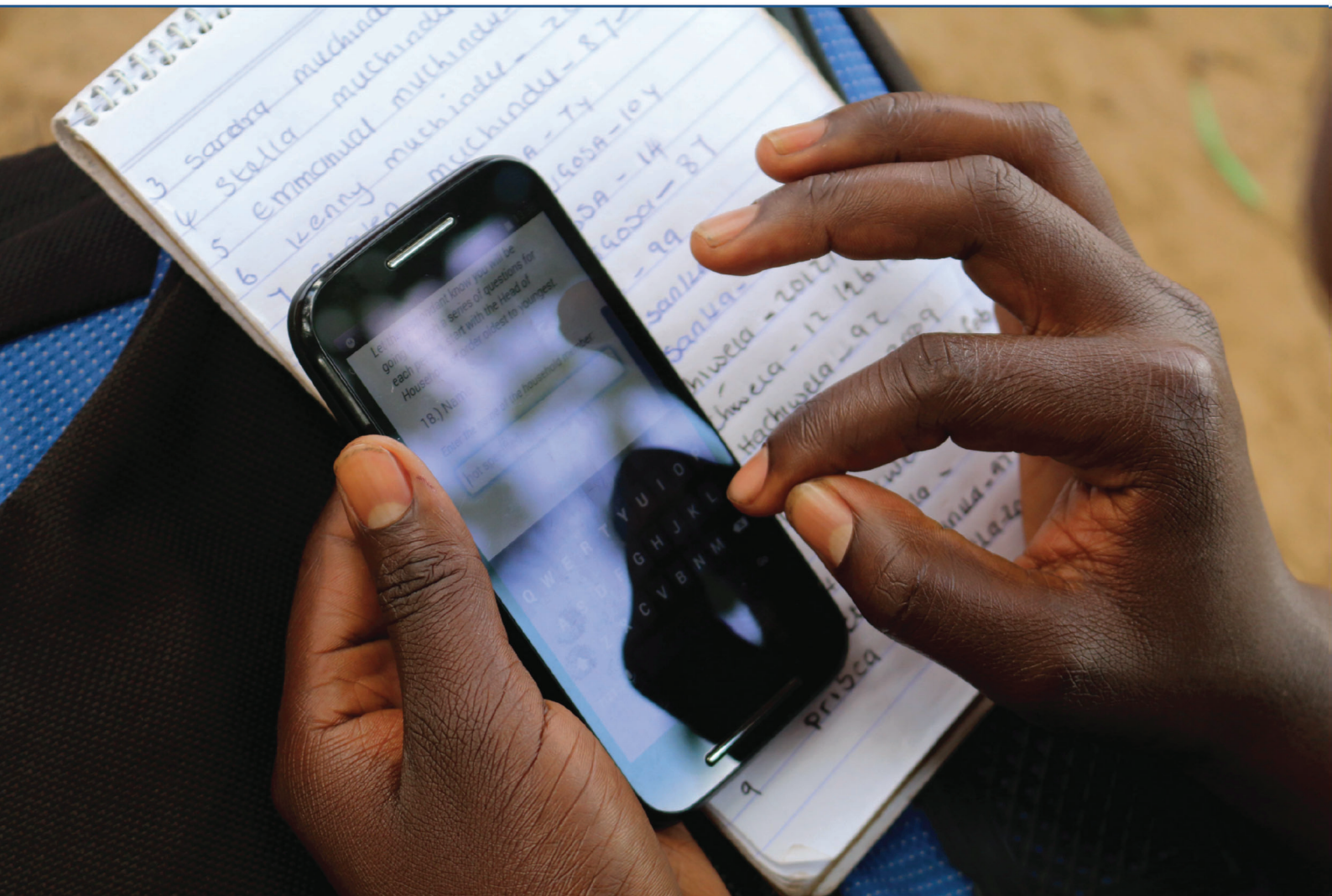


REPUBLIC OF  
ZAMBIA



MINISTRY OF  
HEALTH



# NATIONAL MALARIA MONITORING & EVALUATION PLAN 2022-2026

NATIONAL MALARIA ELIMINATION CENTRE

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## ACRONYMS

ACT	Artemisinin-based combination therapy
ANC	Antenatal care
DHIS2	District Health Information System 2
EPI	Expanded Programme on Immunization
GFATM	Global Fund to Fight AIDS, TB and Malaria
GIS	Geographic information system
HMIS	Health Management Information System
HIV	Human immunodeficiency virus
iCCM	Integrated community case management
IDSR	Integrated Disease Surveillance and Response
IMCI	Integrated Management of Childhood Illness
IPTp	Intermittent preventive treatment in pregnancy
IRS	Indoor residual spraying
ITNs	Insecticide-treated mosquito net
LLIN	Long-lasting Insecticide Treated Net
MICS	Multiple-indicator cluster survey
MIS	Malaria Indicator Survey
MOH	Ministry of Health
MRRS	Malaria Rapid Reporting System
NMEC	National Malaria Elimination Centre
NMEP	National Malaria Elimination Programme
NMESP	National Malaria Elimination Strategic Plan
PMI	U.S. President's Malaria Initiative
PAMO+	PMI/Program for the Advancement of Malaria Outcomes Plus
RBM	Roll Back Malaria Partnership to End Malaria
SBC	Social Behaviour Change
M&E	Monitoring and evaluation
TWG	Technical Working Group
WHO	World Health Organization
ZDHS	Zambia demographic and health surveys

## PREFACE

Malaria is a major public health concern in Zambia. In the past decade Zambia has made significant progress towards malaria burden reduction, however malaria incidence and mortality remain high at 340 cases/ 1000 population and 8/100,000 population as at 2021 respectively. Malaria transmission intensity varies across all the provinces, districts and health centre catchment areas across the country. Burden is highest in the provinces to the north, east and north-west of the country.

In Zambia, malaria is caused by the four *Plasmodium* species that infect humans, with *P. falciparum* accounting for 98% of all infections and causing the severest form of malaria. The entire population is at risk of malaria infection, however pregnant women and children less than five years of age are at a higher risk and more vulnerable to severe disease.

The Government of the Republic of Zambia through the Ministry of Health and its partners are committed to the goal of a “malaria free Zambia”. In this regard the Ministry of Health, through its National Malaria Elimination Programme (NMEP), has developed the Malaria Monitoring and Evaluation (M&E) Plan 2022–2026. This plan has been developed to monitor and evaluate all malaria interventions to be implemented as guided by the National Malaria Elimination Strategic Plan 2022-2026. The plan will provide a roadmap to monitor the implementation of malaria program activities and evaluating the impact of these interventions at a population level through outcome coverage indicators and impact endpoints of the two key performance indicators of malaria incidence and mortality among others. This will be done through scale-up of enhanced routine surveillance at all levels and population-based surveys. This M&E plan was developed based on internationally accepted tools and practices related to surveillance, monitoring and evaluation, with an emphasis on measurement of progress and evidence-based decision making.

I am confident that this document will serve as a vital tool for tracking progress on the malaria elimination agenda in Zambia.



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## 1.0 INTRODUCTION

A technically sound malaria Monitoring and Evaluation (M&E) plan is fundamental for tracking progress on the implementation of malaria control and elimination activities. Zambia's 2022-2026 M&E Plan is based on the National Malaria Elimination Strategic Plan (NMESP) 2022-2026. The M&E plan has been developed to track, monitor and measure the aspirations of the NMESP. It is guided by the national malaria vision of a "*malaria free Zambia*" and the national mission "*To provide equitable access to cost-effective, high-quality health services as close to the family as possible*" under the following national goals:

- To reduce malaria infection, disease and death in Zambia by 2026
- To increase the proportion of the population living in malaria free Health Facility Catchment Areas (HFCAs).
- To maintain a malaria-free status and prevent reintroduction and importation of malaria into areas where the disease has been eliminated.

This M&E Plan provides a framework on the malaria programme indicators, data sources, data analysis, information flow, reporting and feedback for decision-making. It is anchored on the principles of the three-ones: one strategy, one M&E framework and one coordinating body to strengthen the implementation of M&E.

The M&E system uses routine data as the main source of information for malaria indicators collected through the Ministry of Health's (MOH) Health Management Information System (HMIS). Data flows from communities to health facilities to districts and provinces where it is consolidated, validated and transmitted electronically to the national level. The quality of the data reported may be affected when the monthly data from health facilities is incomplete or not received by districts or provinces on time. The HMIS is complemented by the weekly Malaria Rapid Reporting System (MRRS) in selected districts.

Additional data is collected through household population-based surveys, such as the Zambia Demographic and Health Surveys (ZDHS) and Malaria Indicator Surveys (MIS). These surveys provide primary information on the coverage of the various key malaria indicators.

This M and E plan seeks to provide guidance to the national and sub-national levels by strengthening the surveillance systems through regular monitoring and feedback to sub-national levels for decision making.

## 2. OBJECTIVES AND STRATEGIES FOR MONITORING AND EVALUATION

### 2.1: GENERAL OBJECTIVE

To provide reliable and timely information for decision making and monitoring of progress towards achieving set targets

### 2.2: SPECIFIC OBJECTIVES

- To monitor progress towards national malaria goals and objectives
- To coordinate collection, processing, analysis and management of malaria data at all levels
- To evaluate impact of malaria interventions
- To disseminate information to all stakeholders

**Table 1 Objectives, Strategies and Priorities**

Objectives	Strategies	Priorities
To monitor progress towards national malaria goals and objectives	Track programme implementation rate and progress on a monthly basis	<ul style="list-style-type: none"> <li>● Malaria scorecard</li> <li>● Zambia Health Analytics Platform</li> <li>● Tableau</li> </ul>



Objectives	Strategies	Priorities
	Implement the MRR in all levels, weekly reporting in levels 0,1,2 and monthly in levels 3, 4 and 5	<ul style="list-style-type: none"> <li>● Procure reporting phone</li> <li>● Trainings</li> </ul>
	Strengthen data sharing and use at all levels	<ul style="list-style-type: none"> <li>● Production of a monthly malaria statistical bulletin</li> <li>● Data review meetings and data management trainings</li> <li>● Hold TWGs</li> </ul>
To coordinate collection, processing, analysis and management of malaria data at all levels	Ensure S.M.A.R.T programmatic objectives are set across all interventions	<ul style="list-style-type: none"> <li>● Develop the M and E plan</li> <li>● Assess NMESP progress through the Midterm and End term Review</li> </ul>
To evaluate impact of malaria interventions	Measure coverage of malaria interventions and disease burden	<ul style="list-style-type: none"> <li>● Conduct MIS in 2024 and 2026</li> <li>● Provide Reports on Regional bodies</li> <li>● Develop a priority research agenda</li> <li>● Conduct and strengthen Malaria Operations Research</li> </ul>
To disseminate information to all stakeholders		<ul style="list-style-type: none"> <li>● Hold annual malaria research dissemination conferences</li> <li>● Support National Health Research conferences</li> </ul>

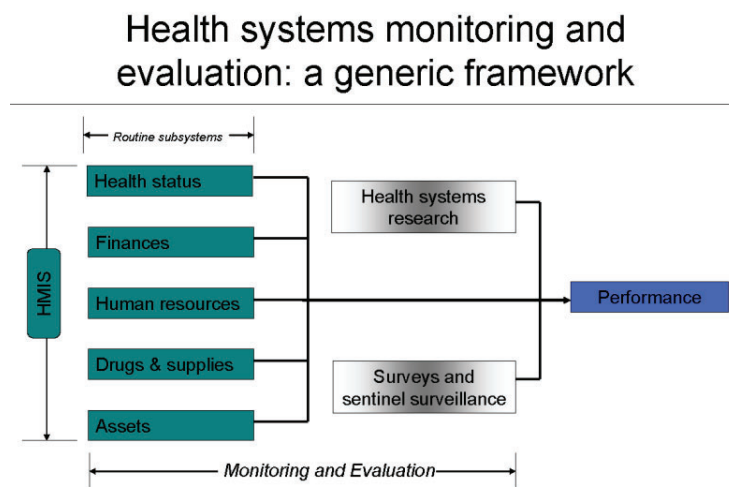
### 3. DATA COLLECTION SYSTEMS

The M&E plan will draw data and information from several sources which include routine national and malaria-specific surveillance systems, periodic household and facility surveys, programmatic reports on implementation from the NMEP and other government line ministries.

#### 3.1: ZAMBIA NATIONAL HEALTH MANAGEMENT INFORMATION SYSTEM (HMIS).

The Zambia HMIS uses the DHIS2 as the main data collection system. The DHIS2 is a platform for collection, collation, validation, reporting, analysis, aggregation,

management and presentation of data for all health programmes. The system captures data based on organizational hierarchy, currently down to community level, and presents opportunities for customization for both inputs and outputs. It has easy to use multiple features such as dashboards, charts, pivot tables, maps and other visualizations. Its use can be extended to other applications.



**Figure 1. The HMIS in health sector monitoring and evaluation in Zambia**

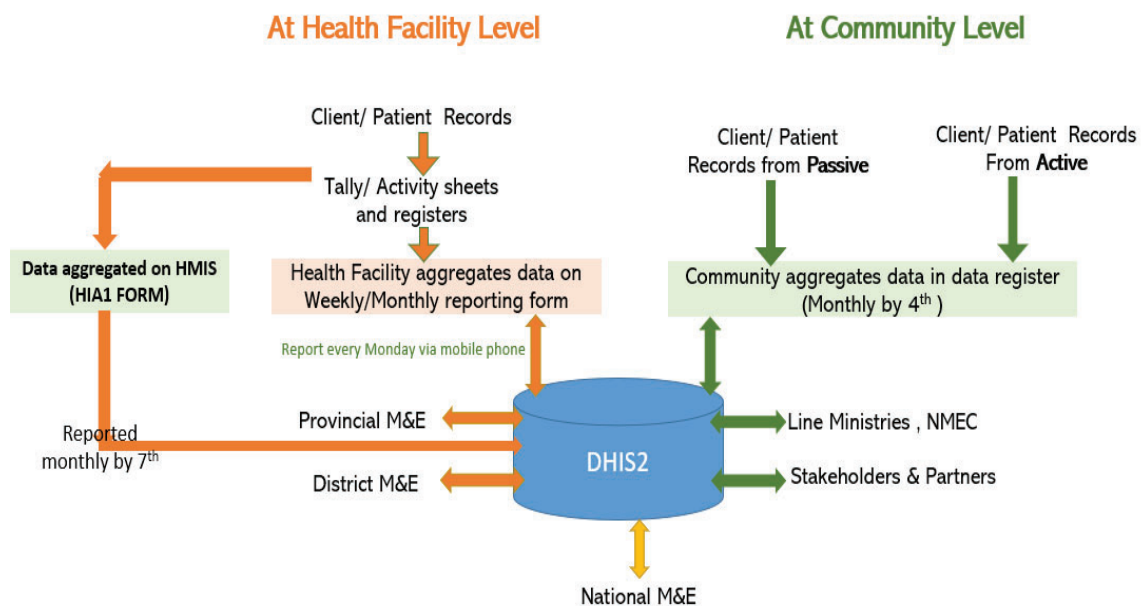
Data on malaria cases and deaths for patients aged under 1 year, 1 to 4 years, 5 to 14 years 15 years and above and, pregnant women is collected in DHIS2. Malaria case data are differentiated between confirmed and clinical cases, and both are reported in HMIS. The primary data collection points are at the health facility and community level. This data subsequently is entered in the system by selected facilities and the District Health Office.

The NMEP has continued to strengthen capacities in malaria surveillance and reporting at the sub-national levels to improve data quality and timeliness. The Programme produces standardized malaria profiles which show performance and

progress on key indicators on malaria trends and commodities. This information is disseminated at all levels using different platforms.

### 3.2 THE MALARIA RAPID REPORTING SYSTEM (MRRS)

The MRRS is implemented in all districts and selected health facilities with a plan to gradually scale up to all health facilities. The system complements the routine HMIS to improve malaria surveillance by providing timely reporting of information on malaria burden, including; testing, treatment and commodities. This also provides a more focused response to the prevailing malaria epidemiological profile. Health facilities upload data on a weekly basis while community data flow is on a monthly basis.



**Figure 2. Malaria Rapid Reporting dataflow from facility and community levels to the Ministry of Health**

### 3.3: LOGISTICS MANAGEMENT SYSTEM (LMS)

The National Malaria Programme has a well-defined logistics management system that is used by all stakeholders involved in the procurement of malaria products. The central stores use the Warehouse Management System (WMS), ("the expert system for ZAMMSA and M-Supply for CHAZ") to receive all malaria commodities. The malaria medicines, RDTs, microscopes and malaria laboratory reagents are managed using the electronic Logistics Management Information System (eLMIS) to move the commodities downstream to health facilities. Health facilities submit monthly dispensary level consumption and stock data in the eLMIS for re-supply using system generated orders. Health facilities without the electronic system submit paper-based reports to the district health office who then collect data in the eLMIS.

Insecticides and long-lasting insecticide treated nets from the WMS are distributed to service delivery points through program generated distribution lists. Logistics documents such as Good Received Note, stock control cards, supply vouchers, registers and other relevant documents are used to manage commodities at facility level for accountability and transparency.

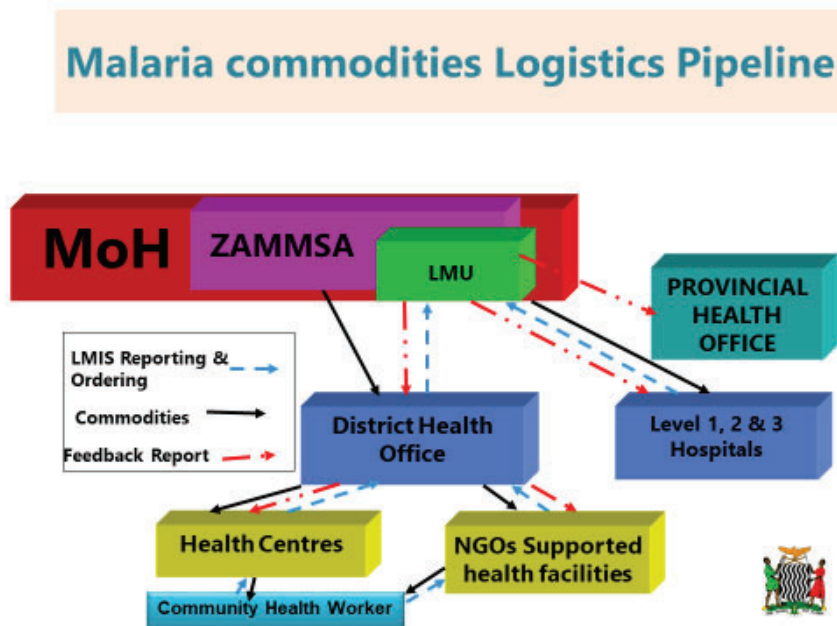


Figure 3 Logistics Management System

### **3.4: MALARIA BURDEN REDUCTION AND ELIMINATION INDICATORS**

This plan will track malaria burden reduction and elimination indicators in line with the NMESP. These indicators will be extracted from the HMIS/DHIS2 as well as from other systems that will be used for collecting malaria data (*Appendix 3 to be updated after the core indicator sessions*).

### **3.5: HARMONIZATION OF DATA SYSTEMS**

Currently there are three malaria reporting systems namely; the MRRS at NMEC, the integrated disease surveillance system (IDSR) at ZNPHI and the main HMIS at MOH. In order to harmonize these systems, there has been consensus with the NMEP and all stakeholders to establish the MRRS as the primary source of malaria data by integrating with IDSR and HMIS. The objective for this harmonization is to have an automated interoperability platform which will be established to ensure that malaria data from the MRRS will be updated on a weekly basis in the IDSR and monthly in the main HMIS systems. This will ultimately streamline malaria reporting by health facilities and establish a single source of reference for all malaria-related information.

## **4: SURVEYS**

Many surveys relevant for malaria monitoring and evaluation have been conducted in Zambia (Table 2). The surveys provide reliable information to evaluate impact of programme implementation. In addition, the data allows comparisons with other evaluation methods and, allows monitoring of trends over time.

## **4.1: HOUSEHOLD SURVEYS**

The main household surveys that provide malaria data in Zambia include; the Demographic Health Survey (DHS), Malaria Indicator Survey (MIS), Net Durability Survey, Post LLIN Distribution Monitoring, Knowledge Attitude and Practice (KAP) Survey, Barrier Analysis (BA) Studies and Intervention Impact Monitoring and Evaluation Assessment.

### **4.1.1: DEMOGRAPHIC HEALTH SURVEY**

The DHS is conducted every five years and provides information on coverage of key malaria interventions, possession and use of ITNs, indoor residual spraying, IPTp and treatment with antimalarials. The DHS also assesses all-cause child mortality that contributes substantially to malaria deaths.

### **4.1.2: MALARIA INDICATOR SURVEY (MIS)**

The MIS is a nationally-representative household survey conducted every two to three years to provide data on key indicators such as ITN ownership and use, IRS, and Intermittent Preventive Treatment (IPTp) for pregnant women. The MIS also assesses the anaemia and parasite prevalence among sampled children to understand changes in malaria infection. Other indicators captured include Social Behaviour Change (SBC) related indicators to aid understanding barriers to malaria elimination.

## **4.2: HEALTH FACILITY SURVEYS**

Health facility surveys are conducted periodically to determine quality of care delivered by health professionals for outpatient and inpatient or severe malaria case

management. It also provides information on stock status of malaria-related drugs, commodities and laboratory equipment.

#### **4.3: NET DURABILITY STUDY**

The Net Durability Study is conducted after every mass distribution campaign of LLINs. The main objectives of this study are to identify causes for net loss at a community level, measure and categorize the condition of the surviving nets post the mass distribution and measure insecticidal longevity of the distributed LLINs. The study involves selecting a sample of nets distributed and monitoring them at 6, 12, 24- and 36-months intervals for a period of 3-years.

#### **4.4: POST LLIN MONITORING**

This is done one month and then a year later after the distribution of the LLINs. Post distribution monitoring involves spot checks on sampled households, health facilities and districts using the onsite data verification tool (OSDV). The aim is to review ITNs received by health facilities from source documents such as the Goods received Notebooks (GRN), ITNS distribution lists and stock control cards.

#### **4.5: KNOWLEDGE ATTITUDE AND PRACTICE (KAP) SURVEYS**

The KAP survey will be undertaken every two years and will act as basis for informing the malaria communication strategy. The surveys will include questions for all SBC indicators and cover questions on recall and uptake of behaviours, and for each behaviour of interest, questions for intermediate outcome indicators would be included.

#### 4.6: BARRIER ANALYSIS STUDY

The BA studies are carried out every 2 years. For this plan, one will be implemented in 2022 to design an effective behaviour change strategy or to modify the existing strategy. The study will utilize both qualitative and quantitative research approaches in data collection. It will also provide information to the malaria program to understand which barriers are preventing the priority groups from practicing the desired behaviours.

#### 4.7: INTERVENTION IMPACT MONITORING AND EVALUATION

The NMEP will monitor the implementation of malaria interventions across service delivery areas. Information on malaria interventions will be collected monthly for routine and yearly for campaigns. The objective is to analyse the intervention data and overlay it on the malaria morbidity and mortality data. This will help to assess the effectiveness, efficiency, impact and sustainability of these interventions.

#### 4.8: OTHER SURVEYS

Other studies will be commissioned as need arises and as guided by the research priority agenda list which is updated after every 2 years. The priority list is categorized into short, medium- and long-term research priorities.

**Table 2 Review of Surveys conducted in Zambia**

Type	Source	Scale	Details	Coverage issues included
Household	MIS 2021	National	~5,050 households, nationally representative	ITNs, IRS, case management, IPTp, SBC
	MIS 2018	National	~ 4,177 households, nationally representative	ITNs, IRS, case management, IPTp, SBC



Type	Source	Scale	Details	Coverage issues included
	MIS 2015	National	~ 3,700 households, nationally representative	ITNs, IRS, case management, IPTp, SBC
	MIS 2012	National	~ 3,700 households, nationally representative	ITNs, IRS, case management, IPTp, SBC
	MIS 2010	National	~ 3,700 households, nationally representative	ITNs, IRS, case management, IPTp, SBC
	MIS 2008	National	~4,400 households, nationally representative	ITNs, IRS, case management, IPTp, SBC
	MIS 2006	National	~3000 households, nationally representative	ITNs, IRS, case management, IPTp, SBC
	ZDHS 2013/14	National	~households, nationally representative	Mosquito net/ITN possession and usage, U5 fever treatment with antimalarials, IPT, all-cause U5 mortality
	ZDHS 2007	National	7,164 households, nationally representative	Mosquito net/ITN possession and usage, U5 fever treatment with antimalarials, IPT, all-cause U5 mortality
	SFH/PSI 2005	National	~2500 households, nationally representative	Mosquito net/ITN possession and usage
	ZDHS 2001/02	National	7,100 households, nationally representative	Mosquito net/ITN possession and usage, U5 fever treatment with antimalarials, IPT, all-cause U5 mortality
	RBM follow up 2004 HFS	10 districts	Non-representative, ~4000 households, ~65 facilities	Facility records, OPD, parasite prevalence, ITN coverage, U5 fever treatment with antimalarials
Health Facility	National Malaria Facility Survey 2011	National	170 facilities (stratified by level of facility) 2500 patients	Quality of malaria care against malaria treatment guidelines

Type	Source	Scale	Details	Coverage issues included
	Service Availability and Readiness Assessment (SARA) 2010, 2015	National	2010 – 565 facilities sampled  2015 – 234 facilities sampled	Facilities readiness to diagnose and treat malaria

**Table 3 Sentinel Studies conducted to assess the efficacy of various anti -malarial drugs**

Drug	Number of available studies	Study years
Artemether-lumefantrine	4	2003, 2004, 2005, 2009, 2011, 2021
Sulphadoxine-pyrimethamine	4	2003, 2004, 2005, 2010
Artemether-lumefantrine, Dihydroartemisinin Piperazine and Artesunate Amodiaquine	1	2016

## 5. INSECTICIDE MONITORING AND VECTOR SURVEILLANCE

Entomological surveillance and monitoring will be implemented at all levels for an effective vector control response. Currently, the programme tracks various indicators overtime that include species composition, density, seasonality, human blood index, sporozoite rates, entomological inoculation rates (EIRs), insecticide resistance, blood feeding patterns and behaviour.

The data generated will be used in real time to inform decisions on the timing of spraying activities, contribute to net-replacement, selection strategies and guide the development and deployment of tools including behavioural change activities. The programme has an insecticide resistance management plan (IRMP) which is revised every two years with all the stakeholders including WHO and implementing partners.

### **5.1 ANTIMALARIAL EFFICACY AND RESISTANCE MONITORING**

This will be conducted to ensure continuous deployment of effective malaria treatment services through monitoring the efficacy of the currently recommended/potential alternative anti-malarial drugs and resistance markers. The therapeutic efficacy studies will be carried out periodically by the NMEP based on standard WHO protocols. The data will be used in decision-making for both the national program and the regional approach to the elimination of multi-drug resistance and to inform national malaria treatment policy.

### **5.2 ANTIGEN DELETION MONITORING**

The NMEP will periodically monitor for the inherent potential of malaria parasites developing mutations that may include deletion of antigen genes. The choice of malaria RDTs is dependent on plasmodium parasite specific antigens and the currently recommended mRDTs is HRP2 based, the antigen produced by plasmodium falciparum (the most predominant malaria parasite in the country). In this regard HRP2 deletion studies will be conducted every two (2) years. This is to monitor the prevalence of pfhrp2/3 gene deletions responsible for false negative P. falciparum HRP2 RDTs to determine whether this warrants a change from the RDTs being currently used or not.

### **5.3 OPERATIONS RESEARCH**

Operation research will provide evidence to guide programmatic implementation. This will include the development of a research priority list which identifies key research topics for the programme through a stakeholder consultative process. The research priority list will also serve as an advocacy tool for investment for malaria research and will be reviewed every two years. New tools and strategies will be

explored and incorporated into the NMESP if proved to be epidemiologically relevant.

## **6. SURVEILLANCE FOR BURDEN REDUCTION AND ELIMINATION**

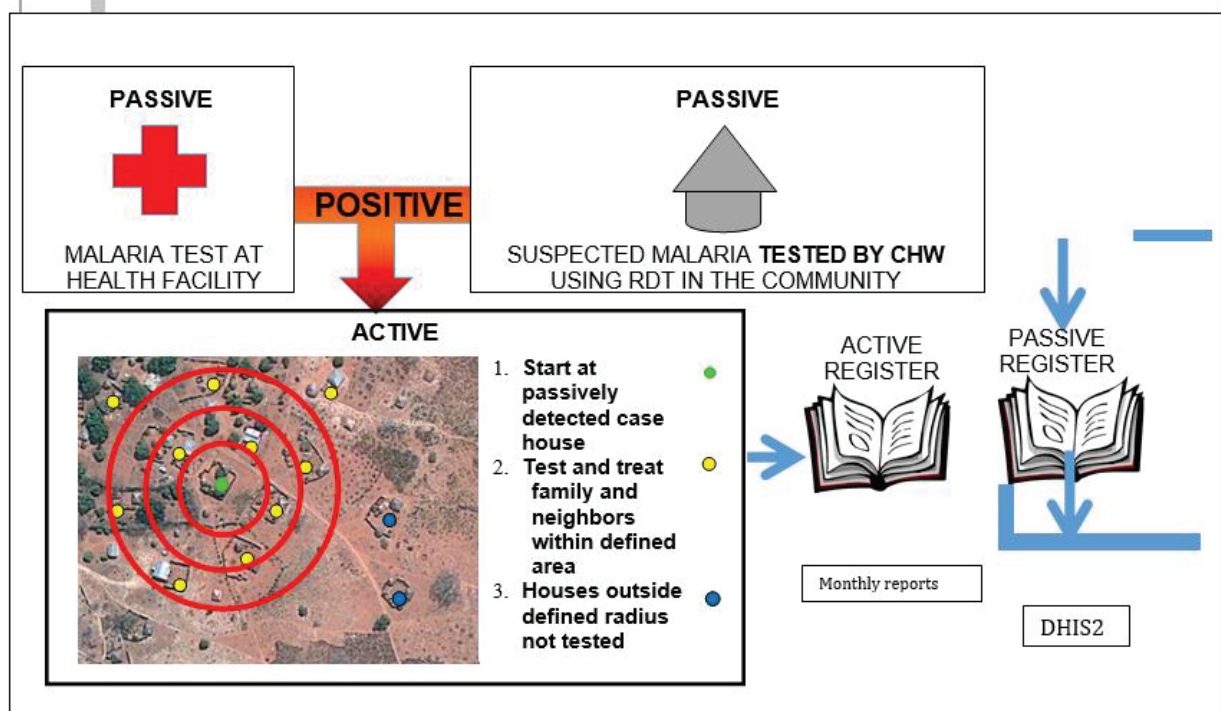
Surveillance will remain a core malaria intervention for the malaria programme. The strategies for surveillance will be tailored to the various epidemiological levels to achieve the goals of the NMESP 2022-2026.

HFCA's in levels 0 and 1 will deploy malaria case-based surveillance system based on the WHO 1,3,7 model while those in HFCA's in levels 2,3 and 4 will have weekly malaria reports submission by health facilities and monthly malaria reports by CHW's into the DHIS2 malaria rapid reporting system.

In epidemiological levels 0 and 1 setting, enhanced surveillance will contribute to the collection of "granular" data to allow effective identification, tracking of cases, foci/case classification and response to all individual cases to achieve elimination and maintain a malaria free status in HFCA's where elimination was achieved.

In epidemiological levels 2,3 and 4 setting, enhanced surveillance contributes to the collection of data for effective tracking of burden, early identification epidemics and trigger response according to the EPR guidelines.

Confirmed (index) cases at community and facility levels in levels 0,1 and 2 will be actively followed up in their communities. The household within a radius of 140 metres of the index case will be visited and offered malaria RDT tests and treated, if positive. The data collected at the health facility and community levels (Figure 2) reported through the MRRS.



**Figure 4 Malaria active infection detection workflow**

## 7. DATA QUALITY AUDITS AND REVIEWS

The NMEP in collaboration with the key stakeholders uses routinely collected data for programme implementation and conducts periodic data quality audits and reviews using standardized tools.

The main methods that will be used for assessing, reviewing and ensuring quality malaria data are as listed below:

- Data Quality Audits
- Malaria Case Management End User Verification (EUV)
- Annual Data Reviews
- Grant related Data Quality Audits
- Joint Annual Review

- Mid-term and End-term reviews

Best practices, gaps and challenges will be identified and documented to guide decision making at all levels. Capacity will be built at all levels to ensure quality by the programme.

## **8. DATA PROCESSING, ANALYSIS AND STORAGE**

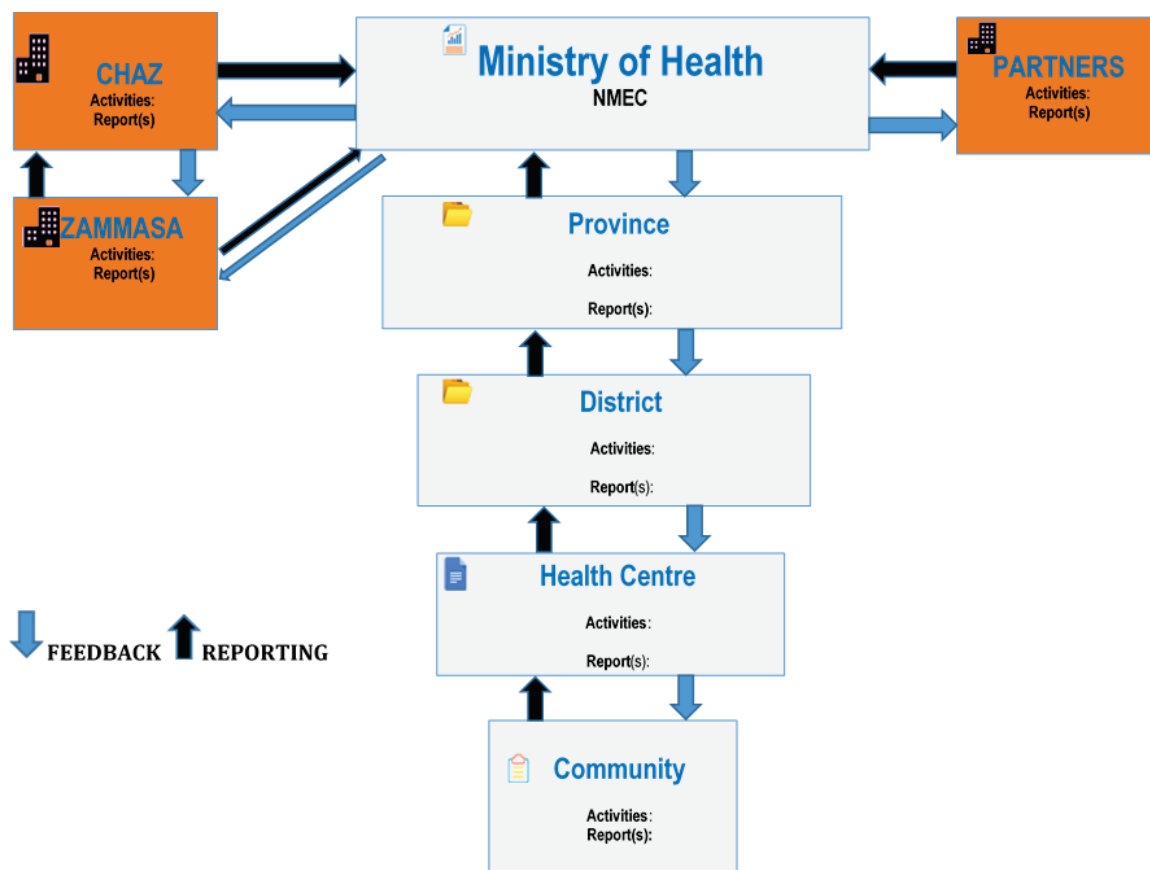
The M&E unit will continue routine data processing and analysis aimed at providing updates on prevailing malaria situations. Analysis of malaria research studies is conducted to inform malaria interventions and policy. The programme uses paper and electronic data storage systems.

## **9. COORDINATION OF MONITORING AND EVALUATION**

The Monitoring and Evaluation Department of the MOH will have the overall responsibility of monitoring and evaluating the performance of the NMESP. The coordination of malaria M&E within Zambia will be led by the MOH with support from partners and agencies. In order to ensure strong collaboration and integration, the SMEOR TWG will work closely with other TWGs from the national programme and other regional bodies.

## **10. IMPLEMENTATION ARRANGEMENTS**

The SMEOR TWG will play an integral role in providing programmatic data to guide in decision making and strategic direction for effective implementation of the NMESP. The implementation will be conducted at different hierarchy as described in the diagram below;



**Figure 5 Levels implementation of the Monitoring and Evaluation Plan**

## **11: MONITORING AND EVALUATION OF THE NATIONAL MALARIA STRATEGIC PLAN 2022-2026**

Monitoring and evaluation of the NMEP will include following progress on malaria elimination, routine information systems, household and facility surveys and longitudinal studies.

Zambia's malaria elimination programme will be evaluated at regular intervals for compliance with the appropriate targets and objectives. The key focus areas will be:

- Monitoring the operational aspects of the programme and measuring impact
- Monitoring changes in epidemiological indicators

- Interpret results and inform policy and strategy revisions

### 11.1: DOCUMENTING PROGRESS TOWARDS MALARIA ELIMINATION

The MOH and Cooperating Partners through SMEOR TWG will monitor the NMESP through conducting the following;

- National Joint Annual Assessments
- Annual planning process
- Malaria Programme review of the malaria strategic plan
- Mid-Term Reviews
- End-term Reviews

The NMESP will be evaluated based on indicators reported in **Appendices 1 and 2**.

Indicators in appendix 3 which will only be applicable when elimination conditions are attained in order to detect any on-going transmission of malaria.

## 12: DISSEMINATION PLAN

The performance of the programme from various reviews, analysis and studies will be disseminated to all key stakeholders throughout the lifespan of the NMESP. Table below shows the dissemination plan of key documents:

**Table 4 Dissemination Plan of key documents**

DOCUMENT	AUDIENCE	FREQUENCY	DISSEMINATION METHODS	INFORMATION USE
NMEP M&E Plan	All Stakeholders	Once	Dissemination meeting NMEC website	Guides and tracks implementation of the NMESP
Mid-Term Review Report	All Stakeholders	After two and half years	Dissemination meeting NMEC website	Track progress on programme implementation
End- Term Review Report	All Stakeholders	After 5 years	Dissemination meeting	Provide progress on impact of



<b>DOCUMENT</b>	<b>AUDIENCE</b>	<b>FREQUENCY</b>	<b>DISSEMINATION METHODS</b>	<b>INFORMATION USE</b>
			NMEC website	programme implementation
Malaria Indicator Survey Report	All Stakeholders	Every two - three years	Dissemination meeting NMEC website	Coverage and uptake of key interventions
Health Facility Survey Report	All Stakeholders	TBD	TBD	TBD
Annual Report	MOH Minister, PS, Directors  Heads of Departments and Programme Managers	Annually	Dissemination meeting NMEC website	Guide progress on coverage indicators
Monthly Report	NMEP Director, Heads of Departments and Programme Managers	Monthly	Dissemination meeting NMEC website	Guide progress on coverage indicators
Quarterly Report	NMEP Director, Heads of Departments and Programme Managers	Quarterly	Dissemination meeting NMEC website	Guide progress on coverage indicators
Data Quality Audit Report	All Stakeholders	Quarterly, Bi-annual, Annual	Review meeting Programme update	Provide guidance on data accuracy and completeness
LLIN Mass Campaign Report	All Stakeholders	Every	TWG meeting Directorate Meeting Website	Guides progress on coverage indicators

<b>DOCUMENT</b>	<b>AUDIENCE</b>	<b>FREQUENCY</b>	<b>DISSEMINATION METHODS</b>	<b>INFORMATION USE</b>
IRS Report	All Stakeholders	Annually	TWG meeting Directorate Meeting Website	Guides progress on coverage indicators
Social and Behaviour Change Strategy	All stakeholders		TWG meeting Directorate Meeting Website	Guides on how to influence specific behavioural and improve malaria outcomes

## 13. APPENDICES

### APPENDIX 1 FIVE YEAR TARGET FOR STRATEGIC PLAN 2022 – 2026

Indicator	Baseline	Source	Targets				
	2021		2022	2023	2024	2025	2026
<b>Impact</b>							
Malaria incidence rate (confirmed and clinical cases) per 1,000 persons per year	340	HMIS	306 (10%)	275.4 (10%)	247.9 (10%)	223.1 (10%)	200.8 (10%)
Malaria incidence rate (confirmed and clinical cases) per 1,000 persons per year	351	HMIS/MRRS	315.9 (10%)	284.3 (10%)	255.9 (10%)	230.3 (10%)	207.3 (10%)
Malaria incidence rate (confirmed per 1,000) persons per year	313	HMIS	282.1 (10%)	253.9 (10%)	228.5 (10%)	205.7 (10%)	185.1 (10%)
Malaria incidence rate (confirmed cases) per 1,000 persons per year	329.8	HMIS/MRRS	296.8 (10%)	267.1 (10%)	240.4 (10%)	216.4 (10%)	194.7 (10%)
Malaria Parasite prevalence: Proportion of children aged 6-59 months with malaria infection by RDT	29	MIS	N/A	N/A	21	N/A	N/A
In-patient malaria deaths (all ages) per 100,000 persons per year	8	HMIS	7.2	6.5	5.8	5.2	4.7
Number of malaria free HFCAs	10	HMIS	60	110	160	210	260
Proportion of confirmed outbreaks responded to within 7 days in level 0 to 1 HFCAs	30%	MRRS	40%	80%	100%	100%	100%
<b>Outcomes</b>							
Percentage of households with at least one insecticide-treated net	53	MIS	N/A	N/A	90	N/A	N/A

Indicator	Baseline	Source	Targets				
	2021		2022	2023	2024	2025	2026
Proportion of households with at least one insecticide-treated net for every two people or sprayed by IRS within the last 12 months	57	MIS	N/A	N/A	90	N/A	N/A
Percentage of households with at least one ITN and/or sprayed by IRS in the last 12 months	71	MIS	N/A	N/A	90	N/A	N/A
Percentage of household members who slept under an ITN the previous night	39	MIS	N/A	N/A	80	N/A	N/A
Percentage of pregnant who slept under an ITN the night before	41	MIS	N/A	N/A	80	N/A	N/A
Percentage of children under five years old who slept under an ITN the previous night	46	MIS	N/A	N/A	80	N/A	N/A
Percentage of women who received 3+ doses of intermittent preventive treatment during antenatal care (ANC) visits during their last pregnancy	68	MIS	N/A	N/A	80	N/A	100
Percentage of households receiving indoor residual spraying (IRS) in the previous 12 months among all households in Zambia	39	MIS	N/A	N/A	14	N/A	100
Percentage of Children under 5-years old with fever in the last 2 weeks who had a finger or heel stick	59	MIS	N/A	N/A	90	N/A	N/A
Percentage of children under five years old with fever in the last two weeks who received treatment with ACTs within 24 hours of onset of fever	30	MIS	N/A	N/A	90	N/A	N/A

Indicator	Baseline	Source	Targets				
	2021		2022	2023	2024	2025	2026
Proportion of facility reports received over the reports expected during the reporting period		HMIS	90	92	93	95	100
Percentage of women ages 15–49 years who recognize fever as a symptom of malaria (Knowledge)	64	MIS	N/A	N/A	90	N/A	N/A
Percentage of women ages 15–49 years who reported mosquito bites as a cause of malaria (Knowledge)	79	MIS	N/A	N/A	90	N/A	N/A
Percentage of women who reported hearing any malaria message (recall)	48	MIS	N/A	N/A	80	N/A	N/A

## APPENDIX 2: NATIONAL CORE MALARIA INDICATORS (WHO)

Indicator	Definition	Source	Frequency	Level of measurement
Under five, all-cause child mortality	The probability of dying before the 5 <sup>th</sup> birthday, expressed per 1000 live births	Representative, household surveys with sufficient sample size (DHS)	Every ~5 years	National
Malaria incidence rate	<p><i>Current definition:</i></p> <p><i>Numerator:</i> reported cases of malaria (&lt;5 years, ≥5 years)</p> <p><i>Denominator:</i> population, expressed per 1000</p>	Routinely reported through HMIS and rapid reporting system	Monthly, weekly	National, provincial, district, facility
	<p><i>Desired definition:</i></p> <p><i>Numerator:</i> reported cases of malaria (&lt;5 years, ≥5 years) with a parasitological confirmed diagnosis using either microscopy or RDTs</p> <p><i>Denominator:</i> population, expressed per 1000</p>	Routinely reported through HMIS and rapid reporting system	Monthly, weekly	National, provincial, district, facility
Malaria positivity rate	<p><i>Desired definition:</i></p> <p><i>Numerator:</i> Reported cases of malaria (&lt;5 years, ≥5 years) with a positive parasitological confirmed diagnosis using either microscopy or RDTs</p>	Routinely reported through HMIS and rapid reporting system	Monthly, weekly	National, provincial, district, facility

Indicator	Definition	Source	Frequency	Level of measurement
	<p><i>Denominator:</i> Number of suspected malaria cases tested using either microscopy or RDTs (by age group, especially U5s)</p> <p>Expressed as a percentage</p>			
Malaria parasite prevalence	<p><i>Numerator:</i> Number of children under five years with malaria parasites, tested either through microscopy or RDTs</p> <p><i>Denominator:</i> Total number of children under five years tested within malaria-endemic areas</p>	Representative, household surveys (DHS, Malaria Indicator Survey)	Biennial	National, provincial
Severe anaemia prevalence among children	<p><i>Numerator:</i> Number of children aged 6-30 months with severe (haemoglobin &lt;8)</p> <p><i>Denominator:</i> Total number of children under five years tested within malaria-endemic areas</p>	Representative, household surveys (DHS, Malaria Indicator Survey)	Biennial	National, provincial

Indicator	Definition	Source	Frequency	Level of measurement
Malaria case fatality rate	<p><i>Current definition:</i></p> <p><i>Numerator:</i> deaths attributed to malaria from a clinical malaria diagnosis</p> <p><i>Denominator:</i> inpatient malaria cases with clinical diagnosis</p> <p>Rate expressed per 1,000 district population</p>	Routinely reported through HMIS	Monthly	National, provincial, district, facility
	<p><i>Desired definition:</i></p> <p><i>Numerator:</i> Deaths attributed to inpatient malaria cases with a confirmed diagnosis using either microscopy or RDTs (by age group, especially U5s)</p> <p><i>Denominator:</i> inpatient malaria cases with a confirmed diagnosis using either microscopy or RDTs (by age group, especially U5s)</p> <p>Rate expressed per 1,000 district population</p>	Routinely reported through HMIS	Monthly	National, provincial, district, facility



Indicator	Definition	Source	Frequency	Level of measurement
Malaria cases with confirmed diagnosis (%)	<p><i>Numerator:</i> number of clinical malaria cases with a positive confirmed diagnosis using either microscopy or RDTs</p> <p><i>Denominator:</i> Total number of suspected malaria cases</p>	Routinely reported through HMIS, rapid reporting system	Monthly, weekly	National, provincial, district, facility
Malaria testing rate (%)	<p><i>Numerator:</i> number of suspected malaria cases tested for malaria</p> <p><i>Denominator:</i> number of suspected malaria cases</p>	Routinely reported through HMIS, rapid reporting system	Monthly, weekly	
Health care providers correctly diagnosing and treating malaria (%)	<p><i>Numerator:</i> Number of health care providers correctly diagnosis and treating malaria according to national policy.</p> <p><i>Denominator:</i> Total number of health care providers surveyed</p>	Representative facility surveys	Biennial	National, provincial
Health facilities with no stock outs of Coartem for more than a week (%)	<p><i>Numerator:</i> Number of health facilities with no stock outs of Coartem for more than one week in a month</p> <p><i>Denominator:</i> Total number of health facilities</p>	Routinely reported through HMIS, rapid reporting system, performance assessment	Monthly, weekly	National, provincial, district, facility

Indicator	Definition	Source	Frequency	Level of measurement
Febrile children who received antimalarial treatment according to national policy within 24 hours (%)	<p><i>Numerator:</i> Number of children under 5 years old with reported fever in the previous 2 weeks who received antimalarial treatment according to national policy within 24 hours of onset of the fever</p> <p><i>Denominator:</i> Total number of children under five years with fever in the past 2 weeks within malaria-endemic areas</p>	Representative, household surveys (DHS, Malaria Indicator Survey)	Biennial	National, provincial
Intermittent preventive treatment (IPT) for pregnant women through ANC visits (%)	<p><i>Routinely reported through facilities:</i></p> <p><i>Numerator:</i> number of antenatal clinic attendances given 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> dose SP</p> <p><i>Denominator:</i> total number of first antenatal clinic attendances</p> <p>Expressed as percentage for each 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> dose IPT received separately</p>	Routinely reported through HMIS	Monthly	National, provincial, district, facility

Indicator	Definition	Source	Frequency	Level of measurement
	<p><i>Household survey sample:</i></p> <p><i>Numerator:</i> Number of women at risk for malaria who took an antimalarial drug to prevent malaria during their last pregnancy that led to a live birth within the last 5 years.</p> <p><i>Denominator:</i> Total number of women surveyed at risk for malaria who delivered a live baby within the last 5 years</p>	Representative, household surveys (DHS, Malaria Indicator Survey)	Biennial	National, provincial
Households with at least one insecticide-treated mosquito net (%)	<p><i>Numerator:</i> Number of households surveyed within malaria-endemic areas with at least one insecticide treated mosquito net (now all distributed ITNs are Long-lasting Insecticidal Nets [LLINs])</p> <p><i>Denominator:</i> Total number of households surveyed within malaria-endemic areas</p>	Representative, household surveys (DHS, Malaria Indicator Survey)	Biennial	National, provincial
Households with ITN to sleeping space ratio $\geq 1$ (%)	<p><i>Numerator:</i> Number of households with the number of reported ITNs greater than or equal to the number</p>	Representative, household surveys (DHS,	Biennial	National, provincial

Indicator	Definition	Source	Frequency	Level of measurement
	<p>of reported households sleeping spaces</p> <p>Denominator: Total number of households surveyed within malaria-endemic areas</p>	Malaria Indicator Surveys)		
Use of ITN among children under five the previous night (%)	<p><i>Numerator:</i> Number of children under 5 years old who slept under an ITN the previous night</p> <p><i>Denominator:</i> Total number of children under five years surveyed within malaria-endemic areas</p>	Representative, household surveys (DHS, Malaria Indicator Survey)	Biennial	National, provincial
Use of ITN among pregnant women the previous night (%)	<p><i>Numerator:</i> Number of pregnant women who slept under an ITN the previous night</p> <p><i>Denominator:</i> Total number of pregnant women surveyed within malaria-endemic areas</p>	Representative, household surveys (DHS, Malaria Indicator Survey)	Biennial	National, provincial
Use of ITN among household members the previous night (%)	<p><i>Numerator:</i> Number of household members who slept under an ITN the previous night</p> <p><i>Denominator:</i> Total number of household members surveyed within</p>	Representative, household surveys (DHS, Malaria Indicator Survey)	Biennial	National, provincial

Indicator	Definition	Source	Frequency	Level of measurement
	malaria-endemic areas			
Targeted structures sprayed for Indoor Residual Spraying (IRS) (%)	<p><i>Numerator:</i> Number of eligible structures sprayed</p> <p><i>Denominator:</i> Number of eligible structures targeted for IRS</p> <p>This indicator represents operational coverage for IRS efforts at districts and national level</p>	NMEC reports	Annual	National, IRS districts
Number of breeding sites identified, treated, eliminated	Includes both IVM activities undertaken by various partners consolidated by NMCC	NMEC program reporting	Monthly	National, provincial, district level
Volumes of insecticide used for vector control	Total volume of insecticides used for vector control, including indoor residual spraying, and other Integrated Vector Management activities. (see WHO standard definition)	NMEC program reporting	Annual	National
Number of eligible structures sprayed	Total number of eligible structures sprayed with indoor residual spraying (IRS)	NMEC program reporting	Annual	National, IRS districts
Number of pregnant women	Total number of pregnant women receiving IPT1, IPT2 and IPT3 through antenatal	Routinely reported through HMIS	Monthly	national, provincial, district, facility

Indicator	Definition	Source	Frequency	Level of measurement
receiving IPT (1,2 or 3)	clinic visits, listed separately for IPT1, IPT2, IPT3			
Number of malaria cases treated	Total number of treatments dispensed for treatment of malaria diagnosis.	Routinely reported through HMIS	Monthly	National, provincial, district, facility
Number of malaria microscopy slides taken	Total number of slides taken for confirmation of clinical diagnosis of malaria	Routinely reported through HMIS	Monthly	National, provincial, district, facility
Number of malaria Rapid Diagnostic Tests (RDTs) taken	Total number of RDTs taken for confirmation of clinical diagnosis of malaria	Routinely reported through HMIS	Monthly	National, provincial, district, facility
Proportion of health facilities with functional malaria microscopy services reporting optimal number of slides done according to policy	Total number of microscopy facilities reporting optimal number of malaria slides as a proportional of the total laboratory staff in the malaria QA as a proportion of the total's fun	Program report	Quarterly*	National, provincial, district, facility
Proportion of pregnant women who have received three or more doses of SP for IPTp	Total number of pregnant women receiving IPT3 or more through antenatal clinic visits	MIS/HMIS	every three years/Monthly	National, provincial, district, facility

<b>Indicator</b>	<b>Definition</b>	<b>Source</b>	<b>Frequency</b>	<b>Level of measurement</b>
Proportion of health facilities with functional malaria microscopy laboratories participating in the malaria QA program	Total number of microscopy facilities reporting optimal number of slides done according to the malaria QA manual.	HMIS/Program reports	Monthly	National, provincial, district, facility
Proportion of suspected malaria cases subjected to a malaria test (RDT or Microscopy)	Proportion of clients with clinical features of malaria who were subjected to a malaria test	HMIS	Monthly	National, provincial, district, facility
Proportion of Health facilities with stockout RDT's for a period of over seven days	Number of HF's with stock out of RDT for a period of seven continuous days in a month	ELMIS	Monthly	National, provincial, district, facility
Proportion of Health facilities with stockout ACT's for a period of over seven days	Number of HF's with stock out of ACT's for a period of seven continuous days in a month	ELMIS	Monthly	National, provincial, district, facility
Proportion of Health facilities with stockout Artesunate for a period of over seven days	Number of HF's with stock out of artesunate for a period of seven continuous days in a month	ELMIS	Monthly	National, provincial, district, facility
Proportion of suspected malaria cases presenting to a	Number of clients tested and treated for malaria as a	ELMIS	Monthly	National, provincial, district, facility

Indicator	Definition	Source	Frequency	Level of measurement
CHW in targeted areas tested and treated for malaria	proportional of the total malaria cases			
Proportion of Health facilities with stockout SP for a period of over seven days	Number of HF's with stock out of artesunate for a period of seven continuous days in a month	ELMIS	Monthly	National, provincial, district, facility
Confirmed malaria cases in children under five seen by CHW (%)	<i>Numerator:</i> Number of children under five with fever diagnosed using RDTs by a CHW  <i>Denominator:</i> Total number of suspected malaria cases seen by CHW	MRR	Monthly	National, provincial
Percent of children under age five years with fever who received treatment from a CHW	<i>Numerator:</i> Number of children under 5 years old with reported fever in the previous 2 weeks who received antimalarial treatment according to national policy within 24 hours of onset of the fever from a CHW  <i>Denominator:</i> Total number of children under five years with fever in the past 2 weeks within malaria-endemic	Representative, household surveys (DHS, Malaria Indicator Survey)	Bi-annually	National, provincial



Indicator	Definition	Source	Frequency	Level of measurement
	areas who sought treatment from a CHW			
Number of SBC materials produced by type	Total number of IEC materials, including print, media, skits, dramas for malaria IEC/BCC activities	NMEC program reporting	Monthly	National
Number of SBCC activities carried out, by type	Total number of SBC activities carried out	NMEC program reporting	Monthly	National, provincial
Number of people trained in SBC for malaria	Total number of people trained in SBC	NMEC program reporting	Monthly	National, provincial, district
Number of people reached	Total number of people reached with malaria messages	NMEC program reporting	Monthly	National, provincial, district
Proportion of people who recall hearing or seeing any malaria message within the last six months	Number of respondents who recall hearing or seeing any malaria message during the last six months	Number of respondents surveyed	Every Six months	Provincial, district
Proportion of people who name mosquitoes as the cause of malaria	Number of respondents who name mosquitoes/mosquito bites as the cause of malaria Denominator Number of respondents surveyed	Representative, household surveys (DHS, Malaria Indicator Survey)	2-4 years	Provincial, district

Indicator	Definition	Source	Frequency	Level of measurement
Proportion of people who know the main symptom of malaria is fever	Numerator: Number of respondents who know that the main sign/symptom of malaria is fever Denominator: Number of respondents surveyed	Representative, household surveys (DHS, Malaria Indicator Survey)	2-4 years	Provincial, district
Proportion of respondents who know the danger signs and symptoms of severe malaria	Numerator: Number of respondents who know that the main sign/symptom of malaria is fever Denominator: Number of respondents surveyed	Representative, household surveys (DHS, Malaria Indicator Survey)	2-4 years	Provincial, district
Proportion of people who know proven preventive measures for malaria	Numerator: Number of respondents who know that the primary preventive measures for malaria include using ITNs, taking preventive medication during pregnancy, taking seasonal prophylaxis, or having their house sprayed with insecticide  Denominator: Number of respondents surveyed	Representative, household surveys (DHS, Malaria Indicator Survey)	2-4 years	Provincial, district
Proportion of people who know the source of malaria messages	Numerator: Number of respondents who know source of malaria messages  Denominator: Number of respondents surveyed	Representative, household surveys (DHS, Malaria Indicator Survey)	2-4 years	Provincial, district

Appendix 3: Surveillance indicators for elimination

Indicator	Target or norm	Data source
<b>Impact</b>		
Number and incidence rate of confirmed malaria cases by classification, sex, age group, risk group (e.g. schoolchildren, migrant workers)		Malaria case investigation database
Number of foci by classification		Malaria focus database
<b>Quantity and quality of surveillance</b>		
Annual blood examination rate by district and focus detected passively and actively	Indicative target in endemic, residual active, new active and residual non-active foci: 8% of population in focus	District monthly and annual reports database
	Indicative target in cleared up and new potential foci: 1–3% of population in focus	
Percentage of expected monthly reports received from health facilities and laboratories (with number of patients tested for malaria and number positive)	Target: 100%	District monthly reports database
Percentage of confirmed cases fully investigated (including case investigation form, focus investigation form and active case detection)	Target: 100%	Malaria case investigation database
Percentage of foci fully investigated (malaria focus investigation form completed, including data from an entomological investigation) and registered (on register, with maps of each focus)	Target: 100%	Malaria focus database
Time from first symptom (fever) to first contact with the health system	Norm: within 48 h	Malaria case investigation database
Time from first contact to testing	Norm: within 24 h	Malaria case investigation database
Time from positive test result to start of treatment	Norm: same day	Malaria case investigation database
Time from positive test result to notification of the national malaria programme (to district or intermediate level, with copy to central level)	Norm: same day	Malaria case investigation database

Indicator	Target or norm	Data source
Percentage of malaria testing laboratories participating in quality management system (all positive slides and 10% of negatives sent for retesting and the blind proficiency test completed each year)	Target: 100%	External quality assurance database
Percentage of past 5 years with national annual malaria programme report	Target: 100%	Program reports

#### APPENDIX 4: ENTOMOLOGICAL AND LARVAL SOURCE MANAGEMENT INDICATORS

Indicator		Definitions	Frequency	Level
<b>Adult Vector: Composition</b>	Occurrence	Mosquito species present in a given geographical area during a specified time period	Monthly	Sentinel sites
	Density	Number of mosquitoes in relation to the number of specified shelters or hosts (e.g. per room, per trap or per person) or to a given period (e.g. overnight or per hour), specifying the method of collection	Monthly	Sentinel sites
<b>Adult Vector: Behaviour</b>	Human Blood Index (Host Preference)	Proportion of malaria vectors feeding or foraging on humans	Monthly	Sentinel sites
	Human Biting Rate	Number of adult vectors attempting to feed or freshly fed per unit time	Monthly	Sentinel sites
	Biting Time	Number of vectors feeding or attempting to feed per person unit time	Monthly	Sentinel sites
	Biting Location	Proportion of vectors resting indoors or outdoors	Monthly	Sentinel sites
	Resting Location (Indoor resting density)	Proportion of vectors resting indoors or outdoors	Monthly	Sentinel sites
<b>Adult Vector: Resistance to Insecticides</b>	Resistance Frequency	100% minus the per cent adjusted mortality in phenotypic bioassays – varied across all four insecticide classes, both within and between regions	Monthly	Sentinel sites
	Resistance Status	Defines status of mosquito resistance to insecticides based on the following definition. 'Resistant' mosquitoes are defined as mosquitoes that survived for 24 hours after the end of the bioassay, and 'susceptible' mosquitoes as those that were knocked down or died during the 60-minute exposure time, or that died within the 24-hour recovery period	Monthly	Sentinel sites
	Resistance Intensity	Strength of resistance in mosquitoes to insecticides, resulting from the level of expression of resistance phenotype(s). Resistance intensity is measured by testing the ability of mosquitoes to survive exposure to 5× and 10× a standard discriminating concentration of insecticide.	Monthly	Sentinel sites
	Resistance Mechanism(S)	The means by which insects survive insecticide exposure – are	Monthly	Sentinel sites

Indicator		Definitions	Frequency	Level
		categorised as metabolic, target-site, reduced penetration or behavioural.		
<b>Immature Vector: Aquatic Habitats</b>	Habitat Availability	Number of aquatic habitats present and types	Quarterly	Sentinel sites
	Habitat Availability	Number of aquatic habitats present and types	Quarterly	Sentinel sites
	Larval Density	Number of individual mosquito larvae collected per habitat	Quarterly	Sentinel sites
<b>Proxies for Transmission</b>	Sporozoite Rate	Proportion of infected vectors in their salivary glands	Quarterly	Sentinel sites
	Entomological Inoculation Rate	Number of infectious bites per person per unit time	Quarterly	Sentinel sites

## APPENDIX 5: DATA QUALITY AUDITS AND REVIEWS

Type of Review	Description	Frequency
<b>Data Quality Audits</b>	Review DHIS2 and programmatic data derived from facilities at different intervals. Regular health facility data verification provide feedback on data quality	Quarterly / Bi-annually
<b>Malaria Case Management - End User Verification (EUV)</b>	Conducted in selected facilities to verify data on stock management, adherence to case management guidelines, cases and availability of ITNs is collected, collated and analysed	Quarterly
<b>Annual Data Review</b>	Conducted at different levels and involves the review and interpretation of available malaria program data and general health data	Annually
<b>Grant related Data Quality Audits –</b>	Performed according to requirements of specific donors (Global Fund, PMI, PATH/MACEPA and others) to provide information on selected indicators at national and sub-national levels	Monthly, Quarterly, annually
<b>Joint Annual Review</b>	Conducted by MOH and stakeholders to review the general sector performance	Annually
<b>Mid-term</b>	Reviews of the progress on the national strategic plans	Year 2 of NMESP
<b>End-term</b>	Reviews of the progress on the national strategic plans	End of Five NMESP

**APPENDIX 6: SMEOR BUDGET (US\$)**

Activity	2022	2023	2024	2025	2026
<b>Routine Surveillance</b>					
Data quality audits	400,000	400,000	400,000	400,000	400,000
Data Reviews	350,000	350,000	350,000	350,000	350,000
Technical Assistance / supervision/ training - HMIS	623,689	600,000	600,000	500,000	500,000
Technical support to district reporting	600,000	750,000	800,000	800,000	800,000
Community surveillance and reporting	691,191	700,000	750,000	800,000	800,000
<b>Evaluation</b>					
Malaria Indicator Survey		780,000			1,000,000
Drug efficacy monitoring		320,000			400,000
Entomological and Insecticide resistance monitoring	486,700	450,000	500,000	500,000	500,000
LLIN durability monitoring	180,000				250,000