Tuberculosis Data Quality Review in the Democratic Republic of the Congo

The Democratic Republic of the Congo (DRC) faces a high tuberculosis (TB) incidence and challenges in TB management and elimination. Reliable, timely, and complete data on TB cases, drug resistance, and outcomes are key to improving and adapting TB elimination efforts to the needs of affected areas. To assess the quality of TB data and the performance of reporting systems in the country, the Tuberculosis Data, Impact Assessment and Communications Hub (TB DIAH) project conducted a TB Data Quality Review (DQR) with the objectives of assessing the components and functionality of the TB information system to generate high-quality TB data and reviewing and validating indicator data for selected TB indicators for a specific reporting period.

METHODS

The TB DQR aimed to evaluate the quality of TB services, data accuracy, and reporting systems in DRC.

The World Health Organization (WHO) DQR tool was adapted to focus on two TB indicators deemed strategically important by the DRC's National TB Program (Programme national de lutte contre la tuberculose, or PNLT).

The data verification component aimed to compare validated results to reported results to determine accuracy. The verification factor (VF) measured accuracy, with acceptable values ranging from 0.9 to 1.1 (90% to 110%).

The system assessment measures whether the information system reporting on health service outputs has all the necessary elements to produce **timely**, **quality** data, and whether these elements are **functioning optimally**. The system assessment helps identify areas of strength and weakness, thereby facilitating the elaboration of plans and interventions for information system strengthening and improved data quality.

Data were collected electronically on tablets using SurveyCTO, allowing real-time data management, and were cleaned and analyzed following the end of the data collection phase.



The DQR was part of a larger quality-of-care cross-sectional study involving **227 TB diagnostic and treatment facilities**, both public and private, across **six provinces** in the DRC.









RESULTS

Strengths in Data Reporting:

Most health facilities (94%) have designated staff responsible for data reporting, receive appropriate training, and undergo regular supervision. A systematic process for quality checks in data compilation exists, which contributes to data accuracy.

Challenges in Data Collection Tools:

Availability and standardization of TB data collection tools vary across facilities. The TB monitoring and evaluation (M&E) framework and standard definitions for key TB indicators are often lacking (46% of facilities did not have the M&E framework and standard written definitions for key indicators were missing in 35% to 66% of cases). Written guidelines for reporting are insufficient (46% to 51% of facilities having no written guideline about what to report to whom, how, and when).

Quality of Data for Drug-Susceptible TB:

For DS-TB reporting, data accuracy is relatively high, with a VF of 102 percent. However, discrepancies arise from incorrect information and arithmetic errors. Missing data elements are prevalent (a third of entries in the DS-TB registers have at least one key data element missing).

Quality of Data for Drug-Resistant TB:

DR-TB data are consistently reported with a VF of 100 percent. Challenges include missing data on treatment outcomes and the availability of quarterly reports (two in five entries in the DR-TB registers have at least one key data element missing and the quarterly reports for DR-TB were unavailable in more than half of the facilities assessed).

RECOMMENDATIONS & CONCLUSION



Standardize Data
Collection Tools



Training and Support



Enhance Electronic Reporting



Focus on DR-TB Reporting



Expand Access to TB Frameworks

The findings highlighted the need to standardize data collection tools, enhance training, improve electronic reporting capabilities, and focus on DR-TB reporting. Addressing these recommendations will strengthen the TB data reporting system in the DRC, leading to **enhanced data accuracy and completeness**. This, in turn, will contribute to more effective TB control and **improved patient care**. By building on existing strengths and addressing identified challenges, the DRC can advance its commitment to TB control and **better health outcomes for its population**.

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DQR REPORT









