecticides, the vector surveillance data are not sufficient to be representative. The most recent human behavioral data collection exercise dates from 2017. There are also widespread difficulties in last-mile malaria commodity distribution, affecting malaria service delivery at the peripheral facility and community levels. While the CHWs make an important contribution to malaria case management, the community health program is inconsistent across the country (some CHWs only treat malaria cases, others have been trained in integrated community case management). The remuneration for CHWs is low throughout the country and variable depending on source of funding. The laboratory infrastructure also needs to be strengthened.

Terrorist activity in West Africa in recent years has become a major destabilizing factor in the region. After Mali, Niger, Burkina Faso, and Nigeria, the terrorist threat has recently evolved in northern Togo, Benin, and Côte d'Ivoire. Terrorist activity could affect security conditions, and therefore malaria interventions, in northern Togo.

3.3. PMI's Approach for Togo

The NSP 2023–2026 aims to contribute to improving the health status of the Togolese population by significantly reducing the burden of malaria by 2026 with the specific objectives of reducing the incidence of malaria by at least 65 percent compared with 2022; reducing the malaria mortality rate by at least 65 percent compared with 2022; and strengthening management capacities in the fight against malaria at all levels. The strategies include IPTp, perennial malaria chemoprevention (PMC), seasonal malaria chemoprevention (SMC),

diagnosis and treatment of malaria through routine health services and integrated community case management, pharmacovigilance, the distribution of ITNs, targeted IRS, larval source management (LSM), insecticide-resistance management, environmental management, entomological surveillance, vaccine introduction, and targeted mass treatment. Cross-cutting strategies include procurement and supply chain management; surveillance, monitoring, and evaluation; and SBC.

PMI aligns its funding and technical assistance to support Togo's overall malaria strategies that reflect the five focus areas of PMI's strategy (2021–2026) and will support all of the strategies in the new strategic plan apart from pharmacovigilance, LSM, environmental management, IRS, and targeted mass treatment.

PMI will work closely with NMCP and other partners (particularly the Global Fund) to ensure that PMI funding complements other programming and financing in the country.

Given that this is the first year of PMI implementation in Togo and the uncertainty surrounding the Global Fund grant, PMI is focused on identifying technical assistance needs starting at the central and regional levels to improve overall implementation of the malaria program in Togo. Furthermore, as all of the commodity needs are likely to be covered through the Global Fund grant, PMI support is focused on strengthening central-level systems.Once the Global Fund grant is finalized, PMI will work with NMCP and implementing partners to develop more targeted and detailed work plans.

II. OPERATIONAL PLAN FOR FOR FY 2023 and FY 2024

1. Vector Monitoring and Control

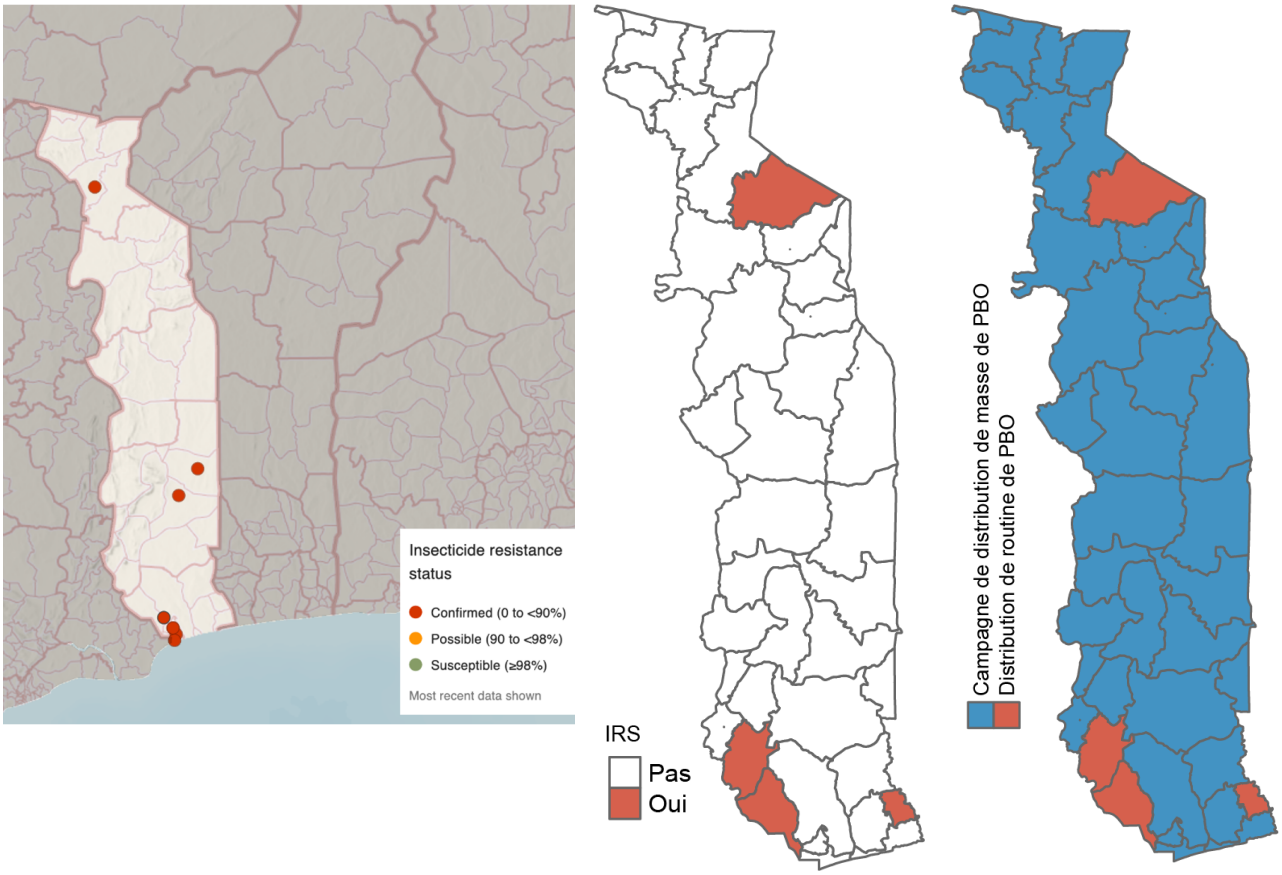
1.1. PMI Goal and Strategic Approach

The new NSP 2023–2026 promotes three insecticide-based vector control activities: ITNs, geographically targeted IRS, and LSM. The plan also calls for comprehensive entomology surveillance and insecticide-resistance monitoring, based on methods recommended by the World Health Organization (WHO) to inform vector control policy decisions. Although NMCP's national strategic plan emphasizes the use of targeted IRS and LSM, PMI will not support IRS given the limited resources and will not support LSM as it is a complementary control intervention. Insecticide resistance has been recognized as a major threat to PMI's insecticide-based vector control interventions. To address this challenge, PMI will strengthen the Togo national plan for monitoring and managing insecticide resistance with a strategy to foster synergies with the Global Fund (which currently supports six sites in four regions) for a national resistance surveillance system comprising at least one site in each of the six regions (Grand Lomé, Maritime, Plateaux, Centrale, Kara, and Savanes) to monitor resistance in the country. The Global Fund and Against Malaria Foundation (AMF) supports mass ITN campaigns every three years, PMI will fill the anticipated gap identified to support the next mass campaign in 2026. PMI will also strengthen laboratory research capacity. NMCP and its collaborating partner, the Laboratory of Ecology and Toxicology of the University of Lomé, have requested such assistance, and PMI plans to support this activity.

Figure 1 shows a summary of information used to inform decisions on vector control activities in Togo. Pyrethroid resistance status from the WHO malaria threats map is on the left, with the map showing confirmed resistance at all sites where testing was done. In the middle, results of the WHO-supported stratification exercise showing districts where IRS was determined to have maximal impact are shown. Finally, on the right, the map shows stratification results depicting the recommendation for ITN distribution to have maximal impact. Blue indicates that piperonyl-butoxide (PBO) ITNs should be used for mass campaigns; red indicates where PBO ITNs should be distributed via routine channels at the proposed IRS sites. In the absence of IRS, PBO ITNs would be recommended in all districts for mass campaigns.

Figure 1. Maps of Vector Control Activities in Togo

From left to right: (a) Current vector surveillance and insecticide resistance monitoring sites; (b) NMCP proposed IRS sites; (c) ITN distribution



1.2. Plans and Justification for FY 2023 and FY 2024 Funding

PMI plans to support entomological monitoring; *An. stephensi* surveillance, laboratory support, and capacity strengthening; support for an insectary; and procurement of ITNs for the CY 2026 mass campaign.

The FY 2023 funding tables contain a full list of vector monitoring and control activities that PMI proposes to support in Togo in FY 2023.

The FY 2024 funding tables contain a full list of vector monitoring and control activities that PMI proposes to support in Togo in FY 2024.

1.2.1. Entomological Monitoring

The Global Fund currently supports insecticide-resistance monitoring at six sites in four regions in Togo. PMI will expand support for entomological monitoring from these 6 to 12 sites, with at least 1 additional site in each region. Activities will include vector bionomics at three of the new six sites and insecticide-resistance monitoring at all six new sites. PMI will also prioritize surveillance of the invasive malaria vector *An. stephensi* at the two bionomics sites around the coastal area in Lomé. Data collected will feed into the national entomological database and help inform decisions and improve understanding of vector-human interactions as well as ITNs procurement policy. PMI will also provide technical assistance to strengthen the laboratory capacity of a local research institution based in Lomé.

Summary of Distribution and Bionomics of Malaria Vectors in Togo

As of 2022, the primary vectors in Togo are *An. coluzzii* and *An. gambiae*. *An. coluzzii* is the most widespread and constitutes over 70 percent of the anopheline population. *An. arabiensis*, *An. melas*, and *An. funestus* are secondary vectors mostly found during the rainy season. *An. melas* is found in brackish water areas in the southeast, while *An. funestus* is found in Centrale and Maritime regions. Peak transmission season is from July to November. There is a dearth of information on preferred biting or resting location of the primary vectors in Togo. Peak biting time is from 11:00 p.m. to 5:00 a.m., and humans are the preferred host.

Status of Insecticide Resistance in Togo

Studies carried out from 2019–2022 at six sites in four regions of Togo highlighted multiresistance of the local populations of *An. gambiae, s.l.* to the four classes of insecticide used in malaria vector control, including pyrethroids, organochlorines, carbamates, and organophosphates[1]. Pyrethroid (permethrin, deltamethrin, and alphacypermethrin) resistance in particular is widespread with high resistance intensity at all the sites characterized with metabolic-based resistance mechanisms. PBO partially restored susceptibility of the tested vectors to pyrethroids. Malaria vectors tested were, however, fully susceptible to pirimiphos methyl in all localities. There is no information on the susceptibility status of *Anopheles* to chlorfenapyr (pyrrol) and clothianidin (neonicotinoid) insecticides in Togo. The data obtained during this study highlight the need to strengthen entomology surveillance to support current control interventions, such as the use of new types of ITNs.

[1] Amoudji, A.D., K.M. Ahadji-Dabla, A.S. Hien, et al. 2019. “Insecticide resistance profiles of Anopheles gambiae s.l. in Togo and genetic mechanisms involved, during 3-year survey: is there any need for resistance management?” *Malar J* 18 (177). https://doi.org/10.1186/s12936-019-2813-z.

1.2.2. Insecticide-Treated Nets

PMI will complement the contributions of NMCP, Global Fund, AMF and other partners by procuring ITNs for the mass campaign in CY 2026. PMI will provide technical assistance in the nationwide launch of ITN distribution, prepare protocols and training for SBC to promote consistent ITN use in households and to mitigate against misuse. NMCP only monitors the quality of ITNs by assessing the bioefficacy of nets distributed through campaigns but does not assess durability through systematic sampling of distributed nets. Consequently, in future years, PMI may consider supporting the implementation of durability monitoring of the ITNs distributed in CY 2026 to monitor the quality of ITNs distributed during mass campaigns.

Please see the SBC section for details on current SBC interventions and challenges and opportunities to improve intervention uptake and maintenance.

ITN Distribution in Togo

NMCP supports universal access to free, long-lasting ITNs for all households, primarily through mass campaigns conducted every three years and reinforced through routine distribution channels, first to pregnant women during antenatal care (ANC) visits and at the time of newborn's first vaccination. Since 2011, Togo has been carrying out a mass ITN distribution campaign every three years. The last campaign, carried out in 2020, distributed 5.8 million pyrethroid-only ITNs, for a coverage rate of 116 percent. The MIS conducted in 2020 after the campaign reported a 59 percent ITNs use rate in the population. The next campaign (June– September, 2023), funded by the Global Fund and AMF, aims to distribute 6.5 million PBO ITNs. Based on insecticide-resistance data, the planned CY 2026 mass ITN campaign intends to distribute only dual active ingredient nets, for a total of 7.1 million ITNs for the six regions. The key barrier faced in implementing ITN activities is the concern that insecticide resistance renders nets ineffective.

Refer to the ITN gap table in the annex for more details on planned quantities and distribution channels.

1.2.3. Indoor Residual Spraying

NMCP's IRS strategy is evidence-based and is a part of its integrated vector management strategy. The strategy recognizes the usefulness of this intervention for reducing morbidity and mortality. To date, no IRS has occurred in the country and none is planned with FY 2023 and FY 2024 funds.

2. Malaria in Pregnancy

2.1. PMI Goal and Strategic Approach

PMI will support the national strategy in the prevention of malaria in pregnancy (MIP), which includes providing ITNs at the first ANC visit and facilitating their effective use, ensuring pregnant women have access to a minimum of three doses of IPTp in malaria endemic areas starting at 13 weeks gestational age, and ensuring prompt access to quality case management of malaria per WHO guidelines. The last dose of IPTp can be given at the time of delivery.

To reach all eligible women, outreach strategies are organized with the Directorate of Maternal and Child Health and Family Planning for the benefit of localities located more than five kilometers from health facilities. Pregnant women who do not attend all ANC visits are actively sought out by providers and CHWs with the involvement of community leaders to ensure that they benefit from ANC as well as IPTp. Apart from the outreach strategies, the heads of the maternity wards receive monthly communication credits to remind pregnant women of ANC appointments. Semiannual feedback sessions on the results of the outreach strategies are organized with the communities during community dialogues. Because of these enhanced activities, IPTp3 coverage has increased from 42 percent in 2017 to 53 percent in 2020, according to the relevant malaria indicator surveys. Coverage varies across the country, ranging from 43 percent for Kara and 61 percent for Savanne in 2020.

In the private sector, IPTp is carried out at all faith-based health facilities and at some for-profit health facilities that provide activity reports to NMCP.

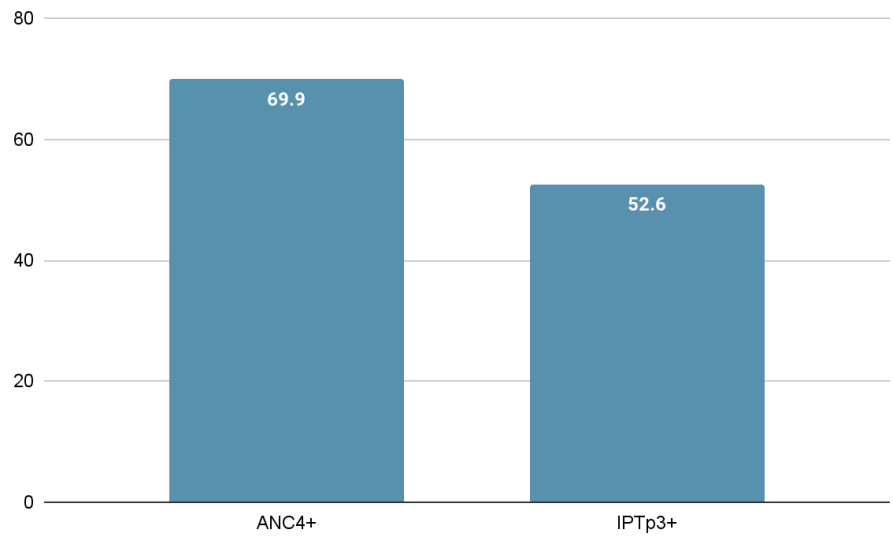
2.2. Plans and Justification for FY 2023 and FY 2024 Funding

All sulfadoxine-pyrimethamine (SP) and ITN needs for MIP are covered through either the current Global Fund grant (NFM4) or the new one (GC7). PMI will support NMCP's request for assistance in strengthening the implementation of MIP activities, including training, monitoring, and improving quality of care.

PMI will encourage NMCP to continue to work closely with the Directorate of Maternal and Child Health and Family Planning to ensure consistent and complementary ANC and MIP services. PMI will provide support for the ongoing outreach services by CHWs to encourage ANC attendance and IPTp awareness. A special emphasis will be placed on working with providers to capitalize on missed opportunities for increasing IPTp3; although IPTp coverage is increasing, there is still a large missed opportunity as ANC4 coverage is 70 percent versus IPTp3 coverage of only 53 percent (see figure 2).

Although the new NSP recognizes that current WHO guidelines recommend ACTs for the treatment of uncomplicated malaria in the first trimester of pregnancy, this has not yet been included in the national policy or guidelines (which NMCP is hoping to update). However, it has been addressed in an administrative letter sent to all maternal and child health service providers.

Figure 2. Malaria-in-Pregnancy Indicators from the 2020 Malaria Indicator Survey



The FY 2023 funding tables contain a full list of MIP activities that PMI proposes to support in Togo in FY 2023.

The FY 2024 funding tables contain a full list of MIP activities that PMI proposes to support in Togo in FY 2024.

Refer to the SP gap table in the annex for more details on planned quantities and distribution channels.

See the SBC section for details on current SBC interventions and challenges and opportunities to improve intervention uptake and maintenance.

3. Drug-Based Prevention

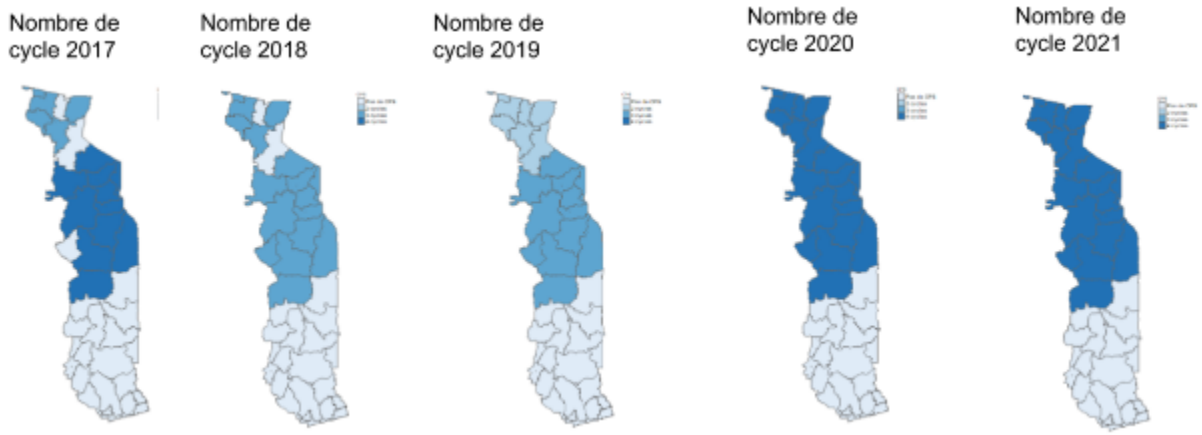
3.1. Seasonal Malaria Chemoprevention

3.1.1. PMI Goal and Strategic Approach

Togo's NSP promotes SMC as a malaria prevention intervention in areas with highly seasonal malaria transmission. SMC has been implemented every year since 2013 via door-to-door campaigns in eligible districts during the peak malaria transmission season (July–October). Initial implementation was restricted to Savanes Region and was extended to Kara and Centrale regions in 2016. Currently, SMC protects approximately 500,000 children aged 3–59 months in the 19 eligible districts in three northern regions—Savanes, Kara, and Centrale. This activity has benefited from support from the United Nations Children's Fund (UNICEF) since 2013 and from the Malaria Consortium since 2020; it is primarily funded via Global Fund financing (see Figure 3 for the coverage and duration of recent campaigns). Based on recent stratification exercises supported by WHO, NMCP plans to extend SMC to cover four new districts in Plateaux Region (Est-Mono, Anié, Amou, and Ogou) in 2024. This would increase the number of targeted children to approximately 615,000. In addition, starting in 2024, NMCP plans to expand from four to five cycles in all but two districts in Plateaux Region (Amou and Ogou).

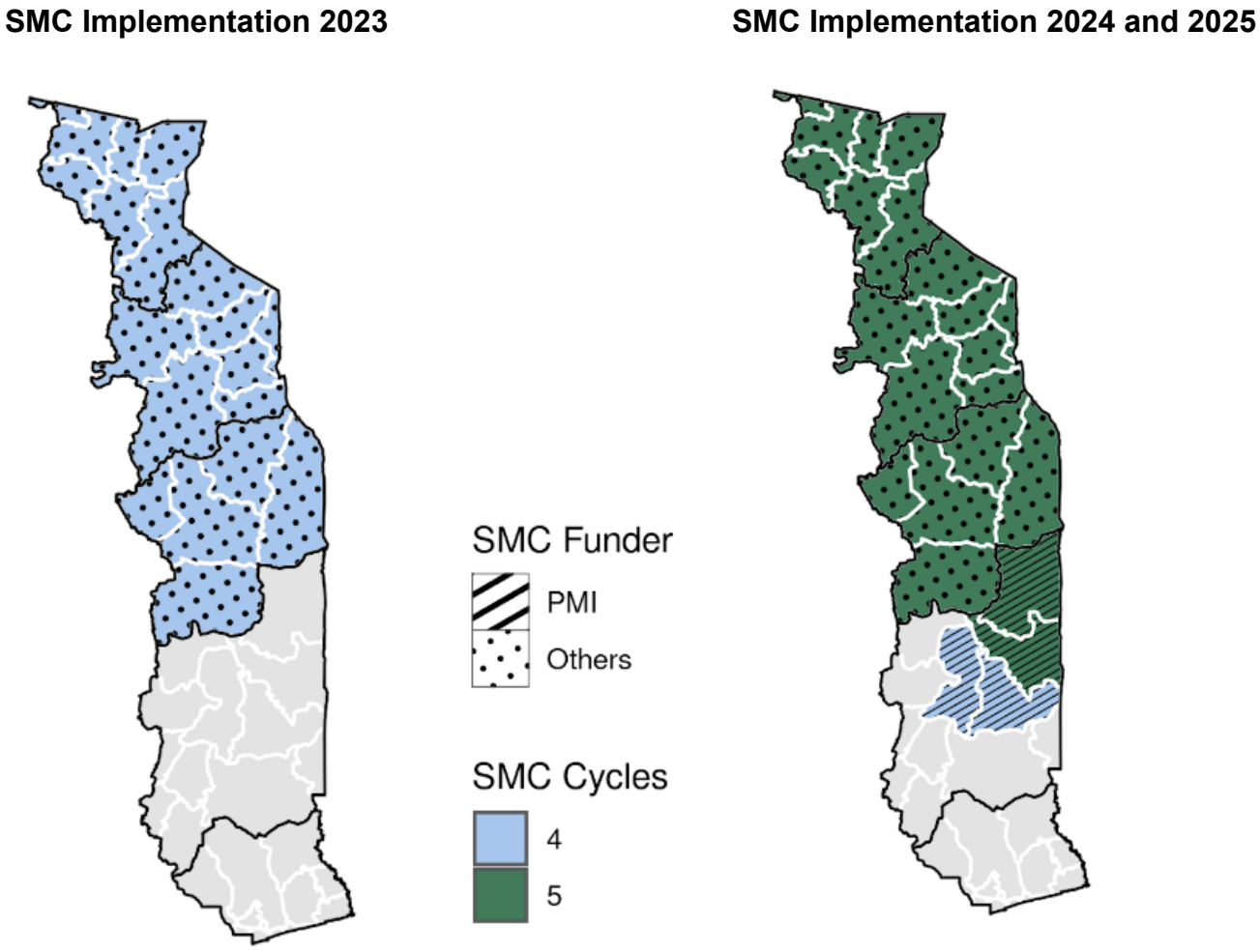
PMI support for SMC follows WHO guidance, including all elements of planning and implementation and monitoring (training, paying distributors, SBC activities, and possibly independent monitoring surveys to assess coverage and adherence). PMI may also support NMCP's SMC activities at the central level, including planning and training.

Figure 3. Maps of Historical SMC Implementation, 2017–2021



Note: The map for 2022 implementation is the same as the map for 2021 with the same districts covered and with four cycles in each district.

Figure 4. Maps of SMC Implementation in Togo, 2023–2025



3.1.2. Plans and Justification for FY 2023 and FY 2024 Funding

Based on results of recent WHO stratification modeling exercises (2022), NMCP has requested support to expand SMC implementation to four new districts in Plateaux Region. As the SP and amodiaquine (SPAQ) needed for the 2024 campaign has already been procured, PMI support is requested for implementation only. This support may include central-level coordination activities, digital data collection, SBC activities, and M&E activities such as independent monitoring surveys, as needed. SP resistance markers may be tested from samples collected as part of the planned therapeutic efficacy study (see the case management section).

The FY 2023 funding tables contain a full list of SMC activities that PMI proposes to support in Togo in FY 2023.

Plans for FY 2024 funding for SMC will be similar to those for the FY 2023 funding stated above, with the addition of procurement, warehouse management, and distribution of SPAQ to meet the needs of the four new implementation districts in Plateaux Region as well as the needs for Savanes Region.

The FY 2024 funding tables contain a full list of SMC activities that PMI proposes to support in Togo in FY 2024.

Refer to the SPAQ gap table in the annex for more detail on the planned quantities and distribution channels.

See the SBC section for details on current SBC interventions and challenges and opportunities to improve intervention uptake and maintenance.

3.2. Other Drug-Based Prevention

Togo's NSP contains plans to roll out PMC to children under two years of age in all 16 eligible districts (where malaria transmission is moderate or high and perennial). PMC in Togo will consist of a treatment course of SP given during routine immunization visits corresponding to Penta 2 (second dose of diphtheria, pertussis, tetanus, hepatitis B, and Haemophilus influenza b immunization typically given at 10 weeks of age), Penta 3 (third dose of diphtheria, pertussis, tetanus, hepatitis B, and Haemophilus influenza b immunization typically given at 14 weeks of age), RR1 (first dose of measles and rubella immunization given at 9 months of age), and RR2 (second dose given at 15 months of age). In 2022, 89 percent of children received Penta 2 and 3, 84 percent RR1, and 71 percent RR2. PMC is currently in a pilot phase in Togo, with MULTIPLY supporting an implementation study in Haho District, Plateaux Region. Assuming favorable results from the pilot, Togo plans to roll this out to eligible districts (those with perennial malaria transmission and moderate to high burdens where SMC is not implemented, including Golfe, Agoe-Nyivé, Lacs, Bas-Mono, Zio, Vo, Yoto, Avé, Haho, Agou, Kloto, Amou, Kpélé, Danyi, Wawa, Akébou, and Moyen-Mono), with support from the Global Fund. PMI is not currently planning to support PMC.

3.2.1. PMI Goal and Strategic Approach

PMI is not currently planning any support for other drug-based prevention interventions.

4. Case Management

4.1. PMI Goal and Strategic Approach

According to the national guidelines, the diagnosis and treatment of malaria in Togo are carried out in an integrated manner. Confirmation of suspected cases of malaria is to be carried out by either a rapid diagnostic test (RDT) or microscopy; only confirmed cases should be given antimalarial treatment. Uncomplicated malaria is treated with ACTs, including artemether-lumefantrine (AL) as the first-line treatment and dihydroartemisinin-piperaquine (DHA-PPQ) as an alternative, second-line treatment. Severe malaria is treated in referral

health facilities (*Centre hospitalier universitaire*, *Centre hospitalier régional*, and *Centre hospitalier préfectoral*). For the treatment of cases of severe malaria, injectable artesunate is recommended as first-line treatment and injectable artemether as the alternative. Pretransfer treatment of serious cases with injectable artesunate is done at peripheral care units.

Since 2013, treatment of uncomplicated malaria for all age groups in Togo has been free. This was extended to cover severe malaria in 2019. Consultation fees, however, are chargeable.

At the community level, diagnosis of all suspected malaria cases is done with an RDT, and positive cases are treated by a CHW with AL. Those with suspected malaria cases that test negative with an RDT or severe febrile cases with a positive RDT result, as well as pregnant women and children under two months of age, are referred to a health facility. According to national policy, all severe cases should be referred after prereferral treatment with an artesunate suppository. However, this pretransfer treatment has not yet been implemented at the community level in Togo. Currently, CHWs diagnose and treat 32 percent of all malaria cases reported into the country's health management information system, with this proportion expected to climb to 38 percent in 2026, according to a gap analysis by Roll Back Malaria.

Training is regularly organized for CHWs to enable them to provide better case management. The program will continue to mobilize resources in collaboration with the other programs involved to gradually extend the integrated management of childhood and newborn illnesses at the community level in all health districts. Support for training, equipping, and supervising 7,500 CHW has been included in the Global Fund grant application for 2024–2026. While the CHWs make an important contribution to malaria case management, the community health program is inconsistent across the country—some CHWs only treat malaria cases, others have been trained in integrated community case management. The remuneration for CHWs is low throughout the country and varies depending on the funding source.

Adverse effects related to antimalarial drugs are reported by health care providers and systematically sent to the national pharmacovigilance monitoring system. Serious cases are treated and investigated in accordance with the protocol in place. The program supports the National Pharmacovigilance Center to strengthen the pharmacovigilance system at all levels. In this context, the NMCP will develop, with the support of the center, algorithms for the management of adverse effects related to antimalarial inputs. Note that PMI does not support pharmacovigilance activities.

4.2. Plans and Justification for FY 2023 and FY 2024 Funding

National-Level Case Management Activities

At the national level, PMI will provide support for the implementation of a pool of trainers and supervisors to strengthen the capacity of CHWs, service providers, and other key health care providers to manage malaria according to the guidelines at the decentralized level, and to train district and health facility personnel at the regional level. PMI will support efforts by NMCP to revitalize the case management technical working group (funded under the capacity strengthening element). Support for improvements to central laboratory infrastructure is also planned.

Commodities

PMI funds will be used to procure some quantities of malaria commodities (RDTs and ACTs) to maintain a balanced stock of commodities in the country. This will contribute to the "common basket" approach for all donor-procured commodities. When necessary, the quantities listed in the gap tables may be adjusted through reprogramming based on updated gap analyses and Global Fund contributions.

Refer to the ACT, RDT, injectable artesunate, and artesunate suppository gap tables in the annex for more details on planned quantities and distribution channels.

Facility Level

At the facility level, PMI will support:

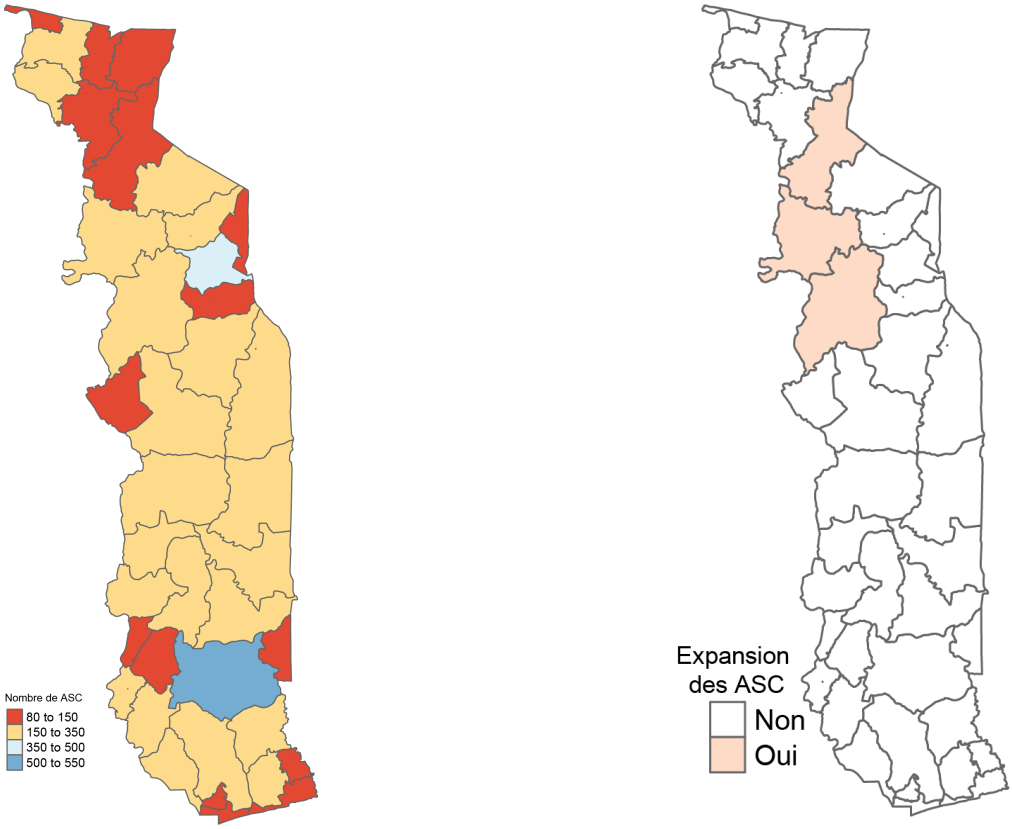
- Strengthening the implementation of case management activities, including training, monitoring, and the quality of care; and
- Strengthening the capacity to improve the correct diagnosis of malaria, including support for microscopy.

Community Level

PMI will support strengthening the implementation of community-level case management activities, including training, monitoring, and quality of care.

Figure 5. Community Health Worker Maps

From left to right: (a) Distribution of CHWs in 2022; (b) districts where expansion of CHWs should be prioritized



Note: The information on current CHW geographic distribution in figure 5A was combined with district-level information on the percent of population living more than 5 kilometers from a health facility and with mortality rates to identify priority districts for additional CHWs (shown in figure 5B).

Monitoring Antimalarial Efficacy

Although Togo started monitoring antimalarial efficacy in 2005, this activity was interrupted in 2013 and resumed in 2021. The 2021 evaluation focused on the therapeutic efficacy and tolerance of AL and DHA-PPQ used for the treatment of uncomplicated *P. falciparum* malaria and conducted at two sites in Togo. After polymerase chain reaction correction, results of the 2021 evaluation show a mean efficacy of 96 percent for AL and 99 percent for DHA-PPQ, which indicates that these antimalarial drugs are still effective for treating malaria cases.

According to the NSP, antimalarial therapeutic efficacy studies are to be done every two years, following WHO guidance. Studies target six sentinel sites (HP Yendoubé, *Centre Hospitalier Préfectoral Niamtougou*, *Polyclinique Tchaoudjo*, *HP Anié*, *CMS Providence Kouvé*, and *CMS de Cacaveli*). The results from these studies are used to help NMCP make decisions on antimalarial drug policies.

Table 1. Ongoing and Planned Therapeutic Efficacy Studies

Year	Site Name	Treatment Arm(s)	Plan for Laboratory Testing of Samples
Ongoing			
2023	Lomé, Niamtougou (Doufelgou DS, Kara region), Dapaong (Tône DS, Savanes regions)	AL, DP	Institut Pasteur, France
Planned (funded under previous or current MOP)			
2024	TBD (2 sites)	AL, DP	TBD PARMA-supported
2025	TBD (2 sites)	AL, DP	TBD PARMA-supported

AL: artemether-lumefantrine; DP: dihydroartemisinin-piperaquine: TBD: to be determined.

PMI will support a therapeutic efficacy study at two sites per year, including re-agents and other inputs required for laboratory analysis. PMI will also engage in discussions with NMCP about adding another alternative arm (e.g., artesunate-pyronaridine) to future studies.

The FY 2023 funding tables contain a full list of case management activities that PMI proposes to support in Togo in FY 2023.

The FY 2024 funding tables contain a full list of case management activities that PMI proposes to support in Togo in FY 2024.

See the SBC section for details on current SBC interventions and challenges and opportunities to improve intervention uptake and maintenance.

5. Health Supply Chain and Pharmaceutical Management

5.1. PMI Goal and Strategic Approach

PMI will work with NMCP and other stakeholders to strengthen the malaria supply chain system. PMI will support NMCP and the Central Medical Stores (CAMEG) in their efforts to improve the quality of the commodity need forecasting and rigorous supply plan monitoring. PMI support will be geared toward addressing the logistics data visibility gap that exists between the regional medical stores and the health facilities. These efforts target the eventual establishment of a routine logistic systems at the last mile and increased capacity of actors at the subnational level of the systems to analyze data and inform decision making around inventory management and re-supply of malaria commodities. Finally, PMI will explore synergies with ongoing U.S.-supported investments for strengthening health supply chain systems through the PEPFAR program in Togo.

5.2. Plans and Justification with FY 2023 and FY 2024 Funding

PMI investments in health supply and pharmaceutical management in Togo will complement the ongoing efforts through Global Fund support. PMI contribution will focus on the following elements of supply chain:

- **Procurement, warehousing, and distribution of malaria commodities** to cover identified gaps.
- **Supply chain system strengthening:** PMI/Togo will provide support to NMCP to strengthen supply plan coordination, in alignment with CAMEG, to ensure the continuous availability of antimalarial commodities, RDTs, and other supplies at service delivery points. Specifically, PMI will help NMCP strengthen key supply chain functions, including quantification, supply planning, order tracking, and monitoring. In addition, PMI will help NMCP regularly produce procurement planning and monitoring reports for malaria activities, as is the case in other PMI partner countries. PMI investments will be used to conduct end-use verification surveys on a regular basis, and the findings will be used to drive program performance. Using the findings of the ongoing evaluation of the electronic logistics management information system, PMI will work with partners and NMCP to coordinate investments and implement evaluation recommendations. This work will be done to improve supply chain data visibility at the subnational level of the health systems. This system support may focus on the last mile (health facility and community level) through the development of standard operating procedures that cover the continuum of logistics tasks, including inventory management, ordering for stock refills, and operating the management information system. It may also include the development of job aids and procedures to guide the community distribution of malaria commodities by CHWs.
- **Institutional support to NMCP and CAMEG:** The capacity of NMCP's procurement and supply management team will be strengthened. Similarly, PMI will invest in improving the capacity at CAMEG, including training in the use of the quantification analytics tool, a modernized solution for country-led forecasting and supply planning.

The FY 2023 funding tables contain a full list of health supply chain and pharmaceutical management systems strengthening that PMI proposes to support in Togo in FY 2023.

The FY 2024 funding tables contain a full list of health supply chain and pharmaceutical management systems strengthening that PMI proposes to support in Togo in FY 2024.

6. Malaria Vaccine

The Ministry of Health has plans to apply for the malaria vaccine as a complementary malaria prevention strategy as recommended by WHO in October 2021. The strategy includes four doses of an antimalarial vaccine administered to children living in zones with moderate to high transmission starting at five months of age. The vaccination schedule consists of three doses at one month intervals, with a fourth dose given 18–24 months after the third dose.

Stratification exercise results show that all districts in Togo, except Golfe, are eligible for the malaria vaccine. Nevertheless, the malaria vaccine program will launch in seven districts in Kara Region (Assoli, Binah, Bassar, Dankpen, Doufelgou, Kéran, and Kozah) and eight districts in Plateaux Region (Akébou, Wawa, Danyi, Kpélé, Kloto, Agou, Haho, and Moyen-Mono), which have been prioritized for the RTS,S vaccine. Expansion to the other districts will be conducted with the R21 vaccine.

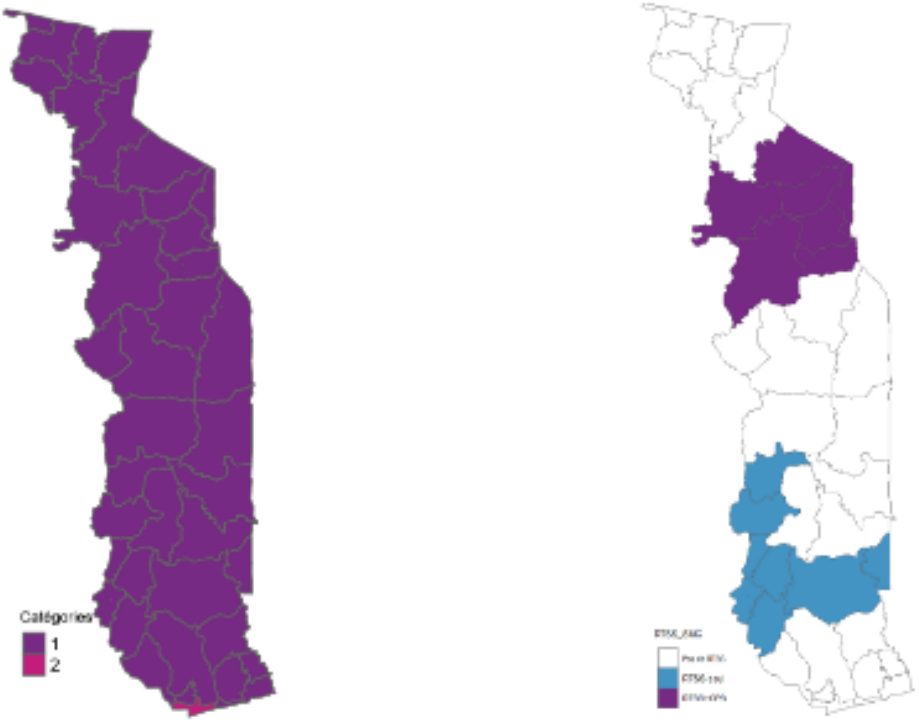
6.1. PMI Goal and Strategic Approach

PMI is not currently planning any malaria vaccine activities because Togo was not included in the first round of vaccine coverage and will therefore not be receiving any RTS,S supply for some time.

Despite all districts except one being identified as eligible for the malaria RTS,S vaccine, a prioritization exercise was conducted for the vaccine roll-out to a subset of districts that stand to benefit the most. The colored districts in Figure 6B indicate priority districts for the roll-out of RTS,S vaccine. Purple indicates RTS,S plus SMC priority-1 districts, and blue indicates RTS,S priority districts outside of the SMC eligible area.

Figure 6. Maps of Malaria Vaccine Plans in Togo

From left to right: (a) Priority 1 and 2 categories for malaria RTS,S vaccine;
(b) districts targeted for priority RTS,S launch with SMC (purple) or without SMC (blue)



Source: Stratification exercises done with WHO support.

7. Social and Behavior Change

7.1. PMI Goal and Strategic Approach

In response to the plans laid out in the new NSP 2023–2026, PMI will support the evaluation and updating of the current communications plan for 2021–2023 (developed in August 2020). The evaluation of the current plan will focus on how well the plan was implemented (the process) and whether or not the objectives laid out in the plan were achieved. The evaluation should also include a review of strengths and weaknesses of the current plan as well as recommendations for the new plan. The updated plan will be based on this evaluation, build on successes of the current communication plan, and support the objectives and strategies of the new NSP. The most recent survey of malaria knowledge, attitudes, and practices was conducted in 2017. PMI will therefore support an updated, nationwide study to provide up-to-date quantitative and qualitative data on the knowledge, attitudes, and practices of the population with regard to malaria, and to measure the impact of several years of communication interventions, to redirect new interventions effectively and sustainably. The information generated by the study, in conjunction with the 2020 MIS and service data, will make it possible to develop specific interventions to identify and address barriers to the adoption of priority behaviors.

Currently, mass media and social networks are used to bring information to the population. Targeted programs and spots are produced and broadcast on local radio stations, while messages of a national scope are broadcast on television channels and on social networks. In addition, activities are developed for communities in conjunction with civil society organizations, locally organized groups, community leaders (traditional chiefs, religious, and others) municipal leaders, and practitioners of traditional medicine. Synergistic behavior change activities are sought with other implementing institutions, such as universities, paramedical schools, and primary and secondary educational institutions).

According to the 2017 survey of malaria knowledge, attitudes, and practices, the primary channel through which the population receives malaria information is health workers or health centers (54.5 percent), followed by the radio (50.8 percent). Other channels include CHWs (27.2 percent); television (21 percent); awareness raising by nongovernmental organizations (5.1 percent); and posters, signs, and leaflets (3.8 percent). Town criers, schools, and places of worship also help convey information about malaria to the population.

7.2. Plans and Justification with FY 2023 and FY 2024 Funding

Priorities

PMI will support SBC activities that promote the uptake and maintenance of all key malaria interventions. During the first year of its implementation in Togo, PMI will work closely with NMCP and other SBC actors to identify priority behaviors. This will be a key element of the review and update of the current SBC communications plan.

Current SBC interventions address the following challenges, according to the current communications plan and message guide:

- Prevention
    - Lack of knowledge on the causes of malaria;
    - Lack of consistent ITN use; and
    - Poor ITN care and upkeep.
- Malaria in pregnancy
    - Women do not take full dose of SP during ANC visits; and
    - Women refuse directly observed treatment.
- SMC
    - Parents do not administer day 2 and day 3 doses of SP/AQ; and
    - Parents do not know how to handle the side effects of SP/AQ.
- Case management
    - The population does not go to CHWs or health facilities if they suspect they have malaria;
    - Testing and treatment supplies are not always in stock at the health facilities;
    - Patients and caregivers do not always follow the prescribed treatment; and
    - Private and public health care workers do not follow the national treatment guidelines.

In FY 2023, PMI plans to support the following activities:

- Evaluation of the current communications plan;
- Development of a new SBC/communications strategy;
- Training in strategic SBC aimed at central-, regional-, and district-level officials involved in malaria programs (rolled out over two years);
- SBC training aimed at facility- and community-based service providers;
- Development of SBC materials based on the new strategy at all levels;
- Social mobilization;
- SBC in schools; and
- Survey of malaria knowledge, attitudes, and practices.

In FY 2024, PMI plans to support the following activities:

- Implementation of the new SBC communications plan;
- Training in strategic SBC aimed at central-, regional-, and district-level officials involved in malaria programs (rolled out over two years);
- SBC training aimed at facility and community-based service providers;
- Distribution of SBC materials at all levels;
- Social mobilization;
- SBC in schools; and
- Updating the SBC/communication plan, incorporating the new data from the survey of malaria knowledge, attitudes, and practices.

The FY 2023 and FY 2024 funding tables contain a full list of SBC activities that PMI proposes to support in Togo in FY 2023 and FY 2024.

8. Surveillance, Monitoring, and Evaluation

8.1. PMI Goal and Strategic Approach

Achieving the objectives of the 2023–2026 NSP requires an effective system for measuring indicators and the timely availability of quality information on malaria at all levels of the health pyramid. The goal is to monitor all interventions and ensure accountability of actions among decision makers, partners, stakeholders, and beneficiaries.

An epidemiological surveillance, monitoring, and evaluation unit within NMCP is responsible for coordinating all activities related to this goal. At the decentralized level, monitoring is carried out by focal points (districts and regions). At a central level, NMCP relies on the monitoring and evaluation technical working group to organize periodic meetings to propose solutions to issues raised during reviews and supervision missions. Each year, an evaluation of the annual work plan is organized to assess performance and prepare the plan for the following year. A mid-term and a final evaluation of the NSP are also organized in accordance with Roll Back Malaria recommendations.

NMCP's surveillance, monitoring, and evaluation objectives include:

- Improving the availability of quality health information for decision making at all levels, including the community level and the private sector;
- Strengthening and optimizing the use of the District Health Information System-2 platform at all levels of the health system;
- Strengthening the archiving and security of digital health data;
- Developing and implementing a strategy for computerizing hospital management; and
- Improving the regulatory framework for managing digital health data.

Areas for improvement in terms of monitoring and evaluation have been identified, including data quality, monitoring/supervision, survey planning, and capacity strengthening for monitoring and evaluation players.

While support for some of these activities has been requested through the recent Global Fund grant application (GC7), PMI plans to complement planned and ongoing activities. Some potential activities include implementation of a national surveillance assessment, capacity strengthening in data reporting and analysis, support for data review meetings and data quality assessments, development of monthly bulletins, and support for a nationally representative household survey that collects crucial data on malaria interventions and outcomes (Demographic and Health Survey [DHS] or MIS).

8.2. Plans and Justification with FY 2023 and FY 2024 Funding

With FY 2023 and FY 2024 funding, PMI proposes to support strengthening epidemiological surveillance systems and the malaria data in the health management information system with a focus on improving data quality and data use for decision making. Support will first focus on any central and regional needs before considering peripheral-level activities. In addition, support will be provided for the organization of science days (*journees scientifiques*) for the exchange of information on scientific and research studies. FY 2023 funding will be used to contribute to a 2024 DHS to ensure collection of malaria data.

The FY 2023 funding tables contain a full list of SM&E activities that PMI proposes to support in Togo in FY 2023.

The FY 2024 funding tables contain a full list of SM&E activities that PMI proposes to support in Togo in FY 2024.

Table 2. Available Malaria Surveillance Sources

Source	Data Collection Activity	2020	2021	2022	2023	2024	2025
Household Surveys	Demographic Health Survey (DHS)					P	
Household Surveys	Malaria Indicator Survey (MIS)	X*					
Household Surveys	Multiple Indicator Cluster Survey (MICS)						
Household Surveys	EPI survey						
Health Facility Surveys	Service Provision Assessment						
Health Facility Surveys	Service Availability Readiness Assessment Survey		X*				
Health Facility Surveys	Other Health Facility Survey						
Malaria Surveillance and Routine System Support	Therapeutic Efficacy Studies				*	P	P
Malaria Surveillance and Routine System Support	Support to Parallel Malaria Surveillance System						
Malaria Surveillance and Routine System Support	Support to Health Management Information System					P	P
Malaria Surveillance and Routine System Support	Support to Integrated Disease Surveillance and Response (IDSR)						
Malaria Surveillance and Routine System Support	Electronic Logistics Management Information System						
Malaria Surveillance and Routine System Support	Malaria Rapid Reporting System						
Other	End-use verification survey					P	P
Other	School-based Malaria Survey						
Other	Knowledge, Attitudes and Practices Survey, Malaria Behavior Survey					P	
Other	Malaria Impact Evaluation						
Other	Entomologic Monitoring Surveys					P	P

*Non-PMI funded activities; X: completed activities; P: planned activities.

9. Operational Research and Program Evaluation

9.1. PMI Goal and Strategic Approach

As part of the surveillance, monitoring, and evaluation framework, NMCP has created a research unit and has carried out a number of studies and evaluations. A research plan has been drawn up, and resources have been mobilized from the government and partners for its implementation. In addition to the impact and effect indicators provided by these evaluations, OR is organized to understand the difficulties associated with implementation, with a view toward readjusting interventions.

Table 3. Non-PMI-Funded OR/PE Studies Planned/Ongoing in Togo

Source of Funding	Implementing institution	Research Question/Topic	Current Status/Timeline
OPT-SMC (EDCTP) through the European Union)	Support from London School of Hygiene and Tropical Medicine, United Kingdom, and the University of Thiès, Senegal, in collaboration with WHO-TDR, Medicines for Malaria Venture and the Togo NMCP	SMC impact study	Data collection is ongoing
MULTIPLY PMC (EDCTP) through the European Union)	Barcelona Institute for Global Health, University of Lomé, Institut de Recherche pour le Développement, Medicines for Malaria Venture, Togo EPI, Togo NMCP	PMC implementation study	Launch: January 2022; end date: August 2024

EDCTP: European & Developing Countries Clinical Trials Partnership; OR: operational research; PE: program evaluation; PMC: perennial malaria chemoprevention.

9.2. Plans and Justification with FY 2024 Funding

While PMI is not currently planning to fund OR/PE activities with FY 2023 or FY 2024 funding, funding for *journées scientifiques* (scientific exchange days) is included under the SM&E section, above.

10. Capacity Strengthening

10.1. PMI Goal and Strategic Approach

One of the goals of the new NSP 2023–2026 is to bolster management capacity in the fight against malaria at all levels. One of the strategies listed for attaining that goal is to strengthen the institutional and management capacity of NMCP. As part of this, NMCP plans to revitalize the currently nonfunctioning multidisciplinary and multisectoral technical committees that have been established to assist NMCP to implement the program, including technical committees in the areas of prevention, case management, monitoring and evaluation, social mobilization, and inventory management. NMCP has also identified a number of logistical support needs, including office material and information technology infrastructure.

PMI's objective is to support NMCP's management and technical capacity development needs to meet the objectives of the NSP.

Peace Corps volunteers have recently returned to Togo following the COVID-19 evacuation. PMI will support volunteers to implement malaria activities at their sites. Some examples include community mobilization and awareness campaigns, assistance with ITN or SMC distribution during campaigns, and focused training programs for CHW.

10.2. Plans and Justification with FY 2023 and FY 2024 Funding

PMI will provide capacity-strengthening support to NMCP staff through participation in conferences and workshops, both national and international, and continued assistance to technical working groups through logistical and operational support and purchase of necessary office and information technology equipment (following an inventory and needs assessment). [[start

PMI will provide support to the Peace Corps through the Small Project Assistance Program.

The FY 2023 funding tables contain a full list of capacity strengthening activities that PMI proposes to support in Togo in FY 2023.

The FY 2024 funding tables contain a full list of capacity strengthening activities that PMI proposes to support in Togo in FY 2024.

11. Staffing and Administration

A minimum of three health professionals will oversee PMI in Togo. The single interagency team, led by the USAID West Africa Mission Director or their designee, consists of a USAID resident advisor and two or more locally hired experts known as *foreign service nationals*, a malaria specialist, and a data specialist, at minimum. The PMI team works together to oversee all technical and administrative aspects of PMI, including finalizing details of the project design, implementing malaria prevention and treatment activities, monitoring and evaluation of outcomes and impact, reporting of results, and providing guidance and direction to PMI implementing partners. PMI interagency staff at the West Africa Regional Mission and USAID/Washington, DC, and Centers for Disease Control and Prevention/Atlanta will provide technical, program, and administrative support to the country team on a regular basis. As this is the first year of PMI support to Togo and as hiring permanent staff will take some time, funding for a short-term consultancy is included in the FY 2023 funding tables. The consultant will help support PMI start-up activities, including providing guidance to implementing partners as they prepare scope-of-work drafts and develop work plans, as well as providing support to NMCP.

ANNEX: GAP ANALYSIS TABLES

Table A-1. ITN Gap Analysis Table

Calendar Year	2023	2024	2025
Total country population	8,281,694	8,472,173	8,667,033
Total population at risk for malaria	8,281,694	8,472,173	8,667,033
PMI-targeted at-risk population	8,281,694	8,472,173	8,667,033
Population targeted for ITNs	8,281,694	8,472,173	8,667,033
Continuous distribution needs			
Channel 1: ANC	254,041	265,340	277,144
Channel 1: ANC type of ITN	PBO	PBO	PBO
Channel 2: EPI	239,771	245,286	253,598
Channel 2: EPI type of ITN	PBO	PBO	PBO
Channel 3: School	0	0	0
Channel 3: School type of ITN			
Channel 4: Community	0	0	0
Channel 4: Community type of ITN			
Channel 5:	0	0	0
Channel 5: Type of ITN			
Estimated Total need for continuous channels	493,812	510,626	530,742
Mass campaign distribution needs			
Mass distribution campaigns	6,628,248	0	0
Mass distribution ITN type			
Estimated total need for campaigns	6,628,248	0	0
Total ITN need: Continuous and campaign	**7,122,060**	**510,626**	**530,742**
Partner contributions			
ITNs carried over from previous year	246,100	246,100	246,100
ITNs from government			
Type of ITNs from government			
ITNs from Global Fund	7,122,060	510,626	530,742
Type of ITNs from Global Fund	PBO	PBO	PBO

ITNs from other donors			
Type of ITNs from other donors			
ITNs planned with PMI funding	0	0	914,787
Type of ITNs with PMI funding		Dual AI	Dual AI
Total ITNs contribution per calendar year	**7,368,160**	**756,726**	**1,691,629**
Total ITN surplus (gap)	**246,100**	**246,100**	**1,160,887**

Table A-2. RDT Gap Analysis Table

Calendar Year	2023	2024	2025
Total country population	8,281,694	8,472,173	8,667,033
Population at risk for malaria	8,281,694	8,472,173	8,667,033
PMI-targeted at-risk population	8,281,694	8,472,173	8,667,033
RDT needs			
Total number of projected suspected malaria cases	5,041,148	5,157,094	5,275,707
Percent of suspected malaria cases tested with an RDT	82%	82%	82%
RDT needs (tests)	2,944,364	2,997,863	3,050,167
Needs estimated based on HMIS data			
Partner contributions (tests)			
RDTs from government	0	0	0
RDTs from Global Fund	3,460,050	2,872,850	3,076,300
RDTs from other donors	0	0	0
RDTs planned with PMI funding	0	300,000	310,000
Total RDT contributions per calendar year	**3,460,050**	**3,172,850**	**3,386,300**
Stock balance (tests)			
Beginning balance	1,317,475	1,833,161	2,008,148
- Product need	2,944,364	2,997,863	3,050,167
+ Total contributions (received/expected)	3,460,050	3,172,850	3,386,300
Ending balance	**1,833,161**	**2,008,148**	**2,344,281**
Desired end of year stock (months of stock)	6	6	6
Desired end of year stock (quantities)	1,472,182	1,498,932	1,525,084

Table A-3. ACT Gap Analysis Table

Calendar Year	2023	2024	2025
Total country population	8,281,694	8,472,173	8,667,033
Population at risk for malaria	8,281,694	8,472,173	8,667,033
PMI-targeted at-risk population	8,281,694	8,472,173	8,667,033
ACT needs			
Total projected number of malaria cases	2,108,197	2,078,339	2,042,579
Total ACT needs (treatments)	**2,108,197**	**2,078,339**	**2,042,579**
Needs estimated based on HMIS data			
Partner contributions (treatments)			
ACTs from government	0	0	0
ACTs from Global Fund	3,087,000	1,110,720	1,988,910
ACTs from other donors	0	0	0
ACTs planned with PMI funding	0	200,000	200,000
Total ACTs contributions per calendar year	**3,087,000**	**1,310,720**	**2,188,910**
Stock balance (treatments)			
Beginning balance	1,252,979	2,231,782	1,464,163
- Product need	2,108,197	2,078,339	2,042,579
+ Total contributions (received/expected)	3,087,000	1,310,720	2,188,910
Ending balance	**2,231,782**	**1,464,163**	**1,610,494**
Desired end of year stock (months of stock)	6	6	6
Desired end of year stock (quantities)	1,054,099	1,039,170	1,021,290
Total surplus (gap)	**1,177,684**	**424,994**	**589,205**

Table A-4. Inj. Artesunate Gap Analysis Table

Calendar Year	2023	2024	2025
Injectable artesunate needs			
Projected number of severe cases	75,904	72,625	69,211
Projected number of severe cases among children	40,580	38,828	37,002
Average number of vials required for severe cases among children	5	5	5
Projected number of severe cases among adults	35,324	33,798	32,209
Average number of vials required for severe cases among adults	15	15	15
Total injectable artesunate needs (vials)	**431,419**	**412,787**	**393,378**
Needs estimated based on HMIS data			
Partner Contributions (vials)			
Injectable artesunate from government	0	0	0
Injectable artesunate from Global Fund	431,419	315,550	383,650
Injectable artesunate from other donors	0	0	0
Injectable artesunate planned with PMI funding	0	0	0
Total injectable artesunate contributions per calendar year	**431,419**	**315,550**	**383,650**
Stock balance (vials)			
Beginning balance	192,077	192,077	94,840
- Product need	431,419	412,787	393,378
+ Total contributions (received/expected)	431,419	315,550	383,650
Ending balance	**192,077**	**94,840**	**85,112**
Desired end of year stock (months of stock)	6	6	6
Desired end of year stock (quantities)	215,710	206,394	196,689
Total surplus (gap)	**(23,633)**	**(111,554)**	**(111,577)**

Table A-5. SP Gap Analysis Table

Calendar Year	2023	2024	2025
Total country population	8,281,694	8,472,173	8,667,033
Total population at risk for malaria	8,281,694	8,472,173	8,667,033
PMI-targeted at-risk population	8,281,694	8,472,173	8,667,033
SP needs			
Total number of pregnant women	254,041	265,340	277,144
Percent of pregnant women expected to receive IPTp1	100%	100%	100%
Percent of pregnant women expected to receive IPTp2	87%	89%	91%
Percent of pregnant women expected to receive IPTp3	66%	70%	74%
Percent of pregnant women expected to receive IPTp4	0%	0%	0%
Total SP needs (doses)	**642,724**	**687,231**	**734,432**
Needs estimated based on HMIS data			
Partner contributions (doses)			
SP from government	0	0	0
SP from Global Fund	520,390	775,620	808,010
SP from other donors	0	0	0
SP planned with PMI funding	0	0	0
Total SP contributions per calendar year	**520,390**	**775,620**	**808,010**
Stock balance (doses)			
Beginning balance	622,410	500,076	588,466
- Product need	642,724	687,231	734,432
+ Total contributions (received/expected)	520,390	775,620	808,010
Ending balance	**500,076**	**588,466**	**662,044**
Desired end of year stock (months of stock)	6	6	6
Desired end of year stock (quantities)	321,362	343,615	367,216
Total surplus (gap)	**178,714**	**244,850**	**294,828**

Table A-6. SMC Gap Analysis Table

Calendar Year	2023	2024	2025
Total population in the SMC targeted age range	490,774	622,564	636,102
SMC drug (SP+AQ) needs			
National population 3-11 months targeted for SMC	76,370	96,878	98,984
National population 12-59 months targeted for SMC	414,404	525,686	537,118
Total national population targeted for SMC	**490,774**	**622,564**	**636,102**
PMI population 3-11 months targeted for SMC	76,364	96,871	98,977
PMI population 12-59 months targeted for SMC	414,410	525,693	537,125
Total PMI population targeted for SMC	**490,774**	**622,564**	**636,102**
Total SP+AQ needs (co-blisters)	**2,552,025**	**3,237,333**	**3,307,730**
Partner contributions (co-blisters, national)			
SP+AQ carried over from previous year	48,501	0	0
SP+AQ from government	0	0	0
SP+AQ from Global Fund	2,011,252	3,199,170	1,531,273
SP+AQ from other donors	0	0	0
SP+AQ planned with PMI funding	0	0	1,737,083
Total SP+AQ contributions per calendar year	2,059,753	3,199,170	3,268,356
Total SP+AQ surplus (Gap)	**(492,272)**	**(38,163)**	**(39,374)**