



**Government of Zimbabwe
Ministry of Health and Child Welfare**

Zimbabwe Malaria Programme Performance Review

June 2011

Aide Memoire

I. Purpose

The Malaria Programme Review (MPR) is a periodic joint programme management process for reviewing progress and performance of country programmes with the aim of improving performance and refining or redefining the strategic direction and focus. This *aide memoire* summarizes the major findings and critical actions emerging from the Zimbabwe MPR. The *aide memoire* is a re-statement of the joint commitment of the Ministry of Health and Child Welfare and partners, to work together to follow up on the recommendations of the MPR and support implementation towards the long term goal of achieving a Zimbabwe free of malaria. It is neither a memorandum of understanding nor a legal document. A detailed report of the MPR from which this *aide memoire* have been derived will be distributed to all partners and stakeholders, and copies will be available at the Ministry of Health and Child Welfare's National Malaria Control Programme.

II. Background

The Ministry of Health and Child Welfare, through the National Malaria Control Programme (NMCP) and in collaboration with partners decided to undertake a comprehensive review of the progress and performance of the malaria programme for the period 2001 to 2010. This decision was made in the context of an observed decline in malaria cases and deaths, and actions required to achieve the MDGs in 2015. The findings of this review will be used to inform policy and strategic directions for future drive towards achieving universal coverage, its maintenance thereof and further action towards pre-elimination and elimination.

The objective of the review was to assess the current strategies and activities with a view of strengthening the malaria control programme for sustaining the gains made and achieving further reductions in the malaria burden. The specific objectives of the MPR were:

- a) to review the epidemiology of malaria in Zimbabwe;
- b) to review the policies and programming within the context of the health system and the national development agenda
- c) to assess progress towards achievement of national, regional and global targets by intervention thematic areas and service delivery levels; and
- d) to define the next steps for sustaining and improving programme performance.

The review was organized in 3 phases. Phase 1: consultation with partners to agree on the need and scope of the review, and develop a plan for the review; Phase 2: desk reviews with the production of the thematic reports; and Phase 3: with the support of an external review team, undertook

consultations with senior management of the Ministry of Health and Child Welfare, and representatives of partner agencies and stakeholders. Field visits to provinces, district offices and hospitals, health centres and communities were also undertaken to validate findings of the desk reviews.

Malaria Program Goals and Objectives 2007-2013

Goals:

- a) Reduce malaria incidence from 95/1000 in 2007 to 45/1000 by 2013
- b) Reduce case fatality rate from 4.5% in 2007 to 2.5% by 2013

Objectives: The major objectives intended to be achieved during and by the end of the planning period include:

A) To achieve universal access to malaria prevention and personal protection

- 1) To reduce the transmission of malaria by scaling up effective vector control interventions (IRS and ITNs) to 90% of the population at risk.
- 2) To achieve at least 85% of intermittent preventive treatment (at least IPT2) in pregnant women attending antenatal care in all medium to high transmission areas of Zimbabwe.

B) To improve diagnosis and treatment of uncomplicated and severe malaria.

- 1) To provide access to appropriate malaria treatment within 24 hours of onset to 85% of all suspected malaria cases.
- 2) To confirm and correctly treat all malaria cases.

C) To improve detection and timely control of malaria epidemics

- 1) To detect and effectively manage at least 95% of malaria epidemics within two weeks of onset.
- 2) To increase malaria free zones in Zimbabwe.

D) To strengthen community and other stakeholder participation to maximize achievement of universal access to malaria control interventions

- 1) To increase community uptake on correct malaria prevention and control measures to 85%.
- 2) To increase the participation of other stakeholders in malaria.

E) To improve coordination, management and monitoring for achieving of universal access to malaria control interventions

- 1) To strengthen malaria surveillance, monitoring, evaluation and operational research.
- 2) To strengthen planning, partnership building and coordination.
- 3) To strengthen the management of malaria control programming through adequate financial and human resource management, logistics support and procurement and supply management

III. Key findings and action points

1. Malaria epidemiology

Historically an estimated 50% of the population in Zimbabwe resided in malaria endemic areas, although there is evidence of recent geographical changes in malaria distribution. The malaria risk mapping and stratification are outdated, and areas for pre-elimination need to be refined. Malaria is mainly seasonal in Zimbabwe with potential for epidemics during the rainy season. Malaria accounts for 30% of all out patient attendances, 12% of hospital admissions and is the second commonest cause of morbidity in Zimbabwe. Ninety-eight percent (98%) of all cases of malaria are caused by *P. falciparum*. The primary vector is *An. arabiensis*. Outpatient Department (OPD) malaria cases decreased from 14% in 2005 to 9% in 2009; inpatient malaria cases declined from 9.5% to 8.4% between 2005 and 2008. Malaria deaths as a proportion to inpatient deaths decreased from 7.1% in 2003 to 3% 2008.

The noticeable decline in absolute figures for malaria over the past 10 years is matched by declining incidence rates as well as positivity rates. Malaria overall remains the second commonest cause of morbidity and mortality after HIV and AIDS related illnesses in the country

Action Points

- a) Use existing routine and surveillance data to update malaria risk maps, stratification and identification of new areas for pre-elimination.
- b) Strengthen analysis of existing epidemiological data for programme planning and management.

- c) Implement pre-elimination/elimination activities in selected low transmission districts.
- d) Conduct malaria prevalence survey as a baseline to monitor impact.

2. Malaria Programme Management, Policies and Strategies

The NMCP has a malaria control policy and strategic plan aligned with the overall National Health Plan 2009-2013. Technical guidelines and training manuals are available to support priority interventions. The Government of Zimbabwe considers malaria as a key target disease as reflected in the old National Health Strategy (NHS) 1997-2007 as well as in the current NHS 2009-2013. GOZ has consistently allocated close to 15% of its national budget to health from 2007. From 2003 a specific budget line item for malaria was created, and between 2009 and 2011 the Government allocated up to USD1,2m to malaria control, the highest allocation for any disease programme in the MOHCW. In addition there exists the Parliamentary Portfolio Committee on Health, which provides as a platform for malaria issues to be discussed at a high political level. Most malaria services are provided free of charge in the country. Furthermore, Zimbabwe has attracted substantial funding from the Global Fund, with other partners promising further support for the medium term. The NMCP conducts regular meetings and programme updates are given to the Minister's and Permanent Secretary's meetings.

However, there is a funding shortfall to complete implementation for the current strategic plan. In addition, partners are not fully coordinated leading to fragmented programme implementation. Placement of the NMCP in the MOHCW organogramme is at a low level compared to similar priority disease programmes, for effective decision making. Challenges exist with respect to decision making, coordination and management between the PR, NMCP, CCM of Global Fund supported activities. Achievements have been made on cross border malaria control activities with South Africa, and this needs to be consolidated and expanded to other border areas.

Action Points

- a) MOHCW to engage Treasury and UNDP (PR) at the highest level to ensure timely release of annually and quarterly allocated malaria funds.
- b) Develop a strategy for resource mobilization and in the short-term convene a stakeholders meeting to fill in identified funding gaps.
- c) Urgently expand community based malaria control services to the underserved through supporting Ward Health Teams.
- d) NMCP's place in the MoHCW organogram to be elevated to a level commensurate with other similar disease programmes, and the task of malaria pre-elimination.
- e) Improve partner coordination and involvement at all stages of the programme planning cycle.
- f) Strengthen cross-border collaboration at provincial and district level with Mozambique, Botswana, South Africa and Zambia.

3. Vector control

The mainstay of vector control in Zimbabwe is indoor residual spraying (IRS) in 45 districts, and this is increasingly being supplemented with long lasting insecticidal nets (LLINs) in thirty districts. Furthermore larviciding is implemented in a few low transmission areas. The Government has consistently funded the IRS programme for the past decade. With additional external financial support, the programme has successfully managed to maintain and even expand the population protected by IRS within the targeted 3.2 million people from 85% in 2008 to 90% in 2010. Since changing to universal coverage of LLINs in 2009, a total of 1.8 million nets have been distributed (giving a coverage of 83%), leaving an existing gap of 650,000 nets. Funding is available for around 1.5 million replacement LLINs starting in 2013, through the GF R10 grant. The available vector distribution map is outdated. Sixteen vector sentinel sites manned by staff trained in basic

entomology, have been established. Information generated from these sites will be used to update the vector distribution map.

The major challenges in vector control include late spraying due to delayed release of funds and delivery of vector control commodities in the recent past. There is need to identify appropriate mechanisms for replacing old ineffective nets with new LLINs, particularly through routine channels such as ANC and CBHWs that can sustain continuous availability of effective replacement nets.

Action Points

- a) Establish an insecticide buffer stock of 215,000 Kg of DDT and 13,000 Kg of Pyrethroids to start the annual IRS spray campaign on time.
- b) Procure and distribute 400,000 LLINs to fill the current gap to reach universal coverage.
- c) Procure and distribute at least 600,000 per annum through campaigns and initiate routine distributions of LLINs (for example through ANC and CBHWs) to ensure a continuous delivery of nets to replace LLINs that have worn out and to cover new sleeping places.
- d) Establish a five year LLIN and IRS needs based plan to accurately quantify total net, IRS resource and commodity requirements to maintain universal coverage in targeted districts and support fund raising efforts.
- e) Strengthen capacities for vector bionomics, including provision of entomological and laboratory equipment and human resources to ensure effective surveillance and monitoring of the impact of vector control interventions.
- f) Expand larviciding to areas of low malaria transmission to support malaria elimination.

4. Malaria Case Management

The malaria diagnosis and case management policy changed to the use of ACTs in 2004 and implementation of the policy started in 2007. Between 2004 and 2007 an interim policy of CQ+SP was used. The new policy recommends parasitological confirmation of all malaria cases. All public health facilities now use rapid diagnostic tests whilst all admitting institutions use microscopy for malaria diagnosis. While malaria case management services are free in the government sector, local authority health facilities charge user fees, but RDTs and ACTs are free. Malaria case management training has been provided to public health staff, other government ministries (Defence, Home Affairs, Local Government) and private health sector institutions that offer health services. Community Case Management of Malaria using the new policy (use of ACTs) was approved in 2010 and training of the Community Based Health Workers has started in one district. Malaria treatment guidelines and standard operating procedures for diagnostics, including manuals for Community Case Management of Malaria, have been developed and distributed to all levels of health care. For quality control and assurance the NMCP works closely with ZINQAP, MCAZ and the NMRL. IPTp is recommended in 30 moderate to high burden malaria districts.

Outdated case definitions and the absence of algorithms on malaria treatment potentially compromises the quality of diagnosis and treatment and reduces the accuracy of HIS and surveillance data. In addition there is lack of a comprehensive QA/QC strategy for malaria laboratory diagnosis. IPTp coverage remains substantially below the national target, with IPTp1 at 45.5% and IPTp2 at 27.8% in 2009. Management of severe malaria in health facilities as per the case management audit is 72.5%, but could be strengthened further. One of the main bottlenecks for sustained case management includes inadequate financing for continuous long term procurements and supplies of RDTs and all anti-malaria medicines (ACTs, SP, quinine and Clindamycin). Moreover, the non-inclusion of anti-malaria commodities in the Essential Drugs Kits constrains the availability of case management services. Adequate stocks of ACTs and RDTs are available for 2011, but there is currently limited funding for new supplies in the pipeline for 2012 onwards. This is a serious shortfall that will undermine the malaria control programme if urgent actions are not taken.

Action Points

- a) Expand malaria community case management through training and maintaining of 6,600 CBHWs in malaria affected communities on the use of RDTs and ACTs.
- b) Introduce pre-referral rectal artesunate for severe malaria (including training and establishing management and supervision systems) through CBHWs.
- c) Urgently leverage additional funds and engage partners to fill the 2012-15 supply gaps for at least 3 million RDTs and 1 million ACTs annually.
- d) Ensure a continuous supply of RDTs and anti-malaria drugs, through the development of accurate short and long term needs based forecasting and supply plans.
- e) NMCP to update case definitions and malaria case management algorithms and disseminate to all health facilities and CBHWs.
- f) Laboratory Directorate to establish a comprehensive QA/QC strategy and guidelines for malaria laboratory diagnosis.
- g) Strengthen collaboration between Reproductive Health and NMCP to improve the access and quality of prevention and treatment of malaria in pregnancy, with a special emphasis on IPTp.
- h) Continue to invest in annual pre-season malaria case management trainings for all health workers (taking into account high staff attrition) in both the private and public health care services, including on severe malaria case management at all the referral hospitals.

5. Epidemic preparedness and response

Zimbabwe is characterized by a highly seasonal malaria transmission pattern which predisposes it to the risk of malaria outbreaks. The NMCP has national EPR guidelines and uses the weekly surveillance system and a community based early warning system that reports public health events. A weekly surveillance epidemiological bulletin is compiled at the HQ and at some provinces, although its dissemination is currently limited. Epidemic thresholds are in use in most health facilities. IDSR trainings have been conducted in the recent past but have not been rolled out to all districts and health facilities due to inadequate funding. There is also lack of documentation on epidemics, no epidemic risk mapping and no post mortems were conducted following malaria epidemics. Most provinces have had inadequate emergency stocks for outbreak response, inadequate training in epidemic preparedness and response and most EPR plans are outdated. In general there is inadequate use of meteorological data for malaria epidemic prediction at all levels.

Action Points

- a) Update EPR plans and thresholds at all levels, taking into account reductions in malaria cases.
- b) Mobilise financial resources to roll out IDRS trainings to all levels of care, including the community level.
- c) Pre-position emergency stocks and establish contingency funds at appropriate levels for emergency epidemic response.
- d) Conduct post-mortems at provincial and district levels and submit the relevant reports to higher levels.

6. Procurement and Supply Management

Zimbabwe has a robust health procurement and supply logistics system. NatPharm is the principle national procurement and supply logistics agency for medical supplies. Nevertheless, recently malaria control procurements have been outsourced to other partners. The Zimbabwe Informed Push (ZIP) is the system that distributes health commodities through the public health system, but due to financial constraints and logistical bottlenecks, the system has been unable to maintain the minimum 3-month's stocks in health facilities. Health facilities also place orders for supplies, to ensure adequate stock availability (PULL system). The actual distribution is done on a quarterly basis based on consumption data. The overriding challenge is that current funding sources, including from the GF, are inadequate to cover the total requirements of malaria control commodities in Zimbabwe from 2012 to 2015.

Action points

- a) Establish a PSM subcommittee within NMCP to oversee timely procurement and supply chain management of malaria supplies as identified in the other thematic areas.
- b) Procurement of RDTs and anti-malaria medicines should be included within other national procurement fund and supply of essential medicines.
- c) Increase the role of NatPharm in malaria procurement and supply logistics.

7. Advocacy, social mobilization and BCC

There is political commitment from the highest levels. Zimbabwe has a national malaria communication strategy that spells out main advocacy, social mobilization and BCC. Implementation of these strategies through the public health system, including CBHWs and community malaria committees (CMCs) is creating demand for malaria control interventions and utilization of services. Generally 80% of the population know the signs and symptoms of malaria. However, early treatment seeking behavior has only increased from 3.6% in 2005 to 40.5% in 2009 and net-use still falls below the national target of 80%. Major challenges include inadequate funding for BCC/IEC activities and limited availability of BCC/IEC materials at all levels, especially for people with minority languages.

Action points

- a) Develop and disseminate the implementation guidelines to further operationalize malaria communication strategy.
- b) Develop adequate BCC/IEC materials, including for minority languages and information packages for travellers.
- c) Conduct operational research, KAP and behavioural studies.
- d) Strengthen and expand BCC through CBHWs and Community Malaria Committees (CMCs) in all malaria transmission districts to provide continuous community BCC.

8. Surveillance, Monitoring and Evaluation and Operations Research

The NMCP has an Monitoring and Evaluation Plan that is aligned to the 2008-2013 Malaria Strategic Plan. Zimbabwe uses the National Health Information System (NHIS) to capture routine morbidity and mortality data on weekly, monthly and quarterly basis. The system collects data on suspected malaria cases, tested and positive malaria cases, deaths, IPTp and ACT consumption by facility. Although RDT data are being recorded, its data collection tool is not standardized. The NHIS has introduced a more comprehensive software package for data capturing and management, for the DHIS countrywide. A total of 1200 out of 1500 health facilities in the country have been supported with cellphones to strengthen weekly data transmission. This system is currently being piloted in two districts. Data on vector control interventions is systematically collected using specific routine systems such as activity reports. Programme data storage, monitoring is weak. There was a Malaria Indicator Survey in 2008, and additional population based surveys such as the DHS are used to collect data on various malaria indicators. Malaria case management Audits are conducted every two years, and the last one was in 2009. Through the NIHR, Zimbabwe conducts operational research on therapeutic efficacy testing studies on first line anti malarials, bioassays, vector bionomics and insecticide susceptibility tests.

There is inadequate monitoring of completeness and utilization of data from the NHIS at national level.. The review also noted that there is inadequate feedback to lower levels and that there is inadequate information sharing with partners. There are several indicators in the national malaria M&E plan however emphasis on monitoring is largely confined on Global Fund performance framework.

Action points

- a) Strengthen malaria data management functions to improve on monitoring, analysis and utilisation.
- b) Conduct routine data validation in collaboration with NHIS to improve data reliability at all levels.

- c) Share malaria data and reports with all stakeholders in malaria control
- d) Ensure that all indicators in the malaria M&E plan are monitored and comprehensive quarterly and annual report that meet all report requirements and demands.
- e) Strengthen the implementation of the national malaria control database to capture all malaria data at all levels.
- f) Establish the malaria research agenda, including operational research.

IV. Conclusion

This Malaria Program Review provided important findings regarding the epidemiology of malaria, the policy, programming framework, progress and performance in the delivery of the key interventions. The review noted the high overall priority and commitment to malaria control, the evidence-based plans and strategies, the provision of free malaria services and the relative increases in funding. Furthermore there has been a marked improvement in intervention coverage and use, which has resulted in the general decline in the number of new malaria cases and deaths nationally.

Zimbabwe has almost reached universal coverage by 2010 on LLINs and IRS, but is lagging behind on providing universal access to early diagnosis and treatment. These gaps need to be filled in order to reach the MDGs by 2015.

The MPR recognizes the very strong and committed set of partners in malaria control in Zimbabwe and strongly encourages them to join in addressing and resolving the issues and needs identified in this report.

Implementation of the recommendations of the review will help place Zimbabwe on the road to a malaria free future.

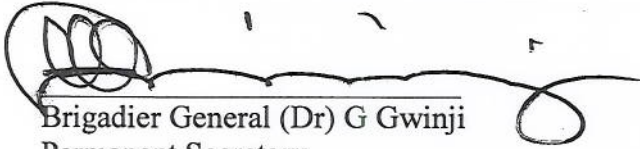
The following strategic directions are recommended for the Zimbabwe malaria control programme in the next three years:

1. Urgently leverage additional funds and engage partners to fill the 2012-13 malaria control resource gaps.
2. Strengthen partnership and program management to address human and financial resource needs, commodity requirements, monitoring and evaluation and operational research.
3. Urgently expand community based malaria control services through strengthening community health systems.
4. Scale up and direct interventions based on epidemiological evidence, including district level targeted elimination activities.
5. Strengthen malaria monitoring and evaluation, surveillance and utilization of evidence for effective programming.

V. Commitment

We, Ministry of Health and Child Welfare and partners in Zimbabwe, re-commit ourselves to the implementation of the programme review actions points and the acceleration and scaling up of malaria control interventions for universal access and sustainable impact with the ultimate goal to eliminate the disease in the country.

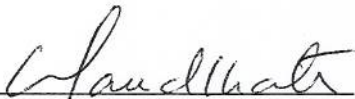
Signed on behalf of the Government of Zimbabwe and Partners:



Brigadier General (Dr) G Gwinji
Permanent Secretary
Ministry of Health

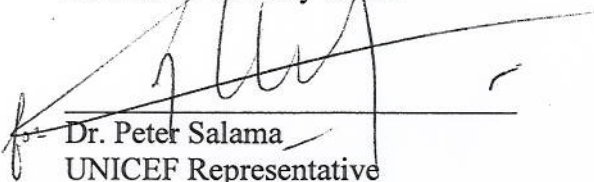


Christine Umtoni
Country Director
UNDP
Zimbabwe Office

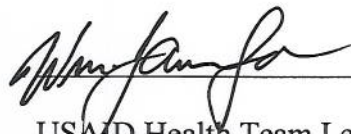


Dr Custodia Mandlhate
WHO Representative
Zimbabwe Country Office

European Union
Zimbabwe



Dr. Peter Salama
UNICEF Representative
Zimbabwe Country Office



USAID Health Team Leader
Zimbabwe Office

DFID Head of Mission
Zimbabwe

In Harare, Zimbabwe, this day Friday the 17th of June 2011