Scale-up of the DataToCare Diagnostic Connectivity System: What did we do?

BACKGROUND

- The Government of the Republic of Zambia introduced Xpert MTB/ RIF rapid test in the public sector in 2012 and adopted its use as the first line test for the diagnosis of tuberculosis (TB) in 2017¹.
- The purpose was to achieve universal access to Xpert MTB/RIF for all presumptive TB patients including those with multidrugresistant TB (MDR-TB), children, people living with HIV/AIDS (PLHIV) and those with extrapulmonary TB¹.

In 2017, the USAID-funded Challenge TB (CTB) project supported the introduction and scale-up of DataToCare connectivity system in the TB program. The use of the new system facilitated electronic transmission of TB test results to Ministry of Health headquarters, clinicians, and notification alerts to patients.

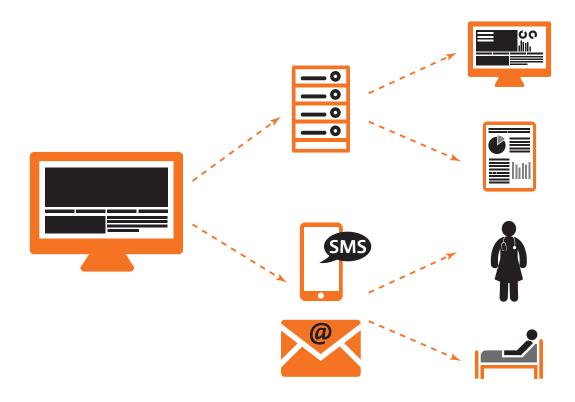


OBJECTIVE

• To introduce and scale-up a new diagnostic connectivity system to facilitate real-time electronic transmission of results for prompt diagnosis and TB treatment initiation.

1 Ministry of Health (2018) Implementation Guidelines and Scale Up Plan for Xpert In Zambia. Lusaka

Transmission of TB laboratory data using the DataToCare Platform



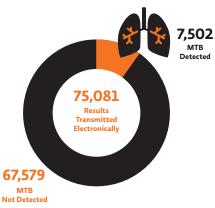
RESPONSE

- Conducted a landscape assessment with STTA support².
- Customization of the platform to the existing recording and reporting tools.
- Conducted training of trainers, provincial TB supervisors, and provided onsite trainings for district and facility staff.
- DataToCare installation and rollout.

RESULTS



- DataToCare installations were done in 144 out of 210 sites countrywide and in 93 sites out of 95 in CTB Areas.
- A total of 75,081 patient Xpert results were electronically transmitted to MoH, clinicians, and patients in real time.
- Of patients tested, 7,502 (10%) were MTB-positive and 298 (4%) were rifampicin-resistant (RR) TB.



LESSONS LEARNED

- There is need for the software developers and the Ministry of Health IT staff to address the challenges with software connecting to the virtual DataToCare server at central level to minimize disruptions in transmission of result due to central server malfunction.
 - Though the DataToCare connectivity system had a positive effect on the TB program, there is urgent need to upgrade the platform to include other functions such as:
 - Linkage to patient treatment initiation
 - Activating line probe Assay (LPA) module for analytics
 - Sending RR-TB notifications to the national MDR-TB coordinator when the result is ready
 - Mapping to highlight RR-TB hotspots in the districts/provinces
 - Ability to provide statistics on the number of module failures per province (possibly show the type of errors)
 - Ability to show the number of Xpert machines that are out of calibration
 - Data utilization for informed decision-making, activity implementation, and sustainability requires leadership at the NTP level (Focal point person). Despite the successful installation and scale-up of a countrywide diagnostic connectivity system, the use of data from the platform remained a challenge at all levels³.

CONCLUSION

The DataToCare connectivity system has greatly improved access to GeneXpert data. If it is used optimally, the platform has huge potential to provide the necessary real-time data for program management implementation.

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³ Challenge TB Zambia (2019) Final Project Report. Lusaka.

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