

Guidelines for RBM Needs Assessment

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**Harmonization Working Group
Roll Back Malaria Partnership**



**Developed by
Malaria Consortium**

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1. Introduction

1.1. Rationale

The signing of the Abuja Declaration in 2000 was a benchmark for increased support and commitment for malaria control in sub-Saharan Africa. Ambitious targets were set to halve malaria morbidity and mortality by 2010. Increased funding over the last seven years through sources such as the Global Fund for Aids, Tuberculosis and Malaria (GFATM), The US President's Malaria Initiative (PMI), the World Bank Malaria Booster Program, the Bill and Melinda Gates Foundation (BMGF) and private foundations have allowed countries to scale-up activities. Despite this, countries have been unable to achieve their targets largely due to financial and technical gaps. More recently, it has been recognised that to substantially reduce malaria-related mortality and morbidity by 2010 and beyond, countries will need to reach **80% coverage of the population at risk** and even higher coverage of the most vulnerable groups - children under five years of age, pregnant women, and people living with HIV/AIDS. This requires an urgent program of accelerated scale-up of core interventions.

In order to rapidly scale up to achieve impact by 2010, it is vital to ensure all current challenges to meeting the 2010 targets are identified, be they resource or operational gaps or strategy limitations. Prioritisation of resources and technical support and implementation can then be done to ensure every country has the necessary requirements to make significant steps towards meeting their national and 2010 targets.

Comprehensive needs assessments have therefore been planned. These will determine what are the programmatic, financial and operational gaps, constraints and opportunities to reach the ambitious targets of national malaria strategic plans and global 2010 RBM targets over the 2008 – 2010 period and beyond. The information collected will also be available to feed into the Global Fund Round 8 proposals. While these assessments will be country-specific, they will share common methodologies to allow for the compilation of a continent wide assessment and subsequent development of a malaria control business plan for Africa.

In a wider planning environment the basic reference points are the multi-year national malaria strategic plans and annual operational plans. There will be three levels of analysis: quantitative, qualitative and financial whose overall goal is to determine whether current objectives and strategies are adequate to meet the targets that have been proposed.

1.2. Scope and Outline of the Guidelines

These guidelines have been written to assist national malaria control programs and partners who will be supported by external and internal consultants, to carry out their individual needs assessment while also providing a general framework for cross-country comparisons/issues.

The process and documentation of the needs assessment will be driven by three main tools: the *Guidelines for RBM Needs Assessment*, the *RBM Needs Assessment Report Template* and the *Needs Assessment Calculation Tool*.

Guidelines

The guidelines take the country and consultants through the core components of the assessment outlining which issues must be addressed and indicating what information and data should be collected at each point, to inform the analysis. Any additional information or the details of extraordinary situations should be provided in the form of an annex.

Report Template

The report template includes subheadings where narrative sections should be inserted and blank tables where the key information, collected as part of the needs assessment, should be included. The guidelines are linked to the report template throughout, with the layout relating to the subheadings making up the report template and with clear indication as to where information collected links to specific tables in the report template.

Calculation Tool

The Needs Assessment Calculation Tool assists with calculation of commodity requirements and costs for the core intervention areas. A careful review of the “*user guide*”, notes on the “*data input sheet*” and final “*notes*” sheet of this calculation tool is absolutely vital to ensuring the tool is used correctly.

It is important that the commodity and cost requirements that are entered in the report template for the core intervention areas are calculated using this tools so that each country needs assessment uses comparable assumptions and formulae. However, and importantly, this is not to say that local more detailed assumptions and costs are not relevant. Consultants or country programs may feel they would like to use more country specific information or detailed information on commodity requirements; if so, it would be very useful to have these data with full explanation of assumptions, included in an annex of the report.

It is also important to note that the Needs Assessment Calculation tool does not provide *all* the information that should be provided in the needs assessment report, it is, on the whole, limited to assisting with calculations of commodity requirements and costs. Consultants will be expected to carry out relevant in country calculations for some additional items, specifically the cross cutting areas.

The tool is somewhat flexible in that it allows modification of targets etc to simulate different scenarios if used to its full potential. Suggestions in the user guide section of the tool are given to assist with this.

The needs assessment process will cover four key areas of:

- General information
- Core interventions
- Cross-cutting issues
- Program management and health systems

The components and issues to be addressed within these sections were identified through a consultative process including WHO consultants, UNICEF, WHO Global Malaria Program, MACEPA, Clinton Foundation and others. The format of the tools has gone through a three stage revision process with considerable input from many partners.

Individual countries may have other issues that are relevant to their situation, which can be included. However, the intent is to have a tool that is broadly applicable. This needs

assessment guide is supported by a template for the needs assessment report and a series of ancillary tools which may be used, where appropriate, to support the situation analysis.

1.3. Organization of the Guidelines and how to use them

This document has three sections:

- **Introduction**
- **Methodology** - describing the assessment methodology including the assessment process, qualifications and skills of the assessment team, guidelines on how to analyze the data collected, and a summary of the assessment report.
- **Assessment Components** – This is the main part of the guidelines. This section is the key part of the guidelines which links to the report template document. It is divided into four main areas (general information, core interventions, cross cutting issues, program management and health systems). The core interventions are then broken down into key components within these areas (e.g. LLINs, diagnosis, treatment etc). Each assessment component has four parts to it:
 - **Rationale** – this section explains why this component is important in the context of malaria control strategies.
 - **Data sources** – this suggests sources to inform the needs assessment including documents, interviews and site visits.
 - **People to interview** – this recommends key individuals and organizations to interview.
 - **Situation analysis and needs assessment:** including **qualitative** and **quantitative** components. Under this section specific questions and issues to be addressed under each component are outlined. These cover both qualitative and quantitative information that guide the gathering of all the relevant information and data to allow identification of gaps, bottlenecks and challenges and to propose solutions.

Not every issue may be applicable to the country setting; if it is not applicable that section of the table should be substituted with a note stating why this is not applicable. At the same time, it is expected that each question or issue receives more than a positive or negative response as these qualitative and quantitative checklists are a guide to data and information collection and analysis process. Indications are given as to where data should be inserted into the relevant tables in the report template and where ancillary tools may be used.

Section 1 of the template outlines the background of the needs assessment including the names of the team who lead the process and date the mission was undertaken.

2. Assessment methodology

2.1. Planning and preparation

For External Consultants: Preparation for the assessment should include a review of background country documents (national strategic plans, recent submissions to the Global Fund, US PMI Malaria Operational Plans, etc) to familiarise oneself with the country situation, either accessed from the internet or from relevant contacts such as the NMCP, WHO, UNICEF, PMI, donors and other organizations.

Prior contact with the NMCP, other RBM partners or the local consultant team member will allow you to request the gathering of in-country documentation and data in advance and also assistance in setting up an interview schedule, with senior government officials who already have busy schedules. This preparatory phase is essential to allow the NMCP manager time both to prepare and to plan how to use the assessment to meet his/her program needs.

For in-country consultants: The NMCP and external consultants will need a considerable degree of orientation and support. Where possible, interview schedules and gathering of documents before the arrival of the external consultant will greatly expedite the process.

2.2. Field work

Introductory Briefing

A brief “kick-off” meeting should be held with the NMCP Manager and other RBM partners to clarify the scope of the assessment, data collection strategy, establish or confirm the interview schedule and timeline for field visits, as well as assign roles and responsibilities to various actors.

Data Collection

To identify the needs of the individual countries, where the gaps exist, constraints and opportunities, it is necessary to collect data on the prevailing situation - “a point prevalence” of where we are at this point in time.

These data can be collected in a variety of ways and from a variety of sources:

- *Interviews.* Interviews with the various stakeholders at different levels. Some suggestions on persons to interview are made in relevant sections in Section 3 (e.g. regulatory authorities, NMCP manager, Ministry of Agriculture, NGOs, private sector) as are questions/issues to be raised. Where possible, interviews should be structured and focus on the area of interest to the interviewee, therefore not all questions will be necessarily relevant for every interview. Structuring interviews in this way will allow common themes to be addressed. In some cases it might be more practical to organise a round table discussion with Provincial and District personnel.
- *Review of country documentation:* For each of the different components data sources have been suggested but are not exhaustive and consultants should be aware of this and identify additional information. Examples of data sources are census data, strategic plans, operational plans, routine data reporting, national and community surveys, procedure manuals, surveillance reports, policy documents – from both government and partners,

GFATM proposals, World Bank Booster aide-memoires and US-PMI malaria operational plans. **For external consultants, it is important to review the documentation before arrival in-country.**

- *Site or Field visits:* Although the majority of the information can be obtained from the central level, it is important that issues relevant to Provincial/District levels are validated (e.g. insecticide storage conditions, supply chain blocks, coordination between different levels of the health system, cascade training impact etc). It is therefore expected that the assessment team will visit some selected district(s) and/or province(s). How many site visits are carried out will depend on the time available for the assessment and the degree to which they are involved in the implementation of malaria control activities. For example, the findings on following national treatment guidelines could be totally different in one region that is low transmission from another that is high transmission setting. The need and practicality of carrying out these visits should be discussed at the initial meeting with the NMCP and partners.

Analysis

Data analysis is critical to the whole assessment process as it is from this that the gaps, constraints and opportunities will be identified and practical and actionable recommendations made.

However, the analysis can only be as good as the data collected. The completeness and quality of the data in providing responses to the questions or issues posed must be guaranteed and validated and any limitations in the data collected should be noted. The following points will aid the process:

Data Organization - Organize the data according to the various components outlined in Section 3, and as feasible, further by the associated issues/question which have been numbered to aid this process. This will allow cross-checking of the information and in turn will facilitate writing the report which should be a summary of the findings. Causes and linkages between issues or assessment components should also be identified.

Source all data collected – Identify the data by individual and/or by site visited and date, you often cannot go back to the source.

Validate the information – The data may be of a poor quality due to the source. Where possible, cross check with related data gathered from other sources and state the limitations of the data.

Feedback Meeting

A presentation of the preliminary findings to the NMCP and the partners should be done at the end of the assessment. Comments can then be incorporated into the report.

2.3. Post field work

A detailed report will be prepared upon returning from the field, according to the outline in Section 2.6. If possible a draft report should be available before leaving the country. If a draft report is not available at the conclusion of field work, an assignment of responsibilities within the in-country team must be determined prior to departure. The analysis and writing of

the assessment report should be done within the time frame of your contract and a draft copy circulated for comments to the NMCP and partners.

2.4. Skills and level of effort needed to conduct the assessment

The RBM partnership/HWG has provided terms of reference for this assignment. Selection of the consultants has been through a tender process. It is envisaged that the team will comprise of one or two external consultants with experience of malaria control programs at country level and one local consultant. This team could also include HWG partners if required.

The team will be expected to spend at least two weeks in the field which will include some in-country travel (the team might decide to split up and cover different areas), interviews, collation of documentation and analyzing the information received. Following the country assignment, the consultants should be available to finalize the report.

2.5. Role of NMCP and other relevant MOH departments in the assessment process

This assessment is for the NMCP to establish what are their needs and what is required for them to achieve their targets and develop an operational and feasible business plan to address those gaps. **To do this it is essential that the NMCP fully participates in the assessment process in order to gain full commitment and ownership of the findings and recommendations.**

Ways to assure this is that all staff of the NMCP are aware of the expectations of the assessment and what will be their individual and group contributions, and what in turn will be provided. This should be augmented with regular meetings with the NMCP and other relevant MoH departments, such as MCH and RH, to give feedback, as well as inclusion on field visits. The preliminary findings should be shared with the NMCP Program Manager, and make sure that he/she reviews the report and agrees to the findings.

2.6. Report outline

The report should be between brief and follow the template that has been provided. The report template is the second of the three key documents used to inform the needs assessment process and should be referred to alongside these guidelines. Whilst uncompleted report template is made up mainly of tables the narratives that go alongside these tables are key to a full interpretation of the country needs and should be given sufficient attention; it is these guidelines that will take you through the issues that must be included in the narrative sections. The report will comprise of the following sections:

Executive summary

- 1. Introduction:** recap on purpose and objectives
- 2. Methodology:** a description of the sets of documents analysed, and commentary on any limitations of data sources

3. **Demographic, socio-economic and epidemiological profile:** to include basic information about the malaria situation as well as a brief population profile.
 4. **Progress, estimated gaps and requirements:** this section summarises key points related to targets, finances and requirement gaps, such as commodities, human resources etc.
 5. **Core interventions:** this section details the findings under the core intervention areas of prevention (including vector control and malaria in pregnancy) and case management (including treatment and diagnosis).
 6. **Cross-cutting issues:** this section details the findings under the cross cutting areas of: epidemic and emergency control; advocacy, BCC and IEC; and surveillance, monitoring and evaluation & operational research.
 7. **Program management and health systems:** this section includes findings under the headings program management, partnership co-ordination, supply management, human resources and health systems strengthening.
- Annexes:** these will include details of the needs assessment process as well as more detailed tables of data.

Each section will include narrative components for which suggested subheadings have been provided. Templates for tables and figures to present key data and information are provided in the template.

3. Assessment Components

As described in section 1.3 this is the main part of the guidelines. The guidelines on how to use this section are therefore repeated here.

This section is the key part of the guidelines which links to the report template document. It is divided into four main areas (general information, core interventions, cross cutting issues, program management and health systems) and then broken down into key components within these areas (e.g. LLINs, diagnosis, treatment etc). An indication is also provided as to the likely source(s) of this information. Each assessment component has four parts to it:

- **Rationale** – this section explains why this component is important in the context of malaria control strategies.
- **Data sources** – this suggests sources to inform the needs assessment including documents, interviews and site visits.
- **People to interview** – this recommends key individuals and organizations to interview.
- **Situation analysis and needs assessment:** including, for the core interventions, **qualitative** and **quantitative** components. Under this section specific questions and issues to be addressed under each component are outlined. These cover both qualitative and quantitative information that guide the gathering of all the relevant information and data to allow identification of gaps, bottlenecks and challenges and to propose solutions.

Not every issue may be applicable to the country setting; if it is not applicable that section of the table should be complete with a note stating why this is not applicable. The qualitative and quantitative checklists guide the data and information collection and analysis process. Indications are given as to where data should be inserted into the relevant tables in the report template and where ancillary tools may be used.

3.1. General Information

3.1.1. Demographic and Epidemiological Profile

Rationale

In order to inform an assessment of needs to reach 2010 targets as well as the adequacy of the current strategies to allow scale up basic country information is needed. This includes information on the epidemiological profile of the country, which will help inform decision making on the appropriateness of the strategies for scale up as well as inform calculation of populations at risk. Demographic information includes data such as the population profile, general health indicators and the socio-economic characteristics.

Data Sources

- Latest census
- NMCP strategic plan
- DHS survey

- Other surveys – MICS/MIS

People to Interview

- NMCP manager
- Epidemiology department
- Health information and planning department
- Central Statistics Office (or equivalent)

The data collection process for this section should be driven by Tables 1, 2 and 3 from the report template.

Information required for Tables 1 and 2 is indicated in the tables and includes socio-economic, demographic and health indicators.

Table 3 summarises the population at risk of malaria in the country. In order to calculate this, assessments must be made on the epidemiological stratification of the country in order to link this to population size in each setting. The NMCP are the most appropriate source of information for this. Their assessments should be compared to any morbidity and mortality data available from these settings for verification as well as against opinions from other technical partners in the country such as research institutions.

In addition to completing Table 3 the epidemiology of malaria in the country should be described in a narrative section and a map showing the stratification (by district if possible). Also the malaria transmission season or if malaria transmission is year-round should be mentioned.

3.1.2. Progress, estimated gaps and requirements

Rationale

Ambitious targets for malaria control have been set both globally and at country level. For the core interventions of case management and prevention the revised RBM targets for 2010 are at 80% of the population at risk. In line, the national targets are similar usually ranging from 80 – 90%. In the majority of cases progress towards reaching these targets has been slow and coverage is far from the end date which is only 3 years away.

Intense support to allow countries to accelerate progress to meet 2010 targets is now being proposed. This support is likely to be both monetary and in the form of technical assistance plus implementation to solve bottlenecks. In order to ensure appropriate and adequate support is provided to countries it is vital to have a summary of the situation with regards to progress towards national and RBM 2010 targets, as well as to summarise available resources and remaining gaps towards their attainment, which has the added benefit of feeding into Global Fund proposals or longer-term business plans.

Once overall gaps are identified an assessment of the NMCP's (and partners') *current and expected absorptive capacity*, must be made to determine whether the country's and/or

global 2010 targets are achievable, assuming all possible financial and technical support is provided. This qualitative assessment is an important component of the needs assessment process to ensure that countries which embark upon an expensive and accelerated campaign over the next couple of years are investing in achievable results.

Data Sources

- NMCP strategic plan
- RBM global targets
- DHS and other large surveys

People to Interview

- NMCP manager
- Health information and planning department

The data collection process for this section should be driven by Tables 4 – 8.

Targets

Table 4 should summarise country progress towards all key targets. Where not relevant to this country setting these need not be addressed. Additional indicators can be added to the Table list where key country indicators are missing. NMCP (or national) targets by year and baseline values should be shown and can likely be sourced from the NMCP strategic plan.

These needs assessments are focusing on needs to meet 2010 RBM targets, or national 2010 targets if these are higher. Additional information will be included throughout on reach 100% coverage and continuing beyond 2010 to 2013, but the focus in the tables and the narrative remains on reach 2010 RBM targets.

Current Financing

Whilst each component part below under core interventions and cross-cutting issues includes details of current financing for that area of intervention an overall summary for malaria should be provided here (section 4.2 of the report template). Table 5 should be completed following interviews with key country, partners and donor staff and likely using the most recent global fund application as a useful additional source. Other major donors present in the country should be added and the committed and expected amounts included in calculations.

In addition to the table a narrative describing the structure and status of overall malaria financing for this country should be included.

Estimated gaps and requirements to attain 2010 - 2013 targets

Section 4.3 is the key summary of the needs assessment. It is an important role of the team carrying out the needs assessment to make informed judgments about the feasibility of achieving targets and therefore whether the quantitative and qualitative gaps presented can appropriately addressed and translated into sensible funding and technical assistance requests. This part of the report should therefore have a comprehensive narrative section discussing absorptive capacity of the country based both on previous experience, expectations given the recommended assistance to management areas as well as the country setting (e.g. conflict affected).

Table 7 summarises, for each core intervention area, the progress and needs for reaching the 2010 targets and beyond in non-monetary terms. The key targets, strategies and approaches, progress and bottlenecks should be summarised and additional activities to achieve targets should be proposed, in particular activities needed to address the major bottlenecks and challenges to scaling up. The information to complete this summary table should be collected during the situation analyses and needs assessments under the core intervention areas, as described in the following sections. Table 7 is a qualitative summary (Tables 8 - 11 capture the quantitative summaries) and should be completed towards the end of the needs assessment in conjunction with the executive summary.

Tables 8 - 11 should display summary information on purely financial requirements. These costs will be calculated during the situation analyses and needs assessments under the core intervention areas. Key sources are the costing of the overall strategic plan, often included in the most recent global fund application. Additionally an RBM costing tool is available from RBM as a useful additional source should the country not have already costed out its strategic plan. The financial targets are most succinctly summarized in Tables 8 and 9. The needs to reach both 100% coverage targets and RBM targets should be shown by intervention in Tables 10 – 11.

3.2. Core interventions

3.2.1. Prevention

Under this component vector control and personal protection issues as well as malaria in pregnancy will be considered.

There are three main approaches to vector control and personal protection, namely: insecticide treated nets (ITNs), indoor residual spraying (IRS) and larval control techniques. The degree to which each of these approaches is used depends on the individual country situation.

Data Sources

- NMCP Strategic plan
- National vector control policy documents
- National ITN and IRS strategies and procurement guidelines
- NMCP annual work plans and budgets
- National / partner database of ITN distributions
- Major donors annual planning documents and details of implementing partners e.g. PMI or joint donor work plans where they exist
- Recent Global Fund applications
- DHS, MIS, MICS or other nationally representative surveys
- RBM Working Group on scalable vector control (WIN).
- World Malaria Report 2005
- GMP database
- Results of research on insecticide efficacy and resistance patterns
- RBM Working Group documents on scalable vector control (WIN).

People to Interview

- NCMP Manager
- NMCP vector control focal person or ITN focal person or IRS focal person
- PMI malaria advisor (if applicable), other relevant donor agencies
- Major implementing NGOs working on ITN or LLIN distributions, IRS, environmental management in country
- MoH (MCH/RH) or implementing partner field staff (e.g. WHO, UNICEF, UNDP) working on ITN scale up, IRS or environmental management
- National regulatory authorities
- Supply division
- Representatives of net private sector
- Members of research institutes
- Representatives of the agricultural sector

Situation analysis and needs assessment

Below are the cross-cutting issues pertinent to the core component of prevention. These issues will not be addressed again in this section. This information should be taken into account when analysing the appropriate strategies under those components.

No.	Questions	Check and Data Source(s)	NMCP	MoH	Other	Provincial	Community	Donors	Partners/NGOs	Private	Regulatory
	Qualitative Issues										
	<i>Procurement and logistics</i>										
1	Are there guidelines for type of net, insecticides and larvicides to be procured and details for the standards for these?		x								
2	Do implementing partners adhere to these guidelines?		x						x		
3	Does the national regulatory authority have the skills and equipment to assess the adherence of imports to these specifications?		x								x
4	Do new LLINs brands, insecticides and larvicides require registration / licensing from the NRA or other body before import? Which LLINs, insecticide and larvicides are registered / licensed?		x								x
	<i>Financing</i>										
5	Which donors are currently supporting ITNs, IRS, Larviciding component?		x					x			
	<i>Communications</i>										

6	Is there a national level advocacy plan in place which specifically address prevention? Does this address all levels of the community? Does it include ITNs? IRS? Larviciding?		x							
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3.2.1.a Insecticide treated nets

Rationale

Insecticide treated nets act in two ways to prevent malaria. Firstly they provide “personal protection” from mosquito bites for those people sleeping under (direct barrier effect) or near (repellent effect) the net. Secondly they have the potential to provide a “mass effect” whereby very high (approximately 80 %) universal ITN coverage in a community results in an impact on the mosquito population as a whole, meaning fewer infectious mosquitoes and overall transmission is reduced.

As coverage of insecticide treated nets increases countries can hope to achieve significant transmission reduction with ITNs in addition to personal protection once high coverage levels are achieved. The accelerated scale-up currently underway is aimed at reaching and maintaining coverage of greater than 80% of entire populations at risk with insecticide treated nets by 2010.

Approaches towards ITN scale up are diverse but it is generally agreed that a combination of approaches (e.g. routine (keep-up) and campaign (catch-up)) is needed to ensure targets are reached and maintained. In most countries planning for and implementation of distribution campaigns of free nets will be needed to rapidly increase ITN coverage and utilization towards the 2010 targets. In addition, it is important that countries consider and include approaches aimed at maintaining coverage – including making nets available to replace those that reach the end of their effective life (either through age or wear) and/or provide nets for those groups not included in the campaigns. Approaches for maintenance commonly include distribution to pregnant women through ANC clinics or to children at routine immunisation and support to an expanded commercial sector. Strategies vary as to whether nets are provided free or at a cost. Generally, large scale campaign distributions provide free nets, with a range of in-country costs for nets distributed through the routine public sector, and in some cases voucher schemes are used whereby the beneficiary is given a discount voucher (rather than a net) and can redeem this in a shop.

In previous years the need to re-treat ITNs was a major impediment to the scale up process. With the arrival of long lasting insecticide treated nets (LLINs), which remain insecticidal for the lifespan of the net (between 3-5 years), this is no longer a concern. This technological break through has been a huge boost for the task of scaling up coverage with ITNs and most countries now ensure that only LLINs are procured for free or subsidized distribution. In countries where the number of untreated or conventional ITNs remains high net retreatment campaigns may continue to play a role in contributing to ITN coverage levels for a few more years.

Situation analysis and needs assessment

No.	Questions	Check and Data Source(s)	NMCP	MoH	Other	Provincial	Community	Donors	Partners/NGOs	Private	Regulatory
	Qualitative Issues										
	<i>Policies, strategies and approaches</i>										
7	Is there a policy document for ITN scale up?		x								
8	What are the national targets by year and to 2012? Do these match RBM 2010 targets? (<i>use National Strategic Plan</i>)		x								
9	Are only certain populations (e.g. under fives, pregnant women, PWLA, etc) targeted or are targets aiming at universal coverage? If only certain populations are targeted is there a plan in place to scale up to universal coverage? What rapid scale up approaches are included? (e.g. campaigns). Are these sufficient to reach the 2010 country and RBM targets? Are they appropriate to the country setting?		x								
10	What maintenance (keep-up) approaches are included? (e.g. health facility linked - ANC, immunisation, VCT, home based care, support to the commercial sector, etc). Are these sufficient to ensure coverage is maintained? Are they appropriate to the country setting?		x								
11	Is the role of the commercial sector acknowledged and included in the strategy document (e.g. subsidized marketing, voucher schemes, etc)? Is that appropriate in this country setting?		x								
12	Is the importance of BCC and utilization in addition to distribution acknowledged in the policy and strategy documents?		x								
13	Does the strategy specify mechanisms to mitigate leakage at national, sub-national and distribution point level? (e.g. managing data on flow of nets through system; marking nets, distribution of unbranded nets)		x								
14	Does the policy specify types of nets to		x								

	be procured for public sector distribution (LLINs or also ITNs)?										
15	Does retreatment still have a role in the country (based on approximate proportion of untreated or conventional ITNs to LLINs)? Is retreatment carried out on a large scale? What strategies are used (e.g. national campaign; local campaigns; permanent retreatment centres; sale of retreatment kits)? Is there adequate quantification and timing of retreat needs?		x								
16	Is there a phase-out plan to replace conventional ITNs with LLINs?		x								
17	Are there plans in place to replace LLINs as they come to the end of their useful life (ie. ~ 3 years for PermaNet™, 5 years for Olyset™)?		x								
Implementation status											
18	To what extent are the different approaches outlined in the policy documents in place?		x								
19	What needs (include financial implications where appropriate) are there for reaching full implementation: (i) training; (ii) human resources; (iii) commodities; (iv) transport and logistics; (v) IEC/BCC; (vi) M&E; (vii) technical assistance for design or implementation of systems.		x								
20	How large a role does the commercial net sector play? (i) annual turn over of untreated, ITNs and LLINs; brands available; national reach of formal or informal outlets? (ii) What scope is there for an increased role? (iii) Is the commercial sector donor supported? Are there any donor supporting socially marketed brands?		x					x		x	
21	What are the main reasons for non-use of nets in the country (e.g. availability, specific IEC issues, cost, access, etc)?		x								
Management and partners' roles											
<i>See under Partnership Coordination</i>											
Procurement and logistics											
22	How are LLIN/ITN needs quantified? Is the forecasted number sufficient and		x								

	adequate for country needs?											
23	Have recent orders faced any procurement problems e.g. delayed GF procurements or other large procurements? What caused this?		x	x								
24	Are there adequate in terms of conditions and size, storage facilities to support the distribution approaches used e.g. for campaigns, at health facility level etc?		x			x						
25	For routine distribution systems have stock outs been a problem? Is the national distribution network sufficient to reach all areas of the country? Are there any alternative networks that can be used? Are there any opportunities for synergies?		x			x						
Communications												
26	Has data on awareness of nets, ITNs and LLINs in general and in key target groups been captured? What indicator was used community level? Is awareness sufficiently high? If not, is there a plan in place to increase this?		x			x	x					
27	Are there specific cultural issues hampering promotion of net use in any parts of the country? Are there any specific cultural issues on net colour, shape etc?		x									
28	Are there standard advocacy communication materials and methodologies used to support ITN or LLIN distributions? For which distribution mechanisms?		x									
Monitoring and evaluation												
29	What data sources are used to inform progress on national indicators? Have these been validated?		x									
30	Is use of nets specifically measured? Through what mechanisms? As part of large scale surveys or also to follow-up specific distributions through differing mechanisms?		x									
31	How are net distributions monitored? Does this include routine support supervision for on-going distribution mechanisms (e.g. through health facilities)? Does this include monitoring of		x			x						

	stocks as well as distribution data?												
32	Is the M&E framework set up to monitor and take action on operational issues which may be slowing down scale up?		x										
33	Is there a database established to monitor and plan scale up? Who maintains this? Who supplies data for this?		x										
	Quantitative Issues												
	Finances and needs												
34	Does the country have estimated costs for different distribution systems? Are data available on these costs or total costs of activities that can be used to calculate per net costs?		x										
35	Quantify the current coverage of nets and ITNs by target group and for universal coverage, considering both ownership and use.		x										
36	Calculate the number of LLINs required for attaining the country targets and for universal approach under each distribution approach. <i>Table 12. Calculation Tool will help with this.</i>		x										
37	Calculate the gaps for achieving targeted distribution numbers by year until 2013. <i>Table 12. Calculation Tool will help with this.</i>		x										
38	What are the financial needs for the achievement of 2010 - 2013 country targets? <i>Table 12. Calculation Tool will help with this. Reference to the most recent Global Fund application should assist this process.</i>		x										
39	What are the country estimates of costs for the different distributions systems? (per net delivered) What does this include? <i>Table 12.</i>		x										

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3.2.1.b Indoor residual spraying

Rationale

Indoor residual spraying is an extremely effective tool for malaria prevention when carried out over a sufficiently wide geographic area and services are delivered at maximum quality. The approach works partly by repelling and deterring mosquitoes from entering sprayed houses and partly by ensuring that mosquitoes which do enter and feed pick up a lethal dose of insecticide when they rest on the walls of the house to digest the blood. The overall

impact is to reduce the number of infectious mosquitoes in the community and thereby malaria transmission.

The mode of action of IRS means that it will have an impact on transmission only in areas where the mosquito vectors rest inside the house after feeding. A second pre-requisite for the vector is that it is susceptible to the chosen insecticides. Public Health insecticides normally come from developments for the agricultural sector. There are presently only four families of insecticides used for IRS, and currently there is debate on whether or not using them in rotation will stave off resistance.

Given the fact that IRS does *not* function primarily as a means of personal protection, coverage is key to the success of the approach. It is estimated that a threshold of approximately 80% coverage of dwelling houses in any given community must be sprayed to ensure impact. Coverage in any given community requires not just that the houses are sprayed but that they are sprayed completely, partial spraying either through refusal of households to have certain rooms sprayed, poor quality spray techniques or watered down insecticides all have detrimental implications on achieving effective prevention. IRS is also often implemented in emergency situations or as a method of epidemic control in particular geographically limited areas.

The operational and logistics requirements for successful IRS are huge and as such the approach is most often carried out as a vertical program rather than decentralised with other health systems components or carried out by large numbers of independent implementing partners.

IRS has been a mainstay of vector control in large parts of sub-Saharan Africa particularly in southern Africa and the horn of Africa. There is now a move to include IRS as a key approach in large parts of sub-Saharan Africa. In order to achieve the desired impact on malaria transmission in such highly endemic settings, the emphasis will need to be on consistency, sustainability and high quality of implementation.

Situation analysis and needs assessment

No	Questions	Check and Data Source(s)	NMCP	MoH	Other	Provincial	Community	Donors	Partners/NGOs	Private	Regulatory
	Qualitative Issues										
	Policies, strategies and approaches										
40	Is IRS part of the national malaria control strategic plan? Are the plans appropriate to the country setting and achievable given sufficient financial and technical support?		x								

41	What are the national targets by year and to 2013? Do these match RBM 2010 targets?		x								
42	Is there an IRS specific strategy document?		x								
43	Is a waste management strategy clearly defined?		x								
44	Is there a pumps and protective equipment management plan?		x								
45	What insecticides are specified? Are there plans for use of other insecticides? Is there a plan to mitigate the development of insecticide resistance?		x								
Implementation status											
46	Is IRS currently used in the country? Which areas? Scale of activity (HH targeted)?		x								
47	Are a certain number of districts targeted for spraying? How are these districts targeted? Are at least 80% of households in the targeted areas sprayed? If not, is there a plan to increase implementation?		x			x					
48	How frequently are spray campaigns carried out?		x			x					
49	Have spray campaigns been carried out within an appropriate time limit at an appropriate time? If not what were the limiting factors?		x			x					
50	Are standard WHO based guidelines for conducting IRS, including training manuals and courses used? Have they been adapted to local conditions?		x			x					
Management and partners' roles											
51	Who currently conducts IRS in the country: MoH, partner organisation or combined? What management and planning role does MoH play if another organisation is implementing?		x			x				x	
52	Do donor plans fit into the overall NMCP strategic plan and work plan?		x							x	
53	What issues, if any, does decentralisation play in the implementation of IRS. Do decentralised MoH teams plan IRS independently or is it co-ordinated centrally? If a non-MoH implementing partner conducts the IRS do they co-		x			x					

	ordinate sufficiently with the decentralised structures?											
	Procurement and logistics											
54	Is there adequate quantification of insecticide and supporting requirements (e.g. pumps, protective equipment, etc)? How are needs quantified?		x			x						
55	Are they adequate storage and transport facilities at the implementing level to support the IRS campaigns?		x			x						
56	Does the capacity for maintenance of equipment exist in the Ministry of Health?		x									
57	Are safety procurements taken into account at the level of storage; handling of insecticide and disposal of expired / unused insecticide?		x			x						
58	Has insecticide leakage been an issue in the past? E.g. been found in the commercial sector or in private use?		x			x						
59	Are mechanisms in place to mitigate leakage of insecticide at national, sub-national and operational level?		x		x	x	x					
60	Is the road network sufficient to reach areas of the country targeted for IRS at times when spraying is meant to take place?		x			x						
	Communications											
61	Has data on awareness of IRS as a malaria preventive intervention been captured? What indicator was used at community level? Is awareness of IRS sufficiently high? If not, is there a plan in place to increase this (where appropriate)?		x			x	x					
62	Has data on the awareness of safety of insecticides in general and in key target groups been captured? What indicator was used community level? Is awareness sufficiently high? If not, is there a plan in place to increase this?		x			x	x					
63	Is there any experience or data relating to the willingness of the population to accept IRS?		x			x						
64	Is the IEC / BCC approach to increase acceptance of IRS (where appropriate) clearly defined? Are standardised		x			x						

	materials available?												
65	Are IEC / BCC activities carried out prior, during and after IRS?		x			x							
	Monitoring and evaluation												
66	What data sources are used to inform progress on IRS national or partner indicators?		x										
67	Does site mapping (i.e. mapping of districts with quantification of the # of households within each district) take place for planning? Are achievements measured against this target?		x			x							
68	Is there a system for monitoring development of and managing insecticide resistance in the country?		x			x							
69	How are IRS activities monitored for quality? Does this include quality control testing of sprayed surfaces? Does this include monitoring of stock movement as well as spraying data?		x			x							
70	Is the M&E framework set up to monitor and take action on operational issues which may be slowing down scale up?		x										
	Quantitative Issues												
	Financing and targets												
71	What is the targeted number of households? <i>Table 13.</i>		x										
72	Quantify the current coverage in terms of % of households in targeted districts sprayed with IRS or % of HH targeted sprayed with IRS.		x										
73	Does the country have estimated costs for IRS per household? What costs are included? Are data available on these costs or total costs of activities that can be used to calculate costs per household (e.g. cost of insecticide, cost of sprayers, training, protective equipment, etc)? . <i>Table 13.</i>		x										
74	What finances currently available by year until 2013? <i>Table 13. Reference to the most recent Global Fund application should assist this process.</i>		x										
75	Calculate the gaps for achieving targeted coverage by year until 2013. <i>Table 13. Calculation Tool will help with this.</i>		x										

76	<p>What are the financial needs for the achievement of 2010 country targets?</p> <p><i>Tables 13. Reference to the most recent Global Fund application should assist this process.</i></p>		x								
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Note: Care should be taken when defining household coverage – it will be necessary to distinguish between coverage of an area and coverage of all structures within those areas.

3.2.1.c Larval control (and environmental management) measures

Rationale

Larval control achieves impact on malaria transmission by reducing the density of adult mosquitoes. A very significant reduction in mosquito densities is needed to have an impact on transmission as even a small population of adult mosquitoes can maintain low to moderate levels of transmission. Larval control measures include chemical and biological larviciding as well as source reduction through environmental management. These methods become important components of integrated vector management and more programmatically useful as a country enters pre-elimination, elimination and prevention of reintroduction phases in the malaria control continuum. However, these methods are expensive, logistically difficult and comparatively low impact techniques particularly in comparison to the two main proven, cost-effective and high impact prevention methods - IRS and ITNs. In addition, operational constraints, particularly decentralisation, urbanisation, and poor infrastructure and health systems make effective large scale larval control problematic.

The key to effective larval control is to reach *all* breeding sites on a regular basis, either to replace larvicides or to eliminate newly arising breeding sites. The behaviour of the vector species and availability of water in the environment are two major issues that influence the feasibility of larval control interventions.

Larval control measures remain, on the whole, a supportive component of country vector control plans while the primary focus is on IRS and ITNs. Often even where these are mentioned in policy documents little implementation in this area is carried out given the difficulty in many areas of ensuring effective control using this approach. In areas where transmission is driven by limited and easily identifiable breeding sites these approaches do play a more central role.

Situation analysis and needs assessment

No.	Questions	Check and Data Source(s)	NMCP	MoH	Other	Provincial	Community	Donors	Partners/NGOs	Private	Regulatory
	Qualitative Issues										
	<i>Policies, strategies and approaches</i>										
77	Are there any areas in the country where larval control is feasible and appropriate?		x								
78	Is larval control part of the national malaria control strategic plan? What criteria for site selection are used? Is the strategy appropriate? Are other strategies (i.e. Ministry of Agriculture) consistent in terms of guidelines?		x								
79	Is there a policy document for larval control either as stand alone or part of a broader vector control document?		x								
80	Are there national indicators for larval control? What are they?		x								
	<i>Financing</i>										
81	What are the country estimated costs of the current larval control activities? What does this include?		x								
82	What short, medium and long term financing is available? From what source? What are the funding gaps to reach country targets? <i>Table 14.</i>		x								
	<i>Implementation status</i>										
83	Is larval control currently used in the country? Which areas? Which type of areas? What scale of activity? On-going or occasional activities?		x			x					
84	What approaches are currently used? (Larviciding (with what chemical or biological agents); biological control (e.g. gambusia fish); source reduction).		x			x					
85	Are standard WHO based training manuals and guidelines used?		x			x					
	<i>Management and partners' roles</i>										
86	Who currently conducts the larval control activities? Is there community involvement?		x			x	x				
	<i>Communications</i>										

87	Is there community support for this intervention (active or passive)?		x			x	x				
88	Are there any specific acceptance issues to address?		x			x					
89	Is the IEC / BCC approach clearly defined with standardised materials available?		x			x					
Monitoring and evaluation											
90	What data sources are used to inform progress on national indicators?		x								
91	Are there data on the susceptibility of vectors to the potential larval control agents?		x								
92	Is there a system for monitoring development of and managing resistance to these?		x								
93	Does breeding site mapping take place for planning and to measure achievements? Is this regularly updated?		x			x					
94	How is impact assessed? Are larval sites revisited to check for breeding? Is impact on vector density and / or malaria morbidity assessed? How? Is this robust?		x			x					

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3.2.1.d Malaria in Pregnancy

Rationale

During the past decade more effective strategies for the prevention and control of malaria in pregnancy have been developed and demonstrated to have a remarkable impact on improving the health of mothers and infants. Countries vary in the extent that they have been able to implement a comprehensive program for control of malaria in pregnancy, so the needs assessment will assess the country situation, and key inputs needed to improve implementation.

In areas of relatively stable transmission, malaria's impact on pregnancy is particularly marked in the first and second pregnancies leading particularly to low birth weight and maternal anaemia. In areas of low transmission, severe malaria becomes a more critical concern. Globally it is estimated that malaria in pregnancy causes up to 10,000 maternal deaths per year, and accounts for 8 to 14% of low birth weight and 3 to 8% of infant mortality. Women with HIV infection are more likely to have symptomatic malaria infection and an increased risk of adverse birth outcome from malaria.

The widely accepted strategy for control of malaria in pregnancy has three components:

1. use of ITNs for prevention (this is discussed in the vector control section)

2. intermittent preventive treatment (IPT) during pregnancy (IPTp) in areas of stable transmission
3. prompt effective case management for treatment¹ (discussed in case management section).

IPT involves providing all pregnant women with at least two doses of an effective antimalarial as preventive treatment during routine ANC visits. A third dose is recommended in some countries for HIV positive women, in countries with a significant burden of HIV infection, it may be preferable to adopt a three dose regimen for all women to facilitate programmatic ease with no risk to non-infected pregnant women. Few drugs have been thoroughly evaluated for safety during the first trimester. Given the importance of using a drug that is safe, effective, easy to administer and ideally has a reasonably long half-life, the current recommended drug of choice is sulfadoxine-pyrimethamine (SP)

IPTp is indicated in areas of high transmission, and is not a recommended strategy in areas of low transmission or which are epidemic-prone. By early 2007, 19 countries in the WHO/AFRO region had introduced IPT country wide in all endemic districts, and a further 14 had begun small-scale implementation.

Key challenges observed in early implementation include the need to improve IPT uptake and increase ANC attendance, especially for the second dose, ensuring security of SP supplies and addressing the issue of declining SP efficacy. Even where ANC attendance is high, IPT delivery can be hampered by staff shortages and poor health worker practices as well as drug stockouts^{2,3}. A key to effective implementation is effective collaboration between the Reproductive Health services, which have responsibility for implementing focused antenatal care (FANC) and national malaria control programs, which set the policy, ensure the availability of necessary resources to support implementation and evaluate progress. Collection of good monitoring and evaluation data on IPT has been a major challenge in countries, even with longer experience of IPT implementation.

The issue of alternatives to SP is a major concern. At present the actual mode of action of SP in preventing the consequences of malaria infection in pregnancy is not completely clear. However, increasing resistance of the malaria parasite to SP is a concern. WHO from a consultation meeting in July 2007 informed that SP continues to be effective for IPT at current levels of SP efficacy and therefore recommends that in countries where IPTp is applicable, it should be implemented and scaled up with increasing emphasis on other preventive strategies and ongoing research and impact evaluation.

Data Sources

- DHS, MIS
- NMCP
- National Reproductive Health and Maternal and Child Health Programs and Service providers
- RBM Working Group on Malaria in Pregnancy

¹ WHO AFRO 2004. A strategic framework for malaria prevention and control during pregnancy in the African Region, AFRMAL/04/01

² Yartey JE Int. J Gynecology Obstetrics. 2006.

³ Hill J, Kazembe P. Trop Med Int Health. 2006;11(4):409-418.

- Malaria in pregnancy networks (MIPESA in East and Southern Africa and RAOPAG in West and Central Africa).

People to Interview

- NMCP
- RH/MCH
- Provincial, District Health Personnel
- Supply Division
- Partner organisations (WHO, UNICEF, etc)

Situation analysis and needs assessment

Note: Of the three key interventions for malaria in pregnancy only IPT is addressed below. Coverage of pregnant women ITNs is included in the ITN section above and treatment of malaria episodes in pregnant women is included in the case management section below.

No.	Questions	Check and Data Source(s)	NMCP	MoH	Other	Provincial	Community	Donors	Partners/NGOs	Private	Regulatory
	Qualitative Issues										
	<i>Policies, strategies and approaches</i>										
95	Is there a policy document for Malaria in Pregnancy?		x								
96	What interventions are included eg IPT, ITN, treatment. Are they stand alone or combined?		x								
	<i>Financing</i>										
97	Which donors are currently supporting this component?		x					x			
98	What are the country estimates of costs to deliver both doses of IPTp? What does this include?		x								
	<i>Implementation status</i>										
99	What percentage of ANC clinics are delivering one does of IPTp? How many are delivering two does of IPTp?		x			x					
100	What needs (include financial implications where appropriate) are there for reaching full implementation?: (i) training; (ii) human resources; (iii) commodities; (iv) transport and logistics; (v) technical assistance for design or implementation of systems.		x								
101	What training has been given to health personnel on IPTp, how long, included		x			x					

	within other case management training, type of training?										
102	Are mobile teams doing ANC and do they provide ITNs and IPTp?		x			x					
	Management and partners' roles										
103	How do the Reproductive Health Services and NMCP coordinate their response to MIP?		x	x							
104	What role do partner agencies, NGOs and private sector play in maternal health care and malaria in pregnancy?		x						x	x	
	Procurement and logistics										
105	Have stock-outs been a problem? If so, was it nationwide or certain Provinces or Districts? What was the reason for the stock-out(s)? If possible determine the duration of the stock-out. Inventory cards might need to be consulted.		x			x	x				
106	How is SP procured and distributed for IPT – separately or with other drugs?		x								
107	Is SP made available to ANC units for direct distribution to pregnant women or is it kept in the pharmacy and provided with prescription.		x			x					
	Communications										
108	Has data been collected on awareness among pregnant women of their increased risk for malaria? If yes, what is the level of awareness among of pregnant women?		x			x	x				
109	What type of sensitisation method is used for this group? Is data being collected on message effectiveness?		x			x	x				
110	What IEC/BCC is being done for this group on IPT?		x			x	x				
	Monitoring and Evaluation										
111	What information is routinely available on uptake of IPT		x								
112	Is this information captured in ANC/maternity registers? And it the data linked to or captured in HMIS.		x			x					
113	Support supervision – is this carried out, how many times/year by whom?		x			x					
	Quantitative Issues										
	Financing and targets										
114	What is the targeted number of pregnant women? <i>Table 15.</i>		x								

115	What is the country estimate of costs for 2 doses of IPT delivered per pregnant woman? What does this include? <i>Table 15.</i>		x								
116	What are the financial needs for the achievement of 2010 and country targets to 2013? <i>Table 15. Calculation Tool will help with this. Reference to the most recent Global Fund application should assist this process.</i>		x								
117	Calculate the gaps for achieving targeted coverage by year and until 2013. <i>Table 15. Calculation Tool will help with this.</i>		x								

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3.2.2 Case management

Malaria case management includes all the activities that occur from when a patient with symptoms indicative of malarial disease comes in to contact with the health system until the patient leaves. Case management of symptoms includes both uncomplicated malaria and severe malaria.

Various socio-economic and physical factors will determine when a person who could be suffering from malaria will first make contact with a health facility. In general the following life-saving activities should take place in coherent order: triage, diagnosis, definitive and ancillary treatment, monitoring of progress and follow up. How quickly and with what quality these activities can be undertaken will depend on the severity of the disease at the point of first contact and the capacity available in the health facility.

WHO recommendations are that children under five in areas of high transmission who present with clinical manifestations of malaria be treated presumptively. Other age groups should be treated based on confirmatory parasitological diagnosis either through a laboratory or with a rapid diagnostic test (RDT). All age groups in areas of low transmission settings should also be treated based on confirmatory parasitological diagnosis. Lower level health facilities which often lack the capacity to provide life-saving care may refer cases to higher level facilities with or without pre-referral treatment depending on capacity within the facility particularly for cases suggestive of severe malaria.

Other activities not directly related to case management but important are antimalarial drug efficacy studies, pharmacovigilance, public-private partnership and health worker adherence to national treatment guidelines. This spectrum of activities should be considered within the existing health system. In some countries, case management begins at the community level with home-based management in order to improve access to and timeliness of treatment especially where geographical barriers to health facilities exist.

In order to ascertain the existing situation and needs for malaria case management this section is divided in to diagnosis and treatment and gives guidance on the kind of information that should be collected.

Data Sources

- Review of National Malaria Control Strategy, malaria case management policy, laboratory personnel training manuals, malaria diagnosis guidelines, implementation/health sector performance reports and joint review mission reports
- Review of HMIS records
- Review survey findings such as MIS or DHS
- Review any relevant and successful GFATM applications
- Review malaria control program and selected sub national level work plans and annual reports
- Review any recent publications of relevant local studies, particularly for drug efficacy studies
- Review training curricula for laboratory and case management of malaria
- Review malaria control program and selected sub national level work plans

People to Interview

- National Malaria Control Program Manager
- NMCP focal person for malaria case management
- Director or equivalent head of the department of clinical care in the Ministry of Health
- A selection of Heads of District health services or equivalent
- Head or equivalent of any in and post service training institutions for doctors and nurses
- Malaria focal points in partner agencies (e.g. WHO National or International Program Officers, UNICEF malaria officers or Heads of Health, etc)
- Head of National Laboratory services including public health laboratory if different
- Laboratory personnel at various levels of the health care system, including those in the private sector
- Health workers at various levels of the health care system including NGO and private sector, community medicine distributors or equivalent

3.2.2.a Diagnosis**Rationale**

Malaria diagnosis can be either done on a clinical basis or in combination with parasitological confirmation. Uncomplicated malaria has non-specific features (e.g. fever, nausea, etc) that make it difficult to clearly attribute the cause of illness to malaria parasites by clinical diagnosis alone. Even severe malaria can be mimicked by other life threatening illnesses such as bacterial sepsis. Recommended best practice is to combine a physical examination with parasitological confirmation. However, resource constraints in many countries mean that in reality functional laboratories do not exist in all health facilities. Therefore many lower level health facilities that lack laboratory technicians, or resources to equip their laboratories must rely on clinical diagnosis alone. Recently the guidance on Integrated Management of Childhood Illness (IMCI) entails some form of clinical diagnosis.

The mainstay of malaria parasitological diagnosis is light microscopy, which is effective if a quality service is maintained. More recently malaria rapid diagnostic tests (RDTs) are becoming more prominent as diagnostic tools. One of their advantages is that they can be used at lower level health facilities and at community level.

Even where when laboratories exist many health workers do not have sufficient confidence in the results to treat accordingly, do not request laboratory confirmation or do not wait for

the results, especially when faced with an overwhelming number of outpatients. Due to resource and capacity constraints, presumptive treatment is mostly used at community level. In this case, all fever cases are considered to be malaria and given treatment.

As earlier treatment regimens lost their efficacy against the malaria parasite and with the introduction of more costly treatment in the form of Artemisinin-based Combination Therapies (ACTs), it is argued that to reduce drug wastage and to lessen the possibility of drug resistance all malaria cases should be confirmed in low transmission settings in addition to adults and children aged five years and above in areas of moderate to high transmission areas. An additional effect of a confirmatory diagnosis is improvement in the quality of care if there are treatment options – both in the form of informed health care personnel and available medications - to manage the malaria-parasite negative patients.

Situation analysis and needs assessment

No	Questions	Check and Data Source(s)	NMCP	MoH	Other	Provincial	Community	Donors	Partners/NGOs	Private	Regulatory
	Qualitative Issues										
	<i>Policies, strategies and approaches</i>										
118	Is there a policy/guidelines on malaria diagnosis? If yes, is it current and in line with WHO recommendations?		x								
119	Are there clear guidelines on the role of microscopy and RDTs in case management including at what level they should be used and by whom? Is this complimentary?		x								
120	If RDTs are recommended, are there clear guidelines on the type of RDT.		x								
121	Is there a national home-based management of malaria (HMM) strategy in place? If yes does this recommend diagnosis with an RDT prior to treatment administration? How widely is HMM being implemented?		x			x	x				
122	Who is responsible for quantification of diagnostic needs? Quantification is based on what criteria? Is the forecasting accurate?		x			x					
	<i>Financing</i>										
123	Which donors currently financially support diagnostic services?		x					x			
124	Are funds available for transport of diagnostic materials? Are funds available for training?		x								
	<i>Implementation status</i>										
	<i>Training and supervision</i>										

125	Are malaria diagnosis training manuals and/or job aids available, down to what level?		x			x	x				
126	Have training manuals and/or job aids been adapted for national use?		x	x		x	x				
127	How often does national training of laboratory personnel occur? If RDTs are used at community level how often are their users trained?		x			x	x				
128	What form of national training exists? For example, is it on-job or workshop type? Is it linked to any post-service training? How are trainers selected and trained? Include community level if appropriate		x	x		x	x				
129	Does national training include laboratory personnel in the private sector? If not how are laboratory personnel in that sector keep abreast of any new guidelines?		x							x	
130	Are there any guidelines for health workers on how to interpret and follow results of parasitological malaria diagnosis? How are negative results handled?		x			x	x				
131	Are there guidelines and are practitioners trained on how to identify and manage treatment failures? What form of supervision exists?		x			x	x				
132	Is there any indication of the proportion of health workers who treat according to laboratory results? Include community level if appropriate.		x			x	x				
	Laboratory services										
133	Are criteria widely available in the community to determine use of microscopy and/or RDTs when a malaria symptomatic patient presents? Is data being collected on whether these criteria are being followed? If the criteria are not being followed what are the most common reasons?		x			x	x				
134	Is 24-hour access available at all laboratories?		x			x					
135	What kinds of microscopes and stains are recommended? Are the recommended materials being supplied and used?		x			x					
136	Are there any barriers to equitable access to parasitological services such as costs, capacity? If yes, how are they being addressed? Are there any overall health/socio-economic constraints (e.g. lack of electricity, lack of adequate storage facilities for RDTs, etc) which are impeding diagnostic services?		x			x	x				
	Management and partners' roles										

137	Which partners are involved in providing diagnostic services? Do they comply with MoH policy?		x				x			x		
138	Does MoH co-ordinate services providers?		x									
Procurement and logistics												
139	Who procures laboratory supplies and stores them (i.e. government or private)?		x	x								
140	Is there any coordination between different departments on laboratory diagnosis e.g. NMCP, Supply Division, Training, Laboratory Services		x									
Communications												
141	Are diagnostics included in the national advocacy plan? Are there any attempts to increase public awareness of the need for parasitological diagnosis before treatment? If no, why not?		x									
Monitoring and evaluation (including quality control and external quality assurance)												
142	Is there a national policy on QC/EQA of laboratory services? If yes, describe it. Does it include the private sector? Include community level if appropriate		x	x								x
143	Is there a functioning QA/QC system in place for microscopy? For RDTs		x	x								x
144	How is the quality/selection of RDTs, stains and microscopes regulated in the public sector? In the private?		x								x	x
145	Is there a system for routine maintenance of microscopes?		x									x
146	Are there any trends/variations in slide/RDT positivity rates? Have these trends been used in the quantification of needs for laboratory supplies, RDT supplies, ACT supplies?		x									x
Quantitative Issues												
147	Collect information on the number and level of health facilities with diagnostic services and whether microscopy or RDTs or both. <i>Table 26.</i>		x									
Financing and targets												
148	What is the estimated targeted number of malaria cases to be tested? <i>Table 16. Calculation Tool will help with this.</i>		x									
149	Calculate the gaps for achieving targeted coverage by year and until 2010- 2013. <i>Table 16. Calculation Tool will help with this.</i>		x									
150	What are the country estimates of costs per case diagnosed for each approach? What does this cost include? <i>Table 16.</i>		x									

	treatment is recommended? Is it nationwide or otherwise?											
155	Does the policy on case management explicitly mention the drug options for pregnant women?		x									
156	Is there any mechanism by which locally generated evidence on case management feeds into the policy development process? For example, whether a drug policy change is based on drug efficacy studies or genetic marker research?		x									
157	Does the national policy include public private partnership?		x									
	Financing											
158	Which donors are supporting malaria treatment?		x						x			
159	Do the health facilities have sufficient funds to support malaria case management and if not how does this affect the delivery of service?		x				x					
160	Is there a consultation fee to the public for malaria? At all levels of the health system? Is payment made for treatment? If so, is it part of a cost recovery system and what is the cost?		x				x	x				
161	If there is community deployment of malaria treatment are the agents such as community medicine distributors given any financial incentives?		x				x	x				
	Implementation status											
	Training and supervision											
162	Are there health worker training manuals, standard treatment guidelines and/or job aids?		x				x	x				
163	Are training manuals or standard treatment guidelines adapted for national use and for different levels?		x	x			x					
164	How often does national training of health workers occur?		x				x					
165	What form of national training exists? For example, is it on-job or workshop type? Is it linked to any post-service training such as CME? How are trainers selected and trained?		x				x					
166	Does national training include health workers in the private or informal sectors? If not how are health workers in that sector informed of the malaria treatment policy?		x									x
	Clinical/community care and follow up											
	(a) Uncomplicated malaria											

	how is the data gathered used for antimalarial quantification?										
183	What is the regulatory status of ACTs? (i.e., over-the-counter (OTC) or prescription only?)		x			x					x x
184	Is there a routine system of testing the quality of antimalarials, especially ACTs, in both the public and private sectors? If so, how is this information used?		x		x						
185	How is the quality of importers, wholesalers, and other related businesses assured? Is there a registered approved list of medicines. Are the costs of antimalarials in the private sector tracked? If so, are there any limits on mark ups?		x		x						x
186	What systems exist to help to enforce regulation on medicines and health worker adherence to national regulations? Describe for both public and private sectors.		x		x						x x
187	How are ACT needs quantified? Is this quantification accurate?										
188	Is there a nationwide ban on sales of oral artemisinin monotherapies? If not, are there plans to put one in place?		x								
189	How many ACTs in addition to the recommended first and second line treatments are available in the country?		x								x
Communications											
190	Is there any form of IEC / BCC to inform the public about the current treatment policy and where to get the treatment?		x	x		x	x				
191	Is there any form of IEC/BCC informing the public and public health practitioners of the need to take the full course of treatment?		x	x		x	x				
192	Is there any form of IEC / BCC to inform the public about danger signs of illness and what to do? Were these messages based on results from KAP studies?		x	x		x	x				
193	Are there clear guidelines that differentiate advertising of public health messages to the general public? For example do public health messages include names of brands or generic names of medicines?		x	x							
194	Are there any studies that have characterised the public's perceptions and acceptability of ACTs?		x								
195	What other interventions are already being implemented that impact consumer behaviour?		x			x					

196	Is there any information on health care providers prescribing practices (following norms) and providing information to the patient – Drug Utilization Reviews, WHO Health Facility Survey		x			x					
197	Is there any IEC/BCC regarding not taking oral artemisinin monotherapies?		x	x		x					
Monitoring and evaluation											
198	Is there any seasonal trend in malaria morbidity? If there is a seasonal trend does this influence deployment of services?		x			x					
199	If there is home-based management, are figures from the community included in HMIS data?		x			x					
200	Is supervision disease specific or integrated? How regular is it?		x			x					
201	Is there any indication of the proportion of health workers who adhere to national treatment guidelines?		x			x					
202	Is there a system in place for monitoring malaria treatment efficacy? If so, do the findings inform policy? Give table of recent and relevant results		x								
203	Is there a routine pharmacovigilance system? Describe this system if it exists		x								
204	How is the quality of malaria case management regulated in the private sector?		x							x	
Quantitative Issues											
205	What is the national annual number of malaria cases? What proportion of these are these confirmed cases?		x								
206	What are the annual numbers of admissions due to malaria?		x								
Financing and targets											
207	What finances currently available by year until 2013? <i>Table 17a-x. Reference to the most recent Global Fund application should assist this process.</i>		x								
208	What are the country estimates of costs per case treated? What does this cost include? <i>Table 17a-x</i>		x								
209	What are the financial needs for the achievement of 2010-2013 RBM and country targets? <i>Table 17a-x. Calculation Tool will help with this. Reference to the most recent Global Fund application should assist this process.</i>		x								
210	Calculate the gaps for achieving targeted treatments by year and until 2013. <i>Table 17a-x. Calculation Tool will help with this.</i>		x								

Notes to table on previous pages: indications are given as to where data should be inserted into the detailed tables for each component under Sections 5, 6 & 7 of the report template. Summary tables in Section 4 of the report template should be compiled as summaries from these as appropriate.

3.3. Cross cutting

3.3.1 Epidemic/Emergency Control

Rationale

In areas of high perennial transmission malaria epidemics are unlikely given the exposure to continual transmission and the semi-immunity of the population. Most countries in sub-Saharan Africa however have some areas which are epidemic prone as a result of low to moderate transmission levels. These often occur in areas of higher altitude or where the temperature, humidity and rainfall conditions are less conducive to year round high transmission. In these situations relatively small changes in transmission patterns, as a result of changes in environmental factors or influx of parasites (e.g. with migrant populations), can lead to small increases in cases which can rapidly lead onto an epidemic. Countries with areas prone to epidemics should have epidemic detection, preparedness and response plans in place. Some countries may, additionally, have early warning systems which flag potential epidemic situations.

Appropriate measures to respond to epidemics depend on the individual situation but the main consideration is speed of implementation. Even the most sensitive early warning systems will not allow much time between the alarm being raised and the rise of the epidemic. In all situations the focus must be on: 1) ensuring adequate drugs and other case management supplies; 2) on bolstering the case management system to ensure cases are rapidly detected and treated; and 3) if epidemics are detected early enough, preventive measures. For this purpose countries with epidemic prone settings should have stock piles of appropriate supplies – particularly anti-malarial drugs. Where the epidemic is detected early enough malaria prevention measures may also be used where these can be rapidly deployed and high coverage can be achieved. Mass distribution of ITNs, retreatment of already existing nets if coverage is very high, or IRS interventions may be appropriate. These will only be able to take place rapidly enough if stock piles of supplies and equipment are in place and the appropriately skilled human resources are available to be able to immediately carry out the intervention. A stumbling block to rapid implementation for epidemics is often flow of funds. Countries should have a system in place to ensure funding can be rapidly mobilised in this situation.

Emergency situations may need specific consideration for malaria control. Both natural emergencies such as flooding as well as political emergencies can result in specific malaria control needs. Some emergencies result in the need support to families as they remain in their own communities but may need additional support for malaria prevention and treatment services may need bolstering. More commonly emergencies result in population displacement leading to temporary IDP or refugee camps. Even in highly endemic areas such population displacement can result in far higher transmission and case loads than usual. This can be a result of increased man-vector contact through crowded and poor living conditions; breakdown of existing control measures; influx of populations with high levels of infection or influx of population with no immunity into a highly endemic area.

Emergency situations have the added issue of often poor health care services as a result of breakdown of existing systems, poor security and inadequate resources and supplies to service the population.

Interventions appropriate to emergency settings may be the same as those used elsewhere in the country: IRS, ITNs, strengthening diagnosis, ensuring effective drugs are in place and IEC/ BCC to ensure prevention measures are accepted and used and treatment is rapidly sought for cases. However, in some settings interventions must be tailored to the setting. Assessments on shelter type, security and water availability should be carried out to determine whether either IRS or distribution of LLINs is appropriate. Some novel interventions such as insecticide treated blankets or plastic sheeting may be considered where neither IRS nor LLINs can be used and appropriate evaluation can be carried out. For case management it may be necessary to put in place temporary solutions to ensure life-saving drugs are available where health facilities are not functioning or overwhelmed – i.e. community-level interventions such as home based management of fever approaches, with the support of community workers. The key to ensuring an appropriate response are site specific assessments, good co-ordination between the often large number of implementers, and mechanisms to ensure the changing situation is assessed regularly to the changing needs can be catered for the response.

Data Sources

- NMCP strategic plan
- National epidemic response policy documents
- NMCP annual work plans and budgets, other partners annual planning documents e.g. PMI or joint work plans where they exist
- Most recent Global Fund application
- DHS, MIS or other nationally representative surveys.

People to Interview

- NMCP Manager
- RH/MCH program manager
- National Emergency Relief Agency
- Partner agencies such as PMI malaria advisor, WHO Malaria NPO/IPO, UNICEF Head of Health or Malaria focal point(if applicable)
- Any NGOs with experience of epidemic response or emergency implementation in country
- MoH or implementing partner field staff working on epidemic response or emergency interventions.

Situation analysis and need assessment

No.	Questions	Check and Data Source(s)	NMCP	MoH	Other	Provincial	Community	Donors	Partners/NGOs	Private	Regulatory
	Qualitative Issues										
	<i>Policies, strategies and approaches</i>										
211	Are there any emergency situations in the country that require specific approaches? (which areas, details)		x								
212	Are there areas of the country that are epidemic prone? (which areas, details)		x								
213	Is there an epidemic response policy document?		x								
214	Is there an epidemic preparedness, detection and response system in place?		x								
	<i>Epidemic detection</i>										
215	Are thresholds for epidemic early detection set? If so what are the thresholds? How are they set? At what level of the health system are they set?		x			x					
216	Is the epidemic detection system hampered by lack of quality data?		x			x					
217	How are potential epidemics investigated? How quickly?		x			x					
	<i>Financing</i>										
218	How does financing for epidemic response function? Are MoH systems flexible enough to allow rapid implementation? Are other donors in a position to provide rapid support?		x								
	<i>Implementation status by intervention area:</i>										
	<i>Epidemic preparedness and response</i>										
219	Are there buffer stocks of drugs, insecticides, LLINs, equipment for epidemic response? Of what proportion is the buffer stock?		x			x					
220	Are the human resources available to allow an epidemic response to take place? Who would lead this process?		x			x					
221	Are there plans in place to guide the response in terms of choice of interventions and details of implementation?		x			x					
222	What are the appropriate strategies in epidemic prone areas of the country? Are these used / recommended?		x			x					
	<i>Emergencies</i>										

223	What type of emergency situation is underway or has been experienced recently? (natural, political)		x								
224	Is malaria one of the main health issues in this population? (Figures)		x			x					
225	Where are the population living and how temporary / long term is this likely to be? (in camps, type of housing structures)		x								
226	Is food aid or non-food item distribution taking place?		x								
227	What malaria prevention measures are being carried out? Are these appropriate? Are others planned?		x								
228	What measures for ensuring effective case management are in place? Are these appropriate?		x								
229	Who is providing the health care services, MoH, NGOs?		x								
230	Is health care coverage sufficient or are some parts of the population unable to access it?		x								
231	Is there a functioning co-ordination mechanism for all implementing partners?		x			x			x		
232	Are reliable data being collected and collated? Who by?		x								
Monitoring and evaluation											
233	What data sources are used to monitor progress towards thresholds? Who monitors this? Has the system worked to detect previous epidemics in a timely manner?		x			x					
234	Are there national indicators for epidemic response? What are they? What data sources are used for these indicators?		x								
235	How is impact of epidemic or emergency interventions assessed?		x			x					
236	Is there ongoing monitoring during the emergency situation? Who is responsible for this? Is this data used to adapt approaches as appropriate?		x			x					
237	Is the progress of the emergency situation being monitored to feeding to adaptation of approaches as appropriate?		x			x					
Quantitative Issues											
Financing and targets											
238	Estimate the population at risk. <i>Table 18.</i>		x								
239	Quantify the existing funding commitments by year and until 2013. <i>Table 18.</i>		x								
240	Estimate the cost for providing a complete malaria control package in an emergency or epidemic situation using country level		x								

	data or judgement where possible or proposed estimates. <i>Table 18.</i>										
241	Calculate the needs and gaps by year and until 2013. <i>Table 18.</i>		X								

Note: indications are given as to where data should be inserted into the detailed tables for each component under Sections 5, 6 & 7 of the report template. Summary tables in Section 4 of the report template should be compiled as summaries from these as appropriate.

3.3.2 Advocacy/BCC/IEC

Rationale

Over time it has become increasingly clear that the existence of a strategic plan to control or eliminate a disease is just the first step. An important, though often underestimated and under budgeted component is the communication strategy that defines how the different people will be addressed and specifies which IEC (Information, Education and Communication) approaches will be used. It is now accepted that merely providing information is not sufficient to have an impact on behavior, hence a behavior change component (BCC: Behavior Change and Communication) has often been included in programs.

More recently, the need to develop a specific strategy towards the policy and decision makers at global and national levels has induced programs and organizations to develop and include an advocacy component. At country level, the IEC or BCC components are often confounded with advocacy, even though these components address different levels of people.

It is therefore important to define the target groups of the strategies and activities. In general, when developing an **IEC/BCC strategy** the following audiences need to be considered and included:

- Pregnant women and in some cases maybe, special materials need to be developed for (as they have strong influence on women):
 - Husbands
 - Mothers in law
- Parents/caretakers of children under five
- People living with HIV/AIDS
- Population in general
- Fathers and husbands
- School children

When designing an **advocacy strategy**, the audiences to be addressed would certainly include:

- President of the country
- Minister of Health
- Director of NMCP
- Donors (in-country and at global level)
- Civil Society leaders (faith based, gender based, professional groups)
- Health and Administrative authorities at province/district/county level
- SWAP partners (when applicable)

In general, it is needed to make not only audience specific materials, but also event or activity specific materials. These need to take into account the needs or objectives of the different components of malaria control.

Data sources

- NMCP Strategic Plan
- National BCC/IEC and/or Advocacy Strategy and Action plan (if existent and approved, if not use draft for review)
- MoH Resource Centre
- Other partners BCC/IEC and/or Advocacy Strategy and Annual Action Plan(s) (if existent)
- List of in-country (national and international) partners working on malaria

People to interview

- NMCP manager
- NMCP IEC/BCC/Advocacy staff (if existing)
- RH/MCH program managers
- Communications and Education department(s) in MOH
- Communications coordinator of major partners involved
- Members of Technical Review Commission or other technical (malaria) coordination mechanisms
- Community leaders and members

Situation analysis and needs assessment

Separate checklists are given below, the first for the advocacy component and the second for the IEC and BCC component.

Advocacy

No.	Questions	Check and Data Source(s)	NMCP	MoH	Other	Provincial	Community	Donors	Partners/NGOs	Private	Regulatory
	Issues										
	<i>Policies, strategies and approaches</i>										
242	Is advocacy included as a component in the National Strategic Plan? In the NMCP? In the Communication Strategy?		x								
243	What are the audiences the national program specifically addresses in the advocacy activities		x								
	<i>Implementation status and approaches</i>										
	<i>Political leadership</i>										
244	Is the highest level of authority in the country (Preferably the head of State) successfully involved in advocacy? To what level? Does he/she attend WMD rallies? Other malaria linked events?		x								

245	Are the health and administrative authorities at provincial/district/county levels) successfully involved in advocacy? Are they attending or leading WMD rallies? Other malaria linked events?		x			x					
246	Are key pronouncements on malaria commonly integrated into politician (President, Ministers) speeches? Local (province/district/county) authorities?		x			x					
247	Are resources, both financial and human, allocated to ensure the implementation of the communication strategy and production of IEC materials? Are these resources allocated by national budget/govt? Are additional funds coming from/through partners? Are there funds for specific advocacy activities? <i>Table 19. Table 26.</i>		x								
Administrative Leadership											
248	Are the available resources allocated to the appropriate decision makers (to implement communication strategy)?		x								
Coordination											
249	Is there any coordination mechanism between NMCP and partners on advocacy needs and activities? Are the meetings on a regular basis (month/year/trimester)? Is there any additional coordination forum or mechanism between (implementation) partners?		x							x	
250	Is there any coordination mechanism specifically for special events (e.g. WMD, SADC malaria day)?		x							x	
251	Are the necessary vertical and horizontal Coordination Mechanisms in place?		x							x	
252	Is there any Newsletter on malaria going out to the Stakeholders? Any health newsletter, integrating malaria issues when appropriate? On what basis (monthly, quarterly)? Is it successfully distributed?		x							x	
Key Opinion Leaders/Organizations											
253	Are key opinion leaders, civil society and other relevant organizations involved in the communication/IEC/Advocacy activities? Please check the following groups: <ul style="list-style-type: none"> • Faith-based? • Professional Groups? • Community based? • Gender based? • Popular and well-known personalities (celebrities)? 		x			x	x			x	

254	Are these leaders involvement in resource mobilization?		X			X	X				
255	Are any of these leaders or “celebrities” used as ambassadors or champions of malaria? Are regional or international champions used for malaria promotion in your country?		X								
Community activities											
256	What community level advocacy activities have been implemented? <ul style="list-style-type: none"> • competency as a learning process among communities • competition as a driving force/motivation among communities Are communities involved in advocacy activities? How?		X			X	X				
257	What role does civil society play in advocacy activities at the community level?		X				X		X		
Media-related activities/mass media											
258	Have media been interested and involved in malaria activities? Have the different media channels been used to promote certain behaviours? Have they been used to disseminate information? Such as: <ul style="list-style-type: none"> • Interactive Malaria shows or road shows • Radio spots or programs • Public Debate on radio/TV • TV series with malaria messages integrated (“social soap series”) • Newspapers’ special editions or thematic insert • Regular press releases on malaria • Web sites 		X								

IEC and BCC

No.	Questions	Check and Data Source(s)	NMCP	MoH	Other	Provincial	Community	Donors	Partners/NGOs	Private	Regulatory
	Issues										
	Policies, strategies and approaches										
259	Is Communications and Behavior Change part of the MOH Strategic Health Plan? Is this component specifically described in the NMCP strategic plan? Is there a specific Malaria Communications (and		X								

	Behavior Change) Strategy?											
260	Is the Communication strategy approved (an official document or draft)? Has the strategy been discussed with the (RBM) partners? Is there a clear procedure for revision, update and approval of strategies and policies?		x									
261	Does the strategy include an M&E component? Have communication indicators been defined? (impact and activity indicators?)		x									
262	Is there a training and capacity building component in the strategy? Who will be/was trained? How many were trained?		x									
263	Does the communication strategy foresee in continuing education of health professional/workers with updated malaria curriculum? Has the curriculum been updated recently? Are there materials developed and available? What is the major barrier for implementing this?		x	x								
	Implementation status											
	Development and production of IEC materials											
264	Is the development of IEC materials centrally coordinated and overseen by NMCP or other organization designated by the program? Are the messages and IEC materials harmonized?		x	x						x		
265	Is there a review commission for IEC materials? Do they meet on a regular basis? Are the review procedures defined and clear?		x	x						x		
266	Are there audience specific materials (e.g. pregnant women, children under five, people with HIV/AIDS; in some cases rural population may benefit from different approach) language		x	x						x		
267	Have event specific materials been developed and used? (e.g. re-treatment nets, indoor spraying, malaria day celebrations, distributions of nets)		x	x						x		
268	Are the IEC materials tested before printing? After translation? Within location are intended for as well as at central level? Always? Sometimes? If not, is this due to lack of capacity? Finance?		x	x								
269	Do IEC materials need official (NPMC/MOH) approval before printing? Are the procedures for that clear? Are there any barriers to obtain such authorization?		x	x						x		
	Community based and linked activities											

270	What IEC activities have been implemented and directed at community level? Theatre? Road shows? Informative meetings? House to House campaigns?		x	x		x	x				
271	Have community workers/volunteers or equivalents been trained, specifically for malaria IEC activities? How many have been trained for malaria specific activities? In how many provinces/districts/communities? Are community meetings and debates on malaria held in communities (and other health issues). How many, how often?		x	x		x	x				
272	What community based organizations are involved in Malaria IEC activities (community health workers networks, Outreach services, FBOs, CBOs, FB and traditional healers)? Have they been trained? Do they have materials to distribute or use? Job aids?		x			x	x		x		
Educational programs											
273	Have specific educational programs or school activities been developed? Are they specifically for Children? Adolescents? Adults? In how many schools have the programs or activities been implemented? How many target audience covered?		x	x	x						
274	Do schools have space in their schedule/curriculum for health or malaria related activities? Are they interested and willing to cooperate?		x		x						
275	Are education authorities at different levels, as well as teachers being “trained” for the use of these programs?		x		x						
Private-public partnership											
276	Is there a private sector network capacity building strategy in-place?		x							x	
277	Is the private sector involved in IEC and BCC (or advocacy) activities? Are they included as partners?		x							x	
Methodologies and research											
278	Are Focus Group Discussions used for the development or review of strategy/policies or materials? Are they documented?		x								
279	Are there any Knowledge, Attitudes, Behaviour and Practices (KABP) studies, specifically on malaria? Are they available? Any recent (less than 2 years) or planned studies? Have these strategies fed into the NMCP POA and revised strategy document.		x								

280	Is Interpersonal communication part of the strategy? How? Where?		x								
281	Are there any peer educational networks (community based, child to child, workplace etc) in place or being developed?		x								
	Coordination										
282	Is there any coordination mechanism between NMCP and partners on BCC or IEC material development? Are the coordination meetings on a regular basis (month/year/trimester)? Is there any additional coordination forum or mechanism between (implementation) partners?		x						x		
283	Is there regular and formalized coordination between NMCP and other departments of MOH and/or other ministries?		x	x	x						
284	Is there any coordination mechanism specifically for special events (e.g. WMD, SADC malaria day)?		x						x		

3.3.3 Surveillance, Monitoring and Evaluation & Operational Research

Rationale

Since Abuja in 2000, national governments and donors are working to drastically reduce the burden of malaria, especially in the sub-Saharan Africa. With increasing resources and the intention to do rapid scale-up, accountability for funding and results reported is becoming increasingly important. The new targets for achieving drastic reductions in morbidity and mortality by the end of the decade are ambitious and will be measured through monitoring and evaluation (M&E) indicators, such as the following:

- What is the incidence and prevalence of malaria, in the population and in vulnerable groups?
- How many people were correctly diagnosed with malaria and receive ACT treatment?
- How many people at risk of malaria have been reached by prevention activities? How many people in the vulnerable populations (children <5 Years and pregnant women) have been reached with prevention activities?
- How many staff have been trained to provide malaria-specific services?

At the country level, various sources of data exist including national health information systems, national surveys such as the Demographic and Health Survey (DHS) or the UNICEF Multi-indicator Cluster Survey (MICS) and more recently Malaria Indicator Survey (MIS). These sources provide information for program monitoring and impact assessment on a regular basis.

However, there are a lot of questions on the reliability, completeness and quality of data collection to measure these indicators. Accurate and quality data will improve Program

management and allow adjustments to the various strategies. It is therefore important that there is a M&E plan and system in place that will provide sufficient data and channel it up the system for aggregation into relevant indicators for Program management and reporting.

Data Sources

- NMCP, RH/MCH and MOH annual reports
- Surveys such as MIS, DHS, MICS, KAP, prevalence
- Routine health information system
- Insecticide resistance studies
- Drug Efficacy Studies

People to interview

- NMCP manager and information (database manager)
- RH/MCH Program Manager
- Department of Health Information
- Ministry of Health Planning Department
- Research Institutions
- Partner institutions (e.g. WHO in-country M&E focal points, PMI, UNICEF focal points – where applicable)

Situation analysis and needs assessment

No.	Questions	Check and Data Source(s)	NMCP	MoH	Other	Provincial	Community	Donors	Partners/NGOs	Private	Regulatory
	Issues										
	<i>Policies, strategies and approaches</i>										
285	Is there a M&E strategic plan and does it reflect the targets of the overall strategic plan		X								
	<i>Implementation status</i>										
	<i>Program organisation</i>										
286	What are the data collection systems used by the NMCP? How does this information channel up the system (information flow chart)?		X								
287	What are the strengths in the system to report accurate, reliable and quality data on implementation activities		X								
288	What are the capabilities of the NMCP at all levels to collect, analyze and report data on the implementation activities?		X								
289	Is there a costed M&E plan in place and is there sufficient funding to implement it?		X								
290	Is there an M&E coordination Unit at the NMCP level, in the MOH		X								
291	Is there an M&E Framework with minimum agreed indicators (list indicators) and targets		X								

292	Has the country completed the GFATM M&E System Strengthening assessment?		X										
Data collection tools and checklists													
293	Is there a composite malaria database available? Are there plans to introduce the WHO Global Database?		X										
294	Is there sufficient equipment (computers and internet access) at all relevant levels of the system?		X			X							
Routine data collection and methodology			X										
295	What information is collected (inputs, process, products, impact)		X										
296	Does the routine processing include indicators?		X			X							
297	Is routine data regularly shared and fed back down the system and with partners?		X										
298	Is there a system in place for controlling data quality?		X										
299	Has there been an evaluation of the M&E plan?		X										
300	Which periodic surveys has the NMCP collected and analyzed data from? MIS, MICS, DHS, KAP etc		X										
301	Does the country have a strong surveillance system?		X										
Cross-linked programs													
302	Is there are coordination and exchange of information with other programs over M&E e.g. MCH, HIV/AIDS, EPI, Education etc		X	X	X								
Quantitative Issues													
Financing and targets													
303	Quantify the existing funding commitments by year and until 2010-2013. <i>Table 20.</i>		X										
304	Estimate the costs requirements for each M&E component based. <i>Table 20.</i>		X										
305	Calculate the gaps by year and until 2010 - 2013. <i>Table 20.</i>		X										

Note: indications are given as to where data should be inserted into the detailed tables for each component under Sections 5, 6 & 7 of the report template. Summary tables in Section 4 of the report template should be compiled as summaries from these as appropriate.

3.4. Program management and health systems

3.4.1. Program Management

Rationale

Sound program management is essential if malaria control is to be scaled up in a coherent and purposeful way. With the budgets of malaria control programs increasing by factors of 10 to 100, the demands on malaria control program managers have increased massively, but often the career background of the managers means they have different skills and experience (frequently coming from pure medical backgrounds) from those required for strong leadership and program management.

Some challenges program managers may face include:

- Insufficient numbers of personnel and lack of qualified personnel
- Inadequate skills for effective program management,
- Competing demands of partners
- Bureaucratic systems impeding smooth flows of financial resources
- Lack of an enabling environment

In sum, these challenges often severely compromise the absorptive capacity of NMCPs. In addition the position of the NMCP within the MoH is influential in determining whether it will be able to lever sufficiently to guarantee that resources that are allocated for the scale-up of interventions are used in the most effective manner.

The NMCP also has a central role to manage the main players in the the malaria response; this task ranges from the central level role of coordinating actions between the various Ministry Departments and the partners as well as a role of leadership and technical support to provinces and districts. To successfully scale up malaria control interventions and make best use of partners' capacity, sound coordination is vital. Without sound coordination, there is the potential for duplication of efforts as well as organisations failing to implement national policies and strategies. In contrast, good coordination can result in joint planning and efficient use of human and financial resources in a country.

At national level, coordination among malaria partners is normally achieved through a national malaria coordinating committee usually chaired by the Ministry of Health with the NMCP serving as the secretariat to the committee. Under the national malaria coordinating committee, technical subcommittees usually exist for key areas such as prevention, case management, monitoring and evaluation, and communications. It is important the national malaria coordinating committee links to other relevant coordinating mechanisms such as Global Fund Country Coordinating Committees (CCMs) as well as broader health policy advisory committees. Inter-sectoral coordination can also be important, for example with the agricultural and education sectors. Outside the Ministry of Health, NGOs may coordinate their actions through a malaria-specific, health or development coordination committee. Public-private partnership coordination mechanisms can also be used to harness the capacity of the private sector in malaria control.

At sub national level, some countries have established malaria coordinating committees usually chaired by the district (or equivalent area) health authority. Membership of such

committees includes the District Health Team, local government authorities and NGOs and FBOs active in the district.

Data Sources

- Interviews with NMCP manager, NMCP staff and stakeholders
- Interviews with other MoH staff, including planning, RH/MCH departments
- Reports of the NMCP, MoH and Provincial Directorates
- National Strategic Plan
- Review of minutes of coordination committee meetings
- Review of joint malaria work plans

People to Interview

- NMCP manager and Staff, including Provincial if applicable
- Other MoH staff including planning, RH/MCH and supply departments
- Donors
- Members of the national RBM partnership and the Country Coordinating Mechanism
- Interviews with chair of malaria coordinating committee and other relevant committees

Situation analysis and needs assessment

No.	Questions	Check and Data Source(s)	NMCP	MoH	Other	Provincial	Community	Donors	Partners/NGOs	Private	Regulatory
	Issues										
	Policies, strategies and approaches										
	NMCP role										
306	What is the NMCP's mandated role? What decision-making authority does the NMCP have?		x								
307	What is the composition and number of the National Malaria Control Program at different levels of the Health System. Are there sufficient personnel with sufficient expertise for scale-up of activities. (See <i>Human Resources section</i>)		x								
308	Do supervisory staff monitor Provincial and District staff performance and give feedback regularly?		x			x					
309	How effectively does the NMCP communicate with the district staff?		x			x					
310	How effectively does the NMCP communicate with the staff of related programs RH/MCH?		x	x							
	Enabling environment										
311	Does the NMCP have sufficient office space and equipment, such as computers, phones, internet access to		x								

	work effectively?										
312	Does the program have sufficient vehicles to undertake a scale-up of activities		x								
313	What systems of communication are available to the NMCP		x								
314	Are allowances/per diems sufficient for people to carry out their tasks?		x								
Planning, monitoring and budgeting											
315	Who (if anyone) at the different levels of the system is responsible for the planning and implementation of malaria prevention and control, training, IEC activities? Are different stakeholders involved?		x			x				x	
316	Who currently provides financial resources to support malaria activities? By what route do the funds channel?		x							x	
317	Does the program have clearly defined goals, objectives and targets? How does the malaria program fit into the development objectives of the country?		x	x							
318	Are operational plans used to guide program implementation?		x								
319	Does the NMCP have adequate capacity to plan and forecast financial resource needs and to implement a plan?		x								
320	Does the NMCP have sufficient absorptive capacity to scale up malaria control efforts?		x								
321	Is the NMCP able to contract out major components of its program to ensure rapid and efficient scale up of interventions?		x	x							
Co-ordination of RBM partners and RBM partners roles											
322	Who are the main RBM implementing partners and what are their roles and capacity? Collect details on the main implementing partners in the country both national and international. Do any of these agencies need specific support to be able to function more effectively? Are there any in country networks that could be utilised more effectively? <i>Table 21.</i>		x								x
National											
323	Is there a national malaria coordinating committee?		x								x
324	Who chairs the committee and what profile, position and authority does it have within the Ministry of Health? Does it have clear terms of reference?		x								x
325	Does membership and attendance of the malaria coordinating committee reflect the constellation of malaria control partners in the country?		x								x

and the capacity required - sufficient and adequately trained personnel in all aspects of procurement and supply management.

This component of the assessment tool is to provide an overall assessment of the NMCP ability to guarantee continuous availability of health commodities at service delivery points and using the results of the analysis to identify and plan the most strategic means for scaling up. This form of systematic assessment is also considered one key action in raising stakeholder awareness thereby leveraging greater resources.

Data Sources

- Interviews with NMCP staff, Medical Supply Division, Provincial and District health personnel, suppliers, donors
- Reports of NMCP, MoH, Medical Supply Division
- Visit to Central Stores/District Medical Store
- Review of inventory records
- Visits to select facilities-review of records and physical check

People to interview

- NMCP manager
- National Medical Store manager
- District store facility
- Donor staff that work with NMCP
- Major suppliers to the NMCP

Situation analysis and needs assessment

For all issues below address the questions (as relevant) for: a) Ministry of Health supply management systems and b) Civil society and private sector supply management systems.

No.	Questions	Check and Data Source(s)	NMCP	MoH	Other	Provincial	Community	Donors	Partners/NGOs	Private	Regulatory
	Issues										
	Procurement										
336	Is there a national procurement plan? Who is responsible for the plan? How is quantification carried out? Are buffer stocks included?		x	x							
337	Does the NMCP have the capacity to forecast and plan its procurement needs and to implement the plan?		x	x							
338	Is there a regulatory authority responsible for quality control, inspections and licensure of supplies? Does it have the capacity to carry out this task?		x								x
339	What is the system for government procurements? What functions/responsibilities are performed by the NMCP?		x	x							

3.4.3. Health Systems Strengthening

Health systems strengthening (HSS) is a continuous process of implementing changes in policies and management arrangements within the health sector so that the health system is effective, efficient and equitable. The process will evolve as a countries' population needs change and grow.

WHO's draft HSS strategy defines six health system elements as:

- Stewardship
- Health financing
- Human resources
- Technology and infrastructure
- Information and knowledge
- Provision of services

Within these elements there are numerous approaches including increasing cost-effectiveness, improving efficiency through reorganized services, decentralized health systems, and resource allocation based on needs.

It is acknowledged that weak health systems constrain efforts to scaling up interventions and will limit improvements in health outcomes. Therefore, it is important that NMCP clearly identifies the barriers in the health system if they are to achieve and sustain scaled-up activities and thereby successfully meet the targets that they have established.

Human resource availability and capacity is a key issue determining the functionality of the health system. The demand for sufficient numbers of properly trained and skilled people at both service delivery and management levels for malaria control is growing at an unprecedented rate due to the increased investment in malaria across Africa. Almost without exception, human resources are presently grossly inadequate. In the public sector this is particularly apparent with poor remuneration and lack of skilled health workers resulting in positions remaining vacant or filled by unqualified staff at service delivery, district and central levels. In the private sector – both for-profit and not-for-profit – human resource needs are not as critical in terms of absolute numbers but remain an issue in terms of properly trained staff.

Any attempt to address human resource needs for malaria control must consider a wide range of issues that relate to malaria, the health sector and in some cases the entire civil service. For example, a number of countries are carrying out civil service reforms that impact on the health sector. Elsewhere, incentives to retain critical staff within National Malaria Control Programmes have been employed. In-service training can be used to upgrade the skills of personnel in key positions. In addition, consideration should be given to how the capacity of non-public sector actors can be utilised by the public sector. This can include secondment of staff to malaria control programmes; contracting not-for-profit and for-profit agencies to provide malaria (and other health) services to under-served populations; and engaging CBOs and FBOs community networks and memberships.

Data sources

- Interviews with NMCP staff, Medical Supply Division, Provincial and District health personnel, suppliers, donors
- Reports of NMCP, MoH, Medical Supply Division
- Visit to Central Stores
- Review of malaria control strategic plan and stated/implied human resource needs
- Review of staffing norms at facility and district levels and positions filled
- Review of Ministry of Health organograms and positions filled

People to interview

- NMCP manager
- National Medical Store manager
- Donor staff that work with NMCP
- Major suppliers to the NMCP
- Interviews with Civil Service Commission, Ministry of Health Human Resources Department/Section
- Interviews with key RBM partners, particularly those involved in implementation

Situation analysis and needs assessment

No.	Questions	Check and Data Source(s)	NMCP	MoH	Other	Provincial	Community	Donors	Partners/NGOs	Private	Regulatory
	Issues										
	The public sector health system										
	Stewardship										
354	Is there sufficient central management capacity for malaria control?		x								
	Information and knowledge										
355	How adequate is the existing system to manage information to effectively carry out the NMCP's mandate?		x								
356	What is the extent of the knowledge on providers, public and private, that could become involved in malaria control at different levels of the system?		x								
357	Is there sufficient equipment and resources for collection and distribution of data?		x								
358	Is there regular feedback of information down to the different levels?		x			x	x				
359	What approaches are being used to strengthen the routine HMIS system?		x	x		x					
	Provision of Services										
360	Are there mechanisms for collaboration among NMCP and other service delivery programs such as Maternal/Reproductive and Child Health services? What are these mechanisms of collaboration and		x			x	x		x	x	

	do they function?											
361	Are there mechanisms for collaboration across different service levels and all health providers? Do they function?		x									
	Technologies and infrastructure											
362	Is laboratory infrastructure and management sufficient to cope with increased activity? Have quality assurance schemes been put in place?		x									
363	Is the supply distribution system adequate for the needs of the NMCP? How can this be improved?		x									
	Human resources: NMCP and national level issues											
364	Does the NMCP have an organogram (check in strategic plan)? How many of these positions are currently filled? Are vacant positions currently funded? <i>Include organogram with norms and actuals as a figure in the report,</i>		x									
365	Does the NMCP organogram reflect the human resource needs required to scale up malaria control?		x									
366	What is the remuneration (including benefits) of key personnel within NMCP? Is remuneration a barrier to filling key positions?		x									
378	Is it possible to recruit properly qualified and experienced staff to fill key positions within NMCP? What are the main barriers to recruiting such staff?		x									
367	Do key malaria control partners have sufficient human resource capacity to scale up their efforts? How do they address capacity gaps (e.g. through international recruitment, professional development)?		x							x		
368	Does a HR development plan exist?		x									
369	Do all personnel within the NMCP (all levels, all operating areas) have job descriptions and have they been reviewed?		x			x						
370	Do work plans exist and are they regularly analysed?		x			x						
371	Is there a defined supervision structure and are evaluations carried out regularly.		x			x	x					
372	Are there regular performance evaluations and are they linked to an incentive scheme? Are the incentives appropriate?		x									
373	Are there sufficient resources (trainers and materials) for the NMCP continuous training needs?		x			x						

374	What is the current operational research capacity in country? Is it sufficient to carry out operational research that is required during scale up?		x				x	x				
Human resources: sub national and service delivery levels												
375	Are there sufficient human resources and are they adequately trained and motivated for scale-up at sub national levels of the health system? <i>Table 22.</i>		x				x	x				
376	What are the staffing norms at district level? How many of these staff and what proportion of their time do they spend on malaria? Is this perceived to be sufficient to scale up malaria control?		x				x					
377	On average, how many of the positions within the district health team are currently filled? <i>Table 22.</i>		x				x					
378	What are staffing norms at facility level? Is this perceived to be sufficient? On average, how many of these positions are currently filled? <i>Table 22.</i>		x				x					
379	Are the community health workers (or equivalent)? Are they currently used for malaria control? What problems (e.g. recruitment, supervision, motivation, retention) are associated with them and what solutions have been proposed?		x				x	x				
Initiatives to improve human resource situation												
380	At national level, are there initiatives to increase the pool of qualified malaria control personnel? Do these initiatives reflect the changing human resource needs of NMCPs (e.g. management, accounting, monitoring and evaluation, operational research, logistics, advocacy and communications)?		x									
381	Does pre-service training curricular for different health cadres properly reflect national malaria policies and strategies?		x									
382	Are there in-service training programmes for different health cadres, both in the public and private sectors? Do these programmes reflect national malaria policies and strategies?		x									
383	Is the human resource capacity of the private (not-for-profit and for-profit) sector fully utilised for malaria control? This should include consideration of both national, district and community based partners. <i>Table 23.</i>		x								x	