**Diagnostic data management in the TB diagnostic network checklist**

The purpose of the checklist is to provide additional information on diagnostic data management for TB beyond what is already included in the TB-Net Tool verification questions. Questions are to be answered with a ‘Yes’, ‘Partial’ or ‘No’, numbers, or text. Space is provided in a ‘Comments’ column to elaborate on the responses for each question.  Where appropriate, enter N/A or not applicable.

|  |  |
| --- | --- |
| Name of laboratory |  |
| Location of site (City/town, District, State) |  |
| Laboratory Level | \_\_ National \_\_ Intermediate (supervisory) \_\_ Peripheral |
| TB tests performed at this site  (check all that apply) | \_\_\_ AFB Smear-microscopy  \_\_\_ Xpert MTB/RIF                 \_\_\_ LPA  \_\_\_ Xpert ULTRA  \_\_\_ Culture                               \_\_\_ phenotypic DST  Other: .......................................................................... |

Persons interviewed

|  |  |
| --- | --- |
| **Name** | **Position** |
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|  |  |
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|  |  |  |
| --- | --- | --- |
| **Question** | **Answer** | **Comments** |
| **Data collection** | | |
| What percentage of data is collected using paper forms? |  |  |
| Are quality checks in place to ensure quality of paper-based data? | Y / P / N |  |
| What percentage of data is collected using electronic systems? |  |  |
| What percentage of data is transcribed from paper forms to electronic systems? |  |  |
| Is there a clear system linking paper-based data to electronic data? | Y / P / N |  |
| What recommendations can be made to improve data use and accessibility at this site? |  | |
| **Systems and Infrastructure** | | |
| For what stages of the diagnostic cascade are electronic systems available? |  |  |
| * Electronic Medical Records (EMR) | Y / P / N |  |
| * Systems to digitally initiate or send in laboratory test requests | Y / P / N |  |
| * Systems to initiate specimen referral and transport and to track the transportation of specimens | Y / P / N |  |
| * Laboratory Information Management system (LIMS/LIS) | Y / P / N |  |
| * System to digitally report laboratory test results | Y / P / N |  |
| * Diagnostics connectivity and remote monitoring systems | Y / P / N |  |
| * Case management tools (e.g., eTB Manager, MOTECH, CommCare, other) | Y / P / N |  |
| If a Laboratory Information Management system is in place:   * Which system is available? |  | |
| * What proportion of the time is the system available (i.e.*,* how many days last month did it work)? |  | |
| * How frequently do staff login to the system? |  | |
| * For what purposes is the system used? |  |  |
| * Automated entry of digitally submitted test requisitions | Y / N |  |
| * Specimen accessioning | Y / N |  |
| * Digital reporting of specimen rejection | Y / N |  |
| * Initiating and tracking testing | Y / N |  |
| * Recording test results | Y / N |  |
| * Digital reporting of laboratory test results to clinicians for patient care | Y / N |  |
| * Digital reporting of diagnostic data to local and national TB programs | Y / N |  |
| * Monitoring and reporting of performance indicators | Y / N |  |
| If a data connectivity solution is in use:   * Which system(s)? |  | |
| * Which tests, instruments (e.g., GeneXpert) or systems (e.g., MGIT960) are connected? |  | |
| * What proportion of the time is the system available (i.e.*,* how many days last month did it work)? |  | |
| * How frequently do staff login to the data connectivity system? |  | |
| * For what purposes do staff access the system? |  |  |
| * Monitor supplies (e.g., kit consumption) | Y / N |  |
| * Monitor instrument functioning | Y / N |  |
| * Automated reporting of test results | Y / N |  |
| * Collect and report performance indicators | Y / N |  |
| * Other (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Y / N |  |
| c. If a data connectivity solution is not in use:   * Are there plans to implement a connectivity system? | Y / N |  |
| * Has the site been assessed for connectivity? | Y / N |  |
| * Is there a costed plan for implementing a connectivity solution that includes? | Y / N |  |
| * Installing and maintaining hardware and software? | Y / N |  |
| * Setting up the connectivity solution? | Y / N |  |
| * Training for users? | Y / N |  |
| * Providing operational costs of the system? | Y / N |  |
| * Is there an adequate budget available for implementing connectivity solution? | Y / N |  |
| Are mobile phones present and in use by staff (indicates presence of cellular signal)? | Y / N |  |
| Are there computers of any type at use in the facility? If so, where? | Y / N |  |
| Is there power at the facility? If so, how reliable? | Y / N |  |
| Source of power (none, generator, solar, grid, other)? |  | |
| Is Internet access available at the facility? (Ethernet, WIFI, 3G, USB dongle, unknown) | Y / N |  |
| **Data storage and access** | | |
| Are SOPs for access, reporting, data entry, data security and data back-up available and implemented? | Y / P / N |  |
| Is data confidentiality formally regulated and can the data system guarantee confidentiality? | Y / P / N |  |
| Is the system for data back-up, archiving and updating adequate? | Y / P / N |  |
| Have measures been put in place to prevent the unauthorized access to data and patient information? | Y / P / N |  |
| * Restricted access to paper or electronic records | Y / P / N |  |
| * Paper and electronic records with patient information are secured (e.g., kept in a locked cabinet) | Y / P / N |  |
| * Electronic files and systems are password protected | Y / P / N |  |
| * Unique passwords for each user | Y / P / N |  |
| **Data analysis** | | |
| Is there a convenient way to export the data into a usable format (e.g., a dashboard)? | Y / P / N |  |
| Is analysis of laboratory data conducted in conjunction with related clinical data (e.g.*,* screening to diagnosis, linkage to care for patients)? | Y / P / N |  |
| Which key performance indicators (KPI) for data analysis and reporting are monitored? |  | |
| What percentage of reports for KPIs are generated electronically? |  | |
| Who generates KPI reports for data analysis and reporting? |  | |
| **Data use** | | |
| Is there a data management unit with dedicated and adequately skilled personnel? | Y / P / N |  |
| Are there any challenges that threaten data quality? | Y / P / N |  |
| Are there any stakeholders that are currently not part of the system, who should be? | Y / P / N |  |
| Are data analyzed and used routinely for decision-making and program improvement in a timely manner? | Y / P / N |  |
| **Human resources for data** | | |
| Are there SOPs and other documentation in place that cover all stages of data management, including data use? | Y / P / N |  |
| Given the scope of work, are a sufficient number of trained data staff available at the site? | Y / P / N |  |
| What level of training and experience do staff typically have at each level? |  | |
| **Data reporting** | | |
| In what format are reports received by clinicians? |  | |
| What mechanisms are in place for reporting of laboratory data to local and national programs? |  | |
| What are your 2 biggest information needs? |  | |
| What is your single largest problem relating to data or information about the patient? |  | |