Malaria Routine Data Quality Assessment Tool

A Checklist to Assess the Quality of Malaria Program Data

For help to use this tool, please see the Instructions tab in this Excel file. See also Malaria Routine Data Quality Assessment Tool: User Manual, which is available here:

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

SMERG Meeting
Bangkok, Thailand
May, 2023

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
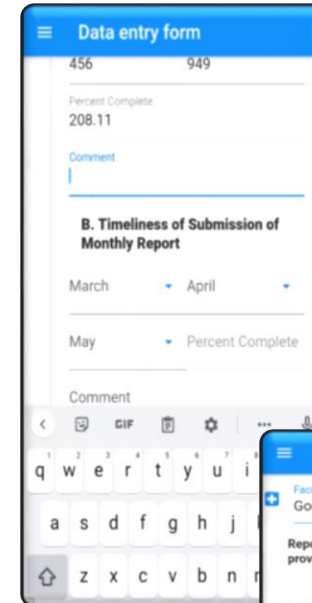
Use case (2)

- 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
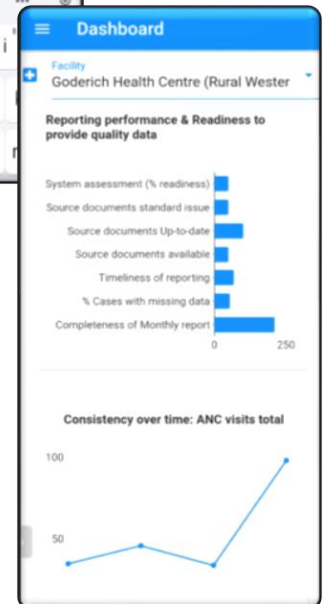
Approach

- 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.)
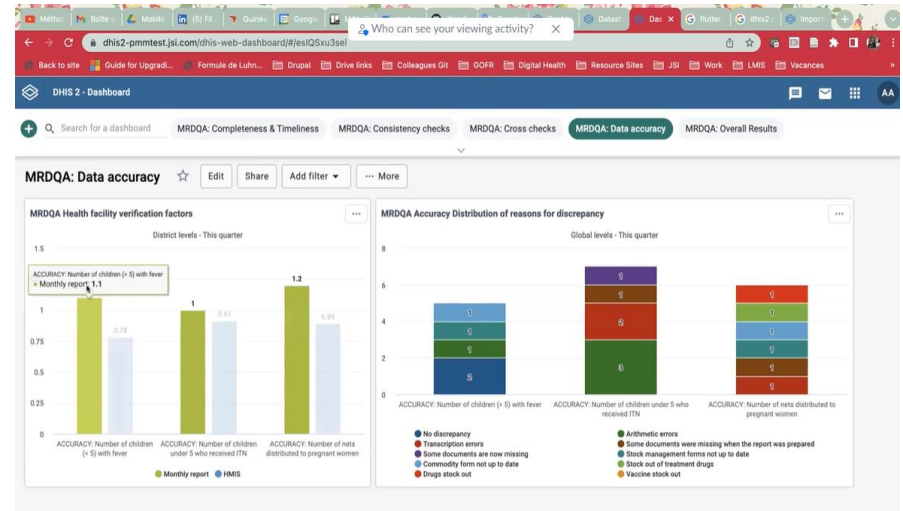
▪ Creates and configures standardized dashboards (charts and graphs) for data quality indicators for different levels of the health system
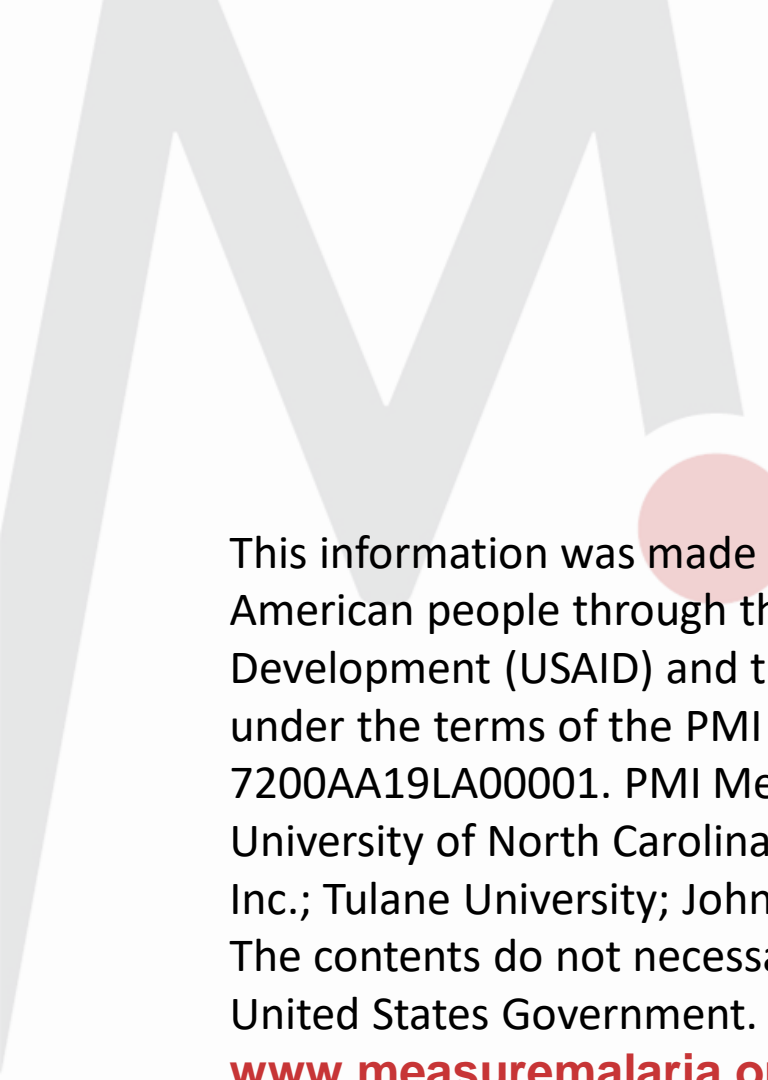
▪ Facilitates syncing of MRDQA Android app with DHIS2

Demo

Next steps

- Pilot-tested in 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
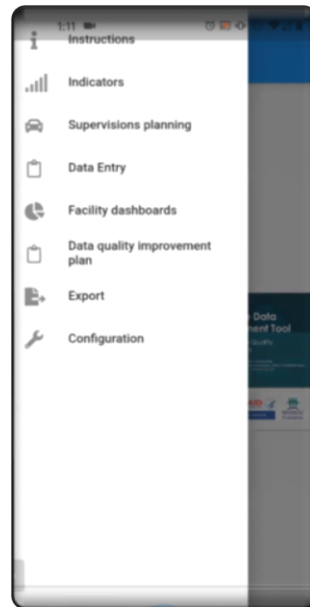
Menu

Description / Instructions
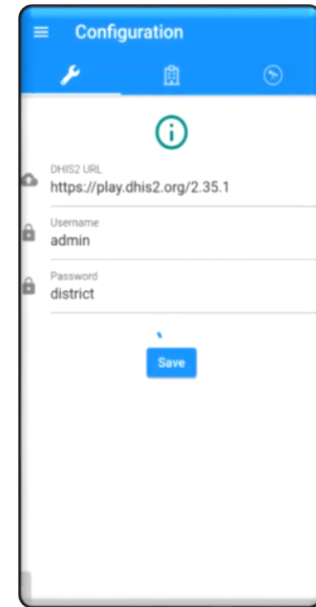
Configure DHIS 2 access & level

M-RDQA Screenshots
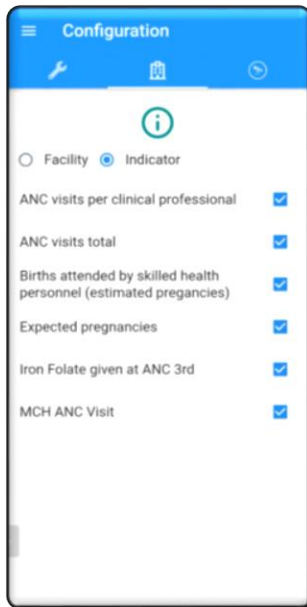
Configuration

Select Indicators
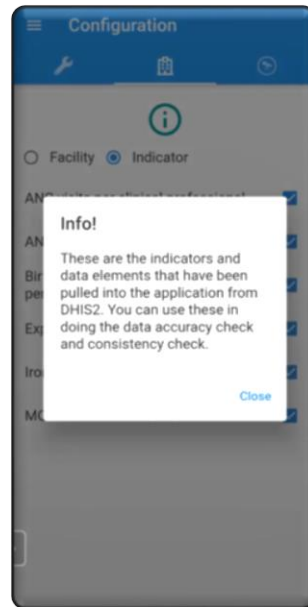
Menu specific Info / instructions
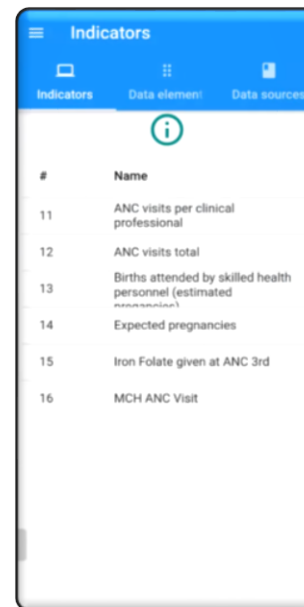
List of selected indicators

Select data elements for completeness check

M-RDQA Screenshots
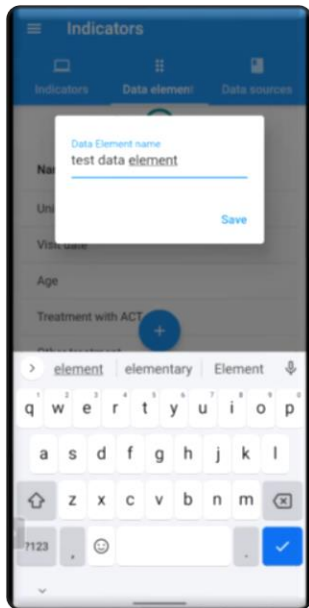
Configuration

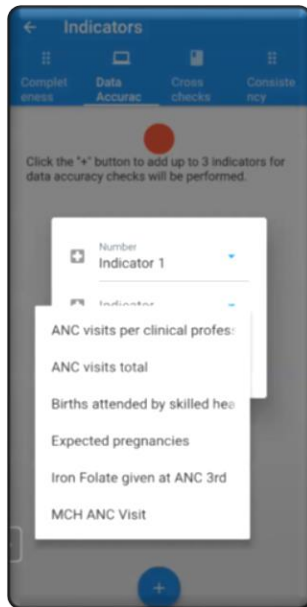Enter user defined data elements
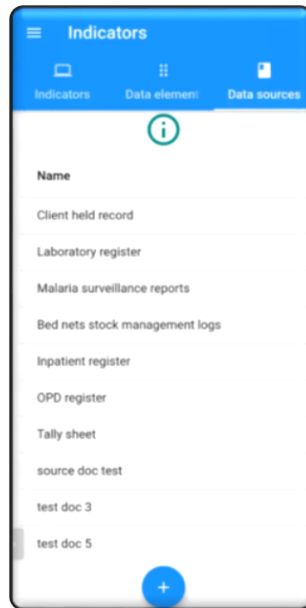
Enter data sources for completeness check
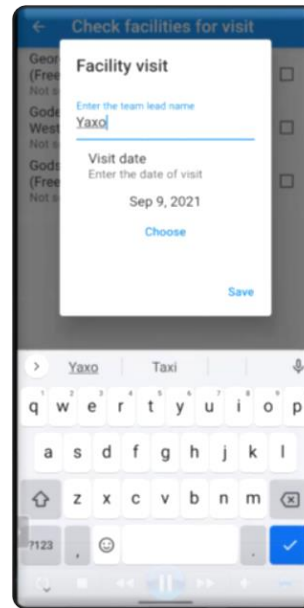
Enter supervision info
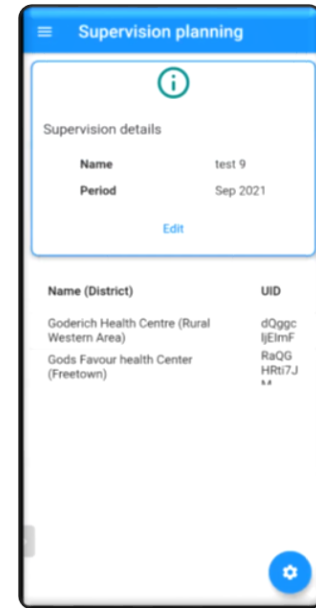
List of facilities scheduled for supervision

M-RDQA Screenshots

Configuration

Configure indicators for accuracy checks
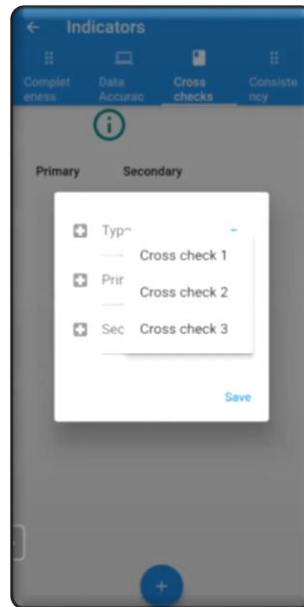
Configure cross checks
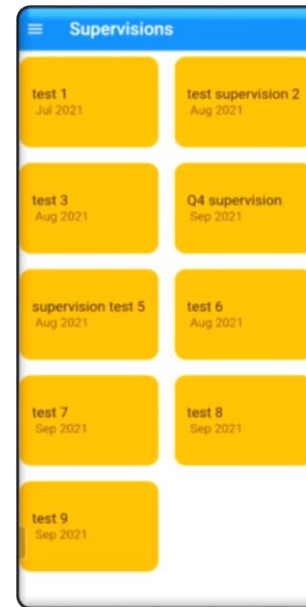
List of scheduled supervisory visits

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

M-RDQA Screenshots

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