

**Table 2: Budget Breakdown by Activity
President's Malaria Initiative --Ghana
Planned Malaria Obligations for FY2018
Revised October 2nd, 2019**

Proposed Activity	Mechanism	Budget		Geographic Area	Description
		Total \$	Commodity \$		
PREVENTIVE ACTIVITIES					
VECTOR MONITORING AND CONTROL					
Entomologic monitoring and insecticide resistance management					
Insecticide resistance monitoring	VectorLink	\$50,000	\$0	National	In collaboration with another partner and national research institutions, PMI will continue to support insecticide resistance monitoring at 10 of the 20 existing NIRMOP entomological sentinel sites. Insecticide resistance monitoring will be conducted using standard WHO susceptibility testing with at least six insecticides from the four insecticide classes. The funding supports technical assistance, equipment, training, oversight, data collection, and reporting. This activity will leverage other vector control partner resources for entomological and insecticide resistance monitoring activities and will help fill gaps to ensure national coverage. RR#1: October 2018: Name of IM changed from initial TBD IRS Project
Entomological monitoring	VectorLink	\$185,500	\$0	National	IRS routine entomological monitoring will continue at 17 entomological monitoring sites in Northern Region. The activities include: WHO bottle assay insecticide susceptibility testing, cone bioassays (for spray quality and durability of insecticide), molecular analysis for species identification and resistance genes, and the determination of entomological inoculation rates, and parity rates from indoor and outdoor human landing catches and pyrethroid spray catches. RR#1 October 2018: Name of IM changed from initial TBD IRS Project
Subtotal Ento monitoring		\$235,500	\$0		
Insecticide-treated Nets					
Procurement and transportation of ITNs	GHSC-PSM	\$5,107,000	\$5,107,000	National	Procure approximately 1.3 million long-lasting ITNs to support continuous distribution channels (schools, ANC clinics and CWCs) to ensure Ghana maintains universal coverage of ITNs following the completion of the planned mass distribution in 2018. The budget includes transportation of ITNs to regional distribution points.

Technical assistance for ITN distribution and supply chain	VectorWorks	\$725,793	\$0	National	Support the GHS/NMCP and GES in distributing ITNs from regional warehouses to schools and health facilities. Funds will support the costs of training, planning, supervision, operations, and M&E. RR#2 January 2019 Planned funding decreased by \$874,207.00, as per discussion between AOR and the Project Director, taking into account existing pipeline, current activities and project end by September 2019.
Technical assistance for ITN distribution and supply chain	Vectorlink	\$850,207		National	Support the GHS/NMCP in continuous distribution of ITNs through ANC and CWC clinics in health facilities, including limited TA for national level coordination. Funds will support the costs of training, planning, supervision, operations, monitoring and reporting. RR#2 January 2019 Activity transferred from ending project (Vectorworks) to ongoing project (Vectorlink), whose scope of work takes over malaria control activities with ITNs.
ITN durability monitoring	VectorLink	\$150,000	\$0	Select monitoring sites - TBD	Support year two of the ITN durability monitoring which will include the 24 month survey to assess net survivorship, attrition, physical integrity and bio-efficacy analysis from a sample of ITNs from the 2018 mass distribution campaign. RR#1 October 2018: Name of IM changed from initial TBD New Vector Control IDIQ
Subtotal ITNs		\$6,833,000	\$5,107,000		
Indoor Residual Spraying					
IRS program implementation and management	VectorLink	\$5,600,000	\$1,215,160	7 Districts	Support IRS implementation and programmatic monitoring and evaluation in seven districts in Northern Region. Funding will support spray operations, data collection, environmental assessment and compliance monitoring, logistics, and SBCC activities including community mobilization. Proposed activities include support for procurement of insecticide and equipment; support for supervision by GHS, Environmental Protection Agency, and Noguchi personnel; and collaboration with the NMCP, MaVCOC, the AGAMal IRS program, and other partners. Programmatic monitoring and evaluation includes the activities that measure the performance of IRS, particularly those relating to monitoring coverage levels. RR#1 October 2018: Name of IM changed from initial TBD IRS Project
Environmental compliance for IRS implementation	ECOS	\$40,000	\$0	7 Districts	Support environmental compliance monitoring for IRS implementation in seven districts in Northern Region. Funding will support environmental assessment and compliance monitoring. RR#1 October 2018: Name of IM changed from initial TBD Environmental compliance Award

Technical assistance to support entomological monitoring for IRS	CDC IAA	\$29,000	\$0	National	Provide technical assistance and quality assurance, through two visits by a CDC entomologist, for ongoing entomological monitoring of the PMI IRS program.
Subtotal IRS		\$5,669,000	\$1,215,160		
SUBTOTAL VECTOR MONITORING AND CONTROL		\$12,737,500	\$6,322,160		
Seasonal Malaria Chemoprevention (SMC)					
Support SMC Implementation (Other SMC Implementation)	G2G GHS	\$585,300	\$0	Northern Region	Support operational costs associated with the June 2019 SMC campaign in Northern region. The GHS/PMU through NMCP will implement this activity. RR#1 October 2018: New activity planned in response to NMCP request to assist with SMC implementation costs in Northern Region
Other SMC Implementation		\$0	\$0	Northern Region	Provide technical assistance to GHS and NMCP to support SMC operations.
Subtotal SMC		\$585,300	\$0		
Malaria in Pregnancy					
Strengthen IPTp implementation	Systems for Health	\$275,000	\$0	5 USAID focus regions	In 5 USAID focus regions (Western, Central, Volta, Greater Accra and Northern), support health care workers at health facilities and CHPS compounds to effectively deliver malaria prevention services to pregnant women, including supportive supervision and on-site training of IPTp at every ANC visit and ensuring the distribution of an ITN at first ANC visit.
	Impact Malaria	\$275,000	\$0	5 non-USAID focus regions	In 5 non-USAID focus regions (Upper West, Upper East, Eastern, Ashanti, Brong-Ahafo), support health care workers at health facilities and CHPS compounds to effectively deliver malaria prevention services to pregnant women, including supportive supervision and on-site training of IPTp at every ANC visit and ensuring the distribution of an ITN at first ANC visit. RR#1 October 2018: Name of IM changed from initial TBD Service Delivery
Subtotal Malaria in Pregnancy		\$550,000	\$0		
SUBTOTAL PREVENTIVE		\$13,287,500	\$6,322,160		
CASE MANAGEMENT					
Diagnosis and Treatment					

Procurement of RDTs	GHS-PSM	\$4,680,000	\$4,680,000	National	Procure approximately 6 million RDTs, to fill identified gaps and ensure that health facilities maintain capacity to test fevers and diagnose malaria cases. RR#1 October 2018: Planned funding increased by \$2,560,000 to procure an additional 2 million RDTs to fill part of the 2,818,743 RDT gap; also note the increase in unit cost from \$0.53 to \$0.78 to account for procuring single doses buffer.
Procurement of ACTs	GHS-PSM	\$1,000,000	\$1,000,000	National	Procure approximately 1.0 million ACTs, to meet estimated infant, toddler, and adolescent treatments (estimated at 40% of total annual ACT needs) for 2019. RR#1 October 2018: Planned funding reduced by \$144,500 taking into account actual supply plan needs, showing an excess of ACTs in the pipeline.
Procurement of injectable artesunate for treatment of severe malaria	GHS-PSM	\$429,000	\$429,000	National	Support the national injectable and rectal artesunate needs for severe malaria: procure approximately 150,000 ampules of injectable artesunate (100 mg/1ml) (estimated to cover 10% of the annual requirements). Procure an estimated 100,000 rectal artesunate suppositories (50mg/1ml and 100mg/1ml), which is 100% of the annual need.
Strengthen quality of malaria microscopy and maintenance of microscopes.	Impact Malaria	\$50,000	\$0	National	Provide technical assistance to support strengthening the capacity of laboratory supervisors at the national level to conduct diagnostic refresher training and proficiency testing on a quarterly basis. RR#1 October 2018: Name of IM changed from initial TBD Service Delivery
	G2G GHS/CLU	\$300,000	\$0	National	Support laboratory OTSS and malaria diagnostic training-of-trainers on a quarterly basis. Funds will support the continued quality improvement of malaria microscopy, RDT use and scale-up, and coordination between laboratory staff and prescribers.
Strengthen malaria case management in CHPS compounds	Systems for Health	\$200,000	\$0	5 USAID focus regions	In 5 USAID focus regions, support in-service training and supportive supervision of integrated case management, with a focus on malaria cases, to CHPS nurses and health officers in CHPS compounds. Support will aim to improve proper diagnosis with RDTs and prompt treatment of uncomplicated cases or referral for severe malaria cases.
	Impact Malaria	\$100,000	\$0	5 non-USAID focus regions	In 5 non-USAID focus regions, support in-service training and supportive supervision of integrated case management, with a focus on malaria cases, to CHPS nurses and health officers in CHPS compounds. Support will aim to improve proper diagnosis with RDTs and prompt treatment of uncomplicated cases or referral for severe malaria cases. RR#1 October 2018: (1) Initial planned budget reduced by \$100,000 taking into account existing pipeline from FY17; (2) Name of IM changed from initial TBD Service Delivery

Strengthen malaria case management at health facilities	Systems for Health	\$450,000	\$0	5 USAID focus regions	In 5 USAID focus region , support routine clinical OTSS to strengthen integrated case management, with a focus on malaria cases in health facilities. Support will work to improve proper diagnosis and prompt treatment and in-service training for prescribers. Support will encourage the engagement of the regional health management team and regional supervision teams to conduct quarterly clinical OTSS visits at district hospitals to improve malaria case management; support district health management teams and district supervision teams to conduct quarterly clinical OTSS at health centers and CHPS compounds; and conduct quarterly data coaching for district health information officers.
	Impact Malaria	\$401,115	\$0	5 non-USAID focus regions	<p>In 5 non-USAID focus region, support routine clinical OTSS to strengthen integrated case management, with a focus on malaria cases in health facilities. Support will work to improve proper diagnosis and prompt treatment and in-service training for prescribers. Support will encourage the engagement of the regional health management team and regional supervision teams to conduct quarterly clinical OTSS visits at district hospitals to improve malaria case management; support district health management teams and district supervision teams to conduct quarterly clinical OTSS at health centers and CHPS compounds; and conduct quarterly data coaching for district health information officers.</p> <p>RR#1 October 2018: (1) Initial planned budget reduced by \$200,000 taking into account existing FY17 pipeline; (2) IM changed from TBD Service Delivery to Impact Malaria</p> <p>RR#2 January 2019: RR #1 had reduced funds by \$200,000, but after review of the work plan and possibility of reprogramming, the intial planned funding is re-instated, because the project will expand OTSS activity to focus regions earlier than initially planned.</p>
Technical assistance to improve supportive supervision at the national and regional levels.	G2G GHS	\$150,000	\$0	National	Funding to support GHS to monitor, coordinate and strengthen supportive supervision at the national and regional levels. To strengthen malaria case management, support will help develop and/or adapt tools to facilitate implementation of malaria prevention and control activities. Additionally, support will assist the regional OTSS teams to bolster supervision, management, leadership and data management. Effort will be made to further institutionalize the process and coordinate activities with the NHIA and other donor activities.

Support NHIA to implement clinical audits	G2G NHIA-Clinical	\$0	\$0	National	<p>Continue support for NHIA to conduct clinical audits to improve treatment standards and the quality of service provision among accredited providers, to ensure adherence to standard protocols, and to check against fraud and abuse. Clinical OTSS teams will join the clinical audit teams to learn first-hand how the clinical audits are conducted so as to improve the OTSS teams' capacity to audit cases treated during the intervening period between two clinical visits. Specific activities will include targeted mentorship and additional supervisory and on-the-job training for poorly performing facilities.</p> <p>RR#4 October 2019: Activity cancelled and budget reduced from \$250,000 to \$0 since NHIA clinical audits have been completed; PMI will support the next round of audits with FY2019 funding.</p>
Subtotal Diagnosis and Treatment		\$7,760,115	\$6,109,000		
Pharmaceutical Management					
Support interim warehousing and supply chain system strengthening	GHSC-PSM	\$1,000,000	\$0	National	<p>In accordance with the Supply Chain Master Plan, continue to provide technical assistance for strengthening logistics, warehousing, and distribution to improve availability of malaria commodities, in accordance with the national Supply Chain Master Plan. Activities will focus on addressing weaknesses in supply management, forecasting, transportation, and reporting systems. Support quarterly EUV surveys to monitor the status of facility-level commodity stock levels including both WHO pre-qualified and locally procured ACTs and identify ongoing programmatic successes and challenges. Support will continue to include central warehousing and transportation of malaria commodities from central to RMS levels. Technical assistance will also include implementation of the plan developed during FY 2017 to address the local procurement of non-quality assured anti-malarial drugs by health facilities and regional health and RMS staff.</p> <p>RR#1 October 2018: Budget line reduced by \$200,000 to increase the money to procure RDTs</p>
Support for third year malaria Peace Corps volunteers	VectorLink	\$12,000	\$0	Northern Region	<p>Support 3rd year malaria PCV to work with VectorLink on IRS mobilization and data analysis/use. Malaria PCV will also strengthen Ghana STOMP committee and encourage community engagement for malaria control activities</p> <p>RR#2 January 2019 New Activity; the former project (AIRS) has established the good use of PCV for malaria control in the IRS covered districts, the PMI country is clarifying the planned funding under the appropriate mechanism.</p>
	Impact Malaria	\$12,000	\$0	Natioanal	<p>Support 3rd year malaria PCV to work with Impact Malaria on malaria control activites including community mobilization for "test, treat and tack" and data analysis/use.</p> <p>RR#2 January 2019 New Activity; Impact Malaria has expressed strong interest to benefit from third year malaria volunteer, for malaria control activities.</p>

Support last mile distribution	GHSC-PSM	\$200,000	\$0	National	Provide support for last mile distribution in up to four new regions (likely Ashanti, Central, Upper West and Upper East), with limited technical assistance continuing in regions where LMD was launched during 2017 to perfect distribution initiative (Northern and Eastern Regions and likely Greater Accra and Volta Regions). Support includes technical assistance for LMD regional implementation plan development, route mapping, logistics implementation support to regions, and monitoring LMD implementation performance. RR#1 October 2018: Budget line reduced by \$75,000 to increase the money to procure RDTs
Strengthen drug quality monitoring capacity	USP-PQM	\$0	\$0	National	Provide support for continued strengthening of the GH-FDA's capacity to effectively monitor quality of anti-malarial drugs available in Ghana. Support to GH-FDA to monitor and regulate locally procured non-WHO pre-qualified antimalarial drugs including batch testing of Ghana manufactured ACTs, SP and severe malaria drugs including support to increase regulation and removal of drugs that fail quality testing. GH-FDA will be supported PMI will support the GH-FDA to build the capacity of local manufacturers to meet GMP and WHO pre-qualification standards. RR#1 October 2018: Planned funding for USP PQM reduced to \$0.00 taking into account existing pipeline, and planned project close-out by March 2019.
Subtotal Pharmaceutical Management		\$1,224,000	\$0		
SUBTOTAL CASE MANAGEMENT		\$8,984,115	\$6,109,000		
HEALTH SYSTEM STRENGTHENING / CAPACITY BUILDING					
Build management capacity at NMCP, GHS and other GOG partners	Systems for Health	\$100,000	\$0	National	Continue to provide support to the NMCP, GHS, and GOG for technical capacity building and improved malaria control systems. This activity will support: 1) attendance in malaria-specific trainings, conferences by select NMCP, GHS, and GOG employees to further build in-country capacity; 2) assisting NMCP with organizing meetings that are important for planning and management of malaria prevention and control activities; and 3) supporting limited information technology investments, such as computers, laptops, internet connection at the GHS's Regional Health Directorate level to ensure timely data reporting to DHIMS2.
Ensure sustainability of NHIA by appropriately incentivizing reimbursement to increase access to appropriate malaria diagnosis and treatment	TBD	\$0	\$0	National	Provide technical assistance to the scale up of a primary health care capitated package of services to five additional regions; improve provider incentives to ensure appropriate case management services by working with key stakeholders to identify examples of best practices, real time data analysis, and communication materials to address the incentive constraints introduced with the preferred provider system. Specific investment will be co-funded with non-malaria USAID health funds, PMI will support NHIA to increase its efficiency and sustainability to improve access to health services in general and quality malaria treatment. RR#3 April 2019: Activity cancelled

Support NHIA capitation rollout	G2G - NHIA Communications	\$0	\$0	National	<p>Support to communication efforts to facilitate NHIA capitation roll out to five additional regions (Brong Ahafo, Central, Eastern, Northern, and Western) with the goal of promoting enrollment in NHIA and informing the public about how to access NHIA-accredited facilities among the general population. Since NHIS enrollment increases the likelihood of seeking formal care for malaria treatment, it is anticipated that this investment will contribute towards strengthening the overall health insurance program, increase enrollment, reduce the risk of insolvency, and ensure sustainability of NHIS.</p> <p>RR#1 October 2018: Planned funding reduced to zero due to GoG delayed implementation of capitation, money proposed for supporting TA to GHS</p>
Strengthen the role of civil society in malaria advocacy	People for Health	\$200,000	\$0	5 USAID focus regions	<p>Build the capacity of local Ghanaian non-governmental organizations and civil society organizations to monitor the quality and ease of access to health services, with a focus on malaria diagnostics and treatment. Work with DHMT to promote adherence to national malaria guidelines and promote the use of district and regional report cards to monitor progress on indicators. Strengthen community structures for advocating for patients' rights and client-centered care, including the availability of malaria commodities. Empower civil society organizations to engage citizens to demand and participate in health service delivery and advocate for their interest. Strengthen the health sector monitoring of government institutions, officials and policy processes, and civil society organization monitoring of issues, including: transparency, accountability health system, and compliance with service standards, regulations, and patients' charter code. PMI estimates that approximately 20 local community groups in five regions will be supported annually through this activity. These groups will monitor the quality of health services and help to identify areas for improvement.</p>
Strengthen GHS Management capacity	TBD	\$0			<p>Support Ghana Health Service (GHS) to ensure successful implementation of G2G funded activities including integrated supportive supervision, malaria OTSS,</p> <p>RR #1 October 2018: New activity RR #3 April 2019: Activity cancelled</p>
Strengthen GHS Human Resources Management	TBD	\$0			<p>Provide policy support to MOH and GHS to establish and run an equitable distribution of human resources across the regions, districts and service delivery points for improved access to and quality services.</p> <p>RR#1 October 2018: New activity. RR #3 April 2019: Activity cancelled</p>

Peace Corps Malaria Program	Peace Corps SPA	\$30,000	\$0	National	Support Peace Corps volunteers based in Ghana to receive small grants from PMI to engage in malaria control and prevention activities, such as community mobilization for SBCC, ITN distribution, and (as needed) operational research.
Long-term field epidemiology and laboratory training	CDC IAA	\$120,000	\$0	National	Support long-term training of individuals to build capacity at the NMCP or GHS in epidemiology, M&E, or other malaria program management functions as needed through the Field Epidemiologic and Laboratory Training Program, which was established with USG support at the University of Ghana's School of Public Health in collaboration with the GHS.
SUBTOTAL HSS & CAPACITY BUILDING		\$450,000	\$0		
SOCIAL AND BEHAVIOR CHANGE COMMUNICATION					
Support mass media communication efforts to promote ITN ownership and use, IPTp uptake, and improved care seeking behavior at the national level.	Communicate for Health	\$284,200	\$0	National	Provide national-level coordination and technical assistance to promote ITN ownership and use, IPTp uptake and improved care-seeking behavior, develop new malaria-specific communication materials, and facilitate dissemination of malaria-related messages, especially mass media communication efforts. Technical assistance will be provided to the NMCP, the National Malaria Communications Committee as well as to the GHS/Health Promotion Unit. RR#1 October 2018: Planned funding reduced by \$115,800 taking into account TEC ceiling and PMI past investment into the project
Support malaria SBCC activities with the GHS HPD and malaria community engagement	Breakthrough Action	\$250,000	\$0	National	Provide support for GHS Health Promotion Division to strengthen malaria SBCC activities and continue to pilot the malaria community engagement. RR#4 October 2019: New activity to bridge SBCC activities following the end of Communicate for Health and start of new USAID bilateral SBCC project.
Support school- and community-based activities to address barriers to correct and consistent use of ITNs and promote ITN care	VectorWorks	\$400,000	\$0	National	

Strengthen facility- and community-level behavior change and interpersonal communication	Systems for Health	\$300,000	\$0	5 USAID focus regions	In 5 USAID focus regions, support facility-and community-level outreach to promote correct and consistent uptake of both preventative and curative malaria interventions. Support will also engage CHPS nurses and health officers to engage with communities and promote malaria-related health seeking behaviors.
	Impact Malaria	\$100,000	\$0	5 non-USAID focus regions	In 5 non-USAID focus regions, support facility-and community-level outreach to promote correct and consistent uptake of both preventative and curative malaria interventions. Support will also engage CHPS nurses and health officers to engage with communities and promote malaria-related health seeking behaviors. RR#1 October 2018: (1) Initial planned budget reduced by \$200,000 taking into account existing FY17 pipeline; (2) IM name changed from TBD Service Delivery to Impact Malaria
SUBTOTAL SBCC		\$1,334,200	\$0		
SURVEILLANCE, MONITORING, AND EVALUATION					
Strengthen and support routine health management information system at the national, regional, district and health facility levels.	Systems for Health	\$175,000	\$0	5 USAID focus regions	In 5 USAID focus regions support health facilities and districts to strengthen data quality to help inform programmatic decisions. Activities will include: providing integrated data coaching visits to health facility data management staff to validate and audit data collection, analysis and reporting to improve data quality; supporting regional mid-year review meetings that focus on improved analysis and data use; supporting the Policy, Planning, Monitoring and Evaluation Division's Center for Health Information Management boot camp meetings to routinely assess and discuss malaria data; and integrated supportive supervision by GHS to improve collection and reporting of data from the health facility up to the district level. RR#1 October 2018: Initial planned budget reduced by \$150,000 taking into account existing pipeline and the need to support the commodity management assessment, a joint investment with MCH and FP
	Impact Malaria	\$325,000	\$0	5 non-USAID focus regions	In 5 non- USAID focus regions support health facilities and districts to strengthen data quality, with a focus on malaria-specific indicators, to help inform programmatic decisions. Activities will include: providing data coaching visits to health facility data management staff to validate and audit data collection, analysis and reporting to improve data quality; supporting regional mid-year review meetings that focus on improved analysis and data use; providing supportive supervision by GHS to improve collection and reporting of data from the health facility up to the district level. RR#1 October 2018: IM name changed from TBD Service Delivery to Impact Malaria

Optimizing pricing for health commodities within cost-recovery supply chain	R4D	\$0			Support SIFPO to conduct a joint MCH/FP and malaria commodity assessment to 1) understand the key approaches to pricing health commodities in the Ghanaian public health supply chain, and identify the decisions and behaviors which drive the prioritization, stocking, and distribution of FP, malaria, and MCH commodities; and 2) provide recommendations on optimal fee structures in the supply chain. RR#1 October 2018: New Activity RR#3 April 2019: Activity cancelled
Support for 2019 DHS	TBD	\$0	\$0	National	Support for the initial planning and coverage of a malaria module for the 2019 DHS. FY19 funds will be added to supplement costs for malaria module. RR#3 April 2019: Activity cancelled
Support for 2019 MIS	DHS-8	\$1,240,000	\$0	National	Provide technical assistance to the National Malaria Control Program and Ghana Statistical Services for the design, implementation, and analysis of the 2019 Malaria Indicator Survey (MIS). RR#3 April 2019: New Activity Added
Technical assistance for SM&E activities	CDC IAA	\$10,000	\$0	National	Support for a technical assistance visit from the CDC PMI M&E team. Technical assistance will include working with the NMCP to support strengthening M&E and health management information system activities.
SUBTOTAL SM&E		\$1,750,000	\$0		
OPERATIONAL RESEARCH					
SUBTOTAL OR		\$0	\$0		
PRE-ELIMINATION					
SUBTOTAL PRE-ELIMINATION		\$0	\$0		
IN-COUNTRY STAFFING AND ADMINISTRATION					
CDC	CDC IAA	\$458,885	\$0	National	To support the coordination and management of all in-country PMI activities including support for salaries and benefits for two resident advisors and local staff, office equipment and supplies, and routine administration and coordination expenses. RR#2 January 2019 Taking into account existing pipeline into the IAA, CDC requested that the FY18 planned funding for their SOW be reduced by \$201,115.00.
USAID	USAID/Ghana	\$1,150,000	\$0	National	
SUBTOTAL IN-COUNTRY STAFFING		\$1,608,885	\$0		
GRAND TOTAL		\$28,000,000	\$12,431,160		