SARN MISSION REPORT OF THE CAPACITY BUILDING WORKSHOP FOR SURVEILLANCE, MONITORING AND EVALUATION FOR MALARIA CONTROL AND ELIMINATION IN EAST AND SOUTHERN AFRICA

CROWN PLAZA HOTEL
HARARE, ZIMBABWE

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SARN Secretariat
Gaborone, Botswana
1.0 Background
In the two recent meetings of Roll Back Malaria sub-regional networks of Southern Africa and East Africa held in Victoria Falls, Zimbabwe and Kigali, Rwanda respectively, countries presented on the progress being made in their countries. However, it was clear that there were critical differences in interpretations of indicators by different countries resulting in difficulties in comparing progress across countries. Also, one of the lessons learnt in implementing malaria control programs in East and Southern Africa is that country peer review has potential to push countries for better uptake of best practices from other countries and rapidly roll these out for public health benefit. This can also be used in improving the quality and use of routine and non-routine data by the malaria programs for decision making. The objective of the workshop is to conduct a malaria data review for countries in East and Southern Africa to respond to a critical need by countries as the New Funding Mechanism of the Global Fund moves on to provide resources to national malaria programs.

2.0 Justification
Although the African Region continues to bear the brunt of the global burden of malaria with about eighty percent of the estimated 207 million global cases of malaria in 2012, there has been great progress in malaria reduction in the last decade. According to the World Malaria Report 2013, between 2000 and 2012, malaria mortality and morbidity in the region declined by 49% and 31% respectively. In East and Southern Africa progress has been made with in most countries with Botswana, Eritrea, Namibia, Rwanda, South
Africa, Swaziland and the island of Zanzibar (United Republic of Tanzania) reductions in reported malaria case incidence or malaria admission rates of 75% or more.

Since 2006 several milestones have been reached in WHO support to tracking of implementation at country level. AFRO initiated the process of malaria program review which culminated into the first MPR Manual developed in 2009 and finalized in 2010. To enhance this process, AFRO developed the malaria strategic planning manual to guide the development of country Malaria Strategic Plans (MSPs). Since then, AFRO has supported 42 malaria endemic countries to conduct malaria program reviews and develop evidence-based MSPs. This process was central to the development of funding proposals to the Global Fund and other partners.

In 2008, a checklist for developing monitoring and evaluation plans for malaria strategic plans was also developed. With all these processes important lessons have been learned in the use of the various program planning tools. Despite this, most countries which conducted malaria program reviews performed poorly in the area of use of data for program planning and decision making due to the following:

- Although monitoring and evaluation plans have been produced in the past countries these plans were done just as a requirement for funding from the Global Fund resulting in limited ownership and use of the document for program management
- Staff in national malaria programs usually move after they have gained much needed skills leaving programs to regularly take on new people who need to be trained or retrained
- A culture of data collection resulting in programs and related systems spending a lot of time in data collection with less time spent on understanding the meaning of the data
- Programs focus on responding to data requirements of projects financed by international organizations and bilateral agencies leaving out a more strategic approach to using available data for making programmatic decisions
- The weak culture of data analysis and interpretation results in missing great opportunities to review past data collection tools, guidelines, practices. Recent meetings have shown that indicator calculation is not uniform across programs resulting in misinterpretation of available information.

Furthermore, several countries in the sub region have the potential to embark on elimination efforts. To do this there is need to refocus the way data is collected, managed, analyzed and interpreted by building on monitoring and evaluations to create a culture of data review, data quality and use for programming. Countries in ESA have also submitted their concept notes to the Global Fund and all of them will be required to submit the monitoring and evaluation plans for grant making before funding is disbursed.

In view of all the above, IST ESA Malaria Unit has planned a workshop in order to build capacity in monitoring and evaluation planning. It will also provide a forum for sharing and peer review of country data from countries in the region and define steps towards better management and use of the data for each country. In addition, this would provide a good framework for analyzing individual country status against the set targets of 2015.
The workshop was attended by a total of 31 participants from IST ESA staff, data managers from National Malaria Programs, WHO staff from countries and SARN:

- 6 IST ESA staff,
- 18 data managers from National Malaria Program,
- 3 data managers from countries (Ethiopia, Tanzania, Uganda), and
- Five WCO malaria staff (South Sudan, Zimbabwe, Malawi, Namibia and Zambia)
- AFRO Malaria Data Manager

3.0 Objectives and Expected Outcomes

General Objective
The main objective of the workshop is to build capacity of the national malaria data managers and monitoring and evaluation officers in malaria data management and monitoring and evaluation.

Specific objectives
The specific objectives are:
- To train participants in the process of developing monitoring and evaluation plans
- To discuss key malaria indicators definitions and how to interpret them
- To share country malaria data for the period 2000 to 2013 (by month and by district from 2009) including how this data is analyzed and used for decision making
- To conduct peer review of the data using a checklist and generate recommendations for the way forward for each country
- To agree on the next steps for each and every country for improving malaria data collection, management, analysis and use

4.0 Method of work
Before the workshop, IST ESA and AFRO MAL Data Manager will compile all the data for countries in ESA. IST will also work with countries to make sure that the fullest dataset possible is put together for each country. The workshop will be organized and conducted both in plenary presentation and working group sessions. Each of these sessions will be followed by plenary feedback and consensus building. Groups will be constituted by epidemiology block or by mixed groups for specific assignments.

5.0 Main outcomes

Key Issues observed by the data managers
- Countries not effectively using data to monitor impact of interventions
- Inadequate investment in ensuring quality assured data for malaria (human, information systems, trainings)
- Inadequate capacity for data management in country programs and WCOs
- Poor quality data from countries
- Different formats of Data Presentation from countries
• Non Involvement of Private sector in surveillance
• Different interpretation and selective use of indicators.
• Late initiation and in country follow up processes in compilation of the WMR
• Poor cross border collaboration

Outcomes
• Reviewed and improved evidence based country monitoring and evaluation Plans
• Reviewed and improved country data and suggestions for further improvement
• Better understanding of Key malaria indicator definitions
• Strengthened monitoring and evaluation capacity for accelerating reduction of malaria burden in the African Region
• There exist huge discrepancies on data quality, frequency, timeliness within each country and intra-country
• Some crucial indicators are not being measured
• Test Positivity Rate (TPR) and proportionate malaria are very good indicators to measure progress especially for high transmission countries
• Consensus on a follow up plan

Meeting issues and recommendations

Key Issues
• Countries not effectively using data to monitor impact of interventions
• Inadequate investment in ensuring quality assured data for malaria (human, information systems, capacity building)
• Inadequate capacity for data management in country programs and WCOs
• Varying levels of the quality of data from countries and different formats of presentation of the data from countries
• The focus of malaria surveillance is mostly on the public sector with very little representation from the private sector
• Across the region there is different interpretation and selective use of indicators.
• With regard to the World Malaria Report, there is late initiation and in country follow up processes in compilation of the WMR

Recommendations
• Strengthen resource mobilization at all levels for enhanced data management and peer review
• Use and apply standardized indicators including in terms of their definitions when measuring progress in malaria control/elimination
• All countries to collect, analyze and report on the ten key malaria indicators (as follows: confirmed malaria cases, inpatient malaria cases, inpatient malaria deaths, malaria test positivity rate (RDT and microscopy), percentage of cases due to P. falciparum, percentage of inpatient cases with a discharge diagnosis of malaria, percentage inpatient deaths due to malaria, annual blood examination rate, malaria testing rate, completeness of health facility reporting)
• Strengthen cross border collaboration
- Harmonize and standardize indicators including their definitions
- All countries to collect, analyse and report on the ten key malaria indicators
- Countries to produce bulletins for measuring progress, advocacy and informed decision making
- Conduct regular data quality audits at country level involving relevant stakeholders
- Have regular meetings to address surveillance issues at all levels (country and regional)
- More investment by countries in data management

Country by country recommendations

<table>
<thead>
<tr>
<th>Country</th>
<th>What needs to be done</th>
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<tr>
<td></td>
<td>Short Term (under 1 year)</td>
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<tr>
<td>Botswana</td>
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<td>Include tested cases as a minimum</td>
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<td>Improve on data completeness for elimination</td>
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<td>Make data quality assurance regular</td>
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<td>N/A</td>
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<td></td>
<td>Improve completeness of data by health facilities and by district</td>
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<td>Build on 2013 data available by district to strengthen targeting of interventions</td>
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<td>Comoros</td>
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<td>Eritrea</td>
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<td>Comoros</td>
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<td>Ethiopia</td>
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<td>Kenya</td>
<td>Data to be compiled by district (sub county – previously by district)</td>
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<td></td>
<td>Include malaria deaths in the data base</td>
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<td>Include in patient data</td>
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<td>Include testing</td>
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<td>Conduct a rapid impact assessment to document progress</td>
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<td></td>
<td>Improve testing rate</td>
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<td>Include clinical cases</td>
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<td></td>
<td>Need to continue strengthening testing</td>
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<td>Improve on completeness for some years</td>
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<td>Focus on cleaning the data</td>
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<td>Conduct a rapid impact assessment to document</td>
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<td>Madagascar</td>
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<td>Malawi</td>
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<td>Region</td>
<td>Progress</td>
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<tr>
<td>Mozambique</td>
<td>• Use data for targeting interventions&lt;br&gt;• Need to investigate outliers in the database&lt;br&gt;• Conduct a rapid impact assessment to document progress</td>
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<td>Namibia</td>
<td>• Improve on testing&lt;br&gt;• Strengthen M&amp;E capacity&lt;br&gt;• Initiate DHIS2&lt;br&gt;• Improve on data review for targeting of interventions&lt;br&gt;• Must make sure tested cases are included urgently&lt;br&gt;• Data collection system needs strengthening&lt;br&gt;• General support in M&amp;E</td>
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<td>South Africa</td>
<td>• Improve on stratification of the indigenous cases&lt;br&gt;• Attendance to the high seasonality (0.002 to 0.28) in some weeks&lt;br&gt;• Improve on the incidence rate by doing business differently by focusing on the 3 districts which constitute 50% of the cases&lt;br&gt;• Attend to the 60% of cases in 10 weeks (between weeks 19-29)</td>
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<td>South Sudan</td>
<td>• Data collection system needs strengthening&lt;br&gt;• General support in M&amp;E</td>
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<td>Swaziland</td>
<td>• Include testing as a key indicator&lt;br&gt;• Improve on completeness&lt;br&gt;• Improve data quality through data auditing&lt;br&gt;• Conduct a rapid impact assessment to document progress</td>
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<tr>
<td>URT Mainland</td>
<td>• Include testing&lt;br&gt;• Improve on completeness&lt;br&gt;• Improve data quality through data auditing&lt;br&gt;• Conduct a rapid impact assessment to document progress&lt;br&gt;• Collect data on a weekly basis (elimination obliges)</td>
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<tr>
<td>URT Zanzibar</td>
<td>• Include testing&lt;br&gt;• Improve on completeness&lt;br&gt;• Improve data quality through data auditing&lt;br&gt;• Conduct a rapid impact assessment to document progress&lt;br&gt;• Collect data on a weekly basis (elimination obliges)</td>
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<td>Uganda</td>
<td>• Pull data for 2010 and 2011 into the structured database&lt;br&gt;• For 2012 see if data can be filled up&lt;br&gt;• Increase efforts on completeness&lt;br&gt;• Intensify detailed cleaning and routine data checks and analysis&lt;br&gt;• Conduct a rapid impact assessment to document progress&lt;br&gt;• Calculate incidence annually (or at least monthly)</td>
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<td>Country</td>
<td>Actions</td>
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| Zambia       | • Conduct data cleaning on tested cases to make sure that testing rate is calculated  
              • Conduct a rapid impact assessment to document progress                  | • Include population estimates for the newly created districts |
| Zimbabwe     | • IST to follow up on “clinical” cases with the country  
              • Data on clinical cases to be reported  
              • Annual Blood Examination Rate (ABER) should be calculated  | • Collect monthly data on inpatient cases and deaths per district  
              • Resolve the issue of catchment populations for urban health institutions  
              • Conduct a rapid impact assessment to document progress |

**6.0 Next Steps**

**SARN-Support Going Forward:**

- Facilitate peer learning exchange visits for improvement of data base, reporting and publication of best practices
- Facilitate countries to develop evidence based strong M/E plans and utilize these to support development of strong country Annual Plans and roadmaps
- Strengthen collaboration with WHO-IST
- Facilitate re-stratification of epidemiological maps based on harmonized and standardized parameters agreed on during the Harare meeting
- Work jointly with WHO-IST and NMCPs (data managers) to finalized the harmonization/standardization of Indicators and case definitions

- **Follow-up**

**Short Term**

- SARN to agree with IST on the framework of country support
- Follow up countries with identified urgent needs and actions.

**Medium term**

- Collaborate with WHO-IST/AFRO to finalize the draft manual for developing malaria monitoring and evaluation plans

**Long term**

- Collaborate with WHO-IST to monitor the improvement of data completeness and quality by country
7.0 **Reference Documents**
- Epidemiological Approach to malaria control: Guide for participants
- Disease Surveillance for Malaria Control: an Operational Manual
- Disease Surveillance for Malaria Elimination: an Operational Manual
- From malaria Control to Malaria Elimination: A Manual for elimination scenario planning
- Malaria Surveillance Bulletin: East and Southern Africa (December 2012)
- Draft Checklist for the Developing Malaria Monitoring and Evaluation Plan
- Country specific data bases

8.0 **MEETING PARTICIPANTS**