This Malaria Operational Plan has been approved by the U.S. Global Malaria Coordinator and reflects collaborative discussions with the national malaria control programs and partners in country. The final funding available to support the plan outlined here is pending final FY 2015 appropriation. If any further changes are made to this plan it will be reflected in a revised posting.

Burundi

Malaria Operational Plan FY 2015

TABLE OF CONTENTS

ABBREVIATIONS and ACRONYMS

ACT	Artemisinin-based combination therapy
ANC	Antenatal care
AS-AQ	Artesunate-amodiaquine
BCC	Behavior change communication
CAMEBU	*Centrale d'Achat de Médicaments Essentiels du Burundi*
CCM	Community case management
DHS	Demographic and Health Survey
DPML	Department of Pharmacies, Medicines, and Laboratories
DSNIS	*Direction du Système National d'Information Sanitaire*
EUV	End-use verification
EPI	Expanded program on Immunization
FY	Fiscal year
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
GOB	Government of Burundi
HMIS	Health Management Information System
IPTp	Intermittent preventive treatment in pregnant women
ITN	Insecticide-treated net
M&E	Monitoring and evaluation
MIP	Malaria in pregnancy
MIS	Malaria indicator survey
MOH	Ministry of Health
MOP	Malaria Operational Plan
NMCP	National Malaria Control Program
RDT	Rapid diagnostic test
SOP	Standard operating procedures
SP	Sulfadoxine-pyrimethamine
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

I. EXECUTIVE SUMMARY

The Republic of Burundi, located in the Great Lakes region of Central Africa, has an estimated population of 10.8 million (2015), an average life expectancy of about 54 years, 90% of its population living on less than $2 per day and is one of the ten poorest countries in the world, ranking 180 out of 187 on the Human Development Index[1]. Burundi emerged from over a decade of protracted civil war in 2000, with the signing of the Arusha Peace Accord. Burundi's first democratic election was held in 2005. Despite that, Burundi is facing a new wave of political instability and violence brought about when the President sought and won, in a disputed election, a third term in office. If the country's history is any indication of where things may be headed, this instability will likely persist in the absence of a political resolution.

Malaria is considered a major public health problem in Burundi and places a heavy burden on the health system. According to Ministry of Health (MOH) statistics, malaria is responsible for up to 25% of all outpatient visits and up to 48% of all deaths in health facilities among children under five years old. Almost the entire population of Burundi lives in areas at risk for malaria.

A Malaria Indicator Survey (MIS) was conducted in 2012, the first nationally representative population-based survey for malaria ever done in Burundi. The results update the data on malaria that was collected in the 2010 Demographic and Health Survey (DHS). The use of preventive measures is increasing, with reported household ownership of an insecticide-treated net (ITN) at 63%. The MIS shows that 53% of children under five years old and 56% of pregnant women were sleeping under an ITN the night before the survey. At the time of both surveys, Burundi did not have an intermittent preventive treatment during pregnancy (IPTp) policy however, the DHS does indicate that 99% of all pregnant women make at least one antenatal care (ANC) visit during their pregnancy.

This Malaria Operational Plan (MOP) was developed during a planning visit to Burundi in February 2015, which included participation of team members from USAID/Washington and USAID/Burundi. The activities that USAID is proposing to support with FY 2015 funding conform to the National Malaria Control Strategic Plan (2013-2017) for Burundi, and complement activities that will be supported under the country's Global Fund malaria grant. This plan was developed in close consultation with the National Malaria Control Program (NMCP). The FY 2015 budget for Burundi is $12 million.

Insecticide-treated nets: The scale-up of ITNs is a key component of Burundi's malaria prevention strategy. The goal is to achieve and maintain universal ITN coverage by providing one ITN per two people. Coverage is mainly achieved through mass distribution campaigns, with keep-up coverage maintained through routine distribution via ANC to pregnant women and to children under five years old via immunization services delivery. The last universal coverage campaign was conducted in mid-2014, when over 5 million ITNs were distributed nationwide with support from USAID in macro and micro-planning. The USAID malaria program has supported the procurement of over 3.6 million ITNs since 2010, contributing to needs for routine distribution and the universal coverage campaign; additional funds supported campaign distribution and planning. With FY 2015 funding, USAID will procure and ensure distribution

[1] http://hdr.undp.org/en/countries/profiles/BDI

of over 1 million ITNs through routine distribution channels including ANC, immunization services and primary schools.

Entomologic Monitoring: Burundi's long-term vector control management goal includes increasing national capacity to collect, analyze, and use entomologic data to inform the country's national malaria control strategy. While national entomology capacity remains limited, a great deal of progress has been made over the last few years. With USAID support, an insectary has been established in Bujumbura and eight sentinel, surveillance, entomologic, monitoring sites are operational. Burundi now has its first entomological baseline data and continues to collect data that will guide programmatic decisions in the future. With FY 2015 funding, USAID will continue to support building national entomology capacity through training, while maintaining support for surveillance and insectary activities.

Malaria in pregnancy: In March of 2015, following several years of extensive support from USAID and UNICEF, Burundi adopted intermittent preventive treatment of pregnant women (IPTp) as national policy, adding it to the package of services available through antenatal care clinics (ANCs). As supplies of sulfadoxine-pyrimethamine (SP) arrive, and the new policy is rolled out, partners, including USAID, will be supporting training and supervision of health personnel, and educating the public on the benefits of IPTp as part of a demand-creation strategy. With FY 2015 funding, USAID will continue to support the introduction and scale-up of IPTp through support for supervision within the four USAID focus provinces, and support for the roll-out of the new policy to the 13 remaining provinces in country.

Case management: The national policy on malaria case management recommends confirmed diagnosis of all suspected cases through either microscopy or rapid diagnostic tests (RDTs), and prompt treatment with an efficacious antimalarial drug for all confirmed cases. However, when diagnostic capacity is not available a clinician may presumptively treat any child under five years old. The current guidelines, which USAID helped to revise and update, recommend scaling up RDT use to cover 80% of all diagnostic needs. For treatment, a fixed dose of artesunate-amodiaquine (AS-AQ) is used to treat uncomplicated cases of malaria, while injectable artesunate is used to treat severe malaria. Community case management of malaria is being scaled up throughout the country. While some stockouts and low stocks persisted, case management strengthening activities have shown improvements. The August 2014 end-use verification survey (EUV) indicated approximately 90% of children under five that were confirmed to have malaria received an artemisinin-based combination therapy (ACT) and 85% of facilities had at least one staff member trained in case management and stock management.

With FY 2015 funding USAID will procure approximately 2,270,000 RDTs and up to 840,000 ACTs along with severe malaria treatments to contribute to filling 2015 gaps. USAID will continue to support community case management where it has previously been introduced, while rolling it out in five additional provinces. USAID will also continue to support strengthening of the national supply chain system and improved pharmaceutical management via training and supervision at the national, district, and health facility levels.

Health systems strengthening/Capacity building: USAID is committed to provide the NMCP with support to sustain and strengthen the program and national strategy, while emphasizing

increased capacity development within the NMCP and key policy and structural reforms. In the past year, USAID has focused on support to the NMCP to manage office operations, coordinate partners through quarterly reviews, and to improve leadership and management through professional development training. With FY 2015 funding, USAID will continue to support the improved management and operations of the NMCP and its staff.

Behavior change communication: Behavior change communication (BCC) remains a new part of the broader health and malaria strategy for Burundi. With support from USAID a new national communication strategy was recently adopted and will be implemented in the coming year. With FY 2015 funds USAID will support the NMCP to strengthen capacity in BCC by supporting the national communication strategy, with the aim of increasing awareness about malaria and its dangers, encouraging prompt action in seeking treatment and correct measures to prevent the transmission of malaria and mitigate its impact during pregnancy.

Monitoring and evaluation: In 2012, with USAID support, Burundi conducted its first ever MIS, providing the country with never-before-available data on key malaria indicators, including parasitemia. More recently, USAID support facilitated the development of a national monitoring and evaluation (M&E) plan for the NMCP, which will tie in to the Health Management Information system (HMIS). USAID has also been supporting the periodic gathering of data through the EUV survey (biannual) and is supporting the 2015 DHS. Finally, USAID has been training NMCP, district and facility-level staff to improve data collection and analysis. With FY 2015 funding, USAID will continue to build on past support for the development of the national M&E plan by training staff and conducting EUV surveys, as well as in providing follow-up technical assistance for the 2015 DHS.

II. STRATEGY

1. Introduction

Burundi has been receiving USAID Malaria funding since fiscal year (FY) 2009. Large-scale implementation of malaria control efforts has progressed rapidly. This FY 2015 MOP presents a detailed implementation plan for USAID support for malaria control in Burundi, based on the U.S. Government malaria strategy and the NMCP's Strategic Plan (2013-2017). It was developed in consultation with the NMCP and with the participation of national and international partners involved in malaria prevention and control in the country. The activities that USAID is proposing to support build on investments made by USAID and other partners, including the Global Fund to Fight AIDS, Tuberculosis, and Malaria (Global Fund), to improve and expand malaria-related services. This document briefly reviews the current status of malaria control policies and interventions in Burundi, describes progress to date, identifies challenges and unmet needs to achieve the targets of the NMCP and USAID, and provides a description of planned activities with FY 2015 funding.

Burundi is a limited presence country for USAID. The office's programs are managed by a Country Representative and a small staff of Foreign Service Nationals (FSN) and Third Country Nationals (TCN). Administrative assistance and overall program oversight is provided from USAID/Rwanda.

The total amount of USAID FY 2015 malaria funding for Burundi is $12 million.

2. Malaria situation in Burundi

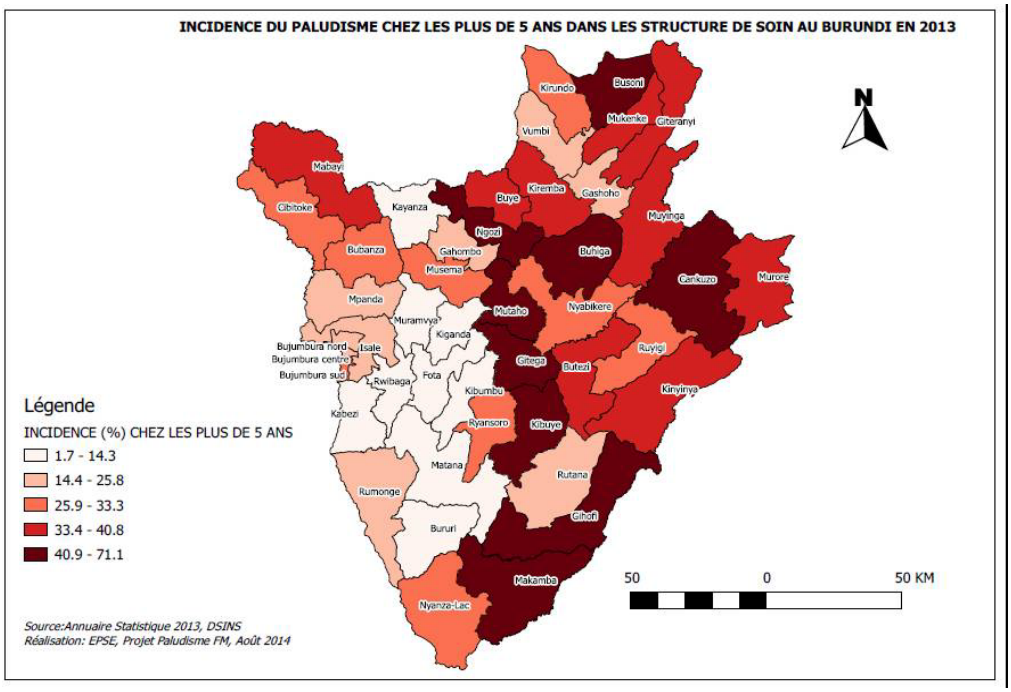
Malaria is considered a major public health problem in Burundi and places a heavy burden on the health system. Burundi's HMIS data indicate that cases of malaria represent approximately 25% of total consultations and account for up to 48% of deaths in health facilities among children under five years old. The estimated 2012 malaria mortality rate was 2%[2]. The major vectors transmitting malaria in Burundi are *Anopheles gambiae* and *An. funestus*.

Nationally, the 2012 MIS found that 17% of children 6-59 months tested positive for malaria while parasite prevalence ranged from 24% in the North region to 1% in Bujumbura-Mairie region. Rural areas carry a higher disease burden than the urban and semi-urban areas. Deeper analysis of available data found that over the 45 health districts, 28 of which are found mostly in the northern side of the country, generate more than 80% of annual cases. The malaria transmission season lasts from May through November, and is longer in the south. *Plasmodium falciparum* accounts for 84% of infections, while the remaining 16% are co-infections with *P. malariae or P. ovale*.

[2] Annual report for the national information system *(Rapport Annuel de la Direction du Système National Information Sanitaire (DSNIS):*

Burundi recorded 4,473,754 reported malaria cases in 2014, a slight increase over the number of cases recorded in 2013 (4,464,369). This increase is likely due to improved diagnosis as confirmed cases of malaria have increased from 87% in 2012 to 96% in 2014[3,4].

Figure 1: Malaria incidence in the greater than 5 population, 2013



3. Country health system delivery structure and Ministry of Health organization

The Republic of Burundi is a small country in the Great Lakes region of Central Africa bordered by Rwanda to the north, Tanzania to the south and east, and the Democratic Republic of the Congo to the west. Although the country is landlocked, it borders Lake Tanganyika to the southwest. Burundi is now a member state of the East Africa Community, which is comprised of Burundi, Kenya, Rwanda, Tanzania and Uganda. The country is divided into 17 provinces, 129 *communes* (five to eleven per province) and 3,061 *collines* with an average population of 3,000 per *colline*. Provincial administrations are structured upon these boundaries. In 2000, the province encompassing Bujumbura was separated into two provinces, Bujumbura Rural and Bujumbura Mairie, consisting of 13 urban *communes*.

The goals outlined in the current national Health Development Plan (*Plan National de Développement Sanitaire II 2011-2015)* are to: reduce maternal and neonatal mortality; reduce infant and child mortality; reduce mortality from communicable diseases; and, strengthen the health system and meet Millennium Development Goals 4, 5, and 6 related to, respectively, reducing child mortality, improving maternal health, and combating infectious diseases. The

[3] EUV 2014

[5] From DSNIS 2014

current National Health Policy places malaria control as first among eight strategies aiming to reduce maternal and neonatal mortality; reduce infant and child mortality; reduce mortality from communicable diseases; and, strengthen the health system and meet new Sustainable Development Goals after the Millennium Development Goals deadline which is 2015. A new national health strategy will be developed from the current strategy for post-2015 health interventions. To improve access to health services for the most vulnerable groups, the Government of Burundi (GOB) has implemented policies to support free services to pregnant women for deliveries in health facilities and for children under five years of age, plus expanding community-based service delivery and national health insurance schemes. The GOB will continue to strengthen the quality of health services through human resource management, capacity building, quality assurance and control, and performance-based financing.

The Ministry of Health (MOH) is organized into three levels with well-defined roles and responsibilities to implement the ambitious national health strategy. The central level is comprised of the Minister and the Heads of Departments and Services who are tasked with setting policies and guidelines. The intermediate level is composed of the 17 health provinces that are administered by a Provincial Bureau, headed by a Chief Medical Officer. The tertiary level is composed of 45 health districts that are managed by health district teams. Each district team is normally led by a physician, and composed of three supervisors, a health information system or data manager, an administrative officer, a drug stocks manager, an accountant, an administrative assistant, a driver, and up to three clerks.

Decentralization is ongoing with strategic planning, implementation, and financial support being transferred to the provincial and district levels. Under the decentralization plan, the provincial health departments will regulate and supervise district-level offices to ensure compliance with the central MOH level. The district-level offices will oversee the delivery of health care services in the local communities. As a result of these changes, provincial and district health departments are becoming responsible for implementing and coordinating activities within their health zones. Included in the decentralization plan, each district will have a district hospital and peripheral health centers; however, the implementation of this plan is not yet complete and five districts still do not have hospitals. The peripheral level is composed of district-based health centers, staffed by nurses who provide preventive and curative interventions for the population.

The MOH has adopted performance-based financing (PBF) countrywide to strengthen the health system with the aim of improving quality care and retaining key personnel. Although PBF is national, not all health elements are covered, and, at the moment, the malaria control program is not included in the system. USAID/PEPFAR has recently withdrawn support to PBF because this support to the health system was classified non-CORE. Currently, the MOH counts on the World Bank, GAVI, and NGOs to support PBF in addition to the GOB. The GOB's budget for health, as a percentage of its total annual budget, had been increasing and peaked at 12%[6] in 2012 before dropping to less than 10% in 2013 as the government prioritized other areas, perhaps due to donor support to the health sector, although no official reason has been stated.

The Burundi health budget dedicated to malaria prevention and control is increasing, though, as the GOB officially committed to pay for malaria commodities in their Global Fund proposal, for

[6] Burundi Budgetary law 2011 *(Loi Budgétaire du BURUNDI 2011)*

an amount of $2,999,892 or 5% of the budget allocated to the country. This amount represents 1% of the total health budget in 2015. The vast majority of funding for malaria control continues to come from external donors (primarily from USAID and the Global Fund).

4. National malaria control strategy

The MOH finalized Burundi's third national malaria strategy (*Plan Strategique National de Lutte Contre le Paludisme 2013-2017)* in November of 2013 and reviewed it in 2014 during the Global Fund concept note development. The national strategy is aligned with the National Health Plan and WHO recommendations. With the support of the GOB and partners, the NMCP's strategy subscribes to the key malaria priorities and activities of universal coverage, improved diagnostics through rapid diagnostic test (RDT) use, increased communication activities, provision of free, first-line malaria treatment, and free case management of severe malaria for children under five and pregnant women.

Burundi's stated goal is to reduce malaria morbidity and mortality by 75% from 2013 levels, by 2017. The strategy is comprised of seven thematic areas: 1) case management, 2) malaria in pregnancy, 3) integrated vector control management, 4) epidemic surveillance, 5) communication, 6) monitoring and evaluation and operational research, and 7) capacity building of the national program. Each area has its own specific goals and objectives.

Case Management
The principal objectives of malaria case management are to minimize severity and complications from malaria infections and thus reduce morbidity and mortality among vulnerable populations, and to ensure that all people with malaria have access to appropriate, timely diagnosis and prompt treatment.

Malaria in Pregnancy
Adopted as a new prevention intervention in Burundi in 2014, under the current national strategy, IPTp was launched in March 2015 in Gitega Province. The NMCP plans to introduce IPTp and scale it up to new provinces progressively. This new intervention is a complement to the distribution of ITNs to pregnant women, providing a more comprehensive package of malaria prevention tools to this vulnerable population. The aim is for all pregnant women to receive at least three doses of SP during antenatal clinic visits, with doses being administered under direct observation of the midwife, as frequently as monthly intervals, starting in the second trimester, up to the day of delivery.

Integrated Malaria Vector Control
Burundi's objectives for integrated vector control are: 1) ensure universal coverage of ITNs with at least 80% use, 2) maintain 100% coverage of households in targeted epidemic-risk districts receiving indoor residual spraying, and 3) establish and operationalize an entomologic surveillance system.

Epidemic Surveillance
The main objective is for the program to develop a surveillance, detection, and alert system containing mapped, high-risk zones with the goal of detecting 100% of epidemics.

Communication
The primary objective under this theme is to ensure that at least 90% of the population will be aware of and adopt the appropriate use of malaria prevention and treatment interventions.

Monitoring and Evaluation
The objective of this theme is to strengthen monitoring and evaluation of malaria control interventions, activities, policies, and strategies and ensure that at least 80% of decisions are made using available evidence.

Capacity Building
The principal objective is to strengthen capacity in program management, resource mobilization and coordination at all levels.

5. Updates in the strategy section

No updates in the strategy section.

6. Integration, collaboration, and coordination

The Global Fund and the USAID malaria program provide more than 90% of malaria control funding to Burundi. This does not take into account staff salaries, which are paid by the government. Other donors include UNICEF, MSF-Belgium, World Vision, World Relief, and other organizations. WHO is providing technical and norm-setting guidance.

The transitional funding mechanism (consolidation of RCC and Round 9) grant ended on July 31, 2015, which covered procurement of key malaria commodities. Under the Global Fund New Funding Model (NFM), the proposed malaria funding level for Burundi is $24,921,567 million for the 2014-2017 allocation period[7] (including remaining funds from the rolling continuation channel, Round 9 and the transition funding.) The NMCP submitted a concept note under the NFM in January 2015, which is currently under review.

The USAID malaria program and the Global Fund provide complementary funding for malaria control efforts in Burundi. The Global Fund Round 9 grant funded the vast majority of the 2014 mass distribution campaign that distributed 5.2 million nets nationwide. The USAID malaria program targeted its funding to ensure technical assistance was available to the NMCP for the macro and micro-planning of the campaign.

For case management, the USAID malaria program and the Global Fund provide all funding for national stocks of ACTs, RDTs, and SP and other essential malaria medicines. USAID coordinates closely with all partners to ensure that national stockouts are avoided and will place emergency orders in case of delayed release of funds or late delivery of commodities. The USAID malaria program will also provide technical assistance for quantification, procurement planning, and monitoring of SP, ACTs, and RDTs. The Global Fund is expanding support for integrated community case management (CCM), which, if funded in Burundi, would open wider

[7] http://www.theglobalfund.org/en/fundingmodel/allocationprocess/allocations/

collaboration with UNICEF and other NGOs that are involved in the integrated management of childhood illnesses. In addition, UNICEF and World Relief support CCM programs in collaboration with WHO and USAID partners in Gitega Province.

Table 1: Major non-USAID Malaria Program External Sources of Funding and Technical Assistance for Malaria Control in Burundi

Source	Amount	Period Covered	What is covered
Global Fund New Funding Model	$24,921,567	August 2015-December 2017	Concept note submitted January 2015. Will cover a portion of prevention and treatment areas of the national strategy.
UNICEF		Ongoing	Delivers nets in emergency situations. Collaborates with World Relief, WHO, USAID and its partners, NMCP to expand CCM activities currently active in Gitega Province. Provides technical and financial support for IPTp implementation.
WHO		Ongoing	Provides technical assistance for the implementation of treatment and prevention policies, planning, M&E, research, surveillance, and management of the NMCP.
World Relief		Ongoing	Collaborating with partners on CCM.
Médecins sans Frontières (Belgium)		Organization leaving in 2015	Collaborating with the NMCP and partners on severe malaria treatment (use of injectable in three districts of Kirundo Province). The project will end in 2015.
World Vision		Ongoing	Implementing CCM in Kibuye Health District.

7. Progress on coverage/impact indicators to date

The following table presents the current state of key malaria indicators in Burundi.

Table 2: Key Malaria Indicators for Burundi

Indicator	MICS 2005	DHS 2010 (baseline)	MIS 2012
Households with at least one ITN	8%	52%*	63%
Children under five years old who slept under an ITN the previous night	8%	46%	53%
Pregnant women who slept under an ITN the previous night	NA	50%	56%
Women who received two or more doses of IPTp during their last pregnancy	NA**	NA**	NA**
Children under five years old with fever in the last two weeks who received treatment with an ACT within 24 hours of onset of fever	NA	70%	69%

*The DHS was conducted before the 2011 universal coverage campaign was conducted.
**IPTp was not policy in Burundi until 2014.

III. OPERATIONAL PLAN

1. Insecticide-treated nets

Background:

The scale-up and maintenance of ITN coverage is a key component of Burundi's overall malaria control and prevention strategy. The NMCP's current national malaria control strategy calls for universal coverage (defined as one net for every two people) through national-level distribution campaigns and supported at all times through continuous (or routine) distribution channels.

Mass Distribution: Mass distribution campaigns are used to quickly scale up coverage of ITNs, by providing one ITN for every two people registered for the campaign. Burundi started mass distribution in 2009 by providing ITNs in three phases, over a two-year period, the last one done in February 2011. This was due to the availability of ITNs. In June of 2014 the country conducted a nationwide campaign, distributing 5.2 million ITNs in one, concerted effort. The ITNs for this campaign were purchased through Global Fund resources. USAID provided key technical assistance for the design and planning of the campaign. The next nationwide campaign is scheduled for mid-2017.

Routine Distribution: Burundi's national malaria control strategy supports free distribution of ITNs to pregnant women and infants through ANC and Expanded Program on Immunization (EPI) clinics respectively. Currently, only UNICEF and USAID provide ITNs for routine distribution, meeting about 85% of the annual, calculated need. ITNs are considered an essential medicine, requiring districts to manage their own stock, which includes quantifying need based on consumption and collecting the district stock from a central warehouse.

Social Marketing: Burundi currently supports the sale of subsidized ITNs via the private sector. This approach began in 2013 after a ten-year hiatus. ITNs are made available throughout the country in shops and in markets. It is estimated that about 50,000 LLINs are sold annually in this manner. In the future, however, it is likely that efforts will refocus maintaining net coverage through EPI and ANC services.

ITN Coverage: Current coverage and usage data are based on the 2012 MIS. The MIS indicates that household ownership of at least one ITN is 63%. Net use among children under five years old and pregnant women is at 54% and 56% respectively, an increase from 45% and 50% in the 2010 DHS. Finally, the MIS shows that 46% of households (one ITN per two people) have access to an ITN. The next DHS is set for mid-2015.

ITN Gap Analysis: The table below presents the total, projected, ITN gap in Burundi between 2015 and 2017. The mass distribution campaign of 2014 reached much of the population. The need moving forward until the next nationwide, mass distribution campaign in 2017 will be to provide adequate supply to maintain high coverage through routine channels, while investigating additional channels such as schools and communities. Contributions from the Global Fund

(based on the concept note), UNICEF, and USAID will cover most of the need for the current three-year period (2015 – 2017).

Table 3: ITN Gap Analysis			
Calendar Year	**2015**	**2016**	**2017**
Total targeted population	10,721,888	11,032,822	11,352,774
Routine Distribution Needs[1]			
ANC	536,094	551,641	567,638
EPI	375,266	386,148	397,347
Estimated Total Need for Routine	911,360	937,789	964,985
Mass Distribution Needs			
2017 mass distribution campaign	0	0	5,676,387[2]
Estimated Total Need for Campaigns	0	0	5,676,387
Total Calculated Need: Routine and Campaign	911,360	937,789	6,641,372
Partner Contributions			
USAID	700,000	850,000	TBD
Global Fund	0	0	3,557,994
Estimated Total Partner Contributions	800,000	950,000	3,557,994
Total ITNs Available	800,000	950,000	3,570,205
Total ITN Surplus[3] **(Gap)**	(111,360)	12,211	(3,071,167)

[1] *Assumptions: Pregnant women are 5% of the total population. Children under 1 are 3.5% of the total population.*
[2] *One ITN for every two people*
[3] *Surpluses are carried over into the next year, but deficits are not.*
UNICEF may provide up to 50,000 nets if there is an emergency.

Progress in the last 12 months:

USAID supported the planning of the 2014 mass distribution campaign, which saw the successful distribution of over 5.2 million ITNs. In the last year, USAID procured and distributed a total of 750,000 ITNs to pregnant women and children under five via routine distribution channels. USAID supported the MOH to expand the harmonized distribution of ITNs to the remaining 25 districts (originally there were 20 pilot health districts), which now manage ITNs in the same manner as essential medicines. Social marketing of ITNs was supported but will be suspended after an analysis that demonstrated that it is not a sustainable intervention in Burundi. The 50,000 ITNs dedicated to social marketing were distributed through the routine system in order to fill gaps.

Proposed activities with FY 2015 funding: ***($4,110,000)***

USAID will continue to support increasing ownership and use of ITNs through routine distribution channels. Specifically, FY 2015 funding will cover:

- *Procurement of ITNs for routine distribution:* Procure approximately 850,000 ITNs to distribute to pregnant women and children under one year of age, free of charge, through ANC and EPI clinics in all 17 provinces. ($2,805,000);

- *Procurement of ITNs for continuous distribution:* Procure approximately 215,000 ITNs for distribution through primary schools as part of the continuous distribution strategy to maintain ITN coverage. ($710,000); and
- *Distribution of ITNs:* Distribute approximately 1,065,000 ITNs through ANC, EPI, and primary schools. ($595,000).

2. Entomologic Monitoring

Background:

The National Malaria Control Strategy calls for the NMCP to establish a sustainable indoor residual spraying (IRS) program in all households where it is needed and feasible. Thus far, the NMCP, with limited NGO resources, has only been able to spray about 50,000 households annually, in targeted communities in Ngozi and Kayanza provinces (epidemic-prone zones). USAID has not prioritized support for IRS but rather has been supporting the development of an integrated vector control strategy and assisting in its implementation. This strategy describes the complementarity between IRS, ITNs, and other vector control interventions as well as the need for surveillance and monitoring systems. The NMCP currently lacks critical resources such as trained entomology personnel at the central and district levels and data management capacity to implement this strategy effectively. As a result, USAID has been supporting the NMCP to build staff capacity, which has produced some notable results including the management of the most recent and successful ITN campaign, the development of fixed entomologic surveillance sites throughout the country and a new insectary in the capital.

Highlighting this support, USAID helped to establish an insectary with an entomology laboratory to enable the NMCP to conduct susceptibility tests for the insecticides used in ITNs and IRS. A susceptible *An. gambiae* (Kisumu strain) colony was received through collaboration with the Rwandan NMCP. The Burundi NMCP made tremendous progress in running the insectary and has already produced reliable data. This will help the NMCP to make informed and evidence-based decisions about vector management approaches.

Progress in the last 12 months:

USAID continues to support the NMCP entomology program to build and expand its capacity. Currently, USAID is supporting eight sentinel sites throughout the country, which provide data on vector densities, behavior, and infectivity. The eight current sentinel sites collect mosquitoes through a variety of methods including via light traps, pyrethrum spray catches, and, newly-introduced, human-landing catches. With support from South Africa, a full, first year of data has been analyzed. These results are added on to data gathered the previous year, and are helping move the NMCP toward the point at which it will be able to make evidence-based, programmatic decisions for vector control measures. There is discussion underway to expand to 12 sites, however USAID will carefully review the proposed rationale, including consultation with USAID/Washington entomologists, before agreeing to support any expansion.

Proposed activities with FY 2015 funding: ***($800,000)***

USAID will continue to support the NMCP to build entomological surveillance, monitoring, and vector control capacity. Specifically, FY 2015 funding will support:

- *Improved vector control capacity:* Continue to improve national entomology capacity, with technical assistance, refresher training for technicians, and conduct entomological monitoring in eight, sentinel sites. ($500,000); and
- *Rehabilitation of entomology laboratory:* Rehabilitation of an old government building to be used as an entomology laboratory; support will include equipment, furnishings and standard laboratory supplies and training on standard laboratory operating procedures. ($300,000).

3. Malaria in pregnancy

Background:

In 2002, based on data derived from therapeutic efficacy studies of the then first-line antimalaria drugs, SP and chloroquine, that showed a 49% treatment failure rate in children under five years old, the MOH decided to ban SP for malaria treatment and prevention use. Starting in 2009, USAID, UNICEF and WHO began advocating for a review of the policy, citing data from numerous studies showing the benefit of SP preventive therapy to pregnant women in spite of SP treatment failure potential, and in the absence of any other alternatives to SP.

In 2014, Burundi adopted a new policy to provide SP to pregnant women through ANC clinics. Given that 99% of pregnant women make at least one ANC visit (2010 DHS) this was an important move in the effort to prevent malaria in pregnancy. The current policy is to administer at least three doses of SP during a woman's pregnancy, with doses being administered under direct observation of the midwife, as frequently as monthly intervals, starting in the second trimester, up to the day of delivery, in addition to providing her an ITN upon her first visit.

A steering committee is now overseeing the roll out of IPTp throughout the country. The roll out includes development of guidance and training manuals, training of health workers, quantification and ordering of SP, and intensive communication efforts to inform the public, in particular pregnant women, to expect and demand IPT when they attend ANC.

Progress in the last 12 months:

USAID and UNICEF have helped the MOH to conduct in-service training for health workers on implementing the new policy. Moreover, a communication campaign has been orchestrated to raise public awareness about the policy change. Finally, USAID procured 1 million treatments of SP (about 40% of the estimated need), which has been pre-positioned throughout the country. An official launch took place March 3, 2015. USAID and UNICEF have plans in place to roll out IPTp throughout the entire country.

Proposed activities with FY 2015 funding: ***($759,500)***

USAID will continue to support the roll out of the new IPTp policy, working toward full nationwide scale up. In particular, FY 2015 funding will support:

- *Supervision of IPTp implementation:* Provide support for supervision of IPTp at ANC in the four provinces which initiated roll out of the new policy (Kirundo, Muyinga, Karuzi, and Kayanza). ($85,000); and
- *Roll out of IPTp at the facility level:* In collaboration with the NMCP, coordinate the roll out of IPTp to the remainder of facilities in the country, ensuring SP administration and support for supervision. ($674,500)

4. Case management

a. Diagnostics

Background:

The 2013-2017 National Malaria Control Strategy sets a target of providing parasitological diagnosis of malaria by 2017, for 90% of persons suspected of having malaria infections. In accordance with WHO recommendations, Burundi has revised its treatment policy to require diagnostic confirmation of all fever cases before treatment with an ACT.[8] Current national policy calls for confirmation of every suspected case of malaria either by RDT or microscopy before any ACT treatment is prescribed. The policy also recommends thick and thin smears for microscopic determination of plasmodium species.

Access to malaria diagnostics is fairly widespread in Burundi: microscopy is available in most health centers and hospitals, and use of RDTs is expanding. Burundi continues to focus on increasing RDT use in an effort to meet WHO guidelines (also the current national malaria guidelines) by following the recommended proportion of 80% RDTs and 20% microscopy to confirm suspected cases; however laboratory registers indicate that microscopy remains the preferred method. Yet, stockouts in RDTs and microscopy reagents due to increased usage and some poorly planned procurement have hindered consistent malaria confirmation. Burundi has made a focused effort to expand access to RDTs, with evidence showing that a trend toward it becoming the primary method for confirming malaria infections. According to 2014 HMIS data, confirmatory testing rates in Burundi are 96%[9], 40% of which is from RDTs and 60% for microscopy. USAID's non-randomized EUV of health facilities, conducted in Sep-Oct 2014, found that 90% of children under-five who tested positive for malaria were prescribed an ACT.

In 2014 USAID filled the gap in RDTs and will fill gaps that were determined in the concept note to the Global Fund in 2016, to maintain adequate stock in country in order to satisfy increased RDT consumption.

[8] Guidelines for the treatment of malaria -- 2nd edition. World Health Organization, 2010. http://whqlibdoc.who.int/publications/2010/9789241547925_eng.pdf

[9] EUV October 2014

The table below describes the current RDT gap analysis. This analysis was created during a joint partner and donor exercise for all malaria commodities while writing the malaria concept note for the Global Fund.

Table 4: RDT Gap Analysis			
Calendar Year	**2015**	**2016**	**2017**
RDT Needs	**4,949,982**	**5,065,283**	**4,538,494**
Partner contributions:			
USAID	2,994,214	2,270,000	1,250,000
Global Fund	1,122,450	-	-
Government of Burundi	833,318	833,318	833,318
World Vision	-	833,333	833,333
RDTs Available	**4,949,982**	**3,936,651**	**2,916,651**
Total RDT Gap (Surplus)	**- 0**	**1,128,632***	**1, 621, 842***

** Gap possibly to be covered by the Global Fund*

Progress in the past 12 months:

USAID remains committed to supporting confirmed diagnosis of suspected malaria cases. In the last year, USAID procured a total of 5,200,000 RDTs for distribution through CAMEBU, for use in health facilities nationwide as well as for CCM. Despite high levels of confirmatory testing noted in the HMIS, supervision visits and the EUV survey reveal that there is still a need for refresher training and continued supervision in proper malaria diagnosis. Although previous confirmatory testing has been high per the EUV in October of 2014 and HMIS, there was, unfortunately, a two month stock out at the central level during July and August 2014, which will likely result in a decline in confirmation (waiting for the results of the EUV conducted in the first half of 2015), and suggests a need of more coordination among donors about procurement processes.

Proposed activities with FY 2015 funding: ***($2,327,500)***

Malaria laboratory diagnosis is a key component of high quality case management and USAID will continue to support the strengthening of microscopic and RDT diagnosis of malaria in health facilities and at the community level. According to the new RDTs selection policy from PMI, Burundi will only purchase Pf tests and the lab technicians will be encouraged to do more microscopy for each negative or non-determined RDT result to detect other species. Specifically, FY 2015 funding will support:

- *Procure RDTs in support of the roll out of the new malaria diagnosis policy:* Procure up to 2,270,000 RDTs to contribute to the estimated RDT need based on the new requirements of current diagnosis protocols. ($1,427,500);

- *Strengthen diagnostic and case management capacity:* Support training, refresher training and supervision for diagnostics and case management. Also, support review and update of current diagnostics and case management policy. ($800,000); and
- *Procure lab supplies:* Procure microscopy reagents, consumables and other materials like microscope spare parts. ($100,000).

b. Treatment

Background:

AS-AQ co-formulated fixed dose remains the first-line treatment for uncomplicated malaria in Burundi according to malaria treatment guidelines. For patients who fail to respond to AS-AQ, a seven-day course of oral quinine-clindamycin is the recommended second-line treatment. For treating malaria infections during pregnancy, quinine clindamycin is used during the first trimester; while AS-AQ is recommended for the second and third trimesters. Injectable artesunate is the recommended treatment for severe malaria.

The MOH, through the NMCP, is scaling up CCM, taking into account the malaria prevalence in health districts. The Global Fund's New Funding Mechanism opened an opportunity to integrate diarrhea and ARI to the CHWs package and to expand the strategy geographically. UNICEF and other donors are providing their support to this strategy.

The table below describes the current ACT gap analysis. This analysis was created during joint partner and donor exercise in March 2014 for all malaria commodities for 2014-2016.

Table 5: ACT Gap Analysis

Calendar Year	**2015**	**2016**	**2017**
ACT Needs	**3,873,899**	**3,526,109**	**3,159,394**
Partner Contributions:			
USAID	1,708,524	1,353,386	1,384,373
World Vision	-	1,000,000	1,000,000
Global Fund	2,167,617	-	-
ACTs Available	**3,876,141**	**2,353,386**	**2,384,373**
Total ACT Gap (Surplus)	**(2,242)**	**1,172,723***	**775,021***

** Gap possibly to be covered by the Global Fund*

Progress during the past 12 months:

USAID remains committed to supporting access to treatment for confirmed malaria cases throughout the country. In the last year, USAID procured 1,983,269 doses of ACTs and

3,200,000 RDTs to fill 2014 commodity gaps due to delays in Global Fund disbursements, to prevent stockouts.

In 2014 USAID procured injectable artesunate and clindamycin to start up with the second-line treatment of uncomplicated malaria and new line for severe malaria.

The CCM project continues to focus on proper diagnosis and treatment of malaria in children under five years old at the community level. The 402 CHWs benefited from refresher training and replacement of used and/or missing equipment in their medical kits. During the first quarter of 2014, these CHWs treated 89% of children who tested positive for malaria with RDTs within 24 hours of onset of fever. More work is needed to improve referral practices of CHWs who are confronted with negative RDT results and a fever, as data from the CCM project evaluation indicate that most children in these circumstances are not referred to a health facility.

Proposed activities with FY 2015 funding*: ($2,060,000)*

Ensuring prompt, effective, and safe ACT treatment to a high proportion of patients with confirmed malaria in Burundi represents a key challenge for the NMCP and its partners. Furthermore, to avoid complications or deaths resulting from delayed care seeking or some other cultural barriers, CCM is an effective approach to ensure that children under five years old have access to prompt and effective treatment. With FY2015 funding, USAID will support the following activities:

- *Procure ACTs:* Procure about 1.4 million AS-AQ treatments, which will meet approximately 100% of the anticipated need in public facilities for calendar year 2015. ($840,000);
- *Procure injectable artesunate:* Procure and distribute about 200,000 vials of injectable artesunate for treatment of severe malaria. ($470,000);
- *Strengthen community case management:* Continue support for CCM of malaria with CHWs in 402 communities, and expand into other communities in the four original USAID target provinces, as part of a comprehensive CCM package of services ($300,000); and
- *Support scale-up of community case management:* Support of scale-up of CCM in five additional provinces, including the recruitment, training and provisioning of about 475 CHWs. ($450,000).

c. Pharmaceutical management

Background:

Ensuring an uninterrupted supply of malaria commodities is essential to reduce morbidity and mortality due to malaria. A strong pharmaceutical management and supply chain system requires that multiple components such as quantification, distribution, and procurement function well together. The Department of Pharmacies, Medicines, and Laboratories (DPML) is the division of the MOH charged with providing oversight to the pharmaceutical sector. The DPML oversees the central purchasing and warehousing agency, CAMEBU.

Procurement and management of all public sector pharmaceuticals destined for public health facilities, both government and faith-based, falls under the responsibility of CAMEBU. The DPML updates the essential drugs list about every three years with CAMEBU issuing tenders, procuring and managing the distribution of essential drugs to public sector facilities. With the income from user fees, districts and hospitals may opt to purchase additional supplies and drugs from the private sector. Health element/disease programs are essentially vertical, responsible for the management of their commodities, including the management of orders, procurement, distribution and general oversight to CAMEBU as it relates to their commodities. CAMEBU shares distribution and inventory data on a monthly basis with the NMCP. CAMEBU does not currently manage ITNs, but discussion is underway in light of the policy change that districts manage ITNs as essential drugs.

The MOH operates both a push and pull pharmaceutical supply system depending on district needs. Distribution to districts occurs intermittently due to costs and a significant lack of functional transportation vehicles for distribution. Quantification of pharmaceutical supplies is primarily based on districts' requests rather than any prior forecasting or planning by the DPML or CAMEBU. With the MOH's decentralization of the health system, provincial warehouses no longer exist. Instead, district personnel submit requests directly to CAMEBU through request forms that are sent or delivered in-person by the district on a monthly basis. Health center personnel collect supplies from the district-level, paying by cash or credit. Stock level parameters are a maximum of 14 months and minimum of 9 nationally, with a desired amount of stock of 12 months and a maximum and minimum of 9 and 6 months at CAMEBU.

Although CAMEBU functions fairly well there are still many constraints in the pharmaceutical management and supply chain system throughout the country. Some hospitals and districts have computers and logistics management information systems (LMIS), but the systems are neither linked to each other or to CAMEBU's system to facilitate quick, automated national quantification and ordering. Currently hospitals can order directly from CAMEBU and immediately receive malaria-related medicines, while health districts must go through an indirect process of approvals.

The national malaria strategic plan for 2013-2017 highlights Objective #7 of ensuring a functioning national supply chain system and ensuring the availability of quality-assured malaria medicines and diagnostics. These assured medicines should also follow the national guidelines on malaria treatment. Achieving the case management objectives outlined in the strategic plan hinge on guaranteeing a strengthened supply chain system and the sustained availability of malaria commodities.

Since the beginning of the USAID malaria program in Burundi, malaria commodity delivery has improved due to better coordination with donors and partners, increased training and supervision, standard operating procedures (SOPs) in pharmaceutical management and improved practices for delivering commodities. When the USAID malaria program began, stockouts were the norm and it took months for malaria commodity orders to be delivered and distributed. USAID supported the formation of a coordination body for the management of medicine stocks to enable regular meetings to be held between CAMEBU, NMCP, and the Global Fund. As part of this

coordination body, USAID facilitated a revised requisition process for the ordering and approval of ACT orders among all partners, which has greatly decreased request and delivery time of orders. New SOPs for pharmaceutical management for the district and facility level were introduced in 2012. The new SOPs greatly improved the ACT requisition system. Although stockouts are still an issue and improved donor coordination is still needed, as mentioned in the case management section, the 2014 EUV survey (although not nationally representative) indicated fewer stockouts and the ability to maintain stock and timely receipt of commodity requests (see Progress during the last 12 months section, below).

Progress during the last 12 months:

In the past 12 months USAID continued to support the strengthening of the malaria pharmaceutical management system, including drug forecasting, procurement, storage, inventory, and transportation. USAID continued to support the coordination body for the management of medicine stocks to enable regular meetings led by the DPML and held between CAMEBU, NMCP, and the Global Fund. Monthly stock status reports and meetings are now held in an effort to improve planning and coordination, although adherence to supply plans remains a challenge. USAID also supported trainings on supply planning, quantification, and pharmaceutical management practices. In addition, terms of reference were developed for the National Quantification Committee for malaria commodities. The committee will serve as the platform for strengthening and supporting regular forecasting and supply planning exercises. In addition to the mentioned support and coordination with the NMCP there is now a full time pharmacist seated at the NMCP to assist with malaria commodities.

Support to the districts around sending reports and placing orders in a timely manner (according to a new distribution calendar) improved to 100% (August 2014 EUV). Although stockouts remain an issue, maintaining high stock availability of at least one ACT on the day of the visit has remained high, 93% in 2014 (2014 EUV) and 91% in 2012 (2012 EUV). However, stockouts of RDTs were unfortunately very high, up to 71% in 2014 which was likely due to some late Global Fund orders, confirming the need for increased coordination among donor commodity orders.

Proposed activities with FY 2015 funding: ***($658,000)***

USAID will continue to support strengthening of the malaria supply chain and pharmaceutical management for malaria system at the national, district and facility levels. Continued training, supervision and capacity building at all levels will focus on improved quantification, increased adherence to treatment guidelines and pharmaceutical management standard operating procedures. Ensuring stock of essential malaria commodities for implementation of CCM of malaria in Gashoho, Gahombo and Kirundo districts is a priority. As RDTs were interrupted this past year and are still rolling out, ensuring an improved flow of commodities will be crucial to uptake and proper diagnosis and treatment. Attention to consumption and use of newly introduced commodities (severe malaria medicines and SP) will be important for accurate future procurements and availability. USAID will coordinate with Global Fund headquarters to avoid delays in bids that cause stockouts.

- *Strengthen national supply chain logistics and pharmaceutical management:* Continue support for supply chain logistics and pharmaceutical management at the national level in collaboration with CAMEBU, including refresher trainings, and coordination of planning committees. This investment will also strengthen the NMCP's capacity to quantify all malaria commodities, and improve the pharmaceutical management capacity in targeted districts. The EUV survey will also be funded under this activity. ($408,000)
- *Strengthen district and facility-level supply chain logistics and pharmaceutical management*: In coordination with national guidelines, strengthen supply chain and logistics systems within targeted health districts (district pharmacies, *Bureau de District de Santé*, hospitals and health centers) to reduce stock-out and waste of essential commodities. Includes support to improve access to essential commodities at the facility level. ($250,000).

5. Health system strengthening and capacity building

Background:

The NMCP was established in January 2009 and is organized into four key program units including case management, vector control, monitoring and evaluation, and resources management. These program units are supported by 21 staff members, which include two physicians, four biologists (who have received some entomology training), several laboratory technicians, and an economist. The program is led by a director and a deputy director. There have been four NMCP directors since its inception, the current director was appointed in January 2014.

One of the four goals of the Burundi National Health Plan is to enhance the performance of the national health system. One of these goals is to devolve critical health system functions to the health districts, by forming and empowering district health teams. The aim is to be able to better provide quality health services, including clinical and community malaria prevention and treatment services. There are, however, no malaria focal persons at the district or health facility levels; rather, health personnel are trained to provide and manage integrated health services, including those for malaria. USAID's health program fully supports this Burundi health goal and is funding activities to improve the health information system, drug management, the supply chain, and human capacity development in an integrated fashion at the health district level.

Progress in the last 12 months:

USAID continues to provide support to the NMCP with the aim of improving the operation of their office and functionality of their staff. This support includes facilitation of quarterly meetings with in-country RBM partners, training in leadership and management, access to regional professional development opportunities, and organizational development based on continuous review of existing capacity versus projected needs.

Proposed activities with FY 2015 funding: ***($150,000)***

With FY 2015 funds, USAID will continue to support the organizational operations and development of the NMCP with the following activities:

- *Support to NMCP:* Provide support to the NMCP to improve operations and functions of their office including quarterly meetings with in-country RBM partners, leadership and management training, regional professional development opportunities, organizational development, and some equipping of the NMCP offices and conference room. ($150,000).

6. Behavior change communication

Background:

Behavior change communication is an important component of malaria prevention and control activities and is crucial to achieving coverage and use objectives. A National Communication Strategy for Malaria was developed in 2014 and considered during the development of the concept note. By 2017, the strategy aims to raise awareness in the general population to increase acceptance and adoption of behaviors related to malaria prevention and treatment.

There is only one full-time BCC staff person at the NMCP, and the BCC technical working group in the NMCP is not yet functional. Nevertheless, donor-supported BCC activities appear to have had an impact on key malaria-related behaviors. The 2012 MIS indicates that there was significant improvement in key indicators from the baseline 2010 DHS. The use of ITNs among pregnant women the night before the survey increased from 50% in 2010 to 63% in 2012. Among children under five years old, ITN use the night before the survey increased from 50% in 2010 to 56% in 2012. Despite these gains, ITN use among pregnant women and children under five years old are still below the national objective of 80%.

Following the 2014 ITN mass distribution campaign, targeted BCC activities are needed to ensure proper ITN use among the targeted populations. Furthermore, following the update and release of the new malaria treatment guidelines, which include the use of clindamycin and quinine for second-line treatment of uncomplicated malaria, BCC interventions are required to ensure compliance.

Progress during the past 12 months:

USAID's investment in BCC activities have focused on increasing uptake of malaria services, including correct and consistent use of ITNs, prompt care seeking behavior for febrile illnesses, and ANC attendance to increase uptake of IPTp among pregnant women.

Proposed activities with FY 2015 funding*: ($470,000)*

USAID will expand its support in this area to include increasing awareness and uptake of critical malaria prevention and treatment tools through integrated BCC activities. Specifically, FY 2015 funding will support:

- *Support malaria BCC activities:* Provide support for communication activities to promote malaria prevention and treatment messages via various channels including radio, local community groups, and health facilities. Messages include uptake of malaria services, including correct and consistent use of ITNs, prompt care seeking behavior, and promoting ANC attendance in four provinces, including Karuzi, Kayanza, Kirundo, and Muyinga. ($120,000); and
- *Support malaria BCC activities:* Provide support for communication activities to promote malaria prevention and treatment messages via various channels including radio, local community groups and health facilities. Messages include uptake of malaria services, including correct and consistent use of ITNs, prompt care seeking behavior, and promoting ANC attendance in the 13 remaining provinces of the country. ($350,000).

7. Monitoring and evaluation

Background:

Malaria is included in Burundi's Department of Statistics system, the *Direction du Système National d'Information Sanitaire* (DSNIS). Each month, public health facilities report on the number of malaria cases and related deaths. Facilities that can perform microscopy are expected to test suspected malaria cases and report slide-positive rates. Although data are stratified by age and facility type (inpatient versus outpatient), they are not consistently reported as laboratory confirmed and, in fact, are often based on a clinical diagnosis.

Baseline malaria information was provided by the 2012 MIS including, for the first time ever, parasitemia rates. A DHS will be conducted in 2015 and will include biomarkers, building on data gathered in the 2012 MIS.

The NMCP is currently operating under the 2013 to 2017 National M&E Plan. The plan includes several key components such as data supervision sheets to verify if planned activities have been implemented according to the annual work plans, identifying gridlocks and proposing solutions. The plan also identifies key indicators linked to the malaria control database. Finally, the plan describes mechanisms to provide feedback to peripheral levels, to policy makers and partners, in order to improve future planning and decision-making and routinely document whether planned strategies have or have not achieved the intended results. The aim of this last piece is to build capacity for local decision-making using health data.

Progress in the last 12 months:

During the last 12 months, USAID assisted the NMCP to roll out their new National M&E plan. The four people who were trained with support from USAID are now assisting with this roll out by training local health officials, who in turn will supervise the various components of the plan as well as lead discussions with key local officials about how to interpret and use the information gathered for making policy.

Also, USAID has been involved in the early planning for the 2015 DHS, including review of the malaria module components: biomarkers and questionnaires on behavior and knowledge.

Proposed activities with FY 2015 funding: ***($565,000)***

USAID FY 2015 malaria funds will be used to:

- *Support 2015 DHS:* Support remaining funding gap for implementation of the malaria module within the 2015 Burundi DHS including technical assistance. ($200,000);
- *Support the HMIS:* Support to the *Direction du Système National d'Information Sanitaire* (DSNIS) to train and facilitate district data managers to lead routine supervision in order to improve data entry and quality, and to analyze data for use in decision-making. ($130,000);
- *Support end-use verification surveys:* Support two end-use verification surveys to monitor the availability and utilization of key antimalarial commodities at the health facility level. ($75,000) and
- *Support the Routine Data Quality Assessment:* Support central-level officials to lead audits and validation of routine data in all health districts, as well as to conduct data checks in health facilities in order to validate the district level information. ($160,000).

8. Operations research

No operations research planned in Burundi with FY 2015 funds.

9. Staffing and administration

Burundi is a Field Office and a part of USAID/Rwanda. Traditionally two health professionals oversee the USAID Malaria Team in Burundi; however the malaria team lead position has been vacant for two years in spite of active and continuing recruitment by the Mission. The malaria team shares responsibility for development and implementation of USAID malaria strategies and work plans, coordination with national authorities, managing collaborating agencies, and supervising day-to-day activities.

The USAID malaria professional staff work together to oversee all technical and administrative aspects of the malaria program, 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 to partners.

The USAID lead in country is the USAID Country Representative. The day-to-day lead for the USAID malaria program is delegated to the USAID Health Office Director and thus the two malaria staff report to the USAID Health Office Director for day-to-day leadership, and work together as a part of a single interagency team. The technical expertise housed in Washington guides PMI programmatic efforts.

Locally-hired staff to support USAID malaria activities either in Ministries or in USAID will be approved by the USAID Country Representative. Because of the need to adhere to specific country policies and USAID accounting regulations, any transfer of USAID malaria funds

directly to Ministries or host governments will need to be approved by the USAID Country Representative and Controller, in addition to the U.S. Global Malaria Coordinator.

Proposed activities with FY 2015 funding: ***($100,000)***

- *In-country USAID staff salaries, benefits, travel, and other malaria program administrative costs:* For the last two years, Burundi has been unsuccessful in filling the resident adviser vacancy. Although solicitations were issued and interviews were conducted, none of the preferred candidates chose to accept the position. In addition, due to the transition of the management authority for the Burundi office from Nairobi to Kigali over the past 16 months, funds that had been planned for overhead and management-backstopping support for the Limited Presence Office in the East Africa Regional Mission were not used. Thus, there currently is a pipeline of $1,201,690 in the overall health budget (Development Objective Agreement or DOAG), a portion of which will be used to pay current malaria-related, A&O costs for the Burundi and Kigali offices, including salary, benefits, and related ICASS costs of the FSN malaria adviser, as well as to hire an additional FSN and to support a resident adviser; the recruitment of the resident adviser will resume over the course of this fiscal year. For FY 2015 funds, $100,000 will be the malaria contribution to the Program Design and Learning (PD&L) costs for the health gender analysis for the Burundi PAD. ($100,000).

Table 1: Budget Breakdown by Mechanism

BURUNDI ($12,000,000)

Planned Malaria Obligations for FY 2015

Mechanism	Geographic Area	Activity	Budget ($)	%
Global Supply Chain	Nationwide	Commodity Procurement (ITNs, RDTs, ACTs, severe malaria treatment and lab supplies) and distribution of ITNs	6,797,500	56%
AIRS	Nationwide	Entomologic capacity building	800,000	7%
Malaria Care	Nationwide	Diagnostics and Case Management	800,000	7%
SIAPS	Nationwide	Support for IPTp, case management, diagnostics and pharmaceutical management strengthening, BCC, M&E and EUV and capacity building for NMCP.	2,547,500	21%
IHPB	Karuzi, Kayanza, Kirundo and Muyinga	Supervision, CCM, BCC, Supply Chain	755,000	6%
Measure DHS	Nationwide	2015 DHS	200,000	2%
USAID	Bujumbura	Administration and oversight (PD&L)	100,000	1%
Total			**12,000,000**	**100%**

Table 2: Budget Breakdown by Activity

BURUNDI FY 2015 ($12,000,000)

Planned Malaria Obligations for FY 2015

Proposed Activity	Mechanism	Budget (*Commodities)*	Geographic Area	Description of Activity
PREVENTIVE ACTIVITIES				
ITNs				
1. Procurement of ITNs for routine distribution	Global Supply Chain	2,805,000	Nationwide	Procure approximately 850,000 ITNs for routine distribution through ANC and EPI programs.
2. Procurement of ITNs for continuous distribution	Global Supply Chain	710,000	Nationwide	Procure approximately 215,000 ITNs for distribution through primary schools as part of the continuous distribution strategy to maintain ITN coverage.
3. Distribute ITNs	Global Supply Chain	595,000	Nationwide	Distribute approximately 1,065,000 ITNs through ANC, EPI, and primary schools.
SUB-TOTAL: ITNs		**$4,110,000** ***($3,515,000)***		
Entomologic Monitoring				
1. Support entomologic capacity building	AIRS	500,000	Nationwide	Continue support to improve national entomology capacity with technical assistance, refresher training, and maintain eight sentinel sites for monitoring.

Proposed Activity	Mechanism	Budget (*Commodities)*	Geographic Area	Description of Activity
2. Rehabilitation of entomology laboratory	AIRS	300,000	Gihanga	Rehabilitation of old government building in order to be used as an entomology laboratory; will include equipment, furnishings, and standard laboratory supplies as well as training on laboratory SOPs.
SUB-TOTAL: Entomology		**$800,000** ***($0)***		
Malaria in Pregnancy				
1. Supervision of IPTp implementation	IHPB	85,000	Karuzi, Kayanza, Kirundo, and Muyinga	Provide support for supervision of IPTp at ANC in the four provinces where IPTp has been rolled out.
2. Roll out of IPTp at the facility level	SIAPS	674,500	Remaining 12 provinces plus remaining districts in Gitega	In partnership with the NMCP, coordinate the roll out of IPTp to remainder of facilities in the country, ensuring SP administration and support for supervision.
SUB-TOTAL: Malaria in Pregnancy		**$759,500** ***($0)***		
CASE MANAGEMENT				
Diagnostics				
1. Procure RDTs	Global Supply Chain	1,427,500	Nationwide	Procure about 2,270,000 RDTs to contribute to filling the annual gap.

Proposed Activity	Mechanism	Budget (*Commodities)*	Geographic Area	Description of Activity
2. Strengthen diagnostic and case management capacity	Malaria Care	800,000	Nationwide	Support training, refresher training, and supervision for diagnostics and case management. Also, support review and update of current diagnostics and case management policy. Training will include pharmacists on the new formulations.
3. Procure laboratory supplies	Global Supply Chain	100,000	Nationwide	Procure laboratory reagents and consumables for microscopy.
SUB-TOTAL: Diagnostics		**$2,327,500** ***($1,527,500)***		
Treatment				
1. Procure ACTs	Global Supply Chain	840,000	Nationwide	Procure and distribute about 1,400,000 ACT treatments (fixed dose AS-AQ) to help fill the gap for annual needs.
2. Procure injectable artesunate	Global Supply Chain	470,000	Nationwide	Procure and distribute about 220,000 vials of injectable artesunate (60mg).
3. Strengthen community case management	IHPB	300,000	Select communities in Karuzi, Kayanza, Kirundo, and Muyinga Provinces	Continue support for community case management of malaria with CHWs in 402 communities, and expand into other communities as part of a comprehensive CCM package of services.

Proposed Activity	Mechanism	Budget (*Commodities)*	Geographic Area	Description of Activity
4. Support scale-up of community case management	SIAPS	450,000	Bubanza, Butezi, Mpanda, Mutaho, and Ngozi	Support scale-up of CCM in five additional provinces, including the recruitment, training, and provisioning of about 475 CHWs.
SUB-TOTAL: Treatment		**$2,060,000** ***($1,310,000)***		
Pharmaceutical management				
1. Strengthen national supply chain management capacity	SIAPS	408,000	Nationwide	Continue support for supply chain logistics and pharmaceutical management at the national level and district level (except districts supported by IHPB) in collaboration with CAMEBU, including refresher trainings and coordination of the *Groupe Thématique de Médicaments*. This investment will strengthen the NMCP's capacity to quantify all malaria commodities, and improve the pharmaceutical management capacity in targeted districts.
2. Strengthen district and facility level supply chain management capacity	IHPB	250,000	Karuzi, Kayanza, Kirundo, and Muyinga	In coordination with national guidelines, strengthen supply chain and logistics systems within targeted health districts (district pharmacies, hospitals, and health centers) to reduce stockouts and waste, and to improve access to essential commodities at the facility level.
SUB-TOTAL: Pharmaceutical Management		**$658,000** ***($0)***		

Proposed Activity	Mechanism	Budget (*Commodities)*	Geographic Area	Description of Activity
HEALTH SYSTEM STRENGTHENING/CAPACITY BUILDING				
1. Support to NMCP	SIAPS	150,000	Central	Provide support to the NMCP to improve operations and functions of their office including quarterly meetings with in-country RBM partners, leadership and management training, regional professional development opportunities, organizational development, and rehabilitation and equipping of the NMCP offices and conference room.
SUB-TOTAL: Health Systems Strengthening/Capacity Building		**$150,000** ***($0)***		
BEHAVIOR CHANGE COMMUNICATION				
1. Support malaria BCC activities	IHPB	120,000	Karuzi, Kayanza, Kirundo, and Muyinga	Provide support for communication activities to promote prevention and treatment uptake of malaria services, including correct and consistent use of ITNs, prompt care seeking behavior, and promoting ANC attendance.
2. Support malaria BCC activities	SIAPS	350,000	13 other provinces	Provide support for communication activities to promote prevention and treatment uptake of malaria services, including correct and consistent use of ITNs, prompt care seeking behavior, and promoting ANC attendance.

Proposed Activity	Mechanism	Budget (*Commodities)*	Geographic Area	Description of Activity
SUB-TOTAL: Behavior Change Communication		**470,000** *($0)*		
MONITORING AND EVALUATION				
1. Support 2015 DHS	Measure DHS	200,000	Nationwide	Support filling gap for implementation of the 2015 DHS with follow up technical assistance.
2. Support the HMIS	SIAPS	130,000	Nationwide	Support to the DSNIS to collect and analyze data for the HMIS through district data managers.
3. Support end-use verification surveys	SIAPS	75,000	Nationwide	Support two end-use verification surveys to monitor the availability and utilization of key antimalarial commodities at the health facility level.
4. Support routine data quality assessment	SIAPS	160,000	Nationwide	Support the audit and validation of routine data in all health districts, setting epidemic threshold in health facilities, and data check before HMIS receives for publication.
SUB-TOTAL: Monitoring and Evaluation		**$565,000** *($0)*		
IN-COUNTRY STAFFING AND ADMINISTRATION				

Proposed Activity	Mechanism	Budget (*Commodities)*	Geographic Area	Description of Activity
1. Support staffing and administration for USAID malaria program management	USAID	100,000	Bujumbura	This will be the malaria contribution to the Program Design and Learning (PD&L) costs for the health gender analysis for the Burundi health PAD. Funds to support the staff and related administrative costs are covered through pipeline FY 2014 funding.
SUB-TOTAL: Staffing and Administration		**$100,000** ***($0)***		
GRAND TOTAL		**$12,000,000** ***($5,662,500)***		