Table 1: Budget Breakdown by Mechanism U.S. President's Malaria Initiative - Ghana Planned Malaria Obligations for FY 2019 Revised March 14, 2022

Mechanism	Activity	Budget	%
PMI Impact Malaria	Implementation of clinical OTSS, support for CHO internships, and TA on diagnosics, and data quality.	\$2,700,000	9.6
Breakthrough ACTION	Strengthen capacity of community SBCC and conduct assessment of malaria communityu engagement pilot.	\$340,147	1.2
CDC IAA	TA, support to FETP, and Staff	\$845,771	3.0
Global Health Supply Chain Procurement and Supply Management (GHSC PSM) Malaria	Commodity procurement, warehousing, and distribution of ITNs, SP, SP+AQ, RAS, and supply chain TA	\$14,726,041	52.6
G2G Ghana	Support government implementation of laboratory and clinical OTSS and SMC, malaria community engagement SBC activities, and GOG capacity building	\$1,400,000	5.0
Peace Corps	Support malaria Volunteers and grants to engage in malaria control and prevention activities	\$30,000	0.1
People for Health	Strengthen the role of civil society in malaria advocacy	\$63,812	0.2
Strengthening Health Outcomes through the Private Sector (SHOPS)	Strengthen LMD of ACTs to ensure drug availability	\$0	0.0
Promoting the Quality of Medicines Plus (PQM+)	Build capacity of FDA to monitor antimalarial drug quality.	\$150,000	0.5
TBD-Ghana Bilateral	Support monitoring of eTracker system	\$300,000	1.1
Environmental Compliance Operational Support (ECOS)	Environmental compliance for IRS	\$0	0.0
USAID	Staff	\$1,230,000	4.4
Malaria Data Integration and Visualization (M-DIVE)	Support for M-DIVE	\$210,000	0.8
Digital Square Project	Improve use of digital technologies	\$210,000	0.8
PMI VectorLink	Entomological and insecticide resistance monitoring, IRS program implementation, and ITN durability and monitoring	\$5,794,229	20.7
TOTAL		\$28,000,000	100.0

Table 2: Budget Breakdown by Activity U.S. President's Malaria Initiative - Ghana Planned Malaria Obligations for FY 2019 Revised March 14, 2022

				Geogr	raphic Reach of PMI	Activity	
	Proposed Activity	Mechanism	Budget (in \$)		If coverage is focused by region, name(s) of region(s)	If coverage is focused by district, name(s) of district(s)	Description of Proposed Activity
INSECTICIDE	E-BASED PREVENTION						
Entom	ologic Monitoring and Insecticide Resista	ance Management					
	Entomologic Monitoring and Insecticide Resistance Management Implementation	PMI VectorLink	\$100,000	Nationwide			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 five insecticide classes. The funding supports technical assistance, equipment, training, oversight, data collection, molecular analysis of specimens, 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. Expand laboratory to include molecular testing.
	Entomologic Monitoring and Insecticide Resistance Management Implementation	PMI VectorLink	\$185,500			Mamprusi, Gushiegu, Karaga, Kumbungu,	IRS routine entomological monitoring will continue at 20 entomological monitoring sites in eight districts 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.
	Entomologic-Related CDC TDY	CDC IAA	\$14,500	Central			Provide technical assistance through two visits by a CDC entomologist focused on longitudinal monitoring to obtain representative vector bionomics data, and to help ensure timely laboratory reporting.
Subtota	al: \$300,000						
Insection	cide-Treated Nets						
	Procure ITNs for Continuous Distribution Channels	Global Health Supply Chain Procurement and Supply Management (GHSC PSM) Malaria	\$3,631,500	Nationwide			Procure approximately 1.3 million long-lasting ITNs, including up to 350,000 PBO synergist LLINs in eligible districts in Greater Accra, Eastern, Northern, and Upper East regions) to support continuous distribution channels (schools) following the completion of the planned mass distribution in 2018.

			Geog	Geographic Reach of PMI Activity		
Proposed Activity	Mechanism	Budget (in \$)		If coverage is focused by region, name(s) of region(s)	If coverage is focused by district, name(s) of district(s)	Description of Proposed Activity
Procure ITNs for Mass Campaigns	Global Health Supply Chain Procurement and Supply Management (GHSC PSM) Malaria	\$96,041	Nationwide			Procure approximately 26,700 long-lasting ITNs with PBO synergist for contributing to the 2024 mass campaign, about at least 3 million ITNs expected from PMI for the mass campaign. The PMI contributed nets be gradually procured from FY21, FY22, and FY23 MOPs
Procure ITNs for Mass Campaigns	Global Health Supply Chain Procurement and Supply Management (GHSC PSM) Malaria	\$7,658,500	Nationwide			Procure approximately 3.77 million pyrethroid+PBO ITNs for the 202 mass distribution campaign. [Will be combined with an additional \$6 million from current PSM commodities pipeline]
Distribute ITNs for Continuous Distribution Channels	Global Health Supply Chain Procurement and Supply Management (GHSC PSM) Malaria	\$1,100,000	Nationwide			Warehouse and distribution of approximately 1.3 million long-lasting ITNs to support continous distribution channels (schools).
Support ITN Durability Monitoring	PMI VectorLink	\$150,000	Central	Eastern	To Be Determined	Support year two of the ITN durability monitoring which will include 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.
otal: \$12,636,041						
oor Residual Spraying					Bunkpurugu, East Mamprusi,	Support IRS implementation and programmatic monitoring and evaluation in eight districts in Northern Region. Funding will support spray operations, data collection, environmental assessment and compliance monitoring, logistics, and SBCC activities including
IRS Implementation	PMI VectorLink	\$5,358,729			Kumbungu,	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, other partners. Programmatic monitoring and evaluation includes the activities that measure the performance of IRS, particularly those relat to monitoring coverage levels.

				Geog	raphic Reach of PMI	Activity	
	Proposed Activity	Mechanism	Budget (in \$)		If coverage is focused by region, name(s) of region(s)	If coverage is focused by district, name(s) of district(s)	Description of Proposed Activity
MALARIA IN	PREGNANCY						
	Other MIP Implementation	PMI Impact Malaria	\$200,000	Nationwide			One round of integrated supportive supervision using ICD integrated checklist in all 10 regions.
	Other MIP Implementation	G2G Ghana	\$0	Nationwide			One round of malaria-specific OTSS using NMCP checklist in all 10 regions. Provide support to GHS ICD for implementation of integrated supportive supervision using ICD checklist.
Total: \$200,00	00						
DRUG-BASEI) PREVENTION						
Season	al Malaria Chemoprevention						
	Procure SMC-Related Commodities	Global Health Supply Chain Procurement and Supply Management (GHSC PSM) Malaria	\$700,000		Northern		Procure approximately 80% of the required SP+AQ, approximately 1.9 million doses, representing four monthly doses for approximately 475,000 children (ages 3-59 months) for the June 2020 SMC campaign in Northern region.
	Other SMC Implementation	G2G Ghana	\$600,000		Northern		Support operational costs associated with the June 2020 SMC campaign in Northern region. The GHS/PMU through NMCP will implement this activity.
	Other SMC Implementation	PMI Impact Malaria	\$0	Central	Northern		Provide technical assistance to GHS and NMCP to support SMC operations.
Total : \$1,300,	000						
CASE MANA	GEMENT						
	Procure RDTs	Global Health Supply Chain Procurement and Supply Management (GHSC PSM) Malaria	\$0	Nationwide			Procure approximately 4 million RDTs, to fill identified gaps and ensure that health facilities maintain capacity to test fevers and diagnose malaria cases. [This amount may be reduced to 2.5 million, as per PM.]
	Procure Other Diagnosis-Related Commodities	Global Health Supply Chain Procurement and Supply Management (GHSC PSM) Malaria	\$50,000	Nationwide			Supply microscopes to new facilities and replace broken microscopes to support prompt diagnosis at hospitals.
	Procure Drugs for Severe Malaria	Global Health Supply Chain Procurement and Supply Management (GHSC PSM) Malaria	\$15,000	Nationwide			Support the national injectable and rectal artesunate needs for severe malaria: procure approximately 150,000 ampules of injectable artesunate (60 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.

				Geog	raphic Reach of PMI	Activity	
	Proposed Activity	Mechanism	Budget (in \$)		If coverage is focused by region, name(s) of region(s)	If coverage is focused by district, name(s) of district(s)	Description of Proposed Activity
_	Other Case Management Implementation	PMI Impact Malaria	\$150,000	Nationwide			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.
	Other Case Management Implementation	G2G Ghana	\$300,000	Nationwide			Support GHS ICD to conduct 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.
	Other Case Management Implementation	CDC IAA	\$10,000	Nationwide			Provide technical assistance for microscope repair.
	Other Case Management Implementation	PMI Impact Malaria	\$200,000	Nationwide	Ashanti, Brong Ahafo, Central, Eastern, Greater Accra, Northern, Upper East, Upper West, Volta, Western		Support CHO internships in all 10 regions.
	Other Case Management Implementation	PMI Impact Malaria	\$600,000	Nationwide			Perform one round of malaria-specific OTSS using the NMCP checklist in all 10 regions. Provide support to ICD for implementation of integrated supportive supervision using ICD checklist.
	Other Case Management Implementation	G2G Ghana	\$400,000	Nationwide			Support one round of integrated supportive supervision by GHS ICD using the ICD integrated checklist in all 10 regions.
	Other Case Management Implementation	PMI Impact Malaria	\$50,000	Nationwide			Support an external assessment and analysis of integrated supervision versus malaria-specific OTSS for malaria case management.
	Other Case Management Implementation	G2G Ghana	\$0	Nationwide			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.

			Geog	raphic Reach of PMI	Activity	
Proposed Activity	Mechanism	Budget (in \$)		If coverage is focused by region, name(s) of region(s)	If coverage is focused by district, name(s) of district(s)	Description of Proposed Activity
TTING AND OTHER HEALTH SYSTEM	IS STRENGTHENING					
armaceutical Management						
Pharmaceutical Management Systems Strengthening	Global Health Supply Chain Procurement and Supply Management (GHSC PSM) Malaria	\$1,000,000	Nationwide			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 according with the national Supply Chain Master Plan. Activities will focus on addressing weaknesses in supply management, forecasting, transportand reporting systems. Support quarterly EUV surveys to monitor the status of facility-level commodity stock levels including both WHO pqualified and locally procured ACTs and identify ongoing programma successes and challenges. Technical assistance will also include implementation of the plan developed during FY 2017 to address the procurement of non-quality assured anti-malarial drugs by health facility and regional health and RMS staff.
CDC In-Country Staffing and Administration	Global Health Supply Chain Procurement and Supply Management (GHSC PSM) Malaria	\$275,000	Central	Ashanti, Eastern, Northern		Support Last mile distribution in coordination with GF, covering at let three regions
Warehousing and Distribution	Global Health Supply Chain Procurement and Supply Management (GHSC PSM) Malaria	\$200,000	Nationwide			Central warehousing and transportation of malaria commodities from central to regional levels.
Pharmaceutical Management Systems Strengthening	Strengthening Health Outcomes through the Private Sector (SHOPS)	\$0	Nationwide			Support SHOPs access to finance work for local pharmaceutical companies who are producing ACTs to strengthen good manufacturin practices (GMP) and work with local logistics and transport companistrengthen last mile distribution to ensure drug availability
Pharmaceutical Management Systems Strengthening	Promoting the Quality of Medicines Plus (PQM)	\$150,000	Nationwide			Provide support for continued strengthening of the GH-FDA's capaci effectively monitor quality of anti-malarial drugs available in Ghana. Support to GH-FDA to monitor and regulate locally procured non-WI pre-qualified antimalarial drugs including batch testing of Ghana manufactured ACTs, SP and severe malaria drugs including support t increase regulation and removal of drugs that fail quality testing. GH-will be supported PMI will support the GH-FDA to build the capacity local manufacturers to meet GMP and WHO pre-qualification standard.

Proposed Activity	Mechanism	Budget (in \$)	Geog	raphic Reach of PMI If coverage is focused by region, name(s) of region(s)	Activity If coverage is focused by district, name(s) of district(s)	Description of Proposed Activity
ial and Behavior Change Communicat	ion					
SBCC Implementation	TBD Ghana Bilateral	\$0	Nationwide			Support national mass media activities targeting identified barriers to malaria-related behaviors and complementing school-based, communicated, and facility-based IPC activities. Support national-level SBC technical working groups (NMCP and HPD) and coordinating struct
SBCC Implementation	TBD - Central Mechanism	\$0	Nationwide			Strengthen capacity (both individual and institutional) of GES SHEI teachers, and parent teacher associations to conduct school-based IP activities targeting identified barriers to key malaria-related behavior
SBCC Implementation	Breakthrough ACTION	\$300,000		Volta		Strengthen capacity of GHS Health Promotion Division (HPD) to implement malaria community engagement and oureach, which aim strengthen facility-based community health nurses and community officers ability to conduct community-based IPC activities targeting identified barriers to key malaria-related behaviors using existing platforms such as durbars, health outreach and education activities, Child Welfare Clinic activities. Support will also include an assessn the pilot conducted in Volta region.
SBCC Implementation	G2G Ghana	\$0		Volta		Provide support to GHS Health Promotion Division to continue to implement activities to strengthen SBCC activities through the male community engagement and outreach pilot in Volta Region.
SBCC Implementation	TBD Ghana Bilateral	\$0	Nationwide			Strengthen capacity (both individual and institutional) of facility-ba providers to conduct service communication activities targeting idea barriers to key malaria-related behaviors. Support facility-based pr behavior change targeting identified barriers to key provider behavior use existing platforms such as malaria-specific and integrated outre training and supporting supervision, provider counseling, and health education activities. Collaborate with facility-based service delivery partners.

				Geog	raphic Reach of PMI	Activity	
	Proposed Activity	Mechanism	Budget (in \$)	3005	If coverage is	If coverage is focused by district, name(s) of district(s)	Description of Proposed Activity
Surveil	llance, Monitoring, and Evaluation						
	Other SM&E Implementation	TBD - Central Mechanism	\$0	Central			Support secondary analysis of household surveys and DHIMS2 data: Ghana-specific technical assistance and training for secondary analysis of household surveys and DHIMS data by NMCP. [This is a Ghana-specific version of the DHIS2 and DHS/MIS secondary analysis workshop.]
	Support Routine Surveillance	PMI Impact Malaria	\$800,000	Nationwide			Provide support to GHS ICD to support routine data quality with District-level data verification and validation meetings; quarterly data review, analysis, and action; and data quality audits to strengthen data management and use for programmatic decision making at the District level by engaging the District Health Management Team.
	Support Routine Surveillance	PMI Impact Malaria	\$300,000	Nationwide			Provide technical assistance and support to improve data quality. Ensure development and use of sub-district and facility-specific dashboards. Support the Frontline Field Epidemiology and Laboratory Training Program (FELTP) to train district, sub-district, and health center health care workers in data analysis and use.
	Other SM&E Implementation	TBD Ghana Bilateral	\$300,000	Nationwide			Support monitoring and evaluation of eTracker.
	Support Routine Surveillance	PMI Impact Malaria	\$400,000	Nationwide			Strengthen supportive supervision feedback by Regional Health Management Team in coordination with PPME to inform existing quarterly review and improve analysis and action and use. Ensure development and use of district and regional dashboards.
	Support Surveys	Breakthrough ACTION	\$40,147	Nationwide			Support the implementation of the 2022 malaria behavior survey to determine the socio-demographic and ideational characteristics associated with malaria-related behavioral outcomes in Ghana and identify key programmatic elements for consideration to improve malaria-related ideational and behavioral outcomes
	Other SM&E Implementation	Malaria Data Integration and Visualization (M-DIVE)	\$210,000	Central			Support development and use of the MDIVE platform.
	Other SM&E Implementation	Digital Square Project	\$210,000				Support to improve use of digital technologies.

				Geog	raphic Reach of PMI	Activity	
	Proposed Activity	Mechanism	Budget (in \$)		If coverage is focused by region, name(s) of region(s)	If coverage is focused by district, name(s) of district(s)	Description of Proposed Activity
	SM&E-Related CDC TDY	CDC IAA	\$10,000	Central			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.
Subtota	al: \$2,270,147						
Operat	ional Research						
	OR Implementation						No OR proposed
Subtota	al:\$0						
Other 1	Health Systems Strengthening						
	Support to Peace Corps	Peace Corps	\$30,000	Nationwide			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.
	Support to FETP	CDC IAA	\$150,000	Nationwide			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.
	Other Health Systems Strengthening Implementation	G2G Ghana	\$100,000	Central			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. Includes regional staff.

			Geog	raphic Reach of PMI	Activity	
Proposed Activity	Mechanism	Budget (in \$)		If coverage is focused by region, name(s) of region(s)	If coverage is focused by district, name(s) of district(s)	Description of Proposed Activity
Other Health Systems Strengthening Implementation	TBD - Central Mechanism	\$0		To Be Determined		Provide technical assistance to the scale up of a primary health care capitated package of services to five additional regions; improve provid incentives to ensure appropriate case management services by working with key stakeholders to identify examples of best practices, real time d 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, Ph will support NHIA to increase its efficiency and sustainability to improvancess to health services in general and quality malaria treatment.
Other Health Systems Strengthening Implementation	G2G Ghana	\$0	Nationwide			Support to communication efforts to facilitate NHIA capitation roll out 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, a ensure sustainability of NHIS.
Other Health Systems Strengthening Implementation	People for Health	\$63,812	Central	Ashanti, Central, Eastern, Northern, Volta, Western		Build the capacity of local Ghanaian non-governmental organizations a civil society organizations to monitor the quality and ease of access to health services, with a focus on malaria diagnostics and treatment. Wor 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 advocation 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 patient 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.

Total: \$4,538,959

	Proposed Activity	Mechanism	Budget (in \$)	Geog	If coverage is focused by region, name(s) of region(s)	If coverage is	Description of Proposed Activity
STAFFING AN	ND ADMINISTRATION						
	USAID In-Country Staffing and Administration: Staffing	USAID	\$690,000	Central			To support the coordination and management of all in-country PMI activities including support for salaries and benefits for resident advisors and local staff, office equipment and supplies
	USAID In-Country Staffing and Administration: Administration	USAID	\$540,000	Central			To support USAID Mision routine administration and coordination expenses
	CDC In-Country Staffing and Administration	CDC IAA	\$661,271	Central			RR #1: Budget reduced from \$660,000 to \$420,000.
	Administration						RR #2: Budget increased from \$420,000 to \$661,271
Total: \$1,891,2	271						
GRAND TOTA	AL:	\$28,000,000					