## Table 1: Budget Breakdown by Mechanism U.S. President's Malaria Initiative - ZAMBIA Planned Malaria Obligations for FY 2018 Revised July 16, 2021

Mechanism	Geographic Area	Activity	Budget	%
GHSC-PSM	National	Procurement of ACTs, RDTs, nets, lab supplies, provide technical assistance to strengthen pharmaceutical and supply chain management systems	\$10,813,888	36%
VectorLink	National and Targeted Districts	Procurement of insecticides for IRS. Support IRS planning and implementation. Support environmental monitoring.	\$9,586,553	32%
РАМО	National and Luapula, Muchinga, Northern and Eastern	Support ITN distribution through routine channels and the 2020 mass campaign. Improve the quality of parasitological diagnosis and treatment in the public sector; strengthen FANC, community-based BCC, HMIS and malaria surveillance. Support district and provincial data audits and M&E. Support modelling in pre-elimination districts.	\$6,267,330	21%
Impact Malaria	Copperbelt, Central, Lusaka	In Central and Coppebelt, strengthen case management at facility level. In Lusaka, strenghten community-based surveillance. In pre-elimination districts, support operations research and enhanced surveillance.	\$806,185	3%
Evidence for Health	National	Support for HMIS strengthening at national level	\$500,000	2%
Population Media Center (PMC)	Luapula, Northern, Muchinga	Support for BCC activities via community radio	\$75,000	0%
Breakthrough Action	National	Support for national level SBCC activities	\$100,000	0%
Peace Corps	National	Support malaria treatment and preventation at community level through small project assistance grant. Provide 3rd year Peace Corps volunteer (funded through PAMO).	\$20,000	0%
CDC-IAA	N/A	ersonnel, Entomologic monitoring and insecticide resistance, M&E, net durability, operations research and FETP training	\$691,160	2%
USAID	N/A	Personnel	\$1,139,884	4%
TOTAL			\$30,000,000	100%

## Table 2: Budget Breakdown by Activity U.S. President's Malaria Initiative - Zambia Planned Malaria Obligations for FY 2018 Revised July 16, 2021

Revised July 16, 2021										
Proposed Activity	Mechanism	Budget (\$)		Geographic Area	Description					
		Total	Commodity							
	PREVENTIVE ACTIVITIES									
VECTOR MONITORING AND CONTROL										
Entomologic monitoring and insecticide resistance management										
Entomological monitoring and insecticide resistance monitoring, support to insectary and training and capacity building for new NMEC entomologist. Environmental Monitoring and Compliance.	VectorLink	450,000		National	Support entomological monitoring and insecticide resistance monitoring and support to insectary. Support environmental monitoring and environmental assessment, to include use of DDT, organophosphates, or carbamates. Support NMEC capacity in entomological monitoring. Conduct environmental monitoring, environmental assessments, and risk mitigation in IRS districts					
Entomologic monitoring and insecticide resistance management	VectorLink	115,000		Pre-elimination disticts, Eastern Province	Continue support for entomologic monitoring in Eastern Province, including mosquito collections at paired sprayed and unsprayed community sites in Katete District (low burden) and Mambwe District (adjacent high burden). In Katete district, also conduct foci investigation guided by HF case incidence data.					
CDC technical assistance on entomological monitoring and insecticide resistance	CDC-IAA	29,000		NA	Provide CDC technical assistance on entomological monitoring and insecticide resistance					
Subtotal Ento monitoring		594,000	0							
Insecticide-treated Nets										
Procurement of ITNs for routine channels	GHSC-PSM	1,840,000	1,840,000	National	Procure approximately 694,000 ITNs for 2018 continuous/routine distribution.					
Procurement of ITNs for school-based distribution, pre-elimination districts	GHSC-PSM	80,000	80,000	Pre-elimination disticts, Eastern Province	Procure - 30,000 regular ITNs to continue support for school-based distribution in the pre-elimination districts during non-campaign years.					
Distribution of ITNs in routine channels	GHSC-PSM	400,000	0	National	Support the distribution of ITNs, including transportation and other logistics, to districts and health facilities.					
Support school-based distribution of ITNs, pre-elimination districts	PAMO	125,000	0	Pre-elimination disticts, Eastern Province	Support training, supervision, monitoring and other technical assistance to support the second year (CY2020) of school-based distributions in the pre-elimination districts, targeting 1st and 4th grades. Per national policy, these will be suspended in the 2021 campaign year.					
Procurement of ITNs for 2020/21 mass campaign to protect pre- elimination program gains	GHSC-PSM	2,612,200	2,612,200	Eastern	Procure at least 740,000 PBO ITNs for the 6 high-burden districts of Eastern Province bordering the pre- elimination districts. Target 50% of population per NMEP policy. Protect gains of the pre-elimination districts and allow for future expansion of the pre-elimination program. Complements FY19 funds for campaign in the 3 pre-elimination districts.					
Support planning and implementation of 2020/21 mass campaign across Eastern Province to protect current and future pre-elimination gains	VectorLink	185,000		Eastern	Support planning of the 2021 mass campaign in Eastern Province, focussed on the remaining 6 districts. PMI is providing the ITNs for Eastern Province and will provide the main support for the campaign, complementing the support by Global Fund and other donors in other provinces.					
Wareshousing and distribution of ITNs in mass campaign	GHSC-PSM	478,000		Eastern and National	Support distribution, to the district and HF levels, of ITNs procured by PMI, Global Fund, Against Malaria Foundation, or other donors. Complements Global Fund funding for distribution.					

Support NMEP in mass ITN campaign planning and implementation, filling gaps to leverage large donations of ITNs by Against Malaria Foundation	VectorLink	250,000		National	Support mass campaign planning and distribution nationwide, including program management and data support. As requested by NMEP, this technical assistance from in-country project staff will leverage the potential large donations of Against Malaria Foundation to multiple provinces (number to be determined). Address implementation bottlenecks in planning, management and monitoring which were identified in the Zambia NMEP's 2017 campaign "lessons learned" report.
Provide technical assistance to expand continuous distribution through schools and community	PAMO	150,000		Luapula, Northern, Eastern and Muchinga	Provide technical assistance to expand continuous distribution channels for sustaining high ITN coverage in selected provinces/districts.
Assessment of ITN repurposing and misuse using PMI-VectorWorks tool	VectorLink	185,000		Luapula, Northern, or Muchinga	Assess ITN repurposing and misuse in focus province(s), including impact on fisheries and potential for mitigation. Using tools recently developed by the PMI-VectorWorks project, this wil provide an evidence basis to address longstanding questions in Zambia. Objectives include: strengthen due diligence in environmental compliance, mitigate the environmental impact of ITN campaign, protect public health investments in ITNs, and improve SBC to promote appropriate ITN use.
Routine net durability monitoring	РАМО	180,000		Eastern	Conduct the routine monitoring of the durability and physical integrity of ITNs in two sites following the 2017 mass campaign.
Technical assistance for routine monitoring of nets	CDC-IAA	10,000		NA	Provide CDC technical assistance for routine monitoring of net durability.
Subtotal ITNs		6,495,200	4,532,200		
Indoor Residual Spraying					
Procurement of IRS commodities and support to other components of the program.	VectorLink	6,140,500	6,140,500	Luapula, Copperbelt, Eastern	Procure insecticides (i.e.clothianidin products) and other IRS supplies/equipment for spraying in target provinces and districts
Implementation of PMI-supported IRS program, monitoring and evaluation, storage/incinerator, community sensitization, geocoding, BCC. National level support to the NMEC IRS program.	VectorLink	1,674,000		Luapula, Copperbelt, Eastern	Support the implementation of the PMI-supported IRS program, including activities to: train spray operators, supervisors, and store keepers; monitoring and evaluation; SBCC for IRS; pesticide storage; waste disposal; and pay for spray operations in 36 PMI-funded districts. Training, monitoring and evaluation, and SBCC for IRS. For the NMEC implemented IRS program, provide support for training of trainers, supervisory support, training materials development, TWG support, microplanning, post-IRS support; waste disposal.
Implementation of PMI-supported IRS program in pre-elimination districts	VectorLink	412,053		Pre-elimination disticts, Eastern Province	Support the implementation of IRS, including: training of spray operators, supervisors, and store keepers; monitoring and evaluation; SBCC for IRS; pesticide storage; waste disposal; and pay for spray operations in the pre-elimination districts. (The cost of IRS commodities in the pre-elimination district will be covered by the project's FY17 pipeline of \$533,446.)
Optimize mapping and deployment of IRS in pre-elimination districts using satellite-based system	VectorLink	175,000		Pre-elimination disticts, Eastern Province	In order to maximize IRS coverage, continue to incorporate and optimize the mSpray system for satellite-based enumeration of structures, guidance of field teams, and monitoring. The mSpray investment will be leveraged to enhance the mapping and modelling activity (see M&E section), inform ITN campaign planning (see ITN section), and inform SBC activities (see SBCC section) in the pre-elimination districts.
Subtotal IRS		8,401,553	6,140,500		
SUBTOTAL VECTOR MONITORING AND CONTROL		15,490,753	10,672,700		

Malaria in Pregnancy					
Maiaria in Freguency	I				
Procurement of SP	GHSC-PSM	138,778	138,778	National	Will procure approximately 1.7 million tablets of SP. Will procure 100 tablet bottles.
Strengthening FANC for IPTp	РАМО	400,000		National, Northern, Luapula, Eastern and Muchinga	Support the training of provincial and district level health workers and supervision of provincial, district, and health facility level health workers on the implementation NMEP IPTp guidelines in four high malaria burden provinces (Eastern, Luapula, Muchinga, and Northern). These 4 provinces constitute 36 high burden malaria districts.
Subtotal Malaria in Pregnancy		538,778	138,778		
SUBTOTAL PREVENTIVE		16,029,531	10,811,478		
	•		CASE MA	NAGEMENT	
Diagnosis and Treatment					
Procurement of RDTs	GHSC-PSM	2,124,910	2,124,910	National	Procure 4,480,000 RDTs for health facilities and iCCM to prevent stock outs by Q1 2020. Fill gaps as assessed in Q1 2019 updates to the national quantification and forecasting exercise.
Procurement of ACTs	GHSC-PSM	2,000,000	2,000,000	National	Procure 2.3 million ACTs (artemether-lumefantrine) for the treatment of malaria in facilities and communities
Procurement of reagents and supplies	GHSC-PSM	40,000	40,000	National	Procure reagents and supplies
Procurement of microscopes, reagents and supplies in pre- elimination districts	GHSC-PSM	5,000	5,000	Pre-elimination disticts, Eastern Province	Procure limited numbers of microscopes, reagents and supplies, in order to strengthen health facility diagnostic capacity and maintain skills. Fill gaps identified in the baseline assessment exercise.
Strengthen malaria case management at facility level	Impact Malaria	511,185		Copperbelt and Central Provinces	Strengthen malaria case management at facility level, including OTSS, outside the current four PMI-targeted focus provinces
Strengthen malaria case management at facility level in pre- elimination districts	РАМО	175,000		Pre-elimination disticts, Eastern Province	Support training and supportive supervision to provide high coverage of OTSS, performance assessments and other quality-improvement measures in health facilities in the pre-elimination districts. This will complement investment at the community level.
Improve the quality of parasitological diagnosis in the public sector for four provinces	PAMO	400,000		Luapula, Northern, Eastern and Muchinga	Improve the quality of parasitological diagnosis in the public sector in four targeted provinces through training and supportive supervision of healthcare providers at PHC and community levels. PMI will work at the provincial, district, and community level to improve the appropriate use of diagnostics including interpreting test results and managing patients based on results.
Facility- and community-based treatment with ACTs	PAMO	1,300,000		Luapula, Northern, Eastern and Muchinga	Support the supervision of healthcare providers in the treatment of uncomplicated malaria and the continued training, deployment and supervision of CHWs in iCCM in four targeted provinces. Where epidemiologically appropriate also incorporate reactive case detection. This will provide malaria case management for all ages. Train and deploy CHWs to fill gaps in local requirement to meet national target of 1 CHWs to 500-750 population. Strengthen supervisory capacity at HF and district levels for supervision of case management.
Procure rectal artesunate to support expansion of community referrals for several malaria in children	GHSC-PSM	20,000	20,000	National	Procure at least 23,000 rectal artesunate suppositories to support scale-up of community based referal systems in Muchinga province and elsewhere. Supplement Global Fund and other resources to partially fill the gaps identified in national quantification exercise.

Expand and strengthen the diagnosis, treatment and referral of severe malaria at community level	PAMO	300,000		Muchinga	Support scale-up of referal systems using rectal artesunate and community ETS, which is an NMEP priority. Target high burden rural areas, building on safe motherhood investments and the pilot in Serenje. Initial focus should be Chama district in Muchinga.				
Subtotal Diagnosis and Treatment		6,876,095	4,189,910						
Pharmaceutical Management	harmaceutical Management								
Provide technical assistance to strengthen pharmaceutical and supply chain management systems	GHSC-PSM	1,000,000		National	Provide technical assistance to strengthen pharmaceutical and supply chain management systems, including: quarterly forecasting and quantification; strengthening of EMLIP system; semi-annual end-use verification activities; supporting MSL to ensure successful adoption of its new tasks, including forecasting and supply planning capacity, as well as the improvement of the storage and distribution of malaria commodities.				
Strengthen pharmaceutical and supply chain management systems to support scale up of iCCM in pre-elimination districts	GHSC-PSM	75,000		Pre-elimination disticts, Eastern Province	Continue to provide technical assistance to strengthen pharmaceutical and supply chain management systems to support rapid expansion of malaria case detection and management at community level. As in FY17, the focus will be on establishing reliable systems for distributing ACTs, RDTs and other iCCM supplies to community workers and for collecting and responding to consumption reports.				
Subtotal Pharmaceutical Management		1,075,000	0						
SUBTOTAL CASE MANAGEMENT		7,951,095	4,189,910						
HEALTH SYSTEM STRENGTHENING / CAPACITY BUILDING									
Training and Capacity Building	PAMO	60,000		National	Provide support to strengthen NMCP staff capacity through professional development activities. Activities will include training workshops (e.g., SM&E, commodity quantification) and regional/global meetings (e.g., American Society for Tropical Medicine and Hygiene)				
Build management capacity of MOH for malaria elimination	PAMO	80,000		Pre-elimination disticts, Eastern Province	Provide support to strengthen MOH staff capacity in malaria elimination monitoring and management through professional development activities. Activities will include training workshops (e.g., SMEO, FETP Frontline Program, commodity quantification) and regional/global meetings (e.g., American Society for Tropical Medicine and Hygiene)				
Peace Corps small project assistance grants	Peace Corps	20,000		National	Provide funding for Peace Corps activities in malaria control including small project assistance (SPA) grants.				
Support 3rd Year Peace Corps volunteer position to assist CHWs to improve quality of services and surveillance data in the pre- elimination program	РАМО	30,000		Pre-elimination disticts, Eastern Province	Support one 3rd-year Peace Corps position, based in the pre-elimination districts. Housing, travel and supplies for one Peace Corps volunteer to assist in malaria activities nationally, leveraging SPA grant funding. He/she will also support selected SMEO activities in the pre-elimination districts, such as support for HMIS, ANC surveillance pilot and the potential OR study of proactive CCM.				
Field Epidemiology Training Program	CDC-IAA	0		National	Provide support for one Zambian national to participate in a field epidemiology Training Program either at the intermediate or advanced level. This activity will support long-term local capacity within the MOH. Funding included in previous fiscal years will be used to cover costs of the activity for this calendar year. (Funded in FY17.)				
SUBTOTAL HSS & CAPACITY BUILDING		190,000	0						
SOCIAL AND BEHAVIOR CHANGE COMMUNICATION									
Support for national SBCC activities	Breakthrough Action	100,000		National	Support national SBCC activities to maintain ownership and proper use of ITNs, increase ANC attendance and demand for IPTp, increase early care seeking behavior and demand for appropriate malaria diagnosis and increased a				

Support mass coverage of malaria messaging in high-burden areas through multiple channels	РАМО	245,000		Luapula, Northern, Eastern and Muchinga	Implement SBC activities with mass-coverage, with the goal of addressing the MIS 2018 findings of low malaria knowledge, attitudes and practice in high-burden provinces.
Expand the reach of community level malaria messaging in high- burden areas through radio programming	Population Media Center (PMC)	75,000		Luapula, Northern, Eastern and Muchinga	Utilitize community radio to increase the reach of malaria messaging in high-burden areas. This will leverage the existing USG-supported platform of popular health educational drama series on community radio, incorporating malaria messaging for the first time.
Provide support for community-based SBCC	РАМО	1,000,000		Luapula, Northern, Eastern and Muchinga	Provide support for community-based SBCC through NGOs/FBOs to increase net ownership and use, increase ANC attendance and demand for increase ANC IPTp, increased early care seeking behavior and demand for proper malaria diagnosis and adherence to treatment for malaria at community level
Support for SBCC in pre-elimination districts	РАМО	250,000		Pre-elimination disticts, Eastern Province	Provide support for district-, HF-, and community-based SBCC to promote malaria elimination interventions. To include: proper and consistent net usage, increased ANC attendance and demand for IPTp, and increased early care seeking behavior and demand for proper malaria diagnosis and adherence to treatment for malaria at HF and community levels. As in FY17, the SBCC efforts will use multiple channels such as local radio, print materials, and community-based SBCC through traditional leaders and NGOs/FBOs.
SUBTOTAL SBCC		1,670,000	0		
		SURVEIL	LANCE, MONI	TORING, AND EV	ALUATION
Support improved provincial, district and community reporting and utilization of data	РАМО	750,000		National	Strengthen routine malaria data reporting at community, health facility, district, and provincial levels in four targeted high burden provinces. Activities will include support for training and mentorship of community health workers, staff at health facilities and district health offices in data collection, reporting, and use for decision making.
District and provincial data audits	РАМО	100,000		National	Provide resources for central-level NMCP personnel to conduct and follow up on data quality audits in all districts and provincial offices in one year. This activity entails visiting officers responsible for collecting, collating, and reporting data from health facilities to higher levels of the health system and ensuring that appropriate quality procedures are followed.
Technical assistance to enhance standardization and reporting of national, facility and community-level data	Evidence for Health	500,000		National	Support national-level M&E activities, including HMIS strengthening, national-level coordination with partners such as MACEPA, CHAI, etc. for their M&E activities, support national M&E technical working group meetings, provide technical assistance to enhance standardization and reporting of national, facility, and community-level data
Enhanced surveillance in Lusaka District	Impact Malaria	100,000		Lusaka district	The Lusaka enhanced surveillance activity served as a model for the stepwise strategy that the current enhanced surveillance program in the southern half of the country evolved from. The support for Lusaka District will be used to restart the rapid reporting and community-level response to investigate potentially locally-acquired infections.
Reactive case detection and community surveillance in pre- elimination setting	РАМО	367,330		Pre-elimination disticts, Eastern Province	Implement reactive case detection and strengthened malaria reporting by CHWs in areas where burden has been reduced.
Support data review and planning to strengthen evidence-based decision-making in pre-elimination setting	РАМО	125,000		Pre-elimination disticts, Eastern Province	Map and model data on intervention coverage and malaria outcomes to guide decision making in the pre- elimination program. Update data sources and analysis to improve modelling and predict impact of interventions. This activity has been an integral, annual aspect of the elimination efforts in Southern Province and has shown promise in Eastern Province.

Lab capacity building for surveillance in pre-elimination setting	РАМО	145,000		National	Support enhanced capacity at NMEC labs for testing of samples from pre-elimination areas, including molecular markers. Support for prevalence survey, including in setting of potential ProACT study and ANC surveillance validation (as below).		
Malaria prevalence monitoring in pre-elimination setting	Impact Malaria	195,000		Chadiza district	Support baseline prevalence survey in a district with moderate burden. Provide data for impact monitoring of the scale-up of iCCM in the standard format, which potentially would also permit comparison with iCCM deployed in an experimental pro-active format (the ProACT study). Provide data for validation of the ANC surveillance approach (see below).		
Pilot ANC-based malaria surveillance approach in moderate-burden district targeted for pre-elimination	PAMO	85,000		Chadiza district	Pilot the use of routine ANC data for malaria surveillance in a district with moderate burden. Develop data collection tools, train and deploy ANC clinic workers and supervisors, analyze data.		
Technical assistance for M&E	CDC-IAA	10,000		NA	Provide CDC technical assistance in monitoring and evaluation activities		
SUBTOTAL SM&E		2,377,330	0				
OPERATIONAL RESEARCH							
SUBTOTAL OR		0	0				
		IN-COU	NTRY STAFFIN	IG AND ADMINIS	TRATION		
USAID	USAID	1,139,884			Support for in-country PMI management and operational costs.		
CDC	CDC-IAA	642,160			Support for CDC annual staffing costs.		
SUBTOTAL IN-COUNTRY STAFFING		1,782,044	0				
GRAND TOTAL		30,000,000	15,001,388				