Process	Patient	Medical Technologist	System
1.Getting a sputum collection schedule	1.1. Patient will go to the laboratory to get a sputum schedule. 1.9. Patient goes home and comes back on the day of collection.	1.2. Using the patient's name, MT will search if there is a request for sputum collection. 1.4. MT will give patient an available schedule and once the patient agrees to the schedule, MT will add the patient to the agreed upon collection date. 1.6. MT will click on Print button. 1.8. MT will give form to patient.	1.3. System will show the request which will include the collection type, the number of days of collection, who requested for it and the date when it was requested. 1.5. System will show confirmation that the patient has been scheduled. 1.7 System will generate and print a form with the collection schedule and some details on how to prepare for the collection.
2.First day of sputum collection / Assign a specimen code	2.1. Patient gives the sputum collection schedule form to the MT	2.2. MT will enter the Patient ID into the system. 2.4. MT will check patient details and click on Assign button to	2.3 System will check if there is an existing sputum collection schedule for the patient and generates a specimen code. System will show generated specimen code along with patient details (patient name, birthday, sex, embassy, number of collection days and collection type). 2.5. System will input this into the database and clears the screen.

	2.7. Patient will collect sputum sample and give the container back to the MT.	assign the specimen code to the patient. 2.6. MT will give a container to the patient with the specimen code. 2.8. Once the sample is collected, MT will instruct the patient to come back again if there is still a pending collection.	
3.Setting a pulmonary evaluation schedule. (Only patients with initial collection will undergo pulmonary evaluation. Patients with repeat collection type will be instructed to proceed to DOTS facility)		3.1. MT will enter Patient ID 3.3. MT will choose pulmonary evaluation date and time and will click Add. 3.5 MT will click print button.	3.2. System will return patient details (name, start date of collection) 3.4. System will input schedule into the database. 3.6. System will generate pulmonary evaluation schedule form and produce a printout.
4.Last day of sputum collection for initial patients.	4.1 Patient gives the sputum collection schedule form to the MT 4.7. Patient will collect sputum sample and give the container back to the MT.	4.2. MT will enter the Patient ID into the system. 4.4. MT will check patient details and click on Assign button to assign the specimen code to the patient. 4.6. MT will give a container to the patient with the specimen code. 4.8. Once the sample is collected, MT will give the pulmonary evaluation slip and instruct the patient to	4.3 System will check if there is an existing sputum collection schedule for the patient and generates a specimen code. System will show generated specimen code along with patient details. 4.5. System will input this into the database and clears the screen.

	4.9. Patient goes home and comes back for pulmonary evaluation on the scheduled date.	come back on the date and time on the slip.	

Process	Medical Technologist	System
5. Logging into the System	5.1. MT will enter username and password	5.2. System will verify username and password. Once verified, system will show home page screen.
6. Start Incubation of tubes	6.1 Once the samples have been processed, MT will start incubation by entering the specimen code. 6.3. MT will choose processing date and the media used for the sample. Click Save.	6.2. System will verify the existence of the specimen code in the Assign Code table. Once verified, system will show a screen with a calendar and check boxes for the available culture media. 6.4. System will input into database and clear the screen.
7. Encoding of smear results	7.1. MT will enter specimen code 7.3. MT will click on the correct smear result and choose a smear result date. Click Save. 7.5. MT will confirm smear result details.	7.2. System will check database if a smear result has been entered for the specimen code. Once verified that there is no result yet, system will show a screen with the possible results for the smear. 7.4. System will show a confirmation screen. 7.6. System will input into database.
8. Editing of smear results	8.1. MT will enter specimen code 8.3. MT will click yes to edit the result. 8.5. MT will encode the edited smear result. Click Save. 8.7 MT will confirm smear result details.	8.2. System will check database if a smear result has been entered for the specimen code. Once verified that there is already a result, system will ask user, “Do you want to edit result?” 8.4. System will show the result previously encoded. 8.6. System will show a confirmation screen.

	8.9 MT with admin account will enter user account and password.	8.8. System will ask for a validation from an admin account. 8.10. System will verify if the user name and password are correct. Once verified, system will input new smear result into database.
9. Requesting for culture work-up test (work-up tests include: ZN smear, ZN resmear, subculture to LJ, subculture to BAP, Capilia test, Niacin test, Nitrate test, Redigest, Genexpert MTB/RIF test and Drug Susceptibility Test for first-line drugs	9.1. MT will enter specimen code 9.3. MT will check requested work-up (if any) and will click the necessary culture work-up and the culture media to be used.	9.2. System will check database and will show on the screen all work-up requests for the specimen code. It will also show available work-up tests and ask MT for the culture media to be used. 9.4. System will input into database.
10. Editing work-up test	10.1. MT will enter specimen code. 10.3. MT will click on the work-up to be edited. Click edit. 10.5. MT will click on the new test desired for the specimen code.	10.2. System will check database and will show on the screen all pending work-up requests for the specimen code. 10.4. System will show details of the test. 10.6. System will cancel the previous request and add the new test and the details into the database. No validation from an admin account necessary.
11. Cancellation of work-up test	11.1. MT will enter specimen code. 11.3 MT will click on the work-up test to be cancelled and click Cancel. 11.5. MT with admin account will enter user account and password.	11.2. System will check database and will show on the screen all pending work-up requests for the specimen code. 11.4. System will ask for a validation from an admin account. 11.6. System will verify if the user name and password are correct. Once verified, system will cancel test.
12. Encoding of culture ZN smear results	12.1. MT will enter specimen code. 12.3. MT will enter if it is AFB positive or negative. Then, MT	12.2. System will verify if there is a work-up request for the specimen code. Once verified, system will show a form asking for details about the ZN smear. 12.4. System will input details into database.

	will write a brief freehand text description of the smear (e.g. “cording”, “non-cording, branching” etc.)	
Editing of culture ZN smear results	1.MT will enter specimen code 3. MT will edit the result. Click Save.	2. System will verify if there is a work-up request for the specimen code. Once verified, system will show details of the ZN smear. 4. System will update database and add edited record.
Adding BAP, CAP, Niacin and Nitrate test results	1.MT will enter specimen code 3. MT will enter the test result and the result date.	2. System will verify that there is no existing test result in the database. Once verified, system will show form that asks for the test result and result date of specimen code. 4. System will add record in the database.
Start incubation of redigested specimen	1.MT will enter specimen code 3. MT will encode the redigest start date.	2. System will verify if there is a pending redigest request for the specimen code. If there is none, system will ask for the start date of incubation. 4. System will add new record in the database.
Monitoring of samples subcultured to LJ	1.MT will go to Subculture Monitor 3. MT will input Embassy and the Collection Type.	2. System will ask user for the Embassy and the Collection Type. 4. System will generate a table that will show records of on-going subculture workup (the Specimen Code, media type, culture start date, date when it was declared for monitoring and the culture end date of the samples).
Adding DST result	1.MT will enter specimen code 3. MT will enter DST result details.	2. System will check if there is an on-going DST request for the specimen code. Once verified, system will ask for the result details (sensitivity result for each first-line drug, test result date and the name of the MT who did the test). 4. System will add new record in the database.

Adding Genexpert result	1.MT will enter specimen code.	2. System will check if there is a pending Genexpert request for the specimen code. Once verified, system will ask for the result details (test result, test result date and the name of the MT who did the test.)
Adding MGIT/LJ/Final culture result	1.MT will enter specimen code. 3. MT will enter culture test result and choose test result date. Click Save.	2. System will check if there is already a result for the specimen code. If no, system will ask for the result details (test result and test result date). 4. System will add new record in the database.
Printing of Batch Report - Smear	1.MT will choose Start Date of Collection, Embassy and Collection Type 3.MT will click Print.	2. System will generate a batch report for smear which will include Patient Name, Age, Patient ID, No. of Samples, Specimen Code, Smear Results and the status (if there is still a pending result or if it is all finished) 4. System will print output.
Printing of Batch Report - Culture	1.MT will choose Start Date of Collection, Embassy and Collection Type 3.MT will click Print.	2. System will generate a batch report for culture which will include Patient Name, Age, Patient ID, No. of Samples, Specimen Code, Culture Results and the status (if there is still a pending result or if it is all finished) 4. System will print output.
Printing of Individual Report	1.MT will enter Patient ID or Specimen Code 3. MT will click Print Sputum Report button 5. MT will click Print	2. System will show a report of patient test results. 4. System will generate an individual report which will include Patient Name, Patient ID, Age, Sex, Date the report was generated, Collection Dates along with the smear and culture results and the release date of the culture. Remarks and DST result will also be shown in the report if there is any. 6. System will print output.

Printing of DST report	1.MT will enter Patient ID or Specimen Code 3. MT will click Print DST Report button 5. MT will click Print.	2. System will show a report of patient test results. 4. System will generate a DST report which will include Patient Name, Patient ID, age, sex, Date the report was generated, drugs used for the testing, drug concentration for each of those drugs and the result. It will also include the collection date of the sample used, the report date and the name of the MT who did the test. 6. System will print output.
Printing of Genexpert report	1.MT will enter Patient ID or Specimen code 3. MT will click Print Genexpert Report button 5. MT will click Print.	2. System will show a report of patient test results. 4. System will generate a Genexpert report which will include Patient Name, Patient ID, age, sex, date the report was generated, collection date of the sample used, the kind of sample used (concentrated or raw sputum sample), the test result date, the test result and the name of the MT who did the test. 6. System will print output.
Printing of Indicators	1.MT will enter the year and the embassy and the type of collection 3. MT will click Print	2. System will generate a report which will be sectioned into different months of the year. The report will include the number of samples processed, the percentage of cultures reported as TB, percentage of culture reported as contaminated, percentage of smears reported as positive, correlation between the smears and the culture etc. 4. System will produce a printout.
