Tanzania (Mainland)

Routine Health Information System
MALARIA REPORTING STRUCTURES
Current as of: August 2022

RHIS Profile: This document outlines the reporting structures of routine health information systems (RHIS) that include malaria data. In Tanzania (Mainland), this includes the national RHIS and electronic Integrated Disease Surveillance and Response (e-IDSR). The RHIS transitioned to an electronic platform, the District Health Information System (DHIS2) platform in 2012. The e-IDSR began reporting into the DHIS2 in 2013. DHIS2 falls under the jurisdiction of the health management information system (HMIS) unit of the Ministry of Health (MOH). Data flows from health facilities through councils and regions to the national level. Because the RHIS and IDSR are linked via DHIS2, often the same personnel managing and reporting to the RHIS are also involved in IDSR responsibilities. Malaria cases are reported weekly and monthly within the IDSR which uses Tanzania's USSD (unstructured supplementary service data) mobile network. This document outlines the reporting structures involved with malaria specific reporting and the relationships between the various health system levels involved.

	RHIS	e-IDSR
	Started: DHIS2 roll-out in August 2013 **Scale-up status:** Country wide	**Started:** IDSR began reporting to DHIS2 in 2013 **Scale-up status:** Country wide
National	**Reporting format/platform:** DHIS2 **Managed by:** HMIS Unit of MOH **Key tasks:** Monthly review of DHIS2 data, ensure full functioning of the DHIS2, promotion of quality data collection and effective use for informed decision, development and dissemination of SOPs, guidelines and strategies for improvement of services. Ensure RHMTs and CHMTs are knowledgeable in HMIS. HMIS tools are in place at the regional and council levels. Verification of what is done by CHMT and RHMT with regards to data. Data analysis for decision making. Supportive supervision. Resource mobilization for both HMIS and e-IDSR.	**Reporting format/platform:** DHIS2 **Managed by:** HMIS Unit of MOH; MOH ICT focal person and epidemiology section under disease surveillance unit. **Key tasks:** Ensure all regions have reported quality data in a timely manner. USSD system development and support. SOPs, standards and guideline in place. Capacity building. Supportive supervision. Resource mobilization for both HMIS and IDSR.
Region • # of regions: 26 • Range from 4 – 11 councils per region	**Reporting format/platform:** DHIS2 **Managed by:** Regional Health Management Team (RHMT) **Reported to:** MOH HMIS unit **Reporting frequency:** Monthly **Key tasks:** Monthly data review for quality. Ensure data is used to spark action and decision making. Serves as a link between National and council levels. Supportive supervision to CHMTs and facility. Ensure that CHMTs are knowledgeable in HMIS data utilization.	**Reporting format/platform:** DHIS2 **Managed by:** RHMT; IDSR focal person **Reported to:** MOHC – IDSR focal person **Reporting frequency: Monthly,** Weekly and immediate **Key tasks:** IDSR focal person to ensure all councils are timely reporting immediately and weekly IDSR reports. Incase notifiable diseases threshold is met, support CHMT and inform MOH for prompt action if necessary. Serve as the bridge between national and council communication.
Council • # of councils: 184 • Range from 10 – 180 facilities per council	**Reporting format/platform:** DHIS2 **Managed by:** HMIS focal person at Council Health Management Team (CHMT) **Reported to:** Region focal person for HMIS. [Regional Medical Officer (RMO)] **Reporting frequency:** Monthly; uploaded to DHIS2 by 15th of the following month **Key tasks:** For summary forms not uploaded at the facility, data is reviewed at the council level before being uploaded to DHIS2. Data validation is then done to remove/investigate outliers regardless of where data is uploaded. Focal person ensures timeliness and completeness of reporting from all reporting facilities. Through the malaria dashboard and Malaria Scorecard, data is used by the CHMT for decision making. Ensuring constant availability of HMIS tools (registers, tally sheets and summary forms.) and all healthcare workers are knowledgeable in HMIS reporting responsibilities. Ensure data is utilized by CHMT for planning and decision making. Receive data related instruction from high level and oversea its implementation at the facility. Data related supportive supervision to HFs.	**Reporting format/platform:** DHIS2 **Managed by:** IDSR focal person at CHMT. For some councils, HMIS/IDSR focal person is the same. **Reported to:** Region focal person for IDSR. [Regional Medical Officer (RMO)] **Reporting frequency: Monthly,** Weekly and immediate **Key tasks:** IDSR focal person to ensure all HFs are timely reporting weekly IDSR reports. In case notifiable diseases threshold is met, inform CHMT for prompt action and higher level if necessary. Serve as the bridge between regional and HFs communication.

Commented [FC1]: Also, Tanzania has introduced immediate reporting of the malaria cases in the areas targeted for elimination i.e., in the very low malaria epidemiological strata. Currently, this initiative is being implemented in three regions namely; Arusha, Manyara and Kilimanjaro

Commented [MK2R1]: In addition to this, 2020 Malaria stratification revealed Njombe and Iringa region in the very low malaria transmission risk, hence for Njombe by the end of 2022 malaria will be immediate reported disease likewise Iringa by Dec 2023

Facility Level		
• Approximately 8,537 facilities in mainland Tanzania • Types of HF: hospital, health center, dispensaries and clinics	**Reporting format/platform:** Paper to DHIS2 **Managed by:** Facility member in-charge is responsible or designates specific staff **Reported to:** CHMT (Council Health management team) or Council level **Reporting frequency:** Monthly; uploaded to DHIS2 by 15th of the following month. If sending to council for upload, must send paper summary forms by 7th of the following month. **Key tasks:** Facility workers fill out tally sheets and registers which are used to complete summary forms. Summary form data is then either uploaded directly to DHIS2 by facility or submitted in paper form to the council level. When uploaded to DHIS2 from the health facility level, data is reviewed and validated for quality. Facility is responsible for reviewing the quality of the forms that are sent to the council level prior to sending. Data use and ownership is promoted for planning and decision making	**Reporting format/platform:** Mobile based reporting **Managed by:** All facility staff have capacity; depending on health facility in-charge **Reported to:** CHMT (Council Health management team) or Council level **Reporting frequency:** Immediate, weekly and monthly. Weekly and immediate reporting is done through mobile phones via health workers. Mobile reports use USSD and connected to DHIS2. All health facilities are capable of reporting through mobile phones. **Key tasks:** Weekly and immediate reporting of priority diseases. Filling out IDSR register, the primary source used for weekly IDSR reports. Notification is done via the USSD mobile network. Responding to action thresholds as well as informing higher level for more support.

Table 1: Key Malaria Indicators by System

Indicate Y or N for each reporting element captured by the system.

Indicators	System	
	HMIS	e-IDSR
Number of suspected malaria cases		
Suspect/fever cases	N	N
Tested (diagnostically)	Y	Y
Diagnostically confirmed (positive)	Y	Y
Clinical/presumed/unconfirmed	Y/Y/Y	Y/Y/Y
Outpatient/inpatient	Y/Y	N/A
Uncomplicated/severe	Y/Y	Y/N/A
Age categories (e.g., <5, 5+)/Sex disaggregation (M, F)	Y/Y	Y/Y
Pregnant women	Y	N
Number of malaria deaths		
Age categories (e.g., <5, 5+)/Sex disaggregation (M, F)	Y/Y	Y/Y
Pregnant women	N	N
Commodities (Availability or stockout/Consumption)		
RDT	Y	N/A
ACT (AL, ASAQ)	Y	N/A
Severe malaria treatment	N	N/A
SP	Y	N/A
IPTP 1/2/3(+)	N/Y/Y	N/A
Completeness of reporting	Y	N/A

Data Quality Activities

Routine data quality reviews and audits:

HFs and councils review their data for quality on a monthly basis. CHMT and RHMTs, through the malaria dashboard and Malaria Service and Data Quality Improvement (MSDQI) assessment found within DHIS2, identify and address issues in data quality. The malaria dashboard allows CHMT and RHMT staff to view which health facilities are over or under performing. If the malaria dashboard identifies quality issues at specific facilities, these facilities will undergo a MSDQI. The MSDQI serves a similar function to a routine data quality assessment of malaria services and put in place actions to resolve quality issues through the development of an action plan. The MSDQI began being used in 2018.

Review meetings: At the national level, the NMCP conducts monthly data quality reviews. Regions, councils and health facilities are expected to also conduct monthly data reviews of their data.

Additionally, NMCP has annual regional review meetings where they meet with RHMTs and CMHTs at regional headquarters to discuss data quality and use related issues. These annual review meeting also serve as a capacity building exercise to ensure that CHMT and RHMT teams are not only capable of managing their data but also equipping and supervising HFs on data.

Supervision: NMCP conducts supportive supervision. As a program, they look at the malaria dashboard and identify specific issues in data quality. Each region should be visited at least once a year with MSDQI checklist. Chronic issues in specific regions may influence more supervision visits.

Monthly or quarterly malaria bulletin: Quarterly bulletins are produced by the NMCP and available electronically. Annual bulletins are printed and distributed to stakeholders. The last annual bulletin printed and distributed is of 2021.

Data availability: Council, regional and national level teams have access to DHIS2. All implementing partners have access to DHIS2 and the malaria dashboard. All health program HMIS data is also publicly available online at: hmisportal.moh.go.tz.

Data use: The data generated from DHIS2 through malaria dashboard and malaria scorecard is used to inform decision making for strategic goal setting, targeting of interventions, budgeting and resource allocation. Data analysis begins at the health facility level.

Additional Context

The Tanzania Health Data Collaborative (THDC), launched in 2017, works to harmonize and streamline a common monitoring and evaluation (M&E) framework and approach across sectors that supports the National Health Sector Strategic Plan (HSSP) 2015-2020.

The principle NMCP partners in Tanzania are PMI, Global Fund, RBM, WHO, CDC, ALMA (Comic Relief), and Deloitte.

Tanzania does not currently have a community health information system. However, Malaria case-based surveillance (CBS) established and efforts to implement integrated community case management (iCCM) underway.

MOH has trained health workers at all health facilities to have the capacity to upload RHIS summary data to DHIS2. This has been done to encourage data ownership, quality and use from the point of generation.

To increase data use at the subnational level, the malaria dashboard has been created by the NMCP. Malaria data in Tanzania is collated from several summary forms into the malaria dashboard via DHIS2. The dashboard is used by CHMT and RHMT to view which health facilities are over or under performing. Displays and charts from the dashboard are often included in the quarterly and annual bulletins. The dashboard has increased data use at the subnational level and serves as a platform to monitor performance.

NMCP has also developed the Malaria Service and Data Quality Improvement (MSDQI) tool. The MSDQI is an android based mobile phone application linked to DHIS2. It is a package of checklists structured for quantifying data quality and malaria services at the facility level. It serves a similar function to a routine data quality assessment of malaria services and data quality. Checklists focus on the various elements of malaria service delivery points including outpatient, reproductive and child health, malaria microscopy, malaria RDT, reproductive and child health, commodities and malaria data quality assessment.

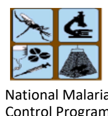
Both the Malaria dashboard and MSDQI are functional components within DHIS2. Together they identify issues in malaria services and malaria indicators and to address these issues. The Malaria Dashboard specifically identifies these through output indicators while the MSQDQI provides process level indicators enabling a plan of action to address these issues. Staff at RHMTs and CHMTs are trained to use the dashboard and MSDQI.

To increase data use at the policy and decision-making level, Tanzania has begun to use the Malaria Scorecard. Malaria Scorecard is a separate tool used to convey key malaria health information to decision makers. Malaria Scorecard is an online color-coded management system designed to help countries track performance of priority malaria indicators from their strategic plan. It uses existing quarterly data from DHIS2 to inform actions that address issues. The Scorecard facilitates action, accountability, and advocacy at national, regional and council levels through the action tracker and workplan function. The online scorecard management tool (web platform) includes various data visualization and management functionalities. Scorecard is available in mobile phones and tablets through applications (country scorecard). The tool was firstly developed in October 2016 with the aim of making malaria data for priority indicators available to leaders and decision makers for action. The Malaria scorecard started being used by the RHMT in November 2019.

Recent updates:

Tanzania has introduced immediate reporting of the malaria cases in the areas targeted for elimination i.e., in the very low malaria epidemiological strata. Currently, this initiative is being implemented in three regions namely; Arusha, Manyara and Kilimanjaro.

In addition to this, 2020 Malaria stratification revealed Njombe and Iringa region in the very low malaria transmission risk, hence for Njombe by the end of 2022 malaria will be immediate reported disease likewise Iringa by Dec 2023



National Malaria
Control Program