

Global Malaria Programme



Assessments to guide malaria surveillance strengthening in <u>any endemic</u> countries

May 2023

SMERG, Bangkok

Agenda

Background

Surveillance assessment Toolkit

Country implementations

Conclusion

1. Background

Surveillance assessment

Malaria surveillance assessments is a systematic approach to measuring the performance of malaria surveillance systems, and identifying and evaluating the determinants of that performance.

They have been implemented in multiple countries, by different partners using a variety of different tools and approaches to assess systems and enable NMPs to improve surveillance system performance.

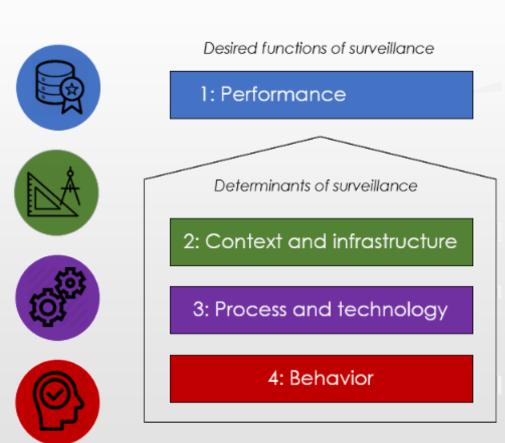


However, past approaches and tools have not been standardized across assessments, making it difficult to compare results between countries, between regions within a country, or over time in any select geographical region.

To address this issue, a standardized Malaria Surveillance Assessment Toolkit was developed to conduct comparable and replicable malaria surveillance assessments across multiple countries and within the same country over time.

2. Surveillance assessment Toolkit

Four objectives of the assessment, and a modular approach



Objective 1: Measure the **performance of the surveillance system** (defined by surveillance system coverage, data quality and data use)

Objective 2: Contextual and infrastructural aspects of the surveillance (health sectors reporting, minimum data captured, information systems used, availability of and adherence to guidelines, human and financial resources and infrastructure)

Objective 3: Processes and technical aspects (processes, tools and personnel involved with the flow and use of data from recording to response)

Objective 4: Behavioral aspects (governance structures, information culture, proficiency, motivation and accountability of staff involved in malaria surveillance)

Total indicators= 79

Total priority indicators =53

Priority for burden reduction settings = 40

Priority for elimination settings =49

Content of the toolkit: eight tools with different functions and an Implementation step-by-step Reference Guide

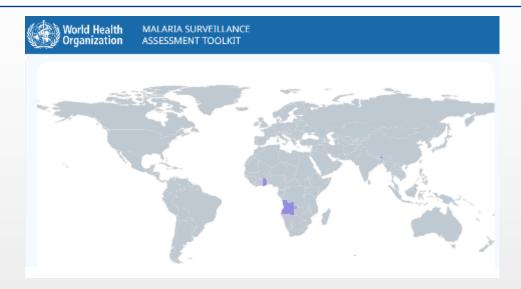
Function	Tools	Description
Define scope	1. Assessment framework tool	A set of key objectives, sub-objectives, and indicators that can be used to quantify and/ or qualify strengths and weaknesses in the surveillance system. This tool should be used as the starting point in an assessment to define the scope of the assessment and the approach.
	2. Concept note and protocol	A template for the outline of a short concept note for refining the scope, methods, expected outputs and outcomes of an assessment and a more detailed protocol outline required for comprehensive assessments.
	3. Assessment planning tool	A budgeting template to assist countries in developing a costed plan to undertake a comprehensive assessment.
Collect & analyse data	4. Desk review Tool	A set of questions, tables, graphics and diagrams used to collect information and summarize what is known about malaria surveillance through document and data review, and optional interviews with surveillance programme staff and other relevant supporting partners.
	5. Data Quality Assessment tools	Tools and guidance for collecting and analysing data to specifically assess data quality at national, regional, district and service delivery levels.
	6. Question Bank	A library of questions which can be used to develop survey questionnaires for data collection at service delivery levels.
	7. Analysis tools	A set of shell tables in excel used to summarise the results of analysis from the survey.
Develop & prioritize recommendations	8. Technical brief and Report outline	A report template for organizing, visualizing, and interpreting results from the assessment. A technical brief is used to highlight a subset of priority results, whereas the complete report includes all assessment results.

Current status of the toolkit, and next steps https://malsurtoolkit.who.int/

Malaria surveillance assessment toolkit Implementation reference guide









Assessment framework

A set of objectives, sub-objectives, and indicators that can be used to quantify angles qualify strangths and weaknesses in the surveillance system. This tool should be used as the starting point in an assessment to define the scope of the assessment is election of the transmission setting, majorio control interventions and strategies and indicators) and the

(model, interest or comprehensive)



Concept note and protocol

A template for the outline of a short concept note for refining the scope, methods, expected outputs and outcomes of an assessment and a more detailed protocol outline required for comprehensive assessments.



A set of questions, tables, graphics and diagrams used to policy information and summarian which is snown about malaria surveillance. Information is collected through document and data review at the national level, and through interviews or more informal discussions with surveillance programme staff and other relevant supporting partners.



Data Quality Analysis

Tools and guidance for collecting and analysing data to specifically assess data quality (completioness, constituess, consistency and concordance) at notional, regional, district and service delivery levels. At the deak level data are extracted from national databases and used to populate a template which automatically generates tables and graphics. At the service delivery level data extracted from the national database is compared with data colleged at the health facility.

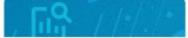
 The first iteration of the WHO web portal is live

 Access to standardized guidance and a common set of adaptable tools, and learnings from other countries

 Tools can be downloaded in English and in French



A library of casestions which can be used to develop survive question raises for data collection at sub-national inspire/district, service delivery or community levels



A set of shall tables in excel used to summarise the results from the survey.



results from the assessment. A technical brief is used to highlight a subsite of practity results, whereas the complete report Includes all assessment results.



3. Country Implementations

Four countries were the focus of comprehensive assessments to pilot the WHO surveillance assessment toolkit



Four countries piloted the surveillance assessment tools between 2019 and 2022

- Benin
- Burkina Faso
- Ghana
- DRC

Additional countries (Angola, Cameroon, Laos, Pakistan, Sudan) are / have been using the WHO surveillance toolkit (or some modules) to conduct assessments

Implementation of a malaria surveillance assessment occurred in four phases (Assessment initiation; Data collection and review; Data analysis and output development; Prioritization of recommendations and dissemination)

Qualitative and quantitative data collection were conducted at all levels of the information systems, including the service delivery, intermediate and central level

Select key findings for data quality and data use

TABLE 5.2.

Results from the assessment of indicators for data quality and use (>80%=met [green], 50–80%=partially met [orange] and <50=not met [red])

Indicator	Burkina Faso	Democratic Republic of the Congo	Ghana
Completeness of reporting	91%	91%	98%
Timeliness of reporting	85%	66%	94%
Consistency between core variables	85%	68%	60%
Completeness of core variables within registers	64%	74%	40%
Concordance of core variables between registers and aggregated reports	32%	38%	30%
Data used for strategic, policy and operational processes	83%	64%	72%
Users with access to data	58%	96%	73%

- Completeness at Health Facility is usually high
- Concordance between paper registers and electronic data is usually poor
- Data use high variable depending on health level (usually lacking at lower level)

Source: 2022 World malaria report

Key cross-cutting recommendations from the assessments



Improve demand for and access to malaria care to improve the surveillance system representativeness



Ensure availability of commodities, infrastructure and guidelines for surveillance and case management



Enhance or intensify the integration of malaria data from different information systems



Improve the **quality** of malaria data



Improve access, analysis, and use of malaria data at all levels of the system



Ensure an environment that allows for effective **planning and implementation** of surveillance interventions

Outputs from the assessments were translated into reports and surveillance strenghtening roadmaps, informing policies, strategies and funding

- ➤ Surveillance assessment outputs have been disseminated in the countries and internationally with key malaria actors through **final reports** as well as technical briefs
- > Identified surveillance gaps were used to develop recommendations and roadmaps in collaboration with NMCP and key partners
- > Donors, including PMI and GF are using the costed roadmaps to inform key fundings for surveillance activities

Evaluation of the malaria surveillance system in Burkina Faso (2020) malaria in 2020. To control the sorred of the disease, the Kational Halaria Control Program (KMCP) has originitized malaria surveillance in its latest National Strategic Plan (NSP). In particular, the program wants to strengthen the quality and use of data to better understand the incidence and cistribution of the disease and control its spread In 2020, the NMCP conducted an assessment of the country's malaria serveillance system to assess its strengths and weaknesses and inform the development of evidence based, high-quality, and effective interventions for prevention, diagnosis, and treatment of the disease. Purpose and objectives Methodology the NMCP evaluated the passive materia case. The NMCP conducted the assessmen surveillance, entomological surveillance, and the malaria surveillance system. developed by the Clinton Health Acc monitoring and evaluation systems for malaria nterventions. These included long lasting insecticidal (LIVs), seasonal malaria chemoprevention context of Burking Faso. The assess (SMC), indoor residual spraying (IRS), and intermittent. A literature review support reventive treatment in pregnancy (PTp), and supply interviews at the central in bein for disensatic twots, and entireliated drugs. (n=42) levels. he assessment evaluated the efficacy of the passive A countitative survey of hesurveillance system by assessing the quality and use including all hospitals (DIRS of data, and to understand key factors influencing its representative sample of me A review of the general context of surveillance the health sectors and surveillance strategies, the information systems used, the documentation and A data quality audit of the guidelines available, and the human and financial variables across the compl resources and infrastructure. Mapping the data flow: the processes, tools

and personnel involved from data recording

An evaluation of the staff involved in malaria surveillance: their competence, motivation, an

This project was funded by the ALLS Middle by Pales Foundation on discolaration by DAM and the MACS in a

responsibilities.

the registers and monthly apthe same facilities included in

n=171) were collected and anal

MINISTERE DE LA SANTE



Unité-Progrés-Austice

GUIDE DE SURVEILLANCE DU PALUDISME AU BURKINA FASO



Three countries in the GMS are undertaking surveillance assessments to identify remaining gaps and to prioritize solutions

Laos: Data Analysis & Outputs



Embedded into the Global Fund mid-term review (MTR) process, the surveillance assessment has been used to identify surveillance gaps that could be directly addressed while applying for RAI4E funding

Vietnam: Assessment initiation



Given that the country had less than 500 cases in 2022, the toolkit will be used to understand where remaining gaps are in endemic areas as well those implementing prevention of reestablishment and to prepare documentation for elimination certification

Cambodia: Assessment initiation



Toolkit will help to formalize surveillance gaps identified in the MTR and targeted in RAI4E, identify gaps that may have been missed, and collect documentation needed for elimination certification

So far, the assessment in Laos has identified key gaps in data concordance and the case investigation and classification system



Data concordance

Background

Comparison of key indicators on paper-based forms at the village, HF, and district (DAM) level and electronically-reported data in DHIS2

Findings

High levels of concordance with testing (~100%), but issues with cases, treatment, and RACD data

Actions

- Shift of data entry from DAM to HF
- Data quality added as key indicator in weekly provincial data reviews
- Targeted supervision and refresher trainings to worst performers
- Removal of duplicate aggregate forms in favor of direct reporting at the HC

Case investigation and classification

Background

Case investigation and classification only done in elimination areas. CMPE previously piloted a simplified CI/CC system in burden reduction areas

Small proportion of cases being investigated and classified (~7%), simplified case investigation and classification pilot had high rates of acceptability and rates of CI/CC

Include a simplified case investigation and classification process in burden reduction areas



Findings

4. Conclusion

Toolkit Implementation lessons learnt, and key recommendations

NMCP ownership critical for the success of the assessment, including in formulation of recommendation and roadmap

Ensure sufficient time throughout the evaluation



Formulate, communicate, and share outputs early on and throughout the evaluation



Follow standard survey best practices for data collection and analysis, with dedicated technical advisor

Consider the use of surveillance assessment to inform strategy as part of malaria planning and routine activities, train program on use of toolkit, and include it in relevant policies by different partners

Surveillance strengthening recommendations are relevant to other programs beyond malaria (e.g. HMIS unit)

Thanks to the malaria programs and the multiple partners who contributed to the toolkit formulation and implementation





































GATES foundation

BILL & MELINDA





Swiss Tropical and Public Health Institute Schweizerisches Tropen- und Public Health-Institut



University of California San Francisco



