Transitioning to digital case-based surveillance systems: achievements and problems

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United Republic of Tanzania

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DHIS2: Electronic TB and Leprosy register (ETLR) aggregated: Overview

- Roll out country wide in October 2014
- Open source, Web based with offline mode
- Primary purpose of system: Surveillance – track progress for outcome & impact, set priorities and strategies
- Who are the main users:
  - For data entry: District Coordinators (basic Management unit)
  - For viewing outputs (dashboards, reports): Coordinators at District, regional and National levels
- Who manages the system: MoH – HMIS unit shared with NTLP
DHIS2 Aggregate data flow diagram

Health facility
Patient Card
Facility Register

District
District register

District Quarterly report forms

DHIS2

District
Regions
National: HMIS & NTLP
Partners
DHIS2: Electronic TB and Leprosy register (ETLR) aggregated: Overview

- The aggregated data from the district level is accessed by the regional and national levels (NTLP & HMIS MoH) through a shared central server-web based.

- Selected indicators shared to the public through National HMIS Web portal.

- Data can be sent to other systems (i.e. excel) by extracting data set reports.
DHIS2: Electronic TB and Leprosy register (ETLR) aggregated: Achievements

• Massive training: 236 Regional and district TB coordinators, and 28 regional HMIS focal people
• Quality of data: improved completeness of the reports due to early assess of the reports
• Timely reporting improved from an average of 65% (2013) to 98% (2017)
• The system dashboard provides a quick snapshot of the indicators
NTLP DHIS2: Overview – dashboard and dataset reports

Quarterly case notification report for tuberculosis and TB/HIV

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<th>0-4</th>
<th>5-9</th>
<th>10-14</th>
<th>15-24</th>
<th>25-44</th>
<th>45-64</th>
<th>65+</th>
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DHIS2: Electronic TB and Leprosy register (ETLR) aggregated: problems remaining that need to be fixed

• Two co-existing recording systems (DHIS2 and paper based)
• Double work for coordinators - district level
• Limited use of automated analysis platform (dashboard) for programme management at lower levels
• Laboratory information system 100% paper based
• Case based information was not available in DHIS2 from district level
The future: DHIS2 Electronic TB and Leprosy register (ETLR) case-based:

**primary purpose:** Surveillance and patient management for both TB susceptible and MDR-TB (+Leprosy)

**main users:** Facility, district, Regional, National and country partners. It is managed by MoH HMIS unit and NTLP

- Three linked registers: TB Register, the DR-TB register and Culture and DST register.
- Simpler way to collect patient level data by reducing paper registers at district level
- Dashboards with customized automated analysis and reports
- Generate standardized report and allow further analysis by pivot table or export for other softwares
DHIS2-ETL case based register
• DHIS2 aggregate data will be used to keep historical TB data (2000-2017)
• The Case based has been rolled out since September 2017: training of all District and regional coordinators and data entry started in January 2018. Support and mentorship ongoing
• Current Plan:
  ❖ Continue refining the system (dashboards, offline mode, customized reports, inter phasing with other reporting platforms, variable formatting)
  ❖ Strengthen capacity to facilities for direct data entry starting with high volume facilities
  ❖ Develop Data management guidelines
  ❖ Review RDQA guideline and tools

Key: PHASED IMPLEMENTATION
USE WHAT THE GOVERNMENT IS USING
ASANTE