

**REPUBLIC OF SOUTH AFRICA MALARIA
PROGRAMME REVIEW
(MPR)**

Aide Memoire

20 October, 2023

1. Purpose

1.1 Purpose of MPR

Malaria programme reviews (MPR) are management tools for evidence-based appraisal of a country's malaria situation and programme performance to strengthen the programme for better results and impact. They evaluate the systems used to deliver interventions, propose solutions to bottlenecks and barriers and help countries and partners to set or reset the malaria agenda in the medium or short term. This aide memoire summarizes the major findings and actions that emerged from the 2023 Republic of South Africa MPR. It is neither a memorandum of understanding nor a legal document but a declaration of the joint commitment of partners, to work together to support the implementation of the recommendations of the MPR.

2. Background

The National Department of Health, through the National Malaria and Other Vector Borne Disease Directorate in collaboration with partners decided to undertake a programme review of the current National Malaria Strategic Plan (NMSP 2019-2023). The decision was made to review the plan in keeping with recommended global practice for effective programme management and evaluation.

2.1 Objectives of the MPR

The overall objective of the MPR was to undertake evidence-based appraisal of the South Africa's malaria situation and programme performance to strengthen the programme for better results and impact, and to make recommendations for better performance and impact. The specific objectives were to:

- Assess progress of the National Malaria Programme towards the epidemiological and entomological impact targets of the MSP.
- Review the level of financing of the NMP.
- Review the capacity of the NMP to implement planned activities.
- Review the attainment of program outcome targets.
- Define the programming implications of the lessons learned in the implementation of the MSP.

2.2 Methodology of the MPR

The review was organized in four Phases: Phase I involved consultation with partners on the need, the scope and implementation plan of the review; Phase II conducted desk reviews that led to the production of the thematic reports and Phase III involved validation of the thematic findings using in depth discussions facilitated by External Review Team. Phase IV is programme strengthening, where the findings are used to strengthen the malaria programme.

3. Key findings

3.1. Progress towards MSP Epidemiological and Entomological Impact Targets

The goal of the MSP was to achieve zero local malaria transmission in South Africa by 2023. Zero local cases also mean zero deaths. Based on the indicator, the number of local malaria cases recorded in the was 1909, hence the goal was not achieved. The country also recorded 91 deaths in the 2022/23 season. While cases declined significantly from the peak of the 2018/19 season, the current trend from the 2020/21 season is showing a steady increase in the total number of cases reported and stagnation in the total number of local malaria cases. As of October 2023, 1431 cases have been reported. The main malaria vector species remain unchanged with no data on entomological inoculation rates given the low malaria transmission setting.

3.2. Review of Financing of the Malaria Programme

The Government of South Africa allocates domestic funds to fight malaria as the main funder. In the period under review the malaria programme was 85% domestically funded. Other historic funders include the

Global Fund, Clinton Health Access Initiative and Elimination 8. In addition to provincial equitable shares funding (funds compensation of employees), programme mobilized a conditional grant to fund key elements. RSA allocated an average of 31.35% of the total government budget to health surpassing the Abuja declaration (15%). However, the review indicates that there were gaps in funding, with the biggest gaps in funding observed in Limpopo province.

3.3. Review of Capacity of the NMP to Implement Planned Activities

The review of the current NSP has identified 221 planned key activities under five objectives. Of the 221 activities, 60% were fully implemented, 34% partially implemented and 6% not implemented at all. The review indicated that the National Malaria and Other Vector Borne Disease Directorate has been able to guide the implementation of planned activities. This has been enabled by allocation of resources by the government, the dedicated National Malaria and Other Vector Borne Disease Directorate team, technical support from partners, availability of appropriate technical/guidance documents and healthy working relationship with stakeholders.

3.4. Review of Effectiveness of Health System in Delivering Malaria Services

Progress was made towards attainment of several of the MSP outcome indicators.

3.4.1 Level of Attainment of Vector Control Outcome Targets

Vector control through Indoor Residual Spraying (IRS) is one of the key strategies for malaria elimination in RSA that has been undertaken over several years. In addition, larval source management is a recently implemented tool. In the period under review, the malaria programme has managed to implement the annual IRS in targeted localities in malaria endemic provinces. This was made possible through effective collaboration with research and academic institutions (NICD, MRC, and UP) for entomological surveillance. However, there is inadequate entomological data to inform IRS deployment criteria, including choice of insecticides (the country is using DDT and pyrethroids, insecticides with the same mode mechanism of action). The appointment of seasonal spray operators is no longer adequate to carry out elimination activities outside the spraying season, with new demand for reactive IRS, winter larviciding, and other activities. The timeliness, duration, and coverage of the IRS were also suboptimal, with overall coverage not reaching WHO recommendations of 85%. In addition, insectary and laboratory infrastructure and capacities are either lacking or suboptimal at the provincial level.

3.4.2 Level of Attainment of Malaria Diagnosis and Treatment Targets

RSA has a network of malaria diagnostic and treatment services in all provinces, allowing for easy access to passive case detection and treatment. Malaria suspected cases are tested using Rapid Diagnostic Tests or microscopy. This was supported by a community-based case management system performed by surveillance agents and community health workers. Diagnostic and treatment policies and technical guidelines were developed, disseminated, and adhered to during the period under review. Capacity was built to diagnose and treat malaria cases according to diagnosis and treatment guidelines. Mortality audits were conducted consistently for most deaths that were due to malaria. The country has a malaria diagnosis QA/QC programme with diagnosis QA/QC guidelines and laboratory data collection tools. Several microscopists were trained and certified competent in the WHO External Competency Assessment of Malaria Microscopists (ECAMM). However, there is inadequate collaboration on implementation, training, and the conduct of death audits with private sector facilities. The malaria programme also lacks malaria case management algorithms for effective management at both private and public health institutions. There is no availability of alternative second-line treatment for uncomplicated malaria, severe malaria, and chemoprophylaxis medicines.

3.4.3 Level of Attainment of Procurement Supply Management (PSM) Outcome Targets

Quality assured RDTs, ACTs, and other consumables were available at all levels with no reports of stockouts. However, there have been major delays in the procurement of insecticides and IRS commodities. Primaquine is placed under Section 21, limiting its availability.

3.4.4 Level of Attainment of Advocacy, Communication and Social Mobilisation (ACSM) Outcomes Targets

Malaria ACSM is addressed in different policy documents that include a health promotion and communication plan (2024), an integrated school health programme resource guide, and a malaria communication strategy. The malaria programme enjoys support from political and traditional leaders for community engagement. Malaria elimination messages are disseminated using mixed communication channels such as radio, TV, print media, social media, and billboards to reach different audiences. Door to door campaigns to schools, churches, and transport hubs are conducted by ‘foot soldiers’. However, ACSM is perceived as a low-priority area and hence poorly funded across provinces, causing suboptimal implementation of SBC interventions. Irregular and inadequate KAP surveys at national and subnational levels coupled with weak linkages KAP work done by academic institutions has hindered the tailoring of communication messages and their full utilization to support implementation.

3.4.5 Level of Attainment of Surveillance Monitoring and Evaluation and Operational Research (SMEOR) Outcome Targets

The national malaria programme has a functioning surveillance and monitoring system (M&E) and has made significant progress in surveillance and M&E. The strong community-based surveillance system in malaria endemic provinces was noted as a huge achievement. Data quality has improved progressively. Surveillance system SOPs were developed, disseminated, and implemented in all three endemic provinces, leading to achievements in reporting, case notification, investigation, and classification. NDoH was able to roll out the DHIS2 across all three endemic provinces. However, the current information systems (the Notifiable Medical Conditions (NMC) App and the DHIS2 system) are unable to address all the elimination surveillance needs. There is limited attention or priority given to malaria surveillance in non-endemic provinces. There is inadequate tailoring of interventions based on epidemiological and entomological stratification.

3.4.6 Functionality of Programme Management Support System

The RSA Malaria Programme enjoys political commitment and leadership support at all levels, which allowed for the provision of coordination and implementation structures, mobilization and multi-sectoral collaboration and cross-border collaboration. Technical guidance is provided at all levels to ensure harmonization of policy for the implementation of key strategies. The NMP in RSA showed strong linkages with stakeholders, funders, and other implementing partners at all levels, which enabled smooth implementation of the NSP. There were policies, plans, strategic documents, and guidelines in place. However, the organizational structure and staffing levels are inadequate and no longer in line with the requirements of the elimination agenda. The Terms of Reference (ToRs) and reporting structures of Technical Working Groups (TWGs) are not clearly defined, and there is no high-level independent NSP performance monitoring entity/committee. Current malaria financial support and capacity building are directed mainly at three malaria-endemic provinces leaving out non-endemic provinces with cases.

4 Programming Implications on the Implementation of the MSP

4.1. Lessons Learnt

The existence of a strong community-based surveillance system that is equipped to do proactive case detections, investigations, classifications, focus investigations, classification, and response was a notable enabler that was associated with a significant decline in malaria cases. Blanket application of interventions

is no longer applicable and should be replaced by tailored interventions based on entomological and epidemiological data as basis of planning or decision-making at all levels.

4.2 Key recommendations

- i. Create an independent High level and multisectoral Oversight committee to oversee performance and progress towards elimination as defined by the new Malaria NSP.
- ii. Urgently review the organizational structure at NDoH and fill vacant posts at both the NDOH and the PDoH to ensure availability of required expertise to support the elimination agenda.
- iii. Clearly define the Terms of Reference and reporting structures for the Technical Working Groups such as SAMEC to avoid conflict of interest.
- iv. Expand the malaria programme to comprehensively cover the financing, capacity building, guidance, and implementation of malaria activities in non-endemic provinces.
- v. Review and further develop the digital NMC App, Tools and DHIS2 systems' Integration to address elimination needs (Health Promotion, Larviciding)
- vi. Expand malaria surveillance systems to include non-endemic provinces to enable case investigation, reporting and facilitate inter-provincial referrals.
- vii. Develop and implement a comprehensive stratification plan to allow for tailoring of interventions in all provinces.
- viii. Develop Insecticide Resistance Management Plan to inform IRS deployment criteria including choice of insecticides.
- ix. Appoint a new cadre on a longer-term contract with an expanded job description which include seasonal spraying, reactive IRS, Health Promotion and Vector Surveillance.
- x. Develop and adhere to annual IRS procurement plans taking into consideration insecticide delivery lead times.
- xi. Build/establish provincial Entomological capacities to enable availability of evidence inclusive of functional insectary infrastructure and an accessible entomological database.
- xii. Explore innovative strategies to collaborate and inform/train private sector health care workers on malaria case management.
- xiii. Develop/update and distribute comprehensive malaria case management algorithms to both private and public health institutions.
- xiv. Update treatment guidelines to include second-line treatment for uncomplicated malaria, severe malaria and chemoprophylaxis medicines especially for children.
- xv. Register Primaquine as standard treatment for malaria (excluding the section 21 provision) and include it into the Essential Drugs List (EDL).
- xvi. Conduct regular and standardized KAP surveys at provincial levels but coordinated at national level.
- xvii. Advocate for increased funding across provinces to enable consistent delivery of SBC at optimal coverage for increased awareness, knowledge, acceptance, and health-seeking behaviour.
- xviii. Incorporate Health Promotion Indicators into DHIS2.

4.3. Future Strategic Directions Recommended

1. Place malaria elimination high on the national development agenda.

2. Re-orient the programme into elimination mode and set up a high-level Oversight committee for accountability on performance.
3. Develop a functional malaria program structure at all levels in line with elimination functions.
4. Expand funding, implementation of malaria activities to non-endemic districts.
5. Build capacity in infrastructures (entomology laboratory and insectary) and an entomology database for entomology surveillance and monitoring.
6. Shift gear from traditional community engagements methodologies that are not yielding adequate results and concentrate on high impact targeted intervention.

5 Commitment

We, the National Department of Health, and its partners in the National Malaria Programme and Other Vector Borne Disease Directorate commit ourselves to the implementation of the 2023 malaria programme review recommendations to achieve the goal of eliminating malaria in line with the country's objectives, mission, and vision stipulated in the health policy documents.