



REPUBLIC OF ZAMBIA

MINISTRY OF HEALTH

ZAMBIA NATIONAL MALARIA ELIMINATION CENTRE

MALARIA OPERATIONAL PLAN 2020-2021

Foreword

Over the past decade, progress has been made in reducing morbidity and mortality due to malaria. The gains that have been realised in this regard have been attributed to the scale up of key high impact preventive and curative interventions across the country. However, the disease still remains a major public health concern in Zambia. Malaria has been prioritised for elimination in Zambia as outlined in the National Health Strategic Plan (2017-2021) and the National Malaria Elimination Strategic Plan (2017-2021). In order to achieve this, the Ministry of Health through its National Malaria Elimination Program (NMEP) has adopted the deployment to scale of key high impact core interventions which include Indoor residual spraying , long lasting insecticide treated bed nets , prompt diagnosis and treatment at both community and health facility level . Additional innovative approaches to malaria programming have also been adopted and these include; where applicable population based parasite clearance interventions such as mass drug administration and index case follow-up and the adoption of an enhanced surveillance system to detect transmission hotspots at community level.

This 2 Year plan aims to guide the operational implementation of malaria programming for the years 2020 and 2021. It is premised in the overall strategic guidance provided in the National Health Strategic Plan (2017-2021) and the National Malaria Elimination Strategy (2017-2021) which serve as a framework for a coordinated and collaborative approach to malaria elimination in Zambia. Additionally, the strategies highlight the need to mobilize the requisite resources, strengthen the capacity of malaria elimination programme management, implement and monitor a package of high-impact malaria interventions driven by local epidemiology, while building a sustainable strong surveillance system. This plan will form the technical base in the development of harmonised annual work plans for the National, Provincial, District and health facility levels. The plan was developed through a consultative process of all key malaria partners and stakeholders and encompasses a collective approach to achieve malaria elimination in Zambia.

Malaria ends with me, and with you.



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Acronyms and Abbreviations

ACT	Artemisinin Based Combination Therapy
AL	Artemether-lumefantrine
CHW	Community Health Worker
CSA	Central Statistics Agency
DHAP	Dihydroartemisinin-piperaquine
EIR	Entomological Inoculation Rate
HC	Health Centre
HFCAs	Health Facility Catchment Areas
iCCM	Integrated Community Case Management
IPT	Intermittent Presumptive Treatment
IRS	Indoor Residual Spraying
LLINs	Long Lasting Insecticide Treated Nets
LSM	Larval Source Management
MDA	Mass Drug Administration
MEC	Malaria Elimination Council
MIP	Malaria in Pregnancy
MIS	Malaria Indicator Survey
MOH	Ministry of Health
MSL	Medical Stores Limited
MTR	Mid-Term Review
NMESP	National Malaria Elimination Strategic Plan
NMRL	National Malaria Reference Laboratory
OR	Operational Research
RAS	Rectal Artesunate Suppositories
RDT	Rapid Diagnostic Test
SBCC	Social and Behavioral Change Communication
SDA	Service Delivery Area
SP	Sulphadoxine-pyrimethamine
TWG	Technical Working Group
ZDHS	Zambia Demographic and Health Survey

1.0 Introduction

Zambia is a landlocked country with a population estimate of about 17.9 million people, with an area of 752,612 square kilometers bordered by eight countries; majority of the population resides in rural areas (60%) (Zambia Statistics Agency, 2020). Administratively, the country is divided into 10 provinces and 118 districts.

The health care system in Zambia includes 109 hospitals, 1500 health centres (HCs) and 300 health posts (HPs) countrywide (MOH, 2013). Malaria control implementation occurs within this health system context at national, provincial, district and Health Facility Catchment Areas (HFCAs). All the health facilities serve as diagnostic and treatment centres for malaria while hospitalization is confined to health centres with admission space/wards. Procurement, storage and distribution of pharmaceutical products or commodities is centralized with some regional hubs in Eastern, Southern, Western and Copper-belt provinces. Medical Stores Limited (MSL) is the main entity managing the drug and logistics supply chain on behalf of the Ministry of Health (MoH). External partners may be outsourced as need arises.

Malaria transmission in Zambia occurs all year round with seasonal differences, peaking in the wetter months around December to March. *Plasmodium falciparum* is responsible for 98% of infections and the most predominant vectors are *Anopheles gambiae* s.s., *An. arabiensis*, and *An. funestus* (NMESP 2017-2021). In view of the heterogeneity in transmission across the country, annual malaria stratification is undertaken so as to align core interventions for each stratum based on the transmission level. Five levels of transmission are currently in use ranging from zero to very high transmission (NMEC MTR Report 2019). The country has recorded a 55% reduction in malaria mortality rate between 2015 and 2018 and a 53% decline in prevalence for the same period. However, malaria incidence reduction remains below 10% (NMEC MTR 2019). In 2018, there were about 5.2 million cases and over 1,400 deaths recorded country wide (HMIS 2019).

Malaria control follows a multipronged approach with implementation at HFCAs. Zambia, being a landlocked country, has a significant mobile and migrant population. As a result, cross border collaborations have been heightened. Monitoring and Evaluation (M&E) is characterized by regular activities to assess if the programme implementation is on track and to monitor progress on key indicators. The success of malaria control and elimination is dependent upon a strong partnership collaboration which includes public, private, non-governmental, academic and faith based institutions from both local and international networks.

Resource mobilization strategy is key and to achieve this, a business strategy is in place. The cost of the NMESP 2017-2021 is estimated to be US\$340 million with a gap of USD100 million (NMEP Business Plan 2018-2020). The main financing partners include Government, Global Funds for HIV/AIDS, Tuberculosis and Malaria (GFATM), Presidents' Malaria Initiative (PMI), PATH/MACEPA, Isdell-Flowers Cross Border Malaria Initiative, Rotarians and various private sector entities.

The National Malaria Elimination Centre (NMEC) in Zambia is a Ministry of Health (MOH) directorate mandated with overall coordination of all malaria control activities in Zambia (<https://www.nmec.org.zm/>). Some of the improvements in governance and coordination include harmonization of malaria work plans across partners; development of an online management tool to enable timely and transparent progress review; streamlining of the technical working groups (TWGs) which meet quarterly (vector, case management and SMEOR; MTEF technical updates restructured by health system levels; creation of malaria taskforce at all levels (MTR Report 2019). In order to improve the capacity of NMEC to plan and implement activities, the national staffing levels have increased from 40 to 52 staff while the position of malaria elimination officers has been introduced at district level with the provincial level having designated malaria focal points.

2.0 National Malaria Elimination Strategic Plan (NMESP) 2017-2021

2.1 Vision

A malaria free Zambia

2.2 Goals

- To eliminate local malaria infection and disease in Zambia by 2021.
- To maintain malaria-free status and prevent reintroduction and importation of malaria into areas where the disease has been eliminated.

2.3 Objectives

- Increase the implementation rate of interventions from 36 percent in 2015 to 95 percent by 2018.
- Reduce malaria incidence from 336 cases per 1,000 population in 2015 to less than 5 cases per 1,000 population by 2019.
- Increase malaria-free HFCAs from 0.5 percent in 2015 to 100 percent in 2021.
- Reduce malaria deaths from 15.2 deaths per 100,000 population in 2015 to less than 5 deaths per 100,000 population by 2021.
- Achieve 100 percent malaria-free status by 2021.
- Maintain 100 percent malaria-free status, following 2021.

2.4 Strategies

- Lowering the burden in high-transmission settings.
- Eliminating malaria in low-transmission settings.
- Preventing the reintroduction of malaria transmission.

These strategies are in line with the National Malaria Elimination Strategic Plan (NMESP) 2017-2021 with its accompanying business plan which seeks to address the gaps in investments. Furthermore, using updated information from the MTR of the NMESP, best practices were identified and prioritized for implementation to ensure attainment of the malaria elimination goals by moving to scale for all interventions and introducing efficiencies in programming. The NMEC will ensure investments are made to support the scale up of interventions to support the elimination agenda. Sources of financing will include Government, USAID Presidential Malaria Initiative (PMI), GFATM, etc. In addition, a national malaria elimination council (MEC) an inter-sectoral body has been established with a mandate for advocacy and resource mobilisation. In the first half of 2019, the MEC secretariat was set up commenced with resource mobilization activities focusing on innovative financing models.

2.5 Rationale for Malaria Elimination

The NMEC in Zambia is leading a campaign for malaria elimination. This is after careful consideration of the progress made in recent years towards addressing malaria and the trend that in many districts, malaria incidence has been reduced to levels where transmission interruption is a feasible objective. Also, considering that a delay in addressing elimination allows the problem of drug and insecticide resistance to emerge, making both malaria elimination and control more challenging in the future. There exists solid evidence that has accumulated over the last decade on approaches for addressing malaria, and new elimination tools are on the horizon. Being mindful of Zambia's domestic financial commitments to control malaria, which have led to the goal of elimination. Recognising the effective mechanisms that are being established to ensure proper coordination of malaria elimination activities with neighbouring countries, particularly where there is movement across international boundaries. Lastly, in tandem with the political and financial commitments from neighbouring countries and partners to achieve a greater impact and eliminate malaria.

2.6 Guiding Principles for Malaria Elimination

- The unit of elimination and of intervention implementation will be the HFCA.
- Malaria incidence thresholds will guide the intervention package towards the goal of malaria elimination.
- Epidemiologic and entomological information (clarified using data reviews and verification procedures) will be critical in directing action and tracking progress.

2.7 Key Elimination Interventions

Vector control: Integrated vector management to control vector borne diseases

- Indoor residual spraying (IRS) to cover at least 50% of the population.
- Long lasting insecticide-treated mosquito nets (LLINs) to cover at least 50% of the population.
- Larval source management (LSM) where applicable.

Case management

- Diagnosis: All suspected malaria cases to undergo microscopy or Rapid Diagnostic Test (RDT).
- Treatment: All confirmed malaria cases to receive prompt and effective antimalarial as per National policy.
- Malaria in pregnancy (MIP) package as per National policy
- Mass drug administration (MDA) where applicable.

3.0 National Malaria Elimination Strategic Plan (NMESP) Mid-Term Review

The Mid Term Review (MTR) of the NMESP 2017-2021 was undertaken between February and May 2019 with the following objectives:

- a) Assess the progress of the National Malaria Control Programme towards the epidemiological and entomological impact targets of the elimination strategy at mid-term.
- b) Review the level of financing of the NMEP at mid-term.
- c) Review the capacity of the NMEP to implement planned activities at mid-term.
- d) Review the attainment of programme outcome targets at mid-term.
- e) Define the programming implications of the lessons learned in the implementation of the elimination strategic plan for the remaining period to achieve the set goal of the plan.

The findings of the review were used to inform the strategic focus for the 2020-2021 MOP so as to improve program performance and allocation of resources. The key findings from the MTR are summarized in the sections below.

3.1 Programme Performance and Status of Outcome Indicators

Implementation rate of activities planned increased from 36 percent in the previous strategic plan to 89 percent in the period under review.

The progress on programme performance was average (about 51%) with variations by strategic action. The best performance was recorded in strategic action to strengthen IRS implementation capacity in all HFCAs (86%); strengthening capacity of the NMESP to implement planned action (80%) and strengthening monitoring and evaluation

(71%). Above average performance was recorded in ITN ownership and use (69%) and management of malaria cases (64%). Below average performance was recorded in OR, LSM, surveillance and SBCC.

Over time, positive progress on key outcome indicators has been tracked using the Zambia Demographic Health Survey (ZDHS) and Malaria Indicator Survey (MIS) as summarized in table 1.

Table 1: Status of the key outcome indicators

Indicator	MIS 2006	DHS 2007	MIS 2008	MIS 2010	MIS 2012	DHS 2013/2014	MIS 2015	MIS 2018
% of households with at least one insecticide-treated net (ITN)	38	53	62	64	68	68	74	80
% of children ages 0–59 months who slept under an ITN the previous night	24	29	41	50	57	41	56	69
% pregnant women who slept under an ITN the previous night	24	33	43	46	58	41	NA	71
% of household members who slept under an ITN the previous night	19	N/A	34	42	49	35	53	64
% of households with at least one ITN per sleeping space	N/A	N/A	33	34	55	N/A	62	47
% of households receiving indoor residual spraying (IRS) in the previous 12 months	10	16	15	23	29	28	28	35
% of households covered by at least one ITN or recent IRS	43	N/A	68	73	74	75	78	84
% of women ages 15–49 years who received two doses of IPTp during most recent pregnancy	59	66	66	70	72	73	79	81
% of children ages 0–59 months who reported fever in the previous two weeks	33	18	28	34	24	21	16	19
% of children ages 0–59 months with fever taking antimalarial drugs which were ACTs	39	NA	30	76	85	91	92	96
% of children ages 0–59 months with fever reporting a finger/heel stick	N/A	N/A	11	17	32	49	36	55
% of women ages 15–49 years who recognize fever as a symptom of malaria	65	N/A	71	75	78	N/A	77	71
% of women ages 15–49 years who reported knowledge of mosquito bites as a cause of malaria	80	N/A	85	85	89	N/A	85	82
% of women ages 15–49 years who reported knowledge of mosquito nets/ITNs as a prevention method	78	N/A	81	82	86	N/A	91	86
% of children ages 0–59 months with malaria parasitaemia by microscopy	22	N/A	10	16	15	NA	17	9
% of children ages 0–59 months with severe anaemia (Hb<8 g/dl)	14	N/A	4	9	7	NA	6	5

Source: Malaria Program Mid Term Review Update Department Meeting: May 2019.ppt

3.2 Lessons learned

The Malaria program MTR undertaken in May 2019 provided valuable lessons which have been instrumental in informing the operational design of the interventions for 2020-2021.

Malaria mortality was reduced from 15.2 per 100,000 population in 2015 to 7 per 100,000 population in 2018, well above the 9 per 100,000 target. However, malaria incidence reduction was below the targeted 191 per 1000 in 2018; only a reduction from 382 per 1000 population in 2016 to 311 per 1000 in 2018 was attained. However, there was no available data to estimate prevalence by HFCA because the MIS provides for national and provincial estimates only. Discrepancies between official Census estimates and local head counts by health staff affected the reliability of malaria incidence and mortality estimates.

In terms of entomological impact, a reduction in entomological inoculation rate (EIR) was noted while the vector composition was such that there was suppression of *An. funestus* and an increase in *An. Arabiensis*. The biting

behaviour of *An. funestus* had changed from indoor to outdoor biting. Additionally, there was a change in the insecticide resistance profile of malaria vectors. In vector control, the NMEP achieved the milestones as the percentage of households with at least one ITN and/or sprayed by IRS in the last 12 months increased from 78% in 2015 to 84% in 2018 (MIS 2018). LLIN mass distribution campaign was implemented as planned, including piloting and rolling out if the school-based distribution.

The milestones for case management as per NMESP were achieved, however, this was not the case for MIP and MDA. The NMEP has built capacity for case management at community level but saturation had not yet been achieved by the time of the MTR. The rollout of pre-referral treatment using rectal artesunate (RAS) had commenced.

Progress had somewhat been made in SBCC, however, there is a need to understand lack of progress in prompt care seeking behaviour. Procurements for malaria commodities was undertaken according to plan (including buffer stock) for LLINs, RDTs in 2017 and Artemether/lumefantrine (AL) for most pack sizes in both 2017 and 2018. However, procurements for insecticides and RDTs in 2018 were less than what was planned. There were challenges with availability of Sulphadoxine-pyrimethamine (SP) countrywide.

Enhancements in malaria surveillance are not yet to scale. Population denominators continue to negatively affect the malaria stratification which in turn serves as a guide for planning key interventions. Reporting of routine distribution of LLINs continues to be suboptimal.

The National Malaria Elimination Business Plan 2018–2020 estimated a gap of approximately USD US\$ 100 million. The key cost drivers were integrated community case management of malaria (iCCM) and MDA. Planning and implementation of some activities still concentrated at the central level. During the period under review, malaria funding both from government and partners has shown some increase but the resource gap for achieving the goals remains.

3.3 Areas of Focus for the 2020-2021 Implementation Period

Based on the NMESP goals and in consideration of the MTR findings, the NMEP adopted key best practices for the remainder of the NMESP. These were deliberated upon by the relevant TWGs and have been prioritized for the 2020-2021 implementation period.

Some of these include sustaining progress in reducing malaria mortality; addressing the factors and bottlenecks contributing to delaying implementation of planned activities. Use incidence by HFCA as an indicator. Use head count for programme implementation and Central Statistical Agency (CSA) population for indicator estimates. In order to attain entomological impact, there will be need to increase the number of fully operational sites for entomological surveillance.

Given the need for the programme to attain elimination goals, there is need to strengthen resource mobilisation so that the gap in financing need is addressed. In order to introduce efficiency, efforts will be made to decentralise operational planning and management to the provinces and districts. The NMEP will continue to harness and explore innovative mechanisms to improve domestic investments in malaria elimination to ensure sustainability of the interventions in support of the elimination agenda.

With regard to malaria vector control, the plan is to sustain achievements in vector control and accelerate towards the set targets. Eligible structures for IRS will be determined by enumeration. For LLIN need, head counts will be utilised and the core approach for LLINs mass campaigns will be door-to-door. Where applicable, community-based IRS will be implemented. Efforts will be made to mobilise more resources for storage facilities for vector control commodities.

The programme intends to accelerate CHW training and deployment to achieve saturation so as to implement pre-referral treatment of severe malaria with RAS to scale. There is need to scale up MDA according to NMESP and mobilise resources to ensure malaria commodity security. The NMEC will continue to monitor the efficacy of the key antimalarial drugs used for treatment. Efforts will be made to ensure that the National Malaria Reference Laboratory has full functionality to support malaria quality assurance and control. To ensure uptake of interventions, SBCC will be prioritised SBCC within the budget.

Adequate funding commitments and timely disbursement of funds will greatly improve the procurement performance. There are plans to scale up “storage in a box” to more health centres and also to ensure that facilities being built have adequate storage space.

Moving forward, the NMEC will use head count for programme implementation and CSA population for indicator estimates. Roll out to scale the enhanced malaria surveillance package. Collate the data sets into a central repository to enhance programme implementation. Institutionalise data quality audit and reviews at district level to ensure availability of quality data to inform decision making for efficient allocation of resources and improved program performance.

4.0 Operational Plan

4.1 Purpose of the Malaria Operational Plan 2020-2021

To guide the operationalization of the last two years of the NMESP 2017-2021. The MOP will be used in collaboration with the NMESP 2017-2021; National Malaria Surveillance, Monitoring and Evaluation Plan 2017-2021; Malaria Business Plan; MTR 2019 Report and other relevant documents. In the 2020-2021 period, the focus will be to build upon the progress made in the implementation of the NMESP and addressing the MTR 2019 recommendations so as to ensure that the malaria elimination goals are attained while ensuring that social and environmental safeguards are in place.

In developing the MOP, all stakeholders were fully engaged, consulted and participated in the review so as to gain consensus on the strategic focus areas for each of the service delivery components. The main service delivery areas and the respective strategic actions are summarised in table 2. The cost estimates for the remainder of the NMSEP are yet to be defined.

4.2 Service Delivery Areas

This operational plan (2020-2021) covers five service delivery areas (SDAs) as shown in Table 2.

Table 2: Service delivery areas, strategic actions and policies

Service delivery area	Strategic action/s	Policy/guideline
Malaria Case Management	➤ Strengthen the management of malaria cases	Parasitological diagnosis of all suspected malaria cases; First-line treatment of uncomplicated P. falciparum malaria with Artemether Lumefantrine; Injectable artesunate for severe malaria with quinine as an alternate. For severe malaria patients between 6 months to 6-year-old who are unable to immediately access parenteral treatment (from hard-to-reach areas), pre-referral intervention with rectal artesunate (RAS) at the community level. In the first trimester, pregnant

Service delivery area	Strategic action/s	Policy/guideline
		<p>women with malaria are treated with quinine and Artemether Lumefantrine after the first trimester.</p> <p>MIP: Free LLINs at first ANC visit and monthly administration of intermittent preventive treatment in pregnancy (IPTp) with Sulphadoxine-pyrimethamine (SP) after the first trimester until delivery, and overall prompt diagnosis and treatment of malaria.</p> <p>MDA: dihydroartemisinin piperaquine (DHAP) administered twice a year, for two years consecutively in selected areas.</p>
Vector Control	<ul style="list-style-type: none"> ➤ Strengthen IRS implementation capacity in all Health Facility Catchment Areas ➤ Improve ITNs Ownership and Use ➤ Strengthen entomological surveillance ➤ <i>Strengthen Larval Source Management</i> ➤ Strengthen entomological surveillance 	<p>Universal vector control coverage with LLINs and IRS. The current NMEP guidance for LLIN and IRS campaign planning is to cover 50 percent of the population with LLINs, and 50 percent with IRS, allowing for a 10 percent overlap in order to minimise gaps. Additional interventions such as LSM will be deployed where applicable.</p>
Social and Behaviour Change Communication	<ul style="list-style-type: none"> ➤ Strengthen the capacity to implement social behavioral change communication 	<p>The national malaria communication strategy is in place to guide districts and communities on appropriate and effective communication approaches, messages, materials and community engagement activities. It also aims to promote uptake of proposed intervention packages and actions based on transmission intensity levels.</p>
Surveillance, Monitoring, Evaluation and Operations Research	<ul style="list-style-type: none"> ➤ Strengthen the surveillance system at all levels ➤ Strengthen the Monitoring and Evaluation ➤ Strengthen operational Research 	<p>SMEOR is anchored on the following guiding principles:</p> <ul style="list-style-type: none"> i) To provide timely and sound evidence to guide the implementation and policymaking process for malaria elimination in Zambia. ii) To strengthen capacity to monitor and evaluate the performance of malaria programmes. iii) To conduct research for evidence-based programming.
Programme Management	<ul style="list-style-type: none"> ➤ Strengthen Capacity of the National Malaria Elimination Programme to implement planned activities. 	<p>Focuses on a strengthened system for resource mobilisation.</p> <p>Decentralised operational planning and management to the provinces and districts.</p>

4.3 Operational Plan by Service Delivery Area

4.3.1 Service Delivery Area: Malaria Case Management

Service Delivery Area Objective: To have 100% of all suspected malaria cases managed according to Guidelines for Diagnosis and Treatment of Malaria in Zambia at all levels.

Strategic Action: Strengthen the management of malaria cases.

Strategic Action Objectives:

- Improving the proportion of suspected malaria cases receiving parasitological diagnosis from 96% in 2018 (HMIS) to 98% in 2020 and 100% in 2021.
- Increasing the proportion of children under five with fever who took an antimalarial drug which was an artemisinin-based combination therapy (ACT) increased from 96% in 2018 (MIS 2018) to 100% in 2021.

Key Findings from the 2019 Programmatic Mid Term Review

- The milestones for case management as per NMESP were achieved however, this was not the case for MIP and MDA.
- The NMEP has built capacity for case management at community level but saturation has not yet been achieved.
- The rollout of pre-referral treatment using RAS has commenced.
- Take advantage of the increased capacity to train CHWs.
- Accelerate CHW training and deployment to achieve saturation.
- Implement pre-referral treatment with RAS to scale.
- Scale up MDA according to NMESP.
- Continue to monitor the efficacy of the key antimalarial drugs used for treatment.
- Ensure that the National Malaria Reference Laboratory has full functionality to support malaria quality assurance and control.
- Hospitals have the highest reported cases of clinical malaria.
- Reported cases of clinical malaria from private practitioners.
- Low utilization of microscopy for malaria diagnosis.
- Stock out of SP for IPTp

Recommended Best Practices

Take advantage of the increased capacity to train CHWs.

- Accelerate CHW training and deployment to achieve saturation.
- Increase the capacity to train CHWs by training more trainers.
- Ensure availability of RDTs and ACTs by timely distribution of adequate commodities.
- Oversight to CHWs by provincial and central levels
- District quarterly supervision of CHWs.
- Monthly supervision of CHWs by facility staff.
-

Implement pre-referral treatment with Rectal Artesunate Suppository (RAS) to scale.

- Trainings in management of severe malaria in health facilities and community level in the use of RAS.
- Enhance documentation of severe malaria in health facilities.
- Selective roll out Rectal RAS in a phased approach.
- Ensure availability of injectable Artesunate, Quinine injection, RAS, AL, RDTs and microscopy reagents by timely distribution of adequate quantities of these commodities.

Scale up Mass Drug Administration (MDA) according to NMESP.

- Reducing transmission by parasite clearance using MDA for burden reduction in all HFCAs according to NMESP.
- Target mobile populations as in most cases they harbour parasites and transmit to those who already received MDA.
- Reactive community MDA and IRS.
- Forecasting and quantification of commodities for MDA.
- Use quantification report to lobby for funds from partners and GRZ

Malaria in Pregnancy (MIP)

- Strengthen the MIP component in OTSS.
- Timely procurement and distribution of SP.
- Enhance the management of MIP through the malaria case management trainings

Ensure that the National Malaria Reference Laboratory (NMRL) has full functionality to support malaria quality assurance and control

- Mobilise resources.
- Accreditation of reference laboratory.
- Increase the number of microscopy sites.

Table 3: Case Management

	INDICATOR/MEASURES OF VERIFICATION	BASELINE	TIMEFRAME								
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Task 1: Strengthening of the 3 designated national reference laboratories (NMEC,UTH &TDRC)	Number of functional reference laboratories/ Malaria QA Report	-	100%								
Activities											
National											
WHO Accreditation of 2 staff from each reference laboratory (total 6).				X	X					X	X
Competence assessment for Microscopists in the 3 reference laboratories			X	X	X	X	X	X	X	X	X
Re- certification of the 3 already certified Microscopists					X			X			
Conduct quality assurance visits			X	X	X	X	X	X	X	X	X

	INDICATOR/MEASURES OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Conduct quarterly proficiency testing activities			X	X	X	X	X	X	X	X
Conducting of malaria Competency assessments for Microscopists			X	X	X	X	X	X	X	X
Coordination of the malaria diagnosis core group meetings			X	X	X	X	X	X	X	X
Printing and distribution of the malaria quality assurance manual			X		X		X		X	
Provincial										
Participate in quality assurance visits			X	X	X	X	X	X	X	X
Participate in malaria microscopy competence assessments			X	X	X	X	X	X	X	X
Participate in the collection of training and proficiency training materials			X	X	X	X	X	X	X	X
District										
Participate in Quality assurance visits			X	X	X	X	X	X	X	X
Participate in malaria microscopy competence assessments			X	X	X	X	X	X	X	X
Participate in the collection of training and proficiency training materials			X	X	X	X	X	X	X	X
Health Facility										
Participate in Quality assurance visits			X	X	X	X	X	X	X	X
Participate in malaria microscopy competence assessments			X	X	X	X	X	X	X	X
Participate in the collection of training and proficiency training materials			X	X	X	X	X	X	X	X
Task 2: Improve the quality of malaria case management in	Number of health facilities participating in		25%	25%	25%	25%	25%	25%	25%	25%

	INDICATOR/MEASURES OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
3,500 health facilities and 5,000 community level	QIP/ QIP Reports									
Activities										
National										
Start the review of the malaria diagnosis and treatment guidelines 4 th edition 2020?			X	X	X	X	X	X	X	X
Dissemination of the malaria diagnosis and treatment guidelines			X	X	X	X	X	X	X	X
Conduct malaria case management refresher trainings				X		X		X		X
Coordinate quarterly clinical meetings in General, central and district hospitals			X	X	X	X	X	X	X	X
Coordinate bi-annual Provincial OTSS to all microscopy health facilities				X		X		X		X
Conduct quarterly quality assurance visits			X	X	X	X	X	X	X	X
Provincial										
Coordinate quarterly district OTSS			X	X	X	X	X	X	X	X
Conduct quarterly Supportive supervision			X	X	X	X	X	X	X	X
Participate in clinical meetings			X	X	X	X	X	X	X	X
Conduct bi-annual OTSS to all microscopy health facilities			X	X	X	X	X	X	X	X
Participate in the review of the malaria diagnosis and treatment guidelines			X	X	X	X	X	X	X	X
District										
Conduct quarterly supportive supervision to			X	X	X	X	X	X	X	X

	INDICATOR/MEASURES OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
selected communities										
Participate in bi-annual OTSS for health facilities with malaria microscopy services				X		X		X		X
Participate in clinical meetings			X	X	X	X	X	X	X	X
Participate in quarterly district OTSS			X	X	X	X	X	X	X	X
Health Facility										
Conduct monthly supportive supervision to trained CHWs			X	X	X	X	X	X	X	X
Participate in clinical meetings			X	X	X	X	X	X	X	X
Participate in quarterly district OTSS			X	X	X	X	X	X	X	X
Task 3: Generation of 50 panels of well characterized malaria microscopy training and proficiency testing materials	Number of panels collected/NMRL Report	0	10	20	10	10	50	50	50	50
National										
Coordinate the collection of slide panels			X	X	X	X	X	X	X	X
Disseminate the panel generation protocol			X	X	X	X	X	X	X	X
Train the Microscopists in the collection of panels			X	X	X	X	X	X	X	X
Characterization of the collected panels			X	X	X	X	X	X	X	X
Storage and distribution of the panels			X	X	X	X	X	X	X	X
Conduct quality assurance visits			X	X	X	X	X	X	X	X
Province										
Participate in the collection of slide panels			X	X	X	X	X	X	X	X

	INDICATOR/MEASURES OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Participate in the distribution and storage of slide panels			X	X	X	X	X	X	X	X
Districts										
Utilization and storage collected panels			X	X	X	X	X	X	X	X
Task 4: Ensure universal supply and availability of malarial drugs and RDTs	Percentage of health facilities with no stock outs of malaria commodities for more than a week/Quarterly report	88% (eLMIS)	100	100	100	100	100	100	100	100
Activities										
National										
Forecasting and quantification of malaria drugs and RDTs					X				X	
Timely Procurement and distribution of commodities as guided by Pipeline			X	X	X	X	X	X	X	X
Conduct quarterly malaria commodity review meetings			X	X	X	X	X	X	X	X
Conduct spot checks to districts and facilities			X	X	X	X	X	X	X	X
Monitor stock levels of malaria case management commodities (drugs/RDTs)			X	X	X	X	X	X	X	X
Monitoring and verification of facilities that order large quantities			X	X	X	X	X	X	X	X
Provincial										
Redistribute commodities in cases of stock outs, understock and overstock to the districts			X	X	X	X	X	X	X	X
District										
Timely ordering of commodities			X	X	X	X	X	X	X	X

	INDICATOR/MEASURES OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Timely assessment of the commodities			X	X	X	X	X	X	X	X
Redistribution of commodities in cases of stock outs, understock and overstock to the facilities			X	X	X	X	X	X	X	X
Health Facility										
Timely ordering of commodities			X	X	X	X	X	X	X	X
Timely assessment of the commodities			X	X	X	X	X	X	X	X
Task 5: Roll out of the Community Health Workers Logistics System (CHWLS)	<i>Percentage of community health workers reporting/Quarterly report</i>	<i>0%</i>	<i>4750</i>	<i>4750</i>	<i>4750</i>	<i>4750</i>	<i>4750</i>	<i>4750</i>	<i>4750</i>	<i>4750</i>
Activities										
National										
Conduct TOTs for trainers			X	X	X	X				
Provide Technical support for the system			X	X	X	X	X	X	X	X
Provincial										
Coordinate training for districts			X	X	X	X	X	X	X	X
Provide oversight to the districts			X	X	X	X	X	X	X	X
District										
Train facility staff and CHWs			X	X	X	X	X	X	X	X
Supervise facilities			X	X	X	X	X	X	X	X
Health Facility										
Supervise the CHWs			X	X	X	X	X	X	X	X
Coordinate and train CHWs			X	X	X	X	X	X	X	X
Task 6: Scale up uptake of IPTp (Sulphadoxine Pyrimethamine)	Percentage of women who received 3+ doses of intermittent preventive treatment during antenatal care (ANC) visits during their last pregnancy/Quar	67% MIS 2018	75	80	85	90	95	100	100	100

	INDICATOR/MEASURES OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Quarterly report and MIS/ZDHS									
Activities										
National										
Forecasting and Quantification					X				X	
Procurement and distribution of SP			X	X	X	X	X	X	X	X
Orientation of Trainers in the WHO ANC policy guidelines.							X	X	X	X
Provide Technical support for the implementation of the ANC guidelines			X	X	X	X	X	X	X	X
Digitalise ANC checklist into the electronic data system for OTSS			X							
Conduct spot checks			X	X	X	X	X	X	X	X
Provincial										
Coordinate the training activities (OTSS and WHO ANC policy guidelines)			X	X	X	X	X	X	X	X
Monitoring of the implementation of the WHO ANC guidelines			X	X	X	X	X	X	X	X
District										
Implement OTSS.			X	X	X	X	X	X	X	X
Conduct SMAG trainings										
Health Facility										
Timely ordering of SP			X	X	X	X	X	X	X	X
Adhere to guidelines			X	X	X	X	X	X	X	X
Provide health education to pregnant women (promote early ANC booking)			X	X	X	X	X	X	X	X
Complete ANC register			X	X	X	X	X	X	X	X
Community										
SMAG in the community promote early ANC booking			X	X	X	X	X	X	X	X

		TIMEFRAME								
	INDICATOR/MEASURES OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Task 7: Generation of accurate data for forecasting and quantification of malaria commodities.	Percentage of facilities reporting accurate data/Quarterly report	80%	100	100	100	100	100	100	100	100
Activities										
National										
Conduct logistics data quality audits in the facilities							X	X	X	X
Support provincial data review meetings							X	X	X	X
Provincial										
Conduct provincial data review meetings							X	X	X	X
Participate in logistics data quality audits in the facilities							X	X	X	X
District										
Review reports and requisition from facilities			X	X	X	X	X	X	X	X
Strengthen documentation			X	X	X	X	X	X	X	X
Attend provincial review meetings							X	X	X	X
Health facility										
Update stock control cards Complete report and requisition with correct data			X	X	X	X	X	X	X	X
Conduct physical count of commodities			X	X	X	X	X	X	X	X
Attend provincial review meetings							X	X	X	X
Task 8: Lobby to include indicators that are required for quantification but are missing in HMIS.										
National										
Convene meeting to finalize on indicators to be added to HMIS			X							

	INDICATOR/MEASUREMENTS OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Meetings with M&E unit at MOH to discuss the indicators and way forward			X	X						
Task 9: Re-Introduce the use of ACT registers in public Health facilities to ensure commodity security										
National										
Finalize the ACT register format			X							
Write memo through PS to all facilities to start using the ACT register (hard cover books) and attach format.			X							
Print ACT registers							X	X	X	X
Monitor and provide Technical support on use of ACT registers				X	X	X	X	X	X	X
Provincial										
Monitor use of ACT register				X	X	X	X	X	X	X
Distribute printed ACT registers to districts							X	X	X	X
Districts										
Supervise use of ACT registers				X	X	X	X	X	X	X
Distribute printed ACT register to facilities							X	X	X	X
Facilities										
Use ACT register correctly				X	X	X	X	X	X	
Task 10: Strengthen logistics management of malaria commodities.	Percentage of facilities with staff trained in logistics system	75%	80%		85%		90%		100%	
Activities										
National										
TOTs in logistics and supply chain			X		X		X		X	

	INDICATOR/MEASURES OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
management system of antimalarial and RDTs										
Training health workers in logistics and supply chain management system of malaria commodities (LMIS)			X	X	X	X	X	X	X	X
Conduct supportive supervision in logistics management system to health facility and community			X	X	X	X	X	X	X	X
Core group trainings in logistics and supply chain management			X	X	X	X	X	X	X	X
Provincial										
Provide Supportive supervision to DHOs			X	X	X	X	X	X	X	X
DHOs										
Identify staff for trainings			X	X	X	X	X	X	X	X
Generate reports following the trainings			X	X	X	X	X	X	X	X
Facilities										
Reports generated at least monthly			X	X	X	X	X	X	X	X
Stock assessment			X	X	X	X	X	X	X	X
Task 10: Scale up CHW & H/F staff training in harmonized curriculum (36,000 CHWs plus 2,400 staff as supervisors)	Number of Health Workers Trained (CHW and HF staff) Training report and attendance logs	Harmonized Curriculum	4,750 CHW/600 HF	4,750 CHW/600HF	4,750 CHW/600HF	4,750 CHW/600 HF				
Activities										
National										
Convene TOTs meeting			X	X						
Coordinate TOT trainings in the Provinces.			X	X						

	INDICATOR/MEASUREMENTS OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Coordinate the training of the CHWs and Staff			X	X	X	X				
Conduct quality assurance visits for ICCM			X	X	X	X	X	X	X	X
Provincial										
Coordinate TOT trainings			X	X	X	X				
Participate to ensure guidelines are followed during CHWs trainings			X	X	X	X				
Participate in the combined technical support supervision planned by Central level			X		X		X		X	
Distribute bicycles to districts				X	X	X	X	X	X	X
District										
Convene ICCM training meetings			X							
Conduct ICCM trainings			X	X	X	X				
Conduct technical support supervision to health facilities			X	X	X	X	X	X	X	X
Health Facility										
Conduct monthly support supervision & mentorship to CHWs			X	X	X	X	X	X	X	X
Conduct monthly support supervision & mentorship to CHWs			X	X	X	X	X	X	X	X
Task 11: Procurement of 25 000 bicycles for CHWs										
Activities										
National										
Convene meeting to discuss the procurement of bicycles by stakeholders			X							
Prepare request for authority to purchase bicycles			X	X	X					

	INDICATOR/MEASURES OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Preparation of inquiries to tenders			X	X	X					
Tendering: Opening and closing			X	X	X					
Evaluation of tenders			X	X	X					
Submissions of tender papers to the procurement			X	X	X					
Award of notification				X	X					
Write to ministry of finance to approve the purchase				X	X					
Write to ministry of Justice					X					
Call the approved suppliers for signing.					X					
Delivery and inspection					X					
Distribution of bicycles to the Province					X	X	X	X		
Province										
Distribution of bicycles to districts and health facilities					X	X	X	X		
Districts										
Distribution of bicycles to health facilities					X	X	X	X		
Health Centre										
Distribution of bicycles to CHWs					X	X	X	X		
Task 12: Procurement of 3200 Phones for CHWs										
Activities										
National										
Convene meeting to discuss the procurement of phones by stakeholders			X							
Prepare request for authority to purchase phones			X	X						
Preparation of inquiries to tenders			X	X						
Tendering: Opening and closing			X	X	X					

	INDICATOR/MEASURES OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Evaluation of tenders			X	X	X					
Submissions of tender papers to the procurement			X	X	X					
Award of notification			X	X	X					
Write to ministry of finance to approve the purchase			X	X	X	X	X			
Write to ministry of Justice			X	X	X	X	X			
Call the approved suppliers for signing.			X	X	X	X	X			
Delivery and inspection			X	X	X	X	X			
Distribution of phones to the Province			X	X	X	X	X			
Training of District & facility staff in malaria rapid reporting (MRR)			X	X	X	X	X	X		
Support supervision & mentorship			X	X	X	X	X	X	X	X
Task 13: Incorporate the use of RAS in iCCM trainings by addition of extra days to the training			X	X						
Convene TOTs meeting			X	X	X	X	X	X	X	X
Coordinate TOT trainings in the Provinces.			X	X	X	X	X	X	X	X
Coordinate the training of the CHWs and Staff					X					
Participate in forecasting and quantification of RAS			X	X	X	X	X	X	X	X
Task 14: Roll out Rectal Artesunate Suppository in a phased approach.										
Provincial										
Coordinate selection of eligible districts/ health facilities for CHWs trainings			X	X	X	X				

	INDICATOR/MEASURES OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Participate in forecasting and quantification for RAS			X							
Distribute RAS to the districts			X	X	X	X	X	X	X	X
District										
Distribute RAS to the health facility			X	X	X	X	X	X	X	X
Training CHWs in RAS administration incorporated in iCCM				X	X	X	X	X	X	X
Conduct support supervision			X	X	X	X	X	X	X	X
Health Facility										
Distribute RAS to the CHWs			X	X	X	X	X	X	X	X
Use RAS as pre-referral where possible			X	X	X	X	X	X	X	X
Conduct support supervision & mentorship				X	X	X	X	X	X	X
Task 15: Scale up Mass Drug Administration in districts where applicable	Number of districts implementing MDA/Quarterly report									
Activities										
Develop selection criteria to apply MDA			X							
Disseminate selection criteria to provinces			X	X	X	X				
Develop flow chart for procurement of Dhap for MDA			X							
Mobilise resources			X	XX						
Consolidate population to benefit from Dhap from the Provinces			X							
Forecasting and Quantify for MDA			X							
Procure DHAP			X							
Distribute DHAP to the Provinces			X	X	X	X	X	X	X	X
Consolidate the Province/districts			X							

	INDICATOR/MEASUREMENTS OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
where MDA will be applied										
Plan for the MDA campaign			X	X						
Conduct TOTs for the provinces				X			X		X	
Technical Support supervision to Provincial TOTs				X		X		X		X
Provincial										
Disseminate selection criteria to Districts			X	X	X	X	X	X	X	X
Consolidate population to benefit from DHAP from the districts										
Distribute DHAP to the Districts			X	X	X	X	X	X	X	X
Consolidate the districts where MDA will be applied										
Plan for the MDA campaign										
Conduct TOTs for the districts							X		X	
Technical Support supervision to district trainings			X	X	X	X	X	X	X	X
Participate in the campaign			X	X	X	X	X	X	X	X
District										
Disseminate selection criteria to Health facility			X	X	X	X	X	X	X	X
Consolidate population to benefit from DHAP from the health facilities			X							
Distribute DHAP to the health facility				X	X	X	X	X	X	X
Consolidate the Health facilities where MDA will be applied				X						
Conduct trainings for the health facilities				X	X	X	X	X	X	X
Technical Support Supervision				X		X		X		X

	INDICATOR/MEASURES OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Participate in the campaign				X	X	X	X	X	X	X
Health Facility										
Consolidate population to benefit from Dhap from the Community				X	X	X	X	X	X	X
Distribute Dhap to the CHW					X	X	X	X	X	X
Consolidate the communities where MDA will be applied				X	X	X	X	X	X	X
Plan for the MDA campaign				X						
Supervise selection of CHW to be trained					X	X	X	X	X	X
Conduct trainings for the CHW					X	X	X	X	X	X
Technical Support supervision					X		X		X	
Participate in the campaign				X	X	X	X	X	X	X
Neighbourhood health committee level										
Supervise selection of CHWs to be trained.				X	X	X	X	X	X	X

4.3.2 Service Delivery Area: Vector Control

Service Delivery Area Objective: To ensure universal access to vector control malaria elimination strategies to potentially reduce malaria risk infections and epidemics.

4.3.2.1 Strategic Action: Strengthen IRS implementation capacity in all Health Facility Catchment Areas

Strategic Action Objective: To attain operational coverage of over 90 percent of eligible structures benefitting up to 80 percent of the population of Zambia, in a timely manner according to transmission season.

Key Findings from the 2019 Programmatic Mid Term Review

- In 2017 the total number of eligible structures 3,281,046 and the targeted were 2,331,898 and we managed spray 1,915,821 denoting 82% against the target and 58% against the total eligible structures
- In 2018 the total number of eligible structures 3,281,046 and the targeted were 1,958,905 and we managed spray 1,798,995 denoting 92% against the target and 55% against the total eligible structures
- Population protected in 2017 was 7,800,704 (55%) and in 2018 the population protected was 7,451,289 (52.5%)

- There was a reduction in the people protected in 2018 due to the reduction in the number of targeted eligible structures

Recommended Best Practices

1. Conduct community IRS
2. Implementing IRS before the onset of the rain season/cultivation/harvest of caterpillars.
3. Timely procurement and distribution of adequate, appropriate and quality IRS Commodities
4. Timely disbursement of implementation funds
5. Servicing and maintenance of spray pumps after and before the next IRS Campaign
6. District Micro planning for IRS
7. Enumeration of all the eligible structures before micro planning
8. Use of community mobilizers in IRS
9. Use of team leaders in supervision
10. Using Direct Observation of Spray forms
11. Pre Spraying Environmental Assessment (helps to ensure that environmental safe guards are in place)
12. Use of Mobile money system to pay the spray teams
13. Post IRS Review Meeting
14. Incident Reporting in IRS operations
15. IRS Needs Assessment

Table 4: Vector Control: IRS

	INDICATOR/MEANS of VERIFICATION	BASELINE	TIMEFRAME									
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Task 1												
Task 1: Conduct community IRS	Number of communities implementing Community Based IRS/ IRS Monitoring Report		140 communities in 10 provinces				140 communities in 10 provinces					
Activities												
National												
Convene national post IRS meeting			x					X				
Disseminate IRS guidelines			X					x				
Coordinate IRS activities							x					x
Procure and distribute IRS logistics				x					X			
Provincial												
Convening IRS micro planning meetings			X					X				
Participate in national post IRS meeting			X					X				
Collate community IRS needs Assessment			X					X				
District												
Preparation of IRS micro plan			X					X				
Identification and consolidation of			X					X				

communities that will conduct IRS										
Conduct assessment and quantification of IRS requirement			X				X			
Prepare IRS base for IRS campaign (stores, soak pit, Sanitary facility, water source)				X				X		
Train Spray Operators					X				X	
Train Spray enumerators			X				X			
Participate in TOT					X				X	
Dispose of IRS waste			X				X			
Health Facility										
Conduct medical examination for spray operators					X				X	
Assess if the SOPs meet the selection criteria					X				X	
Aggregation of the eligible structures			X				X			
Construct Mobile Soak Pits				X				X		
Supervise spray operators						X				X
Community										
Enumeration of eligible structures			X				X			
Identification of spray operators and community mobilizers					X				X	
Identification of storage facilities				X				X		
Spraying of eligible structures						X				X
Task 2: Implementing IRS before the onset of the rain season/cultivation/harvest of caterpillars in all 116 districts	Number of Districts that start IRS by October/ IRS Implementation Report		116 districts				116 districts			
Activities										
National										
Coordinate all IRS activities			X	X	X	X	X	X	X	X
Conduct IRS quality assurance field visits			X	X	X	X	X	X	X	X
Disburse and distribute funds and IRS commodities in time					X				X	
Provincial										
Review micro plans			X				X			
Collate IRS needs for all the districts			X				X			
Convene IRS micro planning			X				x			
Participate in TOT trainings for enumerators					X				X	

District										
Conduct needs assessment			X				X			
Train spray operators					X				X	
Facilitate medical examinations for spray operators					X				X	
Servicing of spray pumps				X				X		
Prepare IRS base				X				X		
Health Facility										
Recruit spray operators					X				X	
Community										
Timely enumeration of eligible structures			X				X			
Identification of Spray operators					X				X	
Task 3: Timely procurement and distribution of adequate, appropriate and quality IRS Commodities	<ul style="list-style-type: none"> • <i>Number of sprayers procured and distributed</i> • <i>Sets of PPEs procured and distributed</i> • <i>Number of sachets of insecticide procured and distributed/Procurement or PM report</i> 						5000 sprayers, 8000 sets PPEs, 938,947 sachets of insecticides		1000 sprayers, 8000 sets PPEs, 1,032,842 sachets of insecticides	
Activities										
National										
Procure and distribution of commodities (5000 sprayers, 8000 sets PPEs, 938,947 sachets of insecticides) following the lead time			X				X			
Provincial			X				X			
Aggregate all the required commodities			X				X			
District										
Conduct needs assessment			X				X			
Task 4: Timely disbursement of implementation funds	Number of district that received Implementation funds by September/ Funds Transfer Schedule and EFTA duly endorsed by the bank						116 districts		116 districts	
Activities										
National										
Timely processing and disbursement of funds to all provinces and districts					X				X	
Provincial										
Timely processing and disbursement of funds to all non-sub recipients					X				X	
District										
Utilize the funds according to the budget							X			X

Task 5: Servicing and maintenance of spray pumps after and before the next IRS Campaign	Number of districts with adequate and functional spray pumps/ Inventory report; Needs assessment report		All functional and non-functional sprayers in 116 districts				all functional and non-functional sprayers in 116 districts			
Activities										
National										
Procurement and distribution of repair kits			X		X		X		X	
Provincial										
Aggregate the required spare parts from all the districts			X				X			
District										
Assessment and quantification of the required spare parts			X				X			
Servicing of the pumps				X				X		
Task 6: District Micro planning for IRS	Number of districts that prepared and submitted micro plans on time/ Micro planning reports and or Finalized budgets and spray calendars		10 Provincial meetings convened				10 Provincial meetings convened			
Activities										
National										
Facilitate provincial micro planning meetings			X				X			
Provincial										
Convene the micro planning meeting			X				X			
District										
Prepare the IRS micro plans and budgeting			X				X			
Task 7: Enumeration of all the eligible structures before micro planning	Number of districts that conducted enumeration of eligible structures before micro planning/ Enumeration reports; Geo cording reports; Map showing enumerated and verified structures		116 districts				116 districts			
Activities										
National										
Aggregation of enumerated structures			X				X			
Conduct quality assurance			X				X			
Facilitate provincial TOTs for training of enumerators			X				X			
Provincial										
Aggregation of enumerated structures			X				X			
Monitoring of enumeration of structures in the districts			X				X			
District										
Training of enumerators			X				X			

Monitoring of enumeration			X				X			
Aggregation of enumerated structures			X				X			
Health Facility										
Supervising enumeration of eligible structures			X				X			
Training of CBVs			X				X			
Aggregation of enumerated structures			X				X			
Community										
Physical counting of eligible structures (Geo coding)			X				X			
Task 8: Use of community mobilizers in IRS HFCA	Number of community mobilizers engaged per community per day/ Mobilization reports; Acceptance rate for IRS Spot checks						2 Mobilisers per day in each spraying HFCA			2 Mobilisers per day in each spraying HFCA
Activities										
National										
Production and Distribution of IEC materials			X				X			
Quality assurance field visits					X	X			X	X
Provincial										
Support Districts to conduct community mobilization for IRS in their catchment areas					X	X			X	X
District										
Convene a stakeholders meeting					X	X			X	X
Training of community Mobilizers					X				X	
Support health facilities to conduct community mobilization for IRS in their catchment areas					X	X			X	X
Health Facility										
Identification of community mobilizers					X				X	
Supervision of community mobilization						X				X
Community										
Conduct community Mobilization and Sensitization(Door to Door)						X				X
Identification of community mobilizers(CBIRS)					X				X	
Task 9: Use of Team Leaders in IRS supervision	Number of team leaders used in supervision of Spray Operators/ DOS forms filled by team leaders; Team leader engagement form; IRS monitoring reports;						1125 team leaders			1158 team leaders

	Team leaders report forms								
Activities									
National									
Production and Distribution of IRS guidelines		X				X			
Quality assurance field visits					X				X
Provincial									
Convene a TOT meeting for team Leaders/supervisors				X				X	
Quality assurance field visits in the districts				X	X			X	X
District									
Training of Team leaders/SOPs				X				X	
Supervision of team leaders					X				X
Health Facility									
Identification of Team leaders				X				X	
Supervision of spray operators					X				X
Community									
Supervision of Team leaders (CBIRS)					X				X
Task 10: Using Direct Observation of Spray forms	Number of SOPs observed using a DOS Form/ DOS Forms filled in by the Team Leaders					5 SOPs observed by one team leader every day during IRS operations			5 SOPs observed by one team leader every day during IRS operations
Activities									
National									
Development and printing of the DOS Forms		X						X	
Provincial									
Timely Distribution of the DOS forms to the districts				X				X	
District									
Aggregation of the scores from the DOS forms					X				X
Health Facility									
Supervision using the DOS Forms by supervisors					X				X
Community									
supervision using the DOS Forms by team leaders					X				X
Task 11: Conduct Pre Spraying Environmental Assessment	Number of Districts that passed the pre spraying Environmental compliance Assessments/ PSECA reports					116 districts			116 districts assessed
Activities									
National									
Formulate environmental compliance check list		X						X	

Conduct pre spray environmental inspections			X		X		X		X	
Provincial										
Work together with national level in conducting pre spray inspections			X		X		X		X	
District										
Rehabilitation/construction of IRS bases				X				X		
Health Facility										
Rehabilitation/construction of IRS base				X				X		
Community										
Rehabilitation/ construction of mobile soak pits				X				X		
Task 12: Use of Mobile money system to pay the spray teams (7334 SOPs and Supervisors)	Number of spray operators and supervisors paid through mobile/ Verified and signed pay sheets; Confirmatory SMS; Mobile money statements									
						7334				7334
Activities										
National										
Engaging mobile money providers					X				X	
Aggregate spreadsheet for all the spray operators					X				X	
Verifications of phone numbers against the names					X				X	
Provincial										
Aggregate spreadsheet for all the spray operators					X				X	
District										
Verifications of phone numbers against the names					X				X	
Determination of the amount each spray operator is entitled						X				X
Health Facility										
Facilitate registration of sim cards					X				X	
Community										
Own an active sim card registered with mobile money					X				X	
Task 13: Hold 10 provincial Post IRS review meetings	Number of post IRS Meetings convened/ Post IRS Review meeting reports					5	5			5 5
Activities										
National										
Facilitate the Post IRS Meeting			X			X	X			X

Develop the Post IRS Review Template			X			X				X
Provincial										
Convene Post IRS Meetings			X			X	X			X
District										
Participate in the Post IRS review Meeting			X			X	X			X
Prepare the post IRS Reports			X			X	X			X
Task 14: Incidents Reporting in IRS operations (All incidents recorded and attended to)	Number of incidents reported and attended to/Incident reports; Incident register				X					X
Activities										
National										
Develop guidelines for Incident Management			X				X			
Develop the incident reporting Tools (Registers and Forms)			X				X			
Provincial										
Support District emergency Response Teams						X				X
District										
Filling in of the incident Register and/or form						X				X
Procure First Aid Box and Spill Kits			X				X			
Formation of an emergency Response Team			X				X			
Health Facility										
Report the Incidents						X				X
Prepare and replenish the emergency trolley					X				X	
Filling in of the incident Register						X				X
Community										
Report the Incidents						X				X
Task 15: IRS Needs Assessment conducted in 11 districts	Number of districts that have conducted and submitted needs assessment/ Needs assessment reports		X				X			
Activities										
National										
Share the needs assessment tools			X				X			
Aggregation of the data from needs assessment			X				X			
Provincial										
Share the needs assessment tools			X				X			
Aggregation of the data from needs assessment			X				X			
District										

Conduct realistic needs assessment			X				X			
Health Facility										
Aggregation of enumerated structures			X				X			
Community										
Enumerate the sprayable structures			X				X			

4.3.2.2 Strategic Action: Improve ITNs Ownership and Use

Strategic Action Objective: To achieve universal coverage (100%) of all household and at least 80% utilization in targeted areas.

Key Findings from the 2019 Programmatic Mid Term Review

1. Sustain achievements in vector control and accelerate towards target.
2. Use head count population to estimate LLIN need for mass campaigns.
3. Use door to door distribution of LLINs during mass campaigns.
4. Stock outs of EPI and ANC LLINs.
5. LLINs for routine (ANC and EPI) distribution not delivered to the last mile.
6. Wide spread resistance to conventional nets.

Recommended Best Practices

1. Timely Procurement and delivery LLINs mass campaign, ANC, EPI and schools countrywide.
2. Secure adequate storage.
3. Revision and dissemination of ITN distribution guidelines, policies and strategies
4. Use of multiple distribution channels such as Mass, ANC, EPI and Schools.
5. Scaling up of LLIN school distribution channel to the rest of the country.
6. Involvement of key stakeholders during planning for LLINs distribution.
7. Delivery of routine (ANC and EPI) distribution LLINs up to the last mile.
8. Timely distribution of the LLINs to the beneficiaries.
9. Establish a logistics system for EPI and ANC LLINs
10. Use of new innovations to counteract resistance (e.g. PBO)

Table 5: Vector Control: LLINs

			TIMEFRAME							
			2020				2021			
	INDICATOR/ MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Task 1:	Timely procurement and delivery of LLINs for mass campaign,		7,000,457 ITNs procured		7,000,457 ITNs delivered					

TIMEFRAME										
			2020				2021			
	INDICATOR/ MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
EPI, ANC and schools										
Timely Procurement and Delivery of LLINs for mass campaign.	Dispatch and Delivery notes.									
Timely Procurement and Delivery of 1,948,203 LLINs for EPI, ANC.	Dispatch and Delivery notes.		1,948,203 ITNS					2,003,546 ITNs		
Timely Procurement and Delivery 500,000 LLINs for schools distribution.	Dispatch and Delivery notes.						500,000 ITNs			
Activities										
NATIONAL										
Forecasting and quantification of LLINs for ANC/EPI and schools.	Forecasting and quantification report.		X							
Review the technical and programmatic standard specification	Minutes.		X							
Submission of the LLIN standard specification	Memorandum/letter.		X							
Delivery of LLINs up the last mile for ANC/EPI and schools.	Delivery notes.		X							
Task 2: Secure adequate storage.	Number of storage facilities available/physical checks or Reports.									
Activities.										
NATIONAL										

TIMEFRAME										
			2020				2021			
	INDICATOR/ MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Review assessment checklist and guidelines for storage		X							
PROVINCIAL										
	Conduct assessment and identification of storage capacity based on guidelines.		X							
DISTRICT										
	Conduct assessment and identification of storage capacity based on guidelines		X							
HEALTH FACILITY.										
	Conduct assessment and identification of storage capacity based on guidelines.		X							
COMMUNITY										
	Conduct assessment and identification of storage capacity based on guidelines.		X							
	Task 3: Revision and dissemination of 2,500 copies of ITN distribution guidelines,	Number of ITN distribution guidelines distributed/ Reports/checklist	x							

TIMEFRAME										
			2020				2021			
	INDICATOR/ MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
policies and strategies										
Activities										
NATIONAL										
	Hold meetings to review LLINs distribution guidelines, policies and strategies.		X							
	Dissemination of LLINs distribution guidelines, policies and strategies to the provinces.		X							
PROVINCIAL										
	Dissemination of LLINs distribution guidelines, policies and strategies to the districts.		X							
DISTRICT.										
	Dissemination of LLINs distribution guidelines, policies and strategies to the health facilities.		X							
	Implementation of the LLIN distribution guidelines, policies and strategies		X							
HEALTH FACILITY.										
	Dissemination of LLINs distribution guidelines, policies and strategies to the		X							

TIMEFRAME										
			2020				2021			
	INDICATOR/ MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
community health structures.										
Implementation of LLIN distribution.			X	X	X	X	X	X	X	X
Task 4: Planning for mass distribution campaign in 116 districts			x							
Activities										
NATIONAL										
Formation of the planning committee (taskforce).	Minutes.		X							
Formation of sub-committees	Minutes.		X							
Development of TORs for the sub committees.	TORs		X							
Hold campaign planning meetings	Minutes.		X	X	X					
Conduct provincial training of trainers. (TOT)	Training report.				X					
Supervise district TOTs	Reports.				X					
PROVINCIAL										
Conduct stakeholders (P-MATF) meeting.	Minutes.		X	X	X	X	X	X	X	X
Conduct district TOT					X					
Supervise district and health facility trainings					X					
DISTRICT.										

TIMEFRAME										
			2020				2021			
	INDICATOR/ MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Conduct micro planning.	Plan.			x						
Conduct stakeholders (D-MATF) meeting.			X	X	X	X	X	X	X	X
Conduct health facility orientation meetings	Minutes/reports.				X					
HEALTH FACILITY.										
Conduct community orientation meetings	Minutes/reports.				X					
Social mobilization (SBCC)	Reports.		X	X	X	X	X	X	X	X
Needs assessment/h ousehold registration.	Reports/ HH reregister.			X						
Task 5: Timely distribution of the LLINs to all beneficiaries in 116 districts.	Number of districts undertaking LLINs distribution/LLIN Distribution Report		116 districts							
Activities.										
NATIONAL.										
Conduct Monitoring and supervision of LLINs distribution to the beneficiaries	Reports.				X					
Report writing	Report.					X				
Dissemination of campaign report	Actual dissemination.		X	X	X	X	X	X	X	X
PROVINCIAL										

TIMEFRAME										
			2020				2021			
	INDICATOR/ MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Conduct Monitoring and supervision of LLINs distribution to the beneficiaries	Reports.				X					
Submission of distribution data to national level	Report.				X					
DISTRICT.										
Conduct Monitoring and supervision of LLINs distribution to the beneficiaries	Report.		X	X	X	X	X	X	X	X
Collation, validation and aggregation of distribution data	Records/reports.		X	X	X	X	X	X	X	X
Submission of distribution data to the province			X	X	X	X	X	X	X	X
HEALTH FACILITY.										
Conduct Monitoring and supervision of LLINs distribution to the beneficiaries			X	X	X	X	X	X	X	X
Collation, validation and aggregation of distribution data			X	X	X	X	X	X	X	X
Submission of distribution data to district level			X	X	X	X	X	X	X	X

TIMEFRAME										
			2020				2021			
	INDICATOR/ MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
COMMUNITY										
	Conduct distribution of LLINs to the beneficiaries.				X					
	Conduct supervision of distribution of LLINs to the beneficiaries.				X					
	Submission of distribution data to health facilities				X					

4.3.2.3 Strategic Action: Strengthen entomological surveillance

Strategic Action Objective: To conduct high level entomological surveillance to generate data that can be used in vector control decision making and insecticide resistance mitigation

Key Findings from the 2019 Programmatic Mid Term Review

- Evidence of insecticide resistance
- Non implementation of the insecticide resistance monitoring and management plan (IRMMP)
- Inadequate personnel trained in entomological surveillance
- Availability of research institutions
- Inadequate operational sites for entomological surveillance

Additional key findings

- Entomological data management and reporting
- Quality assurance of vector control interventions
- Lack procurement flow chart for Entomology Logistics

Recommended Best Practices

- Increase the number of functional sentinel sites for entomological monitoring
- Conduct regular entomologic surveillance at established sentinel sites
- Implement and monitor the implementation of the insecticide resistance monitoring and management plan (IRMMP)
- Provide capacity and logistics to province and districts to implement entomological monitoring activities
- Strengthen entomological data management and reporting

Table 6: Vector Control: Entomological surveillance

	INDICATOR/MEANS OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Task 1: Increase the number of sentinel sites for entomological monitoring from 22 to 39	Number of sentinel sites actively conducting surveillance/through monthly entomological surveillance reports	22	5	4	4	4				
Activities										
National										
Consult PHOs to identify new sentinel sites			X							
Activate dormant sentinel sites: Southern-2, Central-1, Lusaka-2, Western -2, Northwestern -3, Copperbelt- 1, Northern -1, Muchinga -1			X							
Establish Provincial transit Insectary			X	X	X	X				
Provincial										
Identify new sentinel sites at the district level			X							
Identification of space for the establishment of transit insectary			X							
District										
Participate in the establishment of the new sentinel sites in the respective Districts			X							
Health Facility										
Participate in the establishment of the sentinel site in the HFCA			X							
Task 2: Conduct regular entomological surveillance at the 39 sentinel sites	Number of entomological surveillance done in Sentinel sites/Entomological surveillance Reports	22	27	31	35	39				
Activities										
National										
Draw up a calendar for entomological surveillance, sample transfer and data reporting for all sentinel sites			X							
Facilitate conducting of entomological surveillance at all sentinel sites			X							

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Supervision of the entomological surveillance activities to done on a quarterly basis		X	X	X	X				
	Collect samples from the provinces every quarter during support supervision		X	X	X	X				
	Send samples to relevant reference labs for advanced laboratory analysis of samples received from the sentinel sites		X	X	X	X				
Provincial										
	Supervision and monitoring of the entomological surveillance activities in the districts		X	X	X	X				
	Preserve and store identified mosquito samples for further laboratory analysis		X	X	X	X				
District										
	Plan and implement entomological surveillance activities by HLC, Light traps or PSC		X	X	X	X				
	Identify collected mosquitoes and perform parity dissections		X	X	X	X				
	Transfer preserved samples to the national laboratory for advanced laboratory analysis		X	X	X	X				
	Data management and reporting		X	X	X	X				
Health Facility										
	Conduct entomological surveillance activities by HLC, Light Traps or PSC		X	X	X	X				
	Task 3: Conduct annual evaluations of insecticide resistance at all sentinel sites to support evidence based decision making	Number of annual evaluations of insecticide resistance conducted at all sentinel sites to support evidence based decision making/Reports	1				1			1
Activities										
National										

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Prioritize the insecticides to be monitored and communicate to stakeholders		X							
	Conduct insecticide susceptibility tests (discriminating, intensity and synergist assays) twice a year, 1 st and 4 th quarters		X			X				
Provincial										
	Supervise and monitor mosquito field collections for insecticide resistance testing		X	X	X					
District										
	Identify one district officer to supervise the collection and transportation of live mosquito samples		X							
	Facilitate in Identifying four community members to participate in mosquito collections for IR testing		X	X	X	X				
	Conduct field collections of live larvae or blood fed adult mosquitoes		X	X	X	X				
	Transfer the collected mosquitoes to the national laboratory for insecticide resistance testing		X	X	X	X	X	X	X	X
Health Facility										
	Carry out field collections of live mosquitoes for insecticide resistance testing		X	X	X	X	X	X	X	X
	Identify four community members to participate in mosquito collections for IR testing		X				X			
	Task 4: Implement the insecticide resistance monitoring and management plan	Implementation of the insecticide resistance monitoring and management plan done according to guidelines/Reports	X	X	X	X	X	X	X	X
National										
	Review the IRMMP every two years		X							

	INDICATOR/MEANS OF VERIFICATION	BASELINE	TIMEFRAME								
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Disseminate reviewed IRMMP to provinces and national stakeholders			X					X			
Monitor utilization of the IRPPM			X	X	X	X	X	X	X	X	X
Data management and reporting			X	X	X	X	X	X	X	X	X
Provincial											
Disseminate IRMMP to districts and stakeholders			X								
Monitor utilization of the IRMMP			X	X	X	X	X	X	X	X	X
Data management and reporting			X	X	X	X	X	X	X	X	X
District											
Implement and monitor utilization of the IRMMP			X	X	X	X	X	X	X	X	X
Implement Data management and reporting			X	X	X	X	X	X	X	X	X
Health Facility											
Implementation and monitoring			X	X	X	X	X	X	X	X	X
Task 5: Capacity building and logistical support for entomological surveillance	Number of National, Provincial, District and Community staff capacity built and logistical support given in entomological surveillance/ Training reports		X					X			
National											
Training of national province and district officers for entomological monitoring			X					X			
Provision of equipment, supplies and consumables for entomological surveillance activities			X	X	X	X	X	X	X	X	X
Development of procurement flow chart for entomological surveillance equipment, supplies and consumables for each sentinel site			X					X			
Provincial											
Identify provincial and district officers to be trained			X					X			
District											

	INDICATOR/MEANS OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Identify space for storage of entomological surveillance commodities			X					X		
Identify bench space for mosquito handling and identification by use of dissecting microscope			X					X		
Training of community level volunteers for entomological monitoring activities						X				X
Remuneration of community members conducting vector surveillance			X	X	X	X	X	X	X	X
Health Facility										
Identify community volunteers for training in entomological monitoring activities					X				X	
Identify space for storage of entomological surveillance commodities						X				X
Identify bench space for mosquito handling and identification by use of dissecting microscope						X				X
Task 6: Strengthen quality assurance and quality control for entomology	Quality assurance and control plan in place/Availability of the plan		X	X	X	X	X	X	X	X
National										
Develop a quality assurance plan for entomological monitoring			X							
Provincial										
Identify two officers to participate in the development of the quality assurance plan			X							
Supervise and monitor all quality assurance activities			X	X	X	X	X	X	X	X
District										
Identify one officer to participate in the development of the quality assurance plan			X				X			
Implement quality assurance activities			X	X	X	X	X	X	X	X
Health Facility										

	INDICATOR/MEANS OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Implement quality assurance activities			X	X	X	X	X	X	X	X
Task 7: Strengthen entomological data management and reporting	Entomological data management and reporting strengthened through guideline compliance/Reports, Surveillance Registers		X	X	X	X	X	X	X	X
National										
Develop a guide for best practices in entomological data management and reporting			X							
Generate recommendations for changes in vector interventions on the implementation			X	X	X	X	X	X	X	X
Convene TAC/IRMMP annual TWGs for IRM decision making			X				X			
Provide routine entomological report to be shared with provinces			X				X			
Provincial										
Participate in TAC meetings			X				X			
Share routine entomological reports with districts			X	X	X	X	X	X	X	X
District										
Implement best practices for entomological data handling and reporting			X	X	X	X	X	X	X	X
Health Facility										
Implement best practices for entomological data handling and reporting			X	X	X	X	X	X	X	X
Task 8: Establish provincial level insecticide resistance testing sites	Number of provincial level insecticide resistance testing sites established/Reports	0	X		X		X		X	
National										
Identify one sentinel district to serve as the insecticide susceptibility testing site for each province			X							

	INDICATOR/MEANS OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Inspect the district to ensure suitability			X	X	X	X	X	X	X	X
Training of two district officers per province in insecticide resistance testing					X					
Provide logistics and supplies for insecticide susceptibility testing			X	X	X	X	X	X	X	X
Provincial										
Assist with the identification of the district to serve as the insecticide resistance testing site			X							
Identify two district staff to be trained in IR testing			X							
Assist with the establishment and maintenance of insecticide susceptibility test site in the district			X							
District										
Assist with the establishment and maintenance of insecticide susceptibility test site in the district				X						
Health Facility										
Assist with the establishment of insecticide susceptibility test site				X						

4.3.2.4 Strategic Action: Strengthen Larval Source Management

Strategic Action Objectives :

- To provide the dual benefit of reducing the numbers of both indoor and outdoor biting mosquitoes.
- To contribute to reduction in malaria hot spot.
- To contribute to the prevention of the emergence of insecticide resistance.

Key Findings from the 2019 Programmatic Mid Term Review

- Development and distribution of LSM Guidelines were done
- Development of LSM training Manual were done but not distributed.
- Integration of LSM into the Harmonized ICCM Training Manual was done
- Implementation of LSM by some Institution e.g. some Local Authorities, Mining Companies and Zambia Sugar in their localities.

- Funding for LSM being a challenge as it is considered to be one of the Enhanced vector control intervention (additional interventions /co vector control intervention)

Other Findings During the NMOP Meeting

- Larviciding being the only activity considered and reported under LSM, and yet there are a lot which is being done but not reported
- Funding for LSM being a challenge as it is considered to be one of the Enhanced vector control intervention (additional interventions /co vector control intervention to IRS and LLINs).
- Larval source management although being part of the integrated vector management strategy of the National Malaria Elimination Programme (NMEP), is not widely implemented in vector control, as attention and resources have been primarily invested in the IRS and ITN strategies.
- Lack of larval control has attributed to the hard-to-reach breeding sites in the rainy season, and difficulties in implementing this intervention in the rural areas.
- With the emergence of insecticide resistance in the country, larval control by environmental management and larviciding could provide alternative vector control.

Recommended Best Practices

- Collection of baseline data (Identification of breeding sites)
- Mapping of breeding sites in selected Districts with few, fixable and findable sites.
- Categorizing of breeding sites (permanent and non-permanent).
- Identify & implement suitable interventions in selected catchment areas (modification, manipulation, larviciding & biological)
- Incorporating LSM into other existing programs (keep Zambia clean, WASH in public places)
- *conduct operation surveys and share reports with partners/ sponsors for Districts implementing LSM*
- Quantification and costing of all required resources.
- Monitoring and Evaluation at all levels.

Where LSM should take place?

Larval source management activities were not recorded as being implemented if any. There were verbal reports that the Programme was being implemented with support from Companies. According to guidelines for malaria vector control (WHO, 2018), LSM is termed as an enhancer to other vector Control strategies such as Indoor Residual Spraying (IRS) and Long lasting Insecticide Nets (LLINs). It also stated that the programme can best be implemented in urban settings and more effectively at community level

LSM: Management of aquatic habitats (water bodies) that are potential habitats for mosquito larvae in order to prevent completion of development of the immature stages.

Note: The four types of larval source management are:

- i) Habitat modification, which is a permanent alteration of the environment, e.g. land reclamation;
- ii) Habitat manipulation, which is a recurrent activity, e.g. flushing of streams;

- iii) Larviciding, which is the regular application of biological or chemical insecticides to water bodies;
- iv) Biological control, which consists of the introduction of natural predators into water bodies.

LSM will be implemented on pilot basis starting with one urban district per Province with community based interventional approach. National level will develop policy, training guidelines for LSM. Provincial and district Levels will assume the role of facility and community trainings according to guidelines from National level. Health Facility staff that include the Community Health Assistants (CHAs) and Environmental Health Technologists (EHTs) in partnership with Local Government Structures and other stakeholders will coordinate the Implementation of the Programme at community level.

Table 7: Vector Control: Larval Source Management

	INDICATOR/MEANS OF VERIFICATION	BASELINE	TIMEFRAME								
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Task 1: Collection of baseline data (Identification of breeding sites)	# of breeding sites identified/Report	0	5000					6000			
Activities											
National											
Development of data collection tools			x					x			
Conduct TOTs			x					x			
Provincial											
Conduct Cascade Trainings to Districts and Health Facilities				x					x		
Distribution of Data collection tools to Districts				x					x		
District											
Conduct Cascade Trainings to Health Facilities and NHCs				x					X		
Distribution of Data collection tools to Facilities				x					x		
Health Facility											
Distribution of Data collection tools to NHCs				x					X		
Community											
Identification of breeding sites									x		
Collection of data											
Task 2: Mapping of breeding sites (few, fixed & findable)	# of breeding sites mapped /Map, field visits	0	5000					6000			
Activities											

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
National										
	Source for equipment and tools to use for Mapping of breeding sites		x				x			
	Conduct TOTs	Number trained/Training report		x			x			
Provincial										
	Conduct Cascade trainings to district and Health Facility staff	Number of staff trained/Training report		x			x			
District										
	Conduct Cascade trainings to Health Facility staff and NHCs	Number of staff trained/Training Report		x			X			
Health Facility										
	Mapping of breeding sites together with the NHCs.	Mapping report available		x			x			
	Task 3: Categorizing of breeding sites (permanent and non-permanent).	Number of Breeding Sites Categorized/ reports on categorized breeding sites	0	5000			6000			
Activities										
National										
	Develop guidelines on categorization		x				x			
Provincial										
	Disseminate guidelines on categorization			x			x			
District										
	Hold Meetings with Health Facilities and Zonal NHCs to categorize the sites.			x			X			
Health Facility										
	Identify and categories the breeding sites with the NHCs			x			x			
	Task 4: Identify suitable	Number of Suitable Interventions	0	4			4			

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
interventions to be applied (Modification, Manipulation, Larviciding, and Biological Control)	Identified / Reports on Interventions Identified									
Activities										
National										
Develop intervention prioritization Matrix for suitable interventions.				X				X		
Provincial										
Adopt and disseminate the Matrix to lower levels				X				X		
District										
Monitor the Operationalization of the matrix on interventions					X	X			X	X
Health Facility										
Operationalize the matrix on interventions					X	X			X	X
Community										
Implement the interventions accordingly					X	X			X	X
Task 5: Conduct Operation Surveys on LSM and share reports with partners/ sponsors	Number of Operational Surveys on LSM Conducted and Reports shared/ Research Reports	0			10				10	
Activities										
National										
Identify the Provinces and give support		0			X				X	
Provincial										
Identify the Districts and give support		0			X				X	
District										
Conduct the Operational Research		0			X				X	

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Health Facility										
	Participate in the Operational Research	0								
Community										
	Participate in the Operational Research	0			X				X	
Task 6: Incorporating LSM into other Existing Health Programs Expected (Keep Zambia Health Campaigns, WASH & another to be identified)										
	Number of existing Programs into which LSM Activities have been incorporated/ Existing Reports.	0	3				3			
Activities										
National										
	Review the existing programs and incorporate aspects of LSM	0	X				X			
Provincial										
	Adopt and disseminate the reviewed guidelines on LSM		X				X			
District										
	Adopt and implement the reviewed guidelines				X	X			X	X
Health Facility										
	implement the reviewed guidelines with the community			X	X	X		X	X	
Community										
	Implement the interventions accordingly			X	X	X		X	X	
Task 7: Quantification and costing of all required resources.										
	Proportion of resources allocated for LSM/ Budget Lines for LSM Activities	0	1				1			
Activities										
National										

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Conduct Needs Assessment on required Resources	0	X				X			
	Lobby for Resources to implement LSM		X	X	X	X	X	X	X	X
Provincial										
	Conduct Needs Assessment on required Resources		X				X			
	Lobby for Resources to implement LSM		X	X	X	X	X	X	X	X
	Coordinate the budging process		X				X			
District										
	Consolidate the District resource requirement		X				X			
	Lobby for Resources to implement LSM		X	X	X	X	X	X	X	X
	Coordinate the budging process		X				X			
Health Facility										
	Identify resources required to implement the activities		X				X			
Community										
	Identify resources and tools required									
	Mobilize for the tools required to conduct the interventions accordingly.		X	X	X	X	X	X	X	X
	Task 8: Monitoring and Evaluation of LSM Activities at all levels	0	1	1	1	1	1	1	1	1
Activities										
National										
	Develop LSM indicators		X							

	INDICATOR/MEANS OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Include the LSM Indicators in the NMEP.		X							
	Develop LSM Reporting Tools		X							
	Provincial									
	Disseminate the LSM Performance Indicators and reporting Tools.			X						
	Conduct LSM Performance Review Meetings					X				
	District									
	Implement LSM Activities.			X	X	X		X	X	X
	Monitor and Supervise the LSM Out Put Indicators			X	X	X		X	X	X
	Health Facility									
	Implement LSM activities with the communities			X	X	X		X	X	X
	Supervise the implementation of the LSM Activities			X	X	X		X	X	X
	Community									
	Implement LSM activities with the community members mobilized			X	X	X		X	X	X

4.3.3 Service Delivery Area: Social and Behaviour Change Communication

Service Delivery Area Objectives:

1. To increase knowledge of malaria from the 2015 baseline to 100% by 2021.
2. To improve uptake and correct use of key malaria interventions from the 2015 baseline to 90 percent by 2021.

4.3.3.1 Strategic Action: Strengthen the capacity to implement social behavioral change communication

Strategic Action Objective:

1. To increase knowledge of malaria from the 2015 baseline to 100% by 2021.
2. To improve uptake and correct use of key malaria interventions from the 2015 baseline to 90 percent by 2021.

Table 8: SBCC Key Findings from the Programmatic MTR

Indicator	2015 (MIS) Baseline	2018 MIS
Percentage who have heard of malaria	99	90
Percentage who recognize fever as malaria	77	71
Percentage who reported mosquito bites as a cause of malaria	85	82
Percentage who reported a mosquito net treated or untreated as a preventive method	91	86
Percentage who sought treatment from a facility provider same day or next day	31	20
Percentage of children under five who slept under an ITN	56	69
Percentage of pregnant women who slept under an ITN	58	71
Percentage of household member reported to have slept under an ITN the previous night.	53	64

NB: Progress on SBCC indicators

- Use of ITNs among children under five, pregnant women and household members increased
- However, the programme recorded a decline on indicators related to prompt care seeking behaviour.

Recommended Best Practices

1. Community engagement and partnership development
2. Support Civil Society Organizations (CSOs) to reach under-served populations
3. Engage religious leaders, traditional leaders and traditional doctors
4. Review and update SBCC Materials with Provincial & District participation
5. Evidenced-based selection of host districts for malaria events
6. Recognize Volunteers (CHWs, Community Mobilizers etc.) during Malaria Events
7. Exhibit at national, provincial, district, HF and community events
8. Engage Managers and Editors of media organizations (National, Provincial & District)
9. Advocacy meetings

Table 9: Social and Behaviour Change Communication

	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
TASK 1: Advocacy	<ul style="list-style-type: none"> • Number of planned advocacy meetings • Number of institutions/Individuals 									

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	planned to be reached & number reached MoV: Minutes and meeting reports with attendance list									
Activities										
National										
Engage current and non-traditional partners	<ul style="list-style-type: none"> Number of current and non-traditional partners planned to engage and meet Number of engagement meetings planned and held MoV: Engagement reports		x	x	x	x	x	x	x	x
Meetings with Members of Parliament	<ul style="list-style-type: none"> Number of meetings planned and held Number of parliamentarians targeted and reached MoV: Meeting minutes and Attendance list		x		x		x		x	
Orientation meetings with religious mother bodies/organizations	<ul style="list-style-type: none"> Number of orientation meetings planned and held Number of religious mother bodies/organizations targeted and reached MoV: Orientation reports		x				x			
Provincial										
Orientation meetings with local MPs	<ul style="list-style-type: none"> Number of orientation meetings planned & number held Number of MPS planned to be reached & number reached MoV: Orientation reports		x				x			
District										
Engage DHO senior management	<ul style="list-style-type: none"> Number of engagement meetings planned with senior management & number held Number of manager planned to be engaged & number engaged MoV: Engagement reports		x				x			

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Engage E-MATFs	<ul style="list-style-type: none"> Number of engagement meetings planned and engagement meetings held MoV: E-MATF Engagement reports and minutes		x	x	x	x	x	x	x	x
Hold meetings with Councilors	<ul style="list-style-type: none"> Number of meetings planned to be held & number held Number of counselors planned to be reached & counselors reached MoV: Meetings minutes		x				x			
Health Facility										
Hold orientation meetings for Area Development Committees (ADCs)	<ul style="list-style-type: none"> Number of orientation meetings planned with ADCs & Meetings held. MoV: Area Development Committees (ADCs)/Meeting reports/Minutes		x				x			
Community										
Participate in orientation meetings for Area Development Committees (ADCs)	<ul style="list-style-type: none"> Number of orientation meetings planned to be held with Area Development Committees (ADCs) & number held MoV: Meeting reports/Minutes		x				x			
TASK 2: Develop context specific messages and materials for all intervention areas for use at all levels										
	<ul style="list-style-type: none"> Number of SBCC context specific messages planned to be developed and materials & number developed. MoV: Availability of SBCC messages and materials/ Distribution and delivery reports									
Activities										
National										
Hold meeting to review and update existing materials and messages for all interventions	<ul style="list-style-type: none"> Number of meetings planned to review and update the existing SBCC 			x			x			

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	<p>materials and messages & number held</p> <ul style="list-style-type: none"> Number of materials planned to be reviewed and updated & number reviewed and updated <p>MoV: Minutes, attendance list and number of materials reviewed and updated</p>									
Pretest developed messages and materials	<ul style="list-style-type: none"> Number of SBCC material planned to be Pretested & number pretested <p>MoV: Availability of pretested materials for SBCC and reports</p>			x	x		x			
Finalize developed messages and materials	<ul style="list-style-type: none"> Number of Finalized SBCC messages and materials planned to be developed & number developed <p>MoV: Finalized SBCC messages and materials</p>				x		x			
Print materials	<ul style="list-style-type: none"> Number SBCC materials planned to be Printed and number printed <p>MoV SBCC printed materials</p>				x		x			
Disseminate messages through electronic and print media	<ul style="list-style-type: none"> Number SBCC messages planned to be disseminated messages through electronic and print media and number disseminated <p>MoV: SBCC printed material disseminated and aired on local radio and TV</p>				x	x	x	x		
Provincial										
Participate in review and updating of SBCC materials	<ul style="list-style-type: none"> Number of SBCC meetings planned to participate to review and update materials & number invited to attend. <p>MoV: invitation notices and meeting reports.</p>			x			x			

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Distribute the printed materials	<ul style="list-style-type: none"> Number of SBCC printed materials planned to be distributed & number distributed. MoV: distribution list (GRNs & delivery notes)				x			x		
Disseminate messages through electronic and print media	<ul style="list-style-type: none"> Number of electronic and print media messaged planned to be disseminated and number disseminate electronic and print media MoV: number of electronic and print media aired and printed, Program log book		x	x	x	x	x	x	x	x
District										
Participate in review and updating of SBCC materials	<ul style="list-style-type: none"> Number of SBCC meetings planned to participate to review and update materials & number invited to attend. MoV: Invitation notices and meeting reports.			x			x			
Distribute the printed materials to health facility level	<ul style="list-style-type: none"> Number of SBCC printed materials planned to be distributed & number distributed. MoV: Distribution list (GRNs & delivery notes)		x	x	x	x	x	x	x	x
Disseminate messages through appropriate communication channels	<ul style="list-style-type: none"> Number of electronic and print media messaged planned to be disseminated and number disseminate electronic and print media MoV: Number of electronic and print media aired and printed, Program log book		x	x	x	x	x	x	x	x
Health Facility										
Distribute the printed materials to community	<ul style="list-style-type: none"> Number of printed materials planned to be distributed and number distributed MoV: Distribution list GRN.				x			x		

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Community										
Use developed SBCC materials for sensitization	<ul style="list-style-type: none"> Number of sensitization activities planned to be conducted using the received materials and number held. MoV: Reports and number of community members reached.		x	x	x	x	x	x	x	x
Conduct door to door visits to sensitize households	<ul style="list-style-type: none"> Number of door to door visits planned to sensitize households and number conducted. MoV: Sensitization registers and reports		x	x	x	x	x	x	x	x
Hold community/village meetings	MoV: Minutes		x	x	x	x	x	x	x	x
Conduct drama performances	MoV: Reports		x	x	x	x	x	x	x	x
Use local musicians	MoV: Reports									
Task 3: Conduct malaria elimination communication campaigns										
	<ul style="list-style-type: none"> Number malaria elimination communication campaigns planned and number implemented MoV: Campaigns reports and minutes									
Activities										
National										
Develop malaria elimination communication campaign			x							
Engage production house to produce campaign materials			x							
Conduct design and development workshop			x							
Pre-test messages and materials			x	x						
Finalize campaign materials				x						
Print campaign materials				x						
Launch malaria elimination campaign				x						
Provincial										

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Identify participants in the development of malaria elimination communication campaign		x							
	Launch malaria elimination communication campaign		x							
	District									
	Participate in development of the malaria elimination communication campaign		x							
	Participate in pre-testing of messages and materials		x							
	Launch malaria elimination communication campaign			x						
	Implement communication campaign activities			x	x	x	x	x	x	x
	Monitor implementation of campaign activities			x	x	x	x	x	x	x
	Health Facility									
	Launch malaria elimination communication campaign Implement campaign activities			x						
	Community									
	Launch malaria elimination communication campaign Implement campaign activities			x						
	Task 4: Strengthen Community Engagement and Partnership Development	<ul style="list-style-type: none"> Number of Community Engagement and Partnership Development strengthening (OTSS) meeting planned and number conducted 								

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	MoV: OTSS reports and minutes									
Activities										
National										
Stakeholder identification and mapping	MoV: Report		x							
Conduct a workshop to review and develop engagement plan.	MoV: Meeting report and Engagement Plan			x						
Disseminate engagement plans to provinces and districts	MoV: Dissemination meeting reports			x						
Monitoring and supervision of community engagement activities	MoV: Monitoring Report			x	x	x	x	x	x	x
Provincial										
Stakeholder identification and mapping	MoV: Reports		x							
Participate in revision and development of engagement plan	MoV: Reports			x						
Disseminate engagement plans to districts and health facilities				x						
Monitoring and supervision of community engagement activities				x	x	x	x	x	x	x
District										
Stakeholder identification and mapping			x							
Participate in the development of community engagement plan				x						
Disseminate engagement plans to health facilities				x						
Implement community engagement plan				x	x	x	x	x	x	x
Monitoring and supervision of community engagement activities				x	x	x	x	x	x	x
Health Facility										
Stakeholder identification and mapping			x							
Implement community engagement plan				x	x	x	x	x	x	x
Community										

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Village meetings			x	x	x	x	x	x	x	x
Community mobilization			x	x	x	x	x	x	x	x
Information dissemination			x	x	x	x	x	x	x	x
TASK 5										
Task 5: Commemorate annual malaria events	<ul style="list-style-type: none"> Number of malaria commemoration annual malaria events planned & Number commemorated 									
	MoV availability of event reports									
Activities										
National										
Commemorate World Malaria Day				x						
Commemorate SADC malaria week						x				x
Participate in national health week				x						
Participate in safe mother week				x				x		
Participate in child health week activities				x				x		
World environmental day				x				x		
Provincial										
Support Districts Commemorate World Malaria Day				x				x		
Support Districts Commemorate SADC malaria week						x				x
Participate in national health week				x						
Participate in safe motherhood week				x				x		
Participate in child health week activities				x				x		
Support Districts commemorate World environmental day				x				x		
District										
Commemorate and support health facilities to commemorate World Malaria Day				x				x		
Commemorate and support health facilities to Commemorate SADC malaria week						x				x

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Participate in national health week			x						
	Participate in safe mother week			x				x		
	Participate in child health week activities			x				x		
	Commemorate and support health facilities to commemorate World environmental day			x				x		
	Commemorate and support health facilities to commemorate World Malaria Day			x				x		
	Health Facility									
	Commemorate World Malaria Day			x				x		
	Commemorate SADC malaria week					x				x
	Participate in national health week									
	Participate in safe motherhood week			x				x		
	Participate in child health week activities			x				x		
	Participate in World Environmental Day			x				x		
	Community									
	Village meetings			x		x		x		x
	Meetings with pregnant women during Safe Motherhood Week			x		x		x		x
	Drama performances			x		x		x		x
	Roadshows			x		x		x		x
	Task 6: Build capacity in Behaviour Centred Programming (BCP)	Number of BCP capacity building trainings/TSS planned & number conducted								
		MoV: BCP capacity building reports and minutes								
	Activities									
	National									
	Review and update BCP training materials		x							
	Hold BCP training for Provinces and districts			x	x					
	Provincial									
	Participate in review and updating of BCP training materials		x							

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Hold BCP training for District and health facilities				x	x					
Training of stakeholders in BCP					x	x				
District										
Participate in review of BCP training materials			x							
Hold BCP training for health facilities				x	x					
Training of stakeholders in SBCC					x	x				
Health Facility										
Participate in training of CBVs, traditional and religious leaders in BCP					x	x				
Monitor and Mentor CBVs in BCP activities			x	x	x	x	x	x	x	x
Community										
Select CBVs to be trained with the guide of health facilities.				x						
Task 7: Information dissemination	<ul style="list-style-type: none"> Number of information dissemination activities planned and number implemented 									
	MoV: Activity reports									
Activities										
National										
Awarding of media personnel and station for promotion and dissemination of malaria messages						x				x
Conduct road shows			x	x	x	x	x	x	x	x
Support airing of radio and TV programs			x	x	x	x	x	x	x	x
Provincial										
Awarding of media personnel and station for promotion and dissemination of malaria messages						x				x
Conduct road shows			x	x	x	x	x	x	x	x
District										
Training of drama groups				x						
Awarding of media personnel and station for						x				x

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	promotion and dissemination of malaria messages									
	Support the recording of community drama and discussions		x	x	x	x	x	x	x	x
	Conduct road shows		x	x	x	x	x	x	x	x
	Airing of radio programs		x	x	x	x	x	x	x	x
	Health Facility									
	Health talks		x	x	x	x	x	x	x	x
	Conducting drama performance		x	x	x	x	x	x	x	x
	Distribution of IEC materials		x	x	x	x	x	x	x	x
	Community									
	Community meetings and dialogues		x	x	x	x	x	x	x	x
	Community mobilizations		x	x	x	x	x	x	x	x
	Monthly roadside markets		x	x	x	x	x	x	x	x
	Task 8: Strengthen School based malaria programs	Number of school based malaria programs planned and implemented								
		MoV reports								
	Activities									
	District									
	Support health facilities in the Formation and training of school malaria clubs		x							
	support and develop school malaria action plan		x				x			
	Support inter school competition such as quiz, poems, sports etc.		x	x	x	x	x	x	x	x
	Health Facility									
	Formation and training of school malaria clubs		x							
	Develop the school malaria action plan		x				x			
	Support inter school competition such as quiz, poems, sports etc.		x	x	x	x	x	x	x	x
	Task 9: Scale up number of Civil Society Organizations (CSOs) implementing SBCC activities	Number of CSOs implementing community-based activities								

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Number of CSOs receiving grants to implement community based activities									
	MoV: Reports									
Activities										
National										
	Conduct Assessment		x				x			
	Develop funding and reporting mechanism		x	x						
	Support provinces and districts develop workplan for implementation by CSOs		x	x			x			
	Provide guidance to provinces on planning and implementation activities by CSOs			x						
Provincial										
	Guide districts and participate in the identification of CSOs		x				x			
	Provide guidance to districts and health facilities in planning and implementation activities by CSOs						x			
	Monitor activities implemented by CSOs		x	x	x	x	x	x	x	x
	Participate in review of CSOs activities in the districts		x	x	x	x	x	x	x	x
District										
	Identify CSOs		x				x			
	Provide guide to health facilities and CSOs in the planning and implementation of malaria activities		x	x	x	x	x	x	x	x
	Monitor activities implemented by CSOs		x	x	x	x	x	x	x	x
	Participate in review of CSOs activities in the health facilities		x	x	x	x	x	x	x	x
Health Facility										
	Participate in the planning of malaria activities		x				x			
	Work with CSOs in implementation of malaria programs		x	x	x	x	x	x	x	x

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Participate in review of CSOs activities on malaria			x	x	x	x	x	x	x	x
Community										
Participate in identification of CSOs			x				x			
Provide guide to health facilities and CSOs in the planning and implementation of malaria activities			x	x	x	x	x	x	x	x
Monitor activities implemented by CSOs			x	x	x	x	x	x	x	x
Participate in review of CSOs activities in the health facilities			x	x	x	x	x	x	x	x
TASK 10: Monitor implementation of SBCC activities	Number of SBCC monitoring activities planned & number implemented									
	MoV: Monitoring reports									
Activities										
National										
Develop SBCC monitoring tool			x							
Disseminate SBCC monitoring tool to provinces			x	x						
Monitor provinces and districts on the implementation of SBCC activities			x	x	x	x	x	x	x	x
Provincial										
Participate in the development of SBCC tool			x							
Disseminate SBCC monitoring tool to districts			x	x						
Monitor districts on the implementation of SBCC activities			x	x	x	x	x	x	x	x
District										
Participate in the development of SBCC tool.			x							
Disseminate SBCC monitoring tool to health facilities			x	x						

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION (MoV)	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Monitor health facilities on the implementation of SBCC activities			x	x	x	x	x	x	x	x
Health Facility										
Use of SBCC monitoring tool to guide implementation			x	x	x	x	x	x	x	x

4.3.4 Service Delivery Area: Surveillance, Monitoring, Evaluation and Operations Research

Service Delivery Area Objectives:

- To strengthen the capacity to monitor and evaluate the performance of malaria programs and conduct evidenced based programming through research
- To provide timely and sound evidence to guide the implementation and policy making process for malaria control and elimination in Zambia.

4.3.4.1 Strategic Action: Strengthen the surveillance system at all levels

Strategic Action Objective: To provide timely and sound evidence to guide the implementation and policymaking process for malaria control and elimination in Zambia.

Key Findings from the 2019 Programmatic Mid Term Review

- Enhanced surveillance has been rolled out but not to scale.
- Population denominators are negatively affecting stratification which guides planning key interventions

Recommended Best Practices

- Tracking Malaria Elimination Progress
 - Routine analysis of malaria data reported in HMIS and National Malaria Elimination DHIS 2 instance by the Community Health Workers (CHWs) on a monthly basis
 - Weekly monitoring of malaria cases where MRR has been implemented.
 - Synchronization of the National Malaria Elimination DHIS2 instance with Tableau Visualization platform to envisage malaria data at HF and community in real time. This allows the NMEP to visualize the actual malaria burden for the HFCA.
- Malaria Stratification
 - The NMEP stratifies the HFs on a yearly basis to guide program planning and implementation
- Component D Refresher Training

- To keep strengthening active case detection at community level, the Unit conducts refresher trainings in component D every 2years.
- Capacity Building
 - In order to strengthen malaria surveillance at all levels, the Unit has been conducting capacity building training in data management in addition to supportive supervision and mentorship. On a yearly basis dhis2 refresher trainings are provided to the Districts. Formal and informal trainings in malaria data management are also provided coupled with use of the malaria scorecard.

Table 10: Surveillance

			TIMEFRAME							
			2020				2021			
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Task 1: Collate all programmatic and intervention data sets (IRS, ITN, HMIS, MDA, Ento) into one central repository (DDMS)	Availability of complete, updated and validated data sets in the DDMS/DDMS	0	Programmatic and intervention data sets collated into one central repository				Programmatic and intervention data sets collated into one central repository			
Activities										
National										
Updating of the data sets on a monthly basis	Monthly/Quarterly reports		X	X	X	X	X	X	X	X
Roll out DDMS to subnational level				X	X	X				
Provincial										
Verify and validate the reported data by the district				X	X	X	X	X	X	X
Participate in roll out of DDMS				X	X	X				
District										
Verify and validate the reported data by the health facilities and input in the online platform				X	X	X	X	X	X	X
Participate in roll out of DDMS				X	X	X				
Health Facility										
Data collection and verification				X	X	X	X	X	X	X
Participate in roll out of DDMS				X	X	X				
Task 2: Malaria cases reported in		2 provinces (NMEC DHIS2)	Weekly malaria reporting rolled out in				Weekly malaria reporting rolled out in			

			TIMEFRAME							
			2020				2021			
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	real time and monitored in the remaining districts of Central, Copperbelt, Lusaka, North western, Eastern, Luapula, Northern and Muchinga Provinces		<i>the respective provinces</i>				<i>the respective provinces</i>			
Activities										
National										
<i>Rolling out Weekly malaria reporting</i>			X	X	X	X				
Provide TSS for the rolling out of weekly malaria reporting			X	X	X	X				
Provincial										
Coordinate and provide TSS in roll out of weekly malaria reporting			X	X	X	X				
District										
Health Facility										
Implement weekly malaria reporting			X	X	X	X				
Task 3: Active case detection at community level	Number of malaria cases detected through ACD at community level /NMEC DHIS2	(NMEC DHIS2)	Active case detection at community conducted				Active case detection at community conducted			
Activities										
National										
Rolling out enhanced Surveillance (Component D) in remaining districts in Central, Copperbelt, Lusaka, North western, Eastern, Luapula, Northern and Muchinga Provinces			X	X	X	X	X	X	X	X
Provide TSS for the rolling out of enhanced surveillance			X	X	X	X	X	X	X	X

			TIMEFRAME							
			2020				2021			
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Provincial										
	Coordinate and provide TSS in roll out of enhanced surveillance		X	X	X	X	X	X	X	X
District										
	Train health facilities and provide TSS in enhanced surveillance		X	X	X	X	X	X	X	X
Health facility										
	Implement enhanced surveillance		X	X	X	X	X	X	X	X
	Task 4: Health facilities and communities report malaria data using mobile phones in the malaria surveillance system	Number of cases reported via mobile phones/NMEC DHIS2	Malaria data reported using phones by health facilities and CHWs				Malaria data reported using phones by health facilities and CHWs			
Activities										
National										
	Procurement and replacement of mobile reporting phones for Component B and Component D		X	X	X					
	Conduct inventory of operational mobile reporting phones		X							
	Distribute phones to Provinces		X	X	X					
Provincial										
	Conduct inventory of operational mobile reporting phones									
District										
	Conduct inventory of operational		X							

			TIMEFRAME							
			2020				2021			
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	mobile reporting phones									
	Distribute phones to health facilities		X	X	X					
	Health facility									
	Distribute phones to CHWs		X	X	X					
	Use of phones for reporting at Health Facility and Community		X	X	X	X	X	X	X	X
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Task 5: Elimination and prevention of resurgences where malaria has been eliminated	<i>0 (DHIS2)</i>	<i>Malaria eliminated and resurgences prevented where malaria has been eliminated</i>				<i>Malaria eliminated and resurgences prevented where malaria has been eliminated</i>			
	Activities									
	National									
	Pilot Case based surveillance in low burden health facilities (2 districts in Southern prov.)		X	X						
	Implement Case based surveillance in low burden health facilities (2 districts in Southern prov.)				X	X				
	Finalize development /reviewing of tools		X							
	Train provinces		X							
	Provide TSS		X	X	X	X				
	Provincial									
	Train districts		X							
	Provide TSS to districts		X	X	X	X				
	District									
	Train health facilities and provide TSS		X							

			TIMEFRAME							
			2020				2021			
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Support facilities in implementing case based surveillance		X	X	X	X				
Health Facility										
	Implement case based surveillance		X	X	X	X				
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Task 6: Implementation of the malaria scorecard in facilities and newly created districts	Training reports	xx (Scorecard)	Indicators and planned activities in health facilities and newly created districts tracked				Indicators and planned activities in health facilities and newly created districts tracked			
Activities										
National										
	Roll out the malaria Score card to newly created districts and health facilities		X	X	X	X	X	X	X	X
	Provide TSS for the rolling out of the scorecard		X	X	X	X	X	X	X	X
Provincial										
	Coordinate and train districts in the malaria scorecard		X	X	X	X	X	X	X	X
	Provide TSS in roll out of the scorecard		X	X	X	X	X	X	X	X
District										
	Implement the use of the scorecard		X	X	X	X	X	X	X	X
	Train health facilities and provide TSS on the scorecard		X	X	X	X	X	X	X	X
Health Facility										
	Implement the use of the scorecard		X	X	X	X	X	X	X	X
Task 7: Tracking malaria indicators at all levels in the scorecard	Number of indicators in the score card tracked/Quarterly reports		Indicators in the scorecard tracked				Indicators in the scorecard tracked			
Activities										
National										

			TIMEFRAME								
			2020				2021				
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
	Updating and reviewing of the score card		X	X	X	X	X	X	X	X	
	Track indicators in the Score card		X	X	X	X	X	X	X	X	
	Provincial										
	Track indicators in the Score card		X	X	X	X	X	X	X	X	
	District										
	Track indicators in the Score card		X	X	X	X	X	X	X	x	
	Health Facility										
	Track indicators in the Score card		X	X	X	X	X	X	X	x	
	Task 8: Continuous capacity building in CHWs conducting enhanced surveillance	<i>Number of CHWs trained in enhanced surveillance/ Training report</i>	0				<i>CHWs capacitated in enhanced surveillance</i>		<i>CHWs capacitated in enhanced surveillance</i>		
	Activities										
	National										
	Conduct refresher trainings in component D		X	X	X	X	X	X	X	x	
	Provide TSS		X	X	X	X	X	X	X	x	
	Provincial										
	Coordinate and provide TSS		X	X	X	X	X	X	X	x	
	District										
	Train and provide TSS to health facilities		X	X	X	X	X	X	X	x	
	Health Facility										
	Participate and implement component D		X	X	X	X	X	X	X	x	
	Task 9: Continuous capacity building in HMIS to district staff	<i>Number of district staff trained in HMIS/HMIS training reports</i>					<i>District staff capacitated in HMIS</i>		<i>District staff capacitated in HMIS</i>		
	Activities										
	National										
	Conduct refresher trainings in DHIS2			X	X			X	X		

			TIMEFRAME							
			2020				2021			
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	<i>Provide TSS</i>		X	X	X	X	X	X	X	X
	Provincial									
	Coordinate and provide TSS to the districts		X	X	X	X	X	X	X	X
	District									
	Provide TSS to health facilities on HMIS		X	X	X	X	X	X	X	X
	Health Facility									
	Timely submission of correct and complete HMIS reports		X	X	X	X	X	X	X	X
	Task 10: Strengthen malaria information use and ownership at all levels		<i>Information use and ownership at all levels</i>				<i>Information use and ownership at all levels</i>			
	Activities									
	National									
	<i>Conduct malaria data management trainings to provinces</i>			X	X			X	X	
	Provide TSS		X	X	X	X	X	X	X	X
	Provincial									
	Coordinate and train districts			X	X			X	X	
	Provide TSS		X	X	X	X	X	X	X	X
	District									
	Train health facilities and provide TSS			X	X			X	X	
	Health Facility									
	Use data for decision making		X	X	X	X	X	X	X	X
	Task 11: Epidemic Preparedness and response	<i>EPR plan/reports</i>	0							
	Activities									
	National									
	Review and update the guidelines		X	X	X					
	Conduct trainings in Emergency				X	X				

			TIMEFRAME							
			2020				2021			
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Prepared and Response									
	Monitor and respond early warning systems					X	X	X		
Provincial										
	Conduct trainings in Emergency Prepared and Response		X	X	X					
	Monitor and respond early warning systems		X	X	X	X	X	X	X	X
District										
	Monitor and respond early warning systems		X	X	X	X	X	X	X	X
Health Facility										
	Monitor and respond early warning systems		X	X	X	X	X	X	X	X

4.3.4.2 Strategic Action: Strengthen the Monitoring and Evaluation

Strategic Action Objective: To strengthen capacity to monitor and evaluate the performance of malaria programme

Key Findings from the 2019 Programmatic Mid Term Review

- Reporting of routine distribution of LLINs continues to be suboptimal

Recommended Best Practices

- Data Quality Audits: Conducting DQA on a quarterly and by-annual basis.
- Data Review Meetings: Conducting malaria data review meetings either quarterly, bi-annual and/or annually.
- Supportive supervision and Mentorship (SSM): The NMEP conducts routine SSM at all levels of the program. SSM assesses delivery of malaria services, data management, and reporting systems there by capacity building district and HF staff and strengthening the health system
- Use of a scorecard to track activities and implementation rate at National, Provincial and District levels

Table 11: Monitoring and Evaluation

			TIMEFRAME								
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Task 1: Alignment of the M & E plan based on the MTR recommendations	Updated M&E Plan available/Report		M & E plan updated								
Activities											
National											
Review, update and disseminate the M & E plan			X								
Provincial											
Disseminate the updated plan and orient districts				X							
District											
Disseminate the updated plan and orient health facilities				X							
Health Facility											
Track key malaria indicators				X	X	X	X	X	X	X	
Task 2: Increase program implementation rate (Score card work plan)	<ul style="list-style-type: none"> Number of activities implemented Scorecard tracker/monthly reports 	89 (MTR Report)	Implementation rates assessed				Implementation rates assessed				
Activities											
National											
Monitor implementation level of activities at National level as contained in the scorecard			X	X	X	X	X	X	X	X	
TSS to subnational level			X	X	X	X	X	X	X	X	
Provincial											
Monitor implementation level of activities at provincial level as contained in the scorecard			X	X	X	X	X	X	X	X	
Track implementation level for districts			X	X	X	X	X	X	X	X	
District											
Monitor implementation level of activities at			X	X	X	X	X	X	X	X	

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
District level as contained in the scorecard										
Track implementation level for health facilities			X	X	X	X	X	X	X	X
Health Facility										
Monitor implementation level of activities at health facility level as contained in the scorecard			X	X	X	X	X	X	X	X
Task 3: Improve the quality of reported malaria data in 70 districts	Number of districts audited MOV-Audit reports	0	70 districts Audited and mentored				70 districts Audited and mentored			
Activities										
National										
Conduct Data Quality Audits			X	X	X	X	X	X	X	X
Provide TSS/Mentorship to subnational level			X	X	X	X	X	X	X	X
Provincial										
Conduct Data Quality Audits			X	X	X	X	X	X	X	X
Provide TSS/Mentorship to the districts			X	X	X	X	X	X	X	X
District										
Conduct Data Quality Audits			X	X	X	X	X	X	X	X
Provide TSS/Mentorship to health facilities			X	X	X	X	X	X	X	X
Health Facility										
Conduct data quality audits			X	X	X	X	X	X	X	X
Community										
Participate in Data Quality Audits			X	X	X	X	X	X	X	X
Task 4: Review of Malaria performance	Number of data review meetings held MOV-Reports	0	10		10		10		10	
Activities										
National										
Conduct data reviews			X		X		X		X	
Provincial										
Conduct data reviews			X		X		X		X	

			TIMEFRAME								
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
	Support data reviews at district level		X		X		X		X		
	District										
	Conduct data reviews		X		X		X		X		
	Support data reviews at health facility level		X		X		X		X		
	Health Facility										
	Conduct data reviews		X		X		X		X		
	Support data reviews at community level		X		X		X		X		
	Task 5: Track achievement rates of the NMESP against set targets by year (2020, 2021)	Number of reviews done MOV-Reports	0	Indicators tracked annually							
	Activities										
	National										
	Track achievement rates at national level		X				X				
	Provincial										
	Track achievement rates at provincial level		X				X				
	District										
	Track achievement rates at district level		X				X				
	Health Facility										
	Track achievement rates at health facility level		X				X				
	Task 6: NMESP End Term Review	End-term review report								X	
	Activities										
	National										
	Preparations to conduct End-term review					X	X				
	Task 7: Health Facilities using standardized ITN & RDT registers	Number of health facilities using standardized registers MOV- Registers									
	Activities										
	National										
	Procurement of standardized collection tools (ITN & RDT registers)						X				
	Distribution to subnational level						X				
	Provincial										

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Distribution to Districts							X			
District										
Distribution to Health facilities								X		
Health Facility										
Using of the standardize tools								X	X	X
Task 8: Track implementation of ITNs mass campaign and continuous distribution in schools, community and ANC/EPI 2020 - 2021	LLINs implementation monitoring report available									
Activities										
National										
Monitor and evaluate at subnational level				X	X	X	X	X	X	X
Provincial										
Monitor and evaluate at district level				X	X	X	X	X	X	X
District										
Monitor and evaluate at health facility level				X	X	X	X	X	X	X
Health Facility										
Conduct inventory for data collection tools			X	X						
Track 9: Track implementation of IRS campaign 2020 - 2021	IRS implementation monitoring report									
Activities										
National										
Monitor and evaluate at subnational level					X	X				
Provincial										
Monitor and evaluate at district level					X	X				
District										
Monitor and evaluate at health facility level					X	X				
Health Facility										
Conduct inventory for data collection tools			X	X						

4.3.4.3 Strategic Action: Strengthen Operational Research

Strategic Action Objective:

- To conduct research for evidence-based programming.

Recommended Best Practices

- Research Priority Setting
 - NMEP through SMEOR and all stakeholders have developed a list of research priority questions stratified as short, medium and long term. Thus, any person or organization intending to conduct malaria research must first take cognizance of NMEP research priorities.
- Research/Survey
 - The NMEP carries out the Malaria Indicator Survey (MIS) every after 2 years at community level. The MIS assesses coverage of key malaria interventions and malaria-related burden among children under five years of age, and is a key tool for tracking process in fighting the disease and improving targeting of resources.
 - The NMEP also conducts Therapeutic Efficacy Study every 2years to monitor the therapeutic efficacy of anti-malarial medicines for treatment of uncomplicated malaria. The findings of the study are important to ensure that efficacious drugs are used to maintain quality malaria case management in the country.
 - Additionally, the NMEP conducts researches based on the research priority list on a yearly basis and their findings provide guidance to programmatic planning.

Table 12: Operational Research

	INDICATOR/MEANS OF VERIFICATION	BASELINE	TIMEFRAME							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Task 1: Guide programmatic implementation and policy for malaria	Availability of evidence to inform program implementation and policy decision making Number of policies informed by research		Program implementation and policy for malaria guided by evidence based research				Program implementation and policy for malaria guided by evidence based research			
Activities										
National										
Coordinate research activities			x	x	x	x	x	x	x	x
Implement AFROII project(Eastern Prov. Nyimba)			x	x	x	x				
Conduct ITN durability study										
Conduct PROACT and ANC surveillance study			x	x	x	x				
Conduct field trials of Attractive Toxic Sugar Baits			x	x	x	x				

			TIMEFRAME								
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
	<i>Disseminate the Research findings to all stakeholders</i>		X	X	X	X					
	Provincial										
	Participate in research activities		X	X	X	X					
	<i>Disseminate the Research findings to stakeholders</i>		X	X	X	X					
	District										
	Participate in research activities		X	X	X	X					
	<i>Disseminate the Research findings to stakeholders</i>		X	X	X	X					
	Health Facility										
	Participate in research activities		X	X	X	X					
	Task 2: Update priorities in malaria research 2020-2021	Availability of updated malaria research agenda	Priorities in malaria research 2020-2021 updated								
	Activities										
	National										
	<i>Coordinate priority setting</i>				X				X		
	Provincial										
	Participate in priority setting				X				X		
	District										
	Participate in priority setting				X				X		
	Health Facility										
	Participate priority setting				X				X		
	Task 3										
	Monitor resistance of antimalarials 2020-2021	Availability of drug resistance monitoring report for 2020-21/ Report	(Drug Resistance Monitoring Report)	2020-2021 Resistance of antimalarials monitored							
	Activities										
	National										
	<i>Monitor efficacy of malaria treatment drugs 2020 – 2021</i>		X	X							
	<i>Coordinate and monitor</i>		X	X							
	Provincial										

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Participate in monitoring activities			x	x						
District										
Participate in monitoring activities			x	x						
Health Facility										
Participate in monitoring activities			x	x						

4.3.5 Service Delivery Area: Programme Management

Service Delivery Area Objective: To increase the implementation rate of activities from 51% in June 2019 to 95% in 2020 and 100% in 2021 in real time

4.4.5.1 Strategic Action: Strengthen Capacity of the National Malaria Elimination Programme to implement planned activities.

Strategic Action Objective: To increase the implementation rate of activities from 51% in June 2019 to 95% in 2020 and 100% in 2021 in real time.

Key Findings from the 2019 Programmatic Mid Term Review

- The National Malaria Elimination Business Plan 2018–2020 estimated a gap of approximately USD US\$ 100 million. The drivers were iCCM and MDA (Business Plan Pg. 22). Malaria funding both from government and partners has shown some increase but the resource gap for achieving the goals remains.
- Planning and implementation of some activities still concentrated at the central level.
- The EMC, an intersectoral body has been established with a mandate for advocacy and to mobilise resources. In the first half of 2019 it has established a secretariat and is beginning to pursue innovative financing.
- The implementation rate of activities was at 51%.
- Procurement challenges for commodities that requires orders before manufacturing e.g. DDT, DHAP, LLINs,
- Human Resources- Malaria Elimination Officers not fully appointed at both Provincial and District. Some staff at Central Level not yet confirmed

Additional Key Findings during MOP meeting

- Delayed disbursement (Not aligning funds to activities? Not aligning procurements plans to annual work plans)
- Capacity to manage the tools in use e.g. scorecard
- Malaria Operational Plan not disseminated to the lower levels
- Absence of quantification core groups as called by the Health Sector Supply Chain Strategy and Implementation Plan 2019-2021.

Recommended Best Practices

- Harmonised malaria elimination annual work plan (scorecard). With provinces and districts to achieve the “3 ones” principle of partnership management namely: one plan, one monitoring and evaluation, and one coordination mechanism.
- There has been strengthened resource mobilization with increased budgetary allocation from government and partners
- Development of the Business plan
- Establishment of the End Malaria Council and End Malaria Fund
- Appointment of Malaria Elimination Officers at subnational level has markedly improved programme visibility and coordination.
- A number of Cross Border Malaria Initiatives have been established to synchronize efforts and interventions by bordering countries (ZAMZIM NAMZAM),
- Central level monthly directorate and partners’ meetings to track progress.
- Quarterly Technical Working groups to determine recommendations on policy and strategic direction.
- Mid Term Review of the (NMESP) – provides a good opportunity to assess progress made against set targets, identify key challenges hindering progress and recommend improvements for enhancing programme performance to assure impact
- Annual reviews
- Decentralizing planning to the Neighborhood Committees
- Establishment of Quantification Core Group

Table 13: Program Management

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Task 1: Disseminate Mid Term Review Report to all levels.	Number of institutions with a copy MTR Report in use /Field report	0	100%							
Activities										
National										
Disseminate the MTR report			X							
Use report			X	X	X	X	X	X	X	X
Provincial										
Disseminate the MTR report			X							
Use report			X	X	X	X	X	X	X	X
District										
Disseminate the MTR report			X							
Use report			X	X	X	X	X	X	X	X
Health Facility										
Use report			X	X	X	X	X	X	X	X
Task 2: Disseminate Malaria Operational Plan 2019-2021	Number of institutions with a copy MOP in use /Field report	0	100%							
Activities										

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
National										
	Finalise the Malaria Operation Plan		X							
	Disseminate the MOP to the Provinces		X							
	Use MOP report		X	X	X	X	X	X	XX	X
Provincial										
	Disseminate the MOP to the Districts		X							
	Use MOP report		X	X	X	X	X	X	X	X
District										
	Disseminate the MOP to the Health facilities		X							
	Use MOP report		X	X	X	X	X	X	X	X
Health Facility										
	Use MOP report		X	X	X	X	X	X	X	X
	Task 3: Scale up the Harmonised work plan to all levels(Province, District, Health Facility and Neighborhood Committees)	0	100%							
Activities										
National										
	Create the harmonized work plan template for 2020 for all levels		X							
	Convene annual work plan harmonization meeting for the provinces		X							
	Update the workplan		X	X	X	X	X	X	X	X
Provincial										
	Convene annual workplan harmonisation meeting for the Districts		X							
	Update the workplan		X	X	X	X	X	X	X	X
District										
	Convene annual workplan harmonisation meeting for the health facilities		X							
	Update the workplan		X	X	X	X	X	X	X	X
Health Facility										
	Convene annual workplan harmonisation meeting for the community		X							

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
(neighbourhood health committee)										
Update the workplan			X	X	X	X	X	X	X	X
Task 4: Scale up scorecard for the Health Facility	Proportion of health facility using scorecard on the ALMA platform	0	100%							
Activities										
National										
Negotiate with ALMA to expand the platform to include health facilities			X							
Orient the Provinces on use of the platform			X							
Use scorecard to prioritise actions			X	X	X	X	X	X	X	X
Provincial										
Orient the districts on use of the platform			X							
Use scorecard to prioritise actions			X	X	X	X	X	X	X	X
District										
Conduct training of the health facility on use of the platform				X	X					
Use scorecard to prioritise actions				X	X	X	X	X	X	X
Health Facility										
Use scorecard to prioritise actions				X	X	X	X	X	X	X
Task 5: Establish quantification core groups	Core group function/quantification reports									
Activities										
National										
Adopt and adapt TORs			X							
Nomination of members			X							
Appointment of members			X							
Task 6: Development of Procurement flowcharts for key commodities and equipment for Campaigns.	Number of flow charts developed and in use/F	0	3							
National										
Develop a procurement flowchart for DDT (IRS)			X							
Develop a procurement flowchart for Dhap(MDA)			X							

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Develop a procurement flowchart for LLINS(Mass LLINs)		X							
	Disseminate the procurement flowchart		X							
	Use of flow charts to direct action		X							
	Provincial									
	Disseminate the procurement flowchart to the Districts		X							
	Use of flow charts to direct action		X							
	District									
	Disseminate the procurement flowchart to the Healthy Facility		X							
	Use of flow charts to direct action		X							
	Health Facility									
	Disseminate the procurement flowchart to the Community		X							
	Neighbourhood health Committee									
	Use of flow charts to direct action		X							
	Task 7: Scale up 'real-time' Progress Tracking to all levels using the action tracker on the malaria scorecard	Proportion of facilities updating scorecard/Action tracker	37%	50%	75%	90%	100%			
	National									
	Orientation of staff		X							
	Scorecard and work plan presented at monthly directorate meetings		X	X	X	X	X	X	X	X
	Provincial									
	Orientation of staff		X							
	Include scorecard/workplan as an agenda item in monthly meetings		X	X	X	X	X	X	X	X
	District									
	Orientation of staff									
	Include scorecard/workplan as an agenda item in monthly meetings		X	X	X	X	X	X	X	X

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Health Facility										
	Orientation of staff		X							
	Include scorecard/work plan as an agenda item in monthly meetings		X	X	X	X	X	X	X	X
	Task 8: Build Capacity to manage administrative processes electronically	Proportion of staff able to use ITC services/Work plan implementation rate through the action tracker	37%	50%	75%	90%	100%			
National										
	Design the package of equipment required		X							
	Induction/onboarding of new staff into malaria elimination management processes		X	X	X	X	X	X	X	X
	Consult in the designing of the equipment required at Provincial level		X							
Provincial										
	Consult in the designing of the equipment required at District level		X							
	Induction/onboarding of new staff into malaria elimination management processes.		X	X	X	X	X	X	X	X
District										
	Consult in the designing of the equipment required at Health Facility level		X							
	Induction/onboarding of new staff into malaria elimination management processes.		X	X	X	X	X	X	X	X
Health Facility										
	Consult in the designing of the equipment required at Community level		X							
	Induction/onboarding of new staff into malaria elimination management processes.		X	X	X	X	X	X	X	X
	Task 10: Alignment of available resources to the workplan timelines at all Levels	Proportion of workplan aligned with available resources/Action tracker	N/A	100%						
National										

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Consolidated annual spending Plan aligned to the work plan			X							
Monthly alignment of resources to the work plan			X		X	X	X	X	X	X
Provincial										
Consolidated annual spending Plan aligned to the work plan			X							
Monthly alignment of resources to the work plan			X	X	X	X	X	X	X	X
District										
Consolidated annual spending Plan aligned to the work plan			X							
Monthly alignment of resources to the work plan			X	X	X	X	X	X	X	X
Health Facility										
Consolidated annual spending Plan aligned to the work plan			X							
Monthly alignment of resources to the work plan			X	X	X	X	X	X	X	X
Neighbourhood health committee										
Consolidated annual spending Plan aligned to the workplan			X							
Monthly alignment of resources to the workplan			X	X	X	X	X	X	X	X
Task 11: Strengthen Cross border Malaria Initiatives with neighbouring countries(Zambia, Malawi Namibia, Mozambique)	Proportion of CBMI which are functional/Action tracker	30%	30%	100%						
National										
Conduct SWOT analysis			X							
Engage with bordering countries.			X							
Facilitate CBMI steering committee meetings			X	X	X	X	X	X	X	X
Coordinate/ Support convening of annual			X				X			

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
review and planning meetings										
Provincial										
Support districts convene CBMI monthly meetings to share the border data			X	X	X	X	X	X	X	X
District										
Convene meetings to share data			X	X	X	X	X	X	X	X
Implement CBMI activities.			X	X	X	X	X	X	X	X
Undertake exchange visits			X	X	X	X	X	X	X	X
Health Facility										
Task 12: Establish New Crossborder Malaria Initiatives with three neighbouring countries (Tanzania, DRC, and Botswana).	Proportion of functional CBMI/Action tracker	N/A				100%				
National										
Conduct SWOT analysis				X						
Engage with bordering countries				X						
Facilitate CBMI steering committee meetings				X	X	X	X	X	X	X
Provincial										
Convene CBMI meetings				X	X	X	X	X	X	X
District										
Participate in CBMI meetings				X	X	X	X	X	X	X
Health Facility										
Synchronise CBMI activities				X	X	X	X	X	X	X
Task 13: Expand the CSO contracting systems	Number of CSOs implementing community-based activities Number of CSOs receiving grants to implement community based activities	16	50							
National										
Review grants management manual to national context	Refer to SBCC			X						
Develop contracts for CSOs				X				X		

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Provide oversight, technical support supervision				X	X	X	X	X	X	
Conduct TOT on contract management				X				X		
Provincial										
Conduct training of districts on contract management				X				X		
Provide oversight, technical support supervision					X	X	X	X	X	
Guide and oversee implementation of malaria interventions undertaken by CSOs					X	X	X	X	X	
District										
Contract CSOs				X				X		
Guide and oversee implementation of malaria interventions undertaken by CSOs					X	X	X		X	
Health Facility										
Work with CSOs in implementation of malaria interventions undertaken					X	X	X	X	X	
Neighbourhood Health Committee										
Work with CSOs in implementation of malaria interventions undertaken					X	X	X	X	X	
Task 14: Mount a Campaign to raise Funds for Malaria Elimination	Proportion of Gap/Management reports	60%				100%				
National										
Develop campaign strategy			X							
Hold fund raising events (Dinner dance, musical concert)			X	X	X	X	X	X	X	X
Participate in Fund raising events at Provincial and District levels			X	X	X	X	X	X	X	X
Development of guidelines creating EMCs/EMF by level			X							

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Disseminate the guidelines			X							
Share the campaign strategy										
Provincial										
Hold fund raising events (Dinner dance, musical concert)			X	X	X	X	X	X	X	X
Participate in Fund raising events at District levels			X	X	X	X	X	X	X	X
Creating EMCs/EMFs			X							
Hold fund raising events			X	X	X	X	X	X	X	X
District										
Hold fund raising events (Dinner dance, musical concert)			X	X	X	X	X	X	X	X
Participate in Fund raising events at Health Facility levels			X	X	X	X	X	X	X	X
Creating EMCs/EMFs			X							
Health Facility										
Hold fund raising events			X	X	X	X	X	X	X	X
Neighbourhood health committee										
Hold fund raising events			X	X	X	X	X	X	X	X
Task 15: Develop and implement a malaria policy document	Availability of the policy document	N/A	100%							
National										
Convene Task Team to develop malaria policy			X							
Government approval processes			X							
Print the malaria policy document			X							
Launch Malaria Policy				X						
Disseminate policy document to province				X						
Use policy document			X	X	X	X	X	X	X	X
Provincial										
Disseminate policy document to district			X							
Use policy document			X	X	X	X	X	X	X	X
District										
Disseminate policy document to health facility			X							
Use policy document			X	X	X	X	X	X	X	X
Health Facility										

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Disseminate policy document to Neighbourhood health committee			X							
Use policy document			X	X	X	X	X	X	X	X
Neighbourhood Health committee										
Use policy document			X	X	X	X	X	X	X	X
Task 16: Enhance NMEP Operations	Proportion of NMEC functions operational/Action tracker	100%								
National										
Hold EMC Meetings			X	X	X	X	X	X	X	X
Hold EMF Meetings			X	X	X	X	X	X	X	X
Convene monthly Directory meetings			X	X	X	X	X	X	X	X
Hold TWGs Meetings, quarterly			X	X	X	X	X	X	X	X
Convene annual reviews February 2020			X				X			
Conduct an end-term review May-/June2021)								X		
Update and maintain the website			X	X	X	X	X	X	X	X
Align transport plan to work plan			X				X			
Province										
Hold Provincial EMC Meetings			X	X	X	X	X	X	X	X
Hold Provincial EMF Meetings			X	X	X	X	X	X	X	X
Hold PMATF Meetings, quarterly			X	X	X	X	X	X	X	X
Convene annual reviews			X				X			
Participate in end-term review (2021)								X		
District										
Hold District EMC Meetings			X	X	X	X	X	X	X	X
Hold District EMF Meetings			X	X	X	X	X	X	X	X
Hold DMATF Meetings, quarterly			X	X	X	X	X	X	X	X
Convene annual reviews			X				X			
Participate in an end-term review (2021)								X		
Health Facility										

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Participate in an end-term review (2021)								X		
Task 17: Human Resource :Positions in the Establishment filled and confirmed	Proportion of the establishment filled/Tracker	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
National										
Finalise appointments			X	X	X	X	X	X	X	X
Develop Orientation package for MEO			X							
Orient MEO			X							
Coordinate Supportive Supervision to Provincial / District HMT			X	X	X	X	X	X	X	X
Provincial										
Participate in orientation			X							
Coordinate Supportive Supervision to District HMT /Health Facility			X	X	X	X	X	X	X	X
District										
Participate in orientation			X							
Coordinate Supportive Supervision to Health Facility			X	X	X	X	X	X	X	X
Health Facility										
Coordinate Supportive Supervision to Neighbourhood committee			X	X	X	X	X	X	X	X
Task 18: Collaborate with International Stakeholders in conferences	Proportion of international conferences(eligible) attended/Reports	N/A								
Activities										
National										
Selection of participants			X	X	X	X	X	X	X	X
Mobilisation of resources			X	X	X	X	X	X	X	X
Participate			X	X	X	X	X	X	X	X
Provincial										
Participate			X	X	X	X	X	X	X	X
District										
Participate			X	X	X	X	X	X	X	X
Task 19: Prepare a Global Fund(GF) grant application	G/F grant awarded					100%				
Activities										
National										
Appoint a Task Team			X							
Development of proposals			X	X	X	X				

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Task 20: Prepare Presidential Malaria Initiative(PMI) MOP	PMI-MOP granted				100%				100%	
Activities										
National										
Participate in MOP			X							
Task 21: Prepare Medium term Expenditure Framework (MTEF) plan	MTEF submitted				100%				100%	
Activities										
National										
Prepare planning Technical updates			X	X						
Disseminate planning update at the planning circle Launch meeting				X	X					
Prepare the directorate MTEF plan			X	X	X					
Technical Support Supervision during the Provincial Planning meetings				X	X					
Provincial										
Participate in the MoH planning circle			X	X						
Prepare Provincial Technical updates				X	X					
Convene a Provincial Planning meeting			X	X	X					
Disseminate the Technical updates to the districts				X	X					
Technical Support Supervision during the District Planning				X	X					
Prepare Provincial plan			X							
Submit Consolidated final plan to MoH				X	X					
Align MTEF plan to work plan			X				X			
District										
Participate in the Provincial planning meeting			X	X						
Prepare updates				X	X					
Convene a district Planning meeting			X	X	X					
Convene a district Planning meeting				X	X					

			TIMEFRAME							
	INDICATOR/MEANS OF VERIFICATION	BASELINE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Participate in the health facility planning meeting			X	X					
	Technical Support Supervision during Health Facility Planning		X							
	Prepare district MTEF plan			X	X					
	Submit Consolidated final District plan to Province		X				X			
	Align MTEF plan to work plan		X	X						

5.0 Monitoring and Evaluation

In order to monitor and evaluate the malaria programme performance, key indicators will be tracked for each service delivery area as follows:

Table 14: List of selected indicators for each service delivery area

Service delivery area	Strategic action/s	Key Outcome Indicators	Impact Indicators
Malaria Case Management	<ul style="list-style-type: none"> ➤ Strengthen the management of malaria cases 	<p>Proportion of patients with suspected malaria who receive parasitological diagnosis by RDT and/or microscopy.</p> <p>Proportion of patients with confirmed malaria who receive an antimalarial.</p> <p>Proportion of women who received 3+ doses of intermittent preventive treatment during ANC visits during their last pregnancy.</p> <p>Proportion of HFCA in level two where MDA was conducted.</p>	<p>Malaria parasite prevalence</p> <p>Malaria incidence rate per 1,000 population</p> <p>Malaria mortality rate per 100,000 population</p> <p>Number of foci by classification</p> <p>Proportion inpatient deaths due to malaria</p>
Vector Control	<ul style="list-style-type: none"> ➤ Strengthen IRS implementation capacity in all Health Facility Catchment Areas ➤ Improve ITNs Ownership and Use ➤ Strengthen entomological surveillance ➤ <i>Strengthen Larval Source Management</i> ➤ Strengthen entomological surveillance 	<p>Percent of HHs with at least one insecticide-treated net ITN.</p> <p>Percent of HH members who slept under ITN the previous night.</p> <p>Percent of HHs with at least one ITN per sleeping space.</p> <p>Percent of pregnant women who slept under an ITN the previous night.</p> <p>Percent of children ages 0–59 months who slept under an ITN the previous night.</p> <p>Percentage of women of reproductive age group who slept under an ITN the night before.</p> <p>Percentage of households with an ITN-to-Sleeping space ratio of at least 1:1, among household with at one ITN.</p> <p>Percentage of households with at least one ITN and/or sprayed by IRS in the last 12 months.</p> <p>Proportion of structures sprayed against the eligible structures.</p> <p>Proportion of the population protected with IRS against the total population.</p> <p>Percent of HHs receiving IRS in the previous 12 months.</p>	<p>Number of HFCA that were malaria free in which malaria has re-established</p> <p>Number of HFCA that have newly eliminated malaria</p>
Social and Behaviour Change communication	<ul style="list-style-type: none"> ➤ Strengthen the capacity to implement social behavioral change communication 	<p>Percentage who sought treatment from a facility provider same day or next day after onset of symptoms.</p> <p>Percentage of children under five who slept under an ITN</p>	

Service delivery area	Strategic action/s	Key Outcome Indicators	Impact Indicators
		Percentage of pregnant women who slept under an ITN Percentage of household members who slept under an ITN Percentage of households accepting IRS against eligible number of households Percentage HCWs who adhere to treatment guidelines (by provider type) Percentage community member adhering to treatment	
Surveillance, Monitoring, Evaluation and Operations Research	<ul style="list-style-type: none"> ➤ Strengthen the surveillance system at all levels ➤ Strengthen the Monitoring and Evaluation ➤ Strengthen operational Research 	# research activities planned versus completed Updated priority research plan available Availability of an updated M&E plan Proportion of expected health facility reports received at national level Availability of an updated, validated data repository #HFCAs reporting on elimination Number of policies/guidelines on malaria elimination informed by research Implementation rate for planned activities. Completeness of health facility reporting Proportion of malaria cases detected by surveillance system Proportion of cases investigated and classified Proportion of foci investigated and classified	
Programme Management	<ul style="list-style-type: none"> ➤ Strengthen Capacity of the National Malaria Elimination Programme to implement planned activities. 	Percentage of funds available versus the need. Percentage government commitment to malaria elimination. Proportion of health facilities without stock outs of first line treatments. Proportion of health facilities without stock outs of RDTs (or microscopy consumables). Percentage of health facility without stock outs of SP for IPT.	

6.0 Assumptions and Risk

The performance of the programme is critical to ensure attainment of the elimination target by 2021. However, this is based on the assumption that there will be adequate resources allocated to the operations at all levels of the health system. The total financial commitments must match the need. The absorption capacity of allocated and disbursed funds has to be high in line with budget projections. Fiduciary arrangements and clear implementation arrangements should enhance risk management and performance efforts. Thus, resource mobilization activities will be key to ensure universal coverage of high impact vector control interventions so as to reduce malaria transmission to the lowest level possible. Sentinel site surveillance for drug and insecticide resistance needs to be heightened so as to early detect any emergence of resistance and recommend alternative actions where feasible. To fast track implementation and prevent reintroduction of malaria in areas where it had already been eliminated, surveillance systems must be capacitated to early detect and rapidly report imported malaria cases. This will enable the country to address the potential risk arising from cross border trade and movement of people. In program management, procurement and supply chain management has been enhanced to ensure better forecasting of needs, timely procurement and distribution of malaria commodities. Addressing commodity security is critical in this phase of the NMESP. To monitor the performance of the programme, an elaborate M&E system utilizing both routine and periodic data sources coupled with innovations for timely reporting is cardinal. Utilisation of available information to make decisions on for example, resource allocation, service organization, commodity delivery models and anticipate needs will go a long way in addressing bottlenecks during implementation. Findings from the MTR were used to inform the adoption of best practices during this implementation period. An end term evaluation has been planned to gauge the overall programme performance and measure the impact of the interventions. Regionally, it is assumed that there are opportunities to support malaria elimination through the SADC frameworks (e.g. E8 initiative) and also the malaria cross border initiatives being implemented. The various partners, working under the coordinating role of the NMEC are on board and in support of the technical approach. Thus, with adequate risk management at various levels and in all service delivery areas, Zambia remains optimistic to attain malaria elimination and sustain it beyond 2021. The assumptions and risks by service delivery area are outlined in Table 15.

Table 15: Assumptions and Risks

Assumption	Risk	Risk Level
Case Management:		
Available RDTs and ACTs are of quality	Poor quality of RDTs and ACTs	Low
Health care workers adhere to guidelines	HCW non-adherence to guidelines	Medium
Timely procurement of commodities and supplies	Late procurement of commodities and supplies	High
Timely and appropriate distribution of commodities and supplies	Weak supply chain management system	High
Patients seek care promptly and appropriately	Patient late seeking behaviour	Medium
LLINs:		
Timely procurement and distribution	Late procurement	Medium
Utilisation of ITNs	Low utilisation by community members	High
	Insecticide resistance	High
IRS:		
Household hold acceptance	Low acceptance	Medium
Access to HHs	Hard to reach areas	Low
Availability of spray operators	Poor work attitude or adherence to SOPs	Low

Assumption	Risk	Risk Level
Quality insecticide available	Insecticide resistance	High
Availability of functional spraying equipment	Faulty or obsolete spraying equipment	Medium
SBCC Availability of resources to implement SBCC as per communication strategy	Knowledge action gap	Medium
SMEOR: Research priorities are updated and relevant	Research findings not available for use	Medium
Timely and complete reporting by HFCAs	Late and incomplete reporting	Low
Sentinel surveillance sites are fully operational	Sentinel sites not operational	Medium
Information generated will be used to improve program performance and resource allocation	Low uptake of available information from RHIS, surveys and or sentinel sites	Medium
Program Management:		
Availability of adequate resources to support implementation	Gaps in financing or delays in disbursing available funds	High
Timely and adequate procurement of commodities	Misprocurements or delays in procurement	High
Availability of competent staff at all levels	Staff turn over	Low
Well-coordinated partnerships	Weak coordination of partners	Low
Coordination with neighbouring SADC member states in cross border malaria elimination/control activities	Imported malaria via cross border travel or trade	High

7.0 References

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