



**Malawi Malaria Programme Performance Review  
Aide Memoire  
2 July 2010**

## **I Purpose**

The purpose of the review is to identify achievements; progress and performance of current National Malaria Control Programme as well identify major emerging critical issues and priority problems. It will also be used to investigate the cause of problems and propose solutions with the view for program redesign to achieve better performance as regards quality and impact in line with universal coverage thereby moving towards elimination.

## **II Background**

In 2009, the NMCP supported by partners made a decision to conduct a malaria programme review as part of the end-term evaluation of the Malaria Strategic Plan 2005-2010 with a view of identifying key actions to include in the new Malaria Strategic Plan 2011-2015.

### **The specific objectives**

- To review the malaria epidemiology in Malawi
- To review the structure, organization, and management framework for policy and programme development within the health system and the national development agenda in Malawi
- To assess progress towards achievement of national, regional and global targets
- To review the current programme performance by intervention thematic areas and by service delivery levels.
- Define the next steps for improving programme performance and/or redefine the strategic direction and focus including revising policies and strategic plan.

The MPR was conducted in 3 phases. In phase 1, the NMCP together with partners agreed to conduct the review and sourced for funding. In phase 2 the NMCP together with partners constituted an internal review team that conducted systematic thematic

reviews at the national level to identify achievements, progress, challenges and make recommendations. In phase 3, the internal review team was joined by an external review team that further examined available documents, reports and also conducted interviews and field visits to validate the findings of the thematic groups. Interviews were conducted with selected districts, health facilities as well as focused group discussions with the communities within the respective districts visited.

### **III Key Findings and Action Points**

#### **1. Programme Targets**

The goal of the malaria strategic plan 2005-2010 was to halve malaria morbidity and mortality by the year 2010 with further reduction of morbidity and mortality figures of 2001 by 75% by 2015. The specific intervention targets were 80% access to appropriate treatment by all at risk of malaria; 80% access to malaria prevention by pregnant women; as well as 80 % of children under 5 years and pregnant women sleeping under ITNs.

Recent surveys indicate progress in intervention coverage as follows: household ITN possession has increased from 6% in 2000 to 60% in 2010; use of ITNs by children aged less than 5 years to and pregnant women has increased from 8% in 2000 to 54% and 60% respectively. Treatment seeking behavior in children with fever in the last 2 weeks who received an appropriate antimalarial drug has increased from 24% in 2004 to 28% in 2010.

Data from HMIS and IDSR show that nationally, there is an increase in suspected outpatient and inpatient malaria cases. There is also a noticeable decline in malaria admissions and deaths in some districts and an increase in other districts.

#### **2. Malaria Epidemiology**

Malaria is hyper-endemic and transmission occurs throughout the year in most places in Malawi, except in the mountainous areas in the north and south. Transmission is greatest during the rainy season and there is variation in intensity from low, medium and high based on season and topography. The predominant malaria species is *Plasmodium falciparum*. There are three major vectors of malaria in Malawi: *Anopheles gambiae s.s.*, *Anopheles funestus* and *Anopheles arabiensis*.

In 2009, 6.1 million suspected malaria cases and 8,800 suspected inpatient deaths were recorded by HMIS. Incidence rates range from 200 to 850 per 1000 population. However, less than 10% malaria cases are confirmed. The districts surrounding Lake Malawi and in the Shire valley have the highest incidence rates.

#### **Action Points**

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- There is need for detailed analysis and triangulation of the various data sources to determine the current epidemiological situation
- Decisions on scaling up malaria control should be based on the analysis arising out of data triangulation.

### **3. Advocacy, Information Education and Communication, Behaviour Change and Communication/Community Mobilisation**

The NMCP has developed a communication strategy that has been partially implemented. BCC/IEC activities at district level are managed by the district health education unit. There has been an increase in BCC initiatives mainly focusing on under fives and pregnant women, resulting in greater awareness of malaria at community level. Community attitudes such as late-treatment seeking behaviour, myths and misconceptions about IPT, ITNs and LA negatively influence uptake of malaria treatment and prevention services. Collaboration between the district malaria coordinator and the health education officer on malaria BCC/IEC is minimal.

#### **Action Points**

- There is need for intensified high level advocacy for malaria involving political and civic leadership structures at all levels.
- Intensify BCC messages aimed at increased use of malaria control interventions and services in line with universal coverage.
- Update and implement the malaria communication strategy in line with the new malaria strategic plan.
- Improve collaboration between the Health Education Officer and the DMC at the district level

### **4. Vector Control**

Malawi has a policy for free ITNs delivery currently targeting the pregnant women and children under five years. The main delivery channels are ANC, immunization clinics and campaigns. However, there is reported misuse of ITNs in the communities. There are noted stock outs of ITNs in some facilities. IRS has been piloted in one district and will soon be expanded to 6 other districts with highest incidence. Guidelines for IRS adapted from WHO guidelines and also developed by RTI will be adapted for use in the new districts.

Preliminary information from a sentinel site indicates development of insecticide resistance by malaria vector species. Malawi does not have an integrated vector management (IVM) strategy that includes other vector control interventions such as larviciding and environmental control that could be appropriate for urban areas.

#### **Action points**

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- Adopt universal coverage with LLINs for all at risk of malaria in the new malaria strategic plan
- Develop an integrated vector management strategy that includes other vector control interventions.
- Review ITNs/LLINs logistic arrangements in preparation of the upcoming universal coverage campaign.
- Verify the results of the study on vector resistance from one site. Similar studies should be done at other sentinel sites to confirm the magnitude of the problem and take action.
- Set up studies to update vector bionomics and stratification in Malawi

## **5. Malaria Diagnosis and Treatment**

Since 2007, the malaria treatment policy has been Artemether-Lumefantrine (LA) as 1st line treatment, Amodiaquine-Artesunate as Second line treatment with Quinine reserved for severe cases. This policy has been rolled out to the public health facilities and all Christian Health Association of Malawi (CHAM) facilities. The second line treatment is hardly prescribed even where laboratory services are available. In the facilities visited, management of severe malaria in children under-five is done in accordance with the national treatment policy in the hospitals. The new treatment policy has not been fully implemented at the community and in the private sector. In collaboration with IMCI, community management of malaria using LA targeting under-fives is being implemented in 1000 out of the 4000 hard-to-reach villages.

The treatment policy also recommends confirmation of malaria cases before treatment among those aged over 5 years while children under 5 years are treated presumptively according to IMCI protocol. However, there is limited capacity for laboratory confirmation of malaria due to limited number of laboratory technicians, microscopes and reagents. The rapid diagnostic tests for malaria have not been rolled out yet.

There is observed non-adherence to tests results by clinicians, over consumption of ACTs compared to number of cases reported and ACT stock-outs in some facilities. Some health workers have not been trained on the new treatment policy. The quality control system for laboratory diagnosis is weak.

### **Action Points**

- There is a need for an in-depth review of the utility of the second line treatment for malaria in Malawi.
- More refresher training of the prescribers on the new treatment policy including diagnostics.
- Update the treatment policy to include parasitological confirmation for all suspected malaria cases.
- Review the logistics system for distribution of malaria commodities to eliminate stock-outs of malaria commodities.
- There is need to establish a system for documentation of antimalarial stock-levels quarterly at all levels.

- There is need to intensify BCC on the new treatment policy
- The MOH should develop a policy banning artemisinin based monotherapies and other antimalarial monotherapies in the community.
- Strengthen the strategy for ensuring access to ACTs and RDTs at community level.
- Strengthen the quality assurance and quality control system for laboratory diagnosis that should include RDTs.

## **6. Malaria in Pregnancy**

Malaria in pregnancy interventions are part of the focused antenatal care package that has been rolled out in collaboration with the reproductive health unit. It has also been incorporated into the training of the health surveillance assistants. However, it's been noted that there is inadequate knowledge of treatment of malaria episodes in pregnancy. For example quinine and SP are being used to treat uncomplicated malaria in pregnancy in the second and 3<sup>rd</sup> trimester. There is inadequate financial resources for MIP activities.

### **Action Points**

- Strengthen collaboration with reproductive health on scaling up malaria in pregnancy interventions.
- Mobilize more resources for the implementation of MIP activities
- Build capacity of health workers at all levels in MIP

## **7. Surveillance, Monitoring and Evaluation and Operations Research**

The NMCP has developed an M & E plan 2007-2011. Data on commodities delivered is obtained from the Central Medical Stores, Mulli Brothers and PSI as well as from routine supervision. Data for malaria cases and deaths is obtained from the Integrated Diseases Surveillance and Response (IDSR) and Health Management Information System (HMIS). IDSR collects data on in-patient malaria cases, suspected and confirmed outpatient malaria cases, malaria cases and deaths in pregnancy and anaemia but not the number tested. HMIS collects data on OPD cases and deaths. Although data are not always complete or timely, they are useful for decision-making if analysed routinely by the NMCP. There is however inadequate capacity for data collection, analysis and use at levels. Moreover there is no regular feedback to the lower levels. Data from IDSR show that about 10% of malaria cases are confirmed with majority treated presumptively. At the 4 sentinel sites only 25% of malaria cases are confirmed due to inadequate human resources and shortage of reagents and slides. The ongoing HMIS revision is an opportunity for the NMCP to integrated more malaria data elements.

Malawi has successfully conducted several surveys that have provided information on trends in coverage and impact. There is ongoing research on malaria in Malawi. In 2009 malaria research dissemination conference was held and another one is planned

for 2010. However there is need for more engagement between monitoring and evaluation technical working group and malaria research community to prioritize the research agenda.

### **Action Points**

- Update the malaria M & E plan as soon as the new malaria strategic plan is done.
- Conduct frequent training for health workers on data management at the district and health facility level
- Need to strengthen the linkage between the NMCP and IDSR/HMIS to ensure timely access to data to guide decision making.
- Need to institute periodic analysis and reporting of data from IDSR/HMIS to guide decision making.
- Strengthen the sentinel sites through provision of more human resources, reagents and slides as well as regular supervision. The data should be used by the NMCP for action.
- The NMCP should strategically engage with the ongoing HMIS review and IDSR to ensure that core malaria indicators are included
- There is a need for more engagement between monitoring and evaluation technical working group and malaria research community to prioritize the research agenda.

## **8. Programme Policies, Strategies and Management**

Since the NMCP was established, there has been improvement in program performance. The program has policies and guidelines for malaria control that will require updating alongside the development of the new malaria strategic plan. The human resources situation at the NMCP has improved from 4 in 2005 to 12 in 2010 including the appointment of a substantive NMCP Manager and an M&E Officer seconded by MSH. Despite this increase there is only one established position in the NMCP. Furthermore the program requires more staff at the central level to support district implementation and supervision especially in the areas of case management and vector control.

District Malaria Coordinators (DMC) that are appointed by the District Health Office (DHO) work with the Health Surveillance Assistants (HSAs) on malaria control. However, the DMCs need induction training on their responsibilities, regular supervision and follow-up as well as dedicated funds to conduct key activities.

There is a marked increase in funding for malaria control by government and partners. The current financial arrangements through the SWAps have enabled the program to scale up interventions.

Several partners are involved in malaria control in Malawi, there is need to improve partner contribution and coordination.

Although there is some collaboration between the MoH and non health institutions in malaria control, there is a need to formalize the engagement especially with ministries, assemblies and the private sector that can potentially contribute to increased malaria transmission.

#### **Action Points**

- Review the staffing situation at the NMCP and increase staff to adequately cater for the demands on the programme.
- The NMCP should have a defined staff establishment with clear post descriptions and career paths since malaria is a priority disease control programme.
- Improve collaboration with other programmes within the MOH such as Child Health and Maternal health which are responsible for certain aspects of malaria control.
- Strengthen partnership coordination at all levels through ensuring that the malaria advisory groups as well as the technical working groups are functional and meet on a regular basis.
- Strengthen the capacity of the district malaria coordinators through provision of regular training on their responsibilities
- Strengthen support supervision at all levels with consistent use of supervision guidelines and ensure regular feed back

#### **IV Conclusion**

There has been considerable progress in the coverage of malaria interventions achieved through commitment and active involvement of the government, partners and the community.

In order to sustain and improve the gains made there is need to invest in building the capacity of health workers at all levels. There is also need to scale up interventions at community level in order to attain universal coverage and impact. Advocacy at all levels as well as active community involvement is key to scaling up interventions. Finally robust monitoring and evaluations systems will guide evidence-based implementation of activities.

**V Commitment**

We the Ministry of Health and Development Partners supporting malaria control in Malawi commit ourselves to the implementation of the action points in this review and the acceleration of malaria control towards universal access.

**Signed on behalf of the Government of Malawi and Partners**

On this day Friday 2<sup>nd</sup> July, 2010 Lilongwe, Malawi