Malaria – Routine Data Quality Assessment Tool (M-RDQA)

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Use case

- Data quality assurance is important – but requires effort and attention to detail

- Often done by large health facility assessments on a sample of health facilities – infrequent, expensive

- Sometimes done more routinely, e.g. as part of HF supervision.

- But these efforts often lack coordination (what, how, when) – little possibility of deriving global conclusions for improvement
Use case (2)

- MEASURE Malaria created M-RDQA in Excel and used in PMI countries
  - Adaptation to Android to facilitate use and aggregation of data to subnational and national levels
  - DHIS 2 “Configuration Package” – meta data and dashboards
  - More coordinated and standardized approach to routine data quality checks
  - More efficient targeting of resources for data quality improvement
Approach

- Routine supervision
  - Malaria program managers conduct data quality checks during supervision
    - Standard configuration of tool
  - Metrics:
    - Completeness of reporting, completeness of data elements and source documents, timeliness
    - Accuracy checks against monthly reports and DHIS2
    - Consistency over time
    - System assessment
    - Data quality improvement plans
- View results in a dashboard on the portable device
- Export to text file (e.g., .csv) to aggregate across supervision teams/facilities
Approach

- DHIS2 configuration package
  - An app downloaded and installed on local instance of DHIS2
  - Automatically configures and installs indicators for malaria data quality supervision visits (e.g., accuracy for tracer indicators, completeness of data collection, consistency, etc.)
  - Creates and configures standardized dashboards (charts and graphs) for data quality indicators for different levels of the health system
  - Facilitates syncing of MRDQA Android app with DHIS2
Demo
Next steps

• Pilot-tested in Sierra Leone and Cote d’Ivoire - June 2022

• Presented to DHIS 2 Annual Conference 2022 and was top-3 in android app competition.

• Update and finalize M-RDQA app and DHIS2 configuration package based on results of the pilot – June 2023

• Develop guidance for setting up and using the tools in countries – June 2023

• Make available in DHIS2 app repository and Google Play Store – June 2023
Conclusion

• We believe the app will improve coordination of data quality checks and the use of findings for data quality improvement, but there are no short cuts!

• Still requires commitment at national and district levels to collect the data, track results over time, develop and implement interventions to improve data quality

• Potential for use with other program areas
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www.measuremalaria.org
• Some screen shots in case the live demo doesn’t work well.
M-RDQA Screenshots

Configuration

Opening Screen  Menu  Description / Instructions  Configure DHIS 2 access & level
M-RDQA Screenshots

Configuration

Select Indicators

Menu specific Info / instructions

List of selected indicators

Select data elements for completeness check
M-RDQA Screenshots

Configuration

Enter user defined data elements

Enter data sources for completeness check

Enter supervision info

List of facilities scheduled for supervision
M-RDQA Screenshots

Configuration

Configure indicators for accuracy checks
Configure cross checks
List of scheduled supervisory visits
M-RDQA Screenshots

Data Entry

Data entry – completeness monthly report

Data entry – data sources completeness check

Data entry – completeness: enter comments

Data entry – timeliness: standard drop down lists
Data Entry

- Data entry – data element completeness
- Data entry – accuracy of reporting
- Data entry – standard reasons for discrepancy
- Data entry – system assessment
M-RDQA Screenshots

Data Analysis and Improvement Plan

Dashboard – cross check
Dashboard – accuracy of reporting
Dashboard – reporting performance & consistency over time
Enter data quality improvement plans