Towards better malaria surveillance in Mozambique:
Findings, identified bottlenecks and recommendations from 2018 national comprehensive surveillance assessment

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KEY MESSAGES

- Data completeness was found to be robust (95% and 90% at community and health facility (HF) levels, respectively.
- Timeliness was problematic, particularly at the community level; only 42% of community health workers (CHWs') reports were submitted in a timely fashion in the past three months.
- Data accuracy was weak, with discrepancies noted between the data recorded in registers and in monthly reports.
- Capacity to perform basic data analysis and interpretation was greater than respondents self perceive their capacity to be.

Introduction

Malaria remains the largest public health problem in Mozambique, accounting for 29% of all hospital deaths and 42% of deaths among children under five. Malaria control and elimination is particularly complex due to the varied transmission dynamics and endemicity across the territory. To activate responses that are relevant to local needs, it is essential to have a comprehensive malaria information and surveillance system that collects key eco-epidemiological data to regularly update malaria transmission stratification and to inform the deployment of interventions.

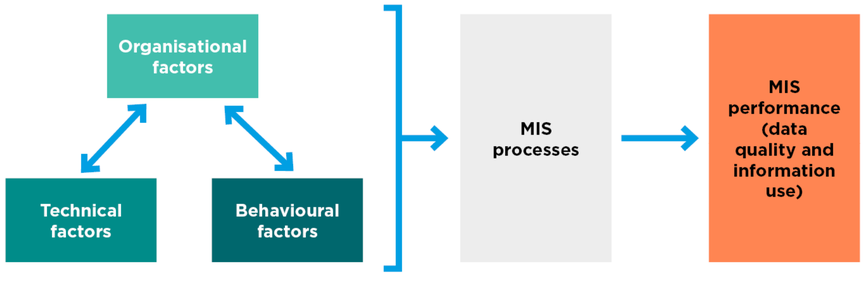
Methods

In July 2018, an observational, cross-sectional survey combining quantitative and qualitative components (see illustration on the right) was conducted in 15 randomly selected districts across eight of Mozambique's 11 provinces. Data collection tools were based on previously conducted Performance of Routine Information System Management (PRISM)[1] assessments, and adapted to the Mozambican context. A total of 159 forms, six at provincial, 15 at district, 80 at HF, and 58 at CHW levels were analysed in Excel for simple calculations and in STATA version 13.1 for calculating mean scores, proportions, and respective ranges.

[1] MEASURE Evaluation. Tools for Data Demand and Use in the Health Sector: Performance of Routine Information Systems Management (PRISM) Tools. 2011. Available at: https://www.measureevaluation.org/resources/publications/ms-11-46-d.

Results

- **System performance**: Only 42% of CHWs' reports were submitted in a timely fashion in the past three months, in part due to recurrent stock-outs of reporting forms; data accuracy was found to be weak, with frequent discrepancies noted between the data recorded in registers and in monthly reports. Variance between the two data sources ranged from 22% to 97% at community level and reached 700% at HF level in southern Mozambique. While data completeness (98%) was good at district level, only 32% of reports were submitted before monthly deadline to DHIS2.
- **Behavioural factors:** Respondents' capacity to perform basic data analysis and interpretation was found to be higher (during testing) than their self-reported capacity: 70% compared to 56% at HF level, and 89% compared to 63% at district level.
- **Organisational factors:** Supervision was found to be weak. While 74% of CHWs interviewed had received a supervision visit in the previous three months, only 42% recalled the quality of their data having been reviewed. Over the same time period, only half of HFs were found to have received any supervision and data quality checks had only been conducted during 27% of those visits.
- **Information system processes:** Problems were noted at data transmission stage; systems for filing reports at HF and district levels were lacking, and limited data processing and analysis was taking place at HF level.



*Adapted from: MEASURE Evaluation, 2011

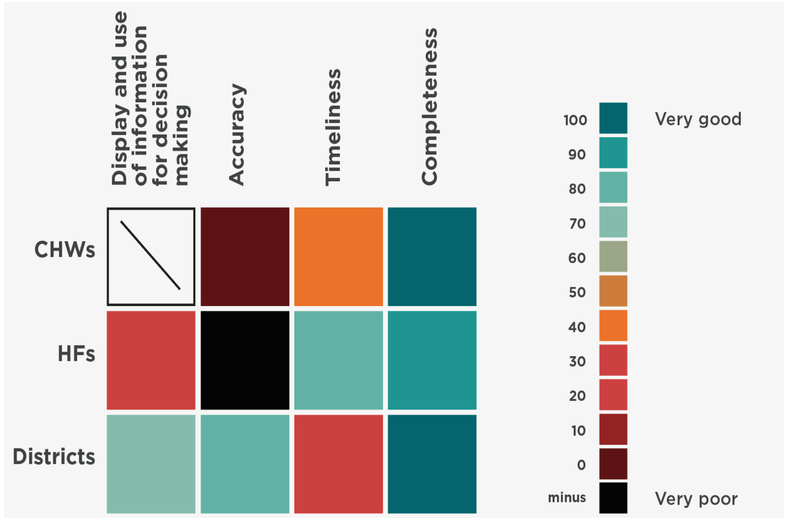


Figure 1: Performance of national malaria surveillance system

Head of the Quissimajulo health centre, August 2018

Conclusion

- Access to timely and reliable data is crucial for malaria surveillance.
- The countrywide malaria surveillance assessment highlighted key gaps and challenges, which point to the need to undertake the following at all levels of the MIS:
  - Prioritise enforcement of data quality checks;
  - Nurture the use of information and
  - Provide and enforce simple and clear technical guidelines for data management.

For more information
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