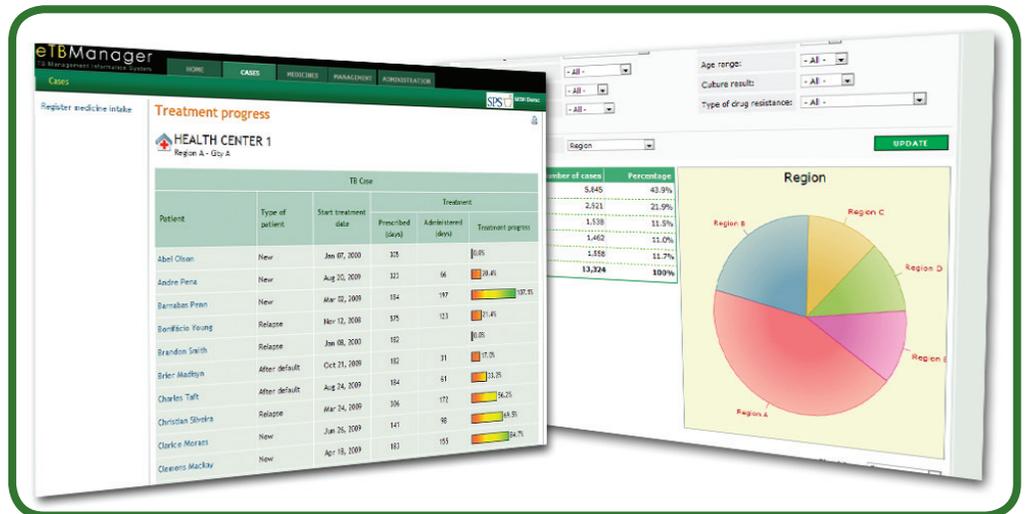


e-TB Manager

User's Guide

A Comprehensive Web-based Tool
for Programmatic Management of TB
and Drug-Resistant TB



USAID
FROM THE AMERICAN PEOPLE

SIAPS
Systems for Improved Access
to Pharmaceuticals and Services



e-TB Manager User's Guide: A Comprehensive Web-based Tool for Programmatic Management of TB and Drug-Resistant TB

Version 2.0
September 2012

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About SIAPS

The goal of the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program is to assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes. Toward this end, the SIAPS result areas include improving governance, building capacity for pharmaceutical management and services, addressing information needed for decision-making in the pharmaceutical sector, strengthening financing strategies and mechanisms to improve access to medicines, and increasing quality pharmaceutical services.

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User's guide, e-TB manager, information system, TB, DR-TB, case management, first- and second-line TB medicines

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CONTENTS

ACRONYMS	VI
DEFINITIONS	VII
HOW TO USE THIS GUIDE	IX
CHAPTER 1. INTRODUCTION	1
WHAT IS E-TB MANAGER?.....	2
WHO WILL BENEFIT FROM THE E-TB MANAGER?.....	3
WHAT ARE THE E-TB MANAGER’S TECHNICAL CHARACTERISTICS?.....	3
CHAPTER 2. E-TB MANAGER STRUCTURE	5
CHAPTER 3. USING THE SYSTEM	7
LAUNCHING THE BROWSER	7
LANGUAGE SELECTION	9
FORGOT YOUR PASSWORD?	10
THE HOME PAGE	10
USER INTERFACE.....	11
CHANGING YOUR SETTINGS	13
<i>Preferences</i>	14
<i>Password</i>	14
<i>Theme</i>	15
<i>Exit</i>	16
<i>Language</i>	16
CHAPTER 4. CASES MODULE	19
HOW TO NOTIFY A CASE	20
HOW TO FIND NOTIFIED CASES	24
CASE MANAGEMENT WORKFLOW.....	31
<i>How to Validate New Cases</i>	33
<i>How to Change Case Data</i>	37
<i>How to Record Exam Results</i>	40
<i>How to Start a Treatment Regimen</i>	44
Standardized Regimen	44
Individualized Regimen	49
<i>How to Change a Treatment Regimen</i>	53
<i>How to Transfer a Case to Another TB Unit</i>	56
<i>How to Delete a Treatment Regimen</i>	60
<i>How to Register Medicine Dispensing</i>	60
<i>How to Change Medical Consultation Data</i>	64
<i>How to Change Additional Information Data</i>	67
Comorbidities and Associated Factors	67
Contacts Evaluation	68
Adverse Reaction to Medicines.....	70
Comments.....	71
<i>How to Read the Drugogram</i>	72
<i>How to Delete Cases</i>	73
<i>How to Close Notified Cases</i>	74
HOW TO NOTIFY A NEW SUSPECT CASE	75

CHAPTER 5. MEDICINES MODULE	79
ELEMENTS OF THE MEDICINES MODULE	79
HOW TO ACCESS THE MEDICINES MODULE.....	80
HOW TO CHANGE THE TB UNIT DISPLAYED.....	82
MEDICINE MANAGEMENT INITIALIZATION	83
MEDICINE ORDERS.....	93
<i>How to Create New Medicine Orders.....</i>	<i>94</i>
<i>How to Check Details of a Medicine Order.....</i>	<i>102</i>
<i>How to Authorize a Medicine Order.....</i>	<i>104</i>
<i>How to Notify Shipment of a Medicine Order (and Select Batches).....</i>	<i>109</i>
<i>How to Notify Receipt of a Medicine Order</i>	<i>117</i>
<i>How to View Medicine Order History.....</i>	<i>127</i>
MEDICINE TRANSFER.....	128
<i>How to Record a New Medicine Transfer.....</i>	<i>129</i>
<i>How to Access Medicine Transfers in Progress</i>	<i>133</i>
<i>How to Notify Receipt of Transferred Medicine</i>	<i>135</i>
<i>How to Access Medicine Transfer History</i>	<i>137</i>
MEDICINE DISPENSING	139
<i>How to Record New Medicine Dispensing.....</i>	<i>139</i>
A. Per patient in a day.....	139
B. By total quantity dispensed in a day.....	142
<i>How to View Dispensing History</i>	<i>143</i>
<i>How to Adjust Dispensing Quantities.....</i>	<i>144</i>
<i>Medicine Movements Report.....</i>	<i>146</i>
<i>How to Access the Medicine Movements Report.....</i>	<i>146</i>
<i>How to Check Estimated Stock Position</i>	<i>147</i>
<i>Stock Transaction Report</i>	<i>149</i>
<i>How to Remove a Unit from Medicine Management</i>	<i>150</i>
RECEIVINGS FROM MANUFACTURERS.....	151
<i>How to Access Medicine Receiving.....</i>	<i>151</i>
<i>How to Record New Medicine Receiving.....</i>	<i>152</i>
<i>How to Change Already Recorded Medicines Received</i>	<i>154</i>
CHAPTER 6. MANAGEMENT MODULE.....	159
HOW TO ACCESS THE MANAGEMENT MODULE	159
CASE MANAGEMENT INDICATORS AND REPORTS.....	160
<i>How to Access the Indicators and Reports</i>	<i>160</i>
Case Notifications (new cases).....	160
Case Notifications (new and re-treated cases)	162
Outcomes.....	165
Drug Resistance Profile	169
Drug Resistance Survey – First Line Drugs	173
Drug Resistance Survey – Second-Line Drugs	176
Adverse Reactions to Medicines	178
HIV Status.....	180
Quarterly Report on MDR-TB Detection and Category IV Treatment Start — WHO Form 05	183
Interim Outcome Assessment of Confirmed MDR-TB Cases - WHO Form 06.....	185
Annual Report of Treatment Result of Confirmed MDR-TB Patients Starting Category IV Treatment - WHO Form 07.....	186
TB/DR-TB Consolidated Report	188
<i>How to Access the Medicine Management Reports.....</i>	<i>189</i>
Stock Position by Region	189
Average Lead Time of Medicine Orders	190
<i>How to Access the Tools.....</i>	<i>191</i>
Medicine Forecasting.....	191

<i>How to Save your Forecast</i>	202
Export TB/DR-TB Case Data.....	204
CHAPTER 7. ADMINISTRATION MODULE	205
HOW TO ACCESS THE ADMINISTRATION MODULE	205
HOW TO USE THE ADMINISTRATION OPTIONS	206
<i>Tables</i>	206
Administrative Units	206
Health Systems.....	211
TB Units.....	213
Medicine Sources.....	217
Medicine Generic Names	219
Medicines.....	223
Treatment Regimens.....	226
Laboratories	230
Weekly Frequencies	233
Age Ranges.....	234
TB Field Values	236
Case Tags.....	238
Users	243
User's Profiles	246
Import Data.....	249
<i>Reports</i>	253
Online users	253
User Session History.....	254
Transaction Log Report	255
Transaction Statistics	256
Error Log Report.....	257
<i>Settings</i>	258
Setup MSH Demo	258
e-TB Manager Setup	260
Workspaces.....	261
Editing a Workspace.....	262
Deleting a Workspace	263
Add/Remove Users from Workspace.....	263
Copying Data from Another Workspace	264

ACRONYMS

CSV	comma separated value [files]
e-TB manager	TB and DR-TB data management information system
DOTS	A WHO TB control strategy
DOTS Plus	The DOTS strategy for MDR-TB
DR-TB	drug-resistant tuberculosis
DST	drug susceptibility testing
FEFO	first expiry, first out (regarding products' expiry)
GDF	Global Drug Facility [Stop TB/WHO]
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
GLC	Green Light Committee [Stop TB/WHO]
M&E	monitoring and evaluation
MDR-TB	multidrug-resistant tuberculosis
MoH	Ministry of Health
MSH	Management Sciences for Health
NTP	National Tuberculosis Control Program
SPS	Strengthening Pharmaceutical Systems [MSH]
TB	tuberculosis
URL	uniform resource locator
USAID	U.S. Agency for International Development
WHO	World Health Organization
XDR-TB	extensively drug-resistant TB

DEFINITIONS

Case tags: A case tag is a keyword or term assigned to describe a case. Tags allow the user to search the system based on the tag's key word or term. A case may have more than one tag.

Dispensing to patient: *Dispensing to a patient* refers to the quantity of first- or second-line TB medicines issued by the TB doctor to a patient during a specified period.

Drug order: Quantity of medicines needed by the local TB unit from the central level and by TB dispensaries from pharmacies constitute the drug order. Quantities are estimated by the system according to the number of registered patients, prescribed treatment schemes, buffer stock requirements, and stock on hand.

Drug receiving: *Drug receiving* refers to all medicines received and recorded according to the standard requirements by the central warehouse and pharmacy from different external sources.

External source: An external source is a source of TB medicines supplied to the National Tuberculosis Control Program (NTP), central warehouse, and pharmacies from outside the NTP system. It does not include the transfer of medicines from pharmacy to pharmacy or from pharmacy to warehouse. Donors, the Ministry of Health (MoH), the Green Light Committee (GLC), and the Global Drug Facility (GDF) are considered to be external sources.

Medicine movement: Every event that increases or reduces the quantity of medicines in a storeroom whether a pharmacy, warehouse, or TB unit is considered to be a medicine movement. Medicine movements include, for example, quantity received, quantity issued, and quantity dispensed.

Medicine unit: Each medicine and medicine product is recorded in the system using its basic unit as configured in the Administration module. Medicine units include, for example, tablet, vial, milligram, gram, sachet, and bottle.

Patient enrolled: Patients are enrolled when they are confirmed to have TB or drug-resistant TB (DR-TB) and registered in DOTS, DOTS Plus, or non-DOTS programs following the decision of the Recruitment Committee. Patients are identified in the system by their first names, last names, and security numbers.

Shipped medicines vs. Sent medicines: To distinguish between medicine orders and medicine transfers the term **shipped** is used for medicine orders and the term **sent** is used for medicine transfers.

Stock estimation: Based on the number of registered TB and DR-TB cases and their treatment regimens, the system is able to estimate the quantities of medicines needed by the TB dispensary for the next order period.

Stock position: Stock position is the quantity of medicines stocked at any point in time in any facility involved in the supply of TB medicines; it is elaborated by product name and TB unit.

TB unit: Any unit using the e-TB Manager to manage TB patients or medicines are called *TB units*. Examples of TB units are NTP, MoH, the medicine warehouse, and TB health centers.

User profile: Every user in the system is assigned a profile. The profile is a set of permissions that indicates what the user can or cannot do in the system. One example is the *Administrator Profile*. Users assigned to the Administrator Profile have permission to do everything in the system; that is, they have no restrictions in the system. Another example is the *Warehouse Pharmacist Profile*, which allows only to medicines movements and some reports.

User: A *user* is any person or health facility authorized to enter, register, edit, order, monitor, and validate data into the e-TB Manager. Each user has his or her own login and password. Users include the NTP coordinator, the central unit of the NTP, the drug management coordinator, TB doctors, pharmacists, data entry operators, and TB/DR-TB experts.

Workspace: A workspace defines a unique database, with specific medicines, sources, regimens and TB units assigned to it. A single version of the e-TB Manager can hold several different workspaces—each workspace may be a country, a parallel health system in the country (for example, one workspace for the MoH and another for the penitentiary system), or any other health system.

HOW TO USE THIS GUIDE

To use the guide effectively we strongly urge you to become familiar with the layout and content of this guide. Following is a general overview of what this guide contains and how to find it.

Chapters

The user's guide is divided into seven chapters –

- Chapter 1 – Introduction
- Chapter 2 – e-TB Manager Structure
- Chapter 3 – Using the System
- Chapter 4 – Cases Module
- Chapter 5 – Medicines Module
- Chapter 6 – Management Module
- Chapter 7 – Administration Module

Each chapter is divided by headings and sub-headings. For example, *Chapter 4, Cases Module, Case Management Workflow, How to Notify a Case.*

When applicable, the material in this guide is consistent with the most recent version of the WHO *Treatment of Tuberculosis: Guidelines for National Programmes* and *Guidelines for the Programmatic Management of Drug-Resistant Tuberculosis* at the time this version was released.

Graphics and special formatting have been used in this guide to bring certain text to your attention.

- Whenever possible figures, illustrations, and web page displays appear on the same page where they are first mentioned. If they are not located on the same page, then they are placed on the next available page.
- **Bold** lettering with text is used in this Guide to emphasize text or to quote text from an e-TB Manager web page
- ***Bold Italics*** lettering within text is used in this Guide to emphasize the name of a web page, dialog box, form, or displayed by the system.
- A note is text within a centered box indicating important information that should be called to your attention.

CHAPTER 1. INTRODUCTION

Tuberculosis (TB) control is well standardized through, for example, World Health Organization (WHO) forms, guidelines, and recommendations, but managing information for adequate TB program support usually requires a challenging and complex integration of systems with separate modules developed and managed in separate sectors.

The e-TB Manager software, a comprehensive Web-based tool for programmatic management of TB and DR-TB, was designed to integrate in one Web-based tool all relevant dimensions for NTP management purposes at different levels (e.g., cases, medicines, and other TB commodities). . The system provides key information consolidated online at any level for rapid decision making and epidemiological surveillance where interventions are needed.

The emergence of drug-resistant TB, including multidrug-resistant TB (MDR-TB) and extensively drug-resistant TB (XDR-TB), has created significant health problem in many countries, increasing the need for close monitoring and tools that can control the amplitude of TB and support an uninterrupted supply of medicines. The team approach to case management and appropriate surveillance systems is necessary to successfully address these issues.

The e-TB Manager offers great potential for significantly improving the management of TB and DR-TB cases, first- and second-line medicines, and commodities used for treatment. The e-TB Manager is also a useful tool for TB and DR-TB surveillance and control. It can be used as a Web-based data information system integrating the central unit for TB and DR-TB surveillance with periphery treatment units.

The team would use the e-TB Manager tool according to TB unit procedures and approved national guidelines. The data captured and reports generated by the tool can be summarized as follows:

- *Treatment and case management:* The e-TB Manager uses online notification and follow-up, records clinical and laboratory results, tracks patients transferring in and out, and provides data for treatment adherence and patient contacts evaluation. The **Cases** module of e-TB Manager, for example, allows NTP staff to closely monitor first-line TB or DR-TB case evolution from a status of TB suspect to a notified case until the final result of treatment.
- *First- and second-line medicines management:* The tool provides data for medicine needs forecasting, ordering, distributing, and dispensing, and for recording stock movements with medicines as well as batch number tracking at all levels.
- *Information and surveillance management:* The e-TB Manager maps TB and MDR/XDR cases, epidemiological indicators, resistance panels, co-morbidities, previous treatment history, and treatment cohort results, providing surveillance reports and updated information with ready access online at central and peripheral levels.
- *Operational and clinical research:* The tool provides easy methods for analyzing collected data and exporting data to other statistical programs.

What Is e-TB Manager?

The e-TB Manager is—

- A tool for online notification, case treatment, monitoring, follow-up, and patient transfers in and out of TB units
- A system that allows for recording of clinical and laboratory results and provides data for treatment adherence and patient contact evaluation
- A tool for tracking first- and second-line TB medicines from the date the NTP receives medicines until they are dispensed to patients (Figure 1)
- A tool for monitoring medicine safety and efficacy at the patient level by tracking side effects of TB medicines reported and providing data on treatment outcomes
- A system that facilitates ordering and delivery of medicines between central and peripheral levels of the NTP
- A tool that provides monitoring and evaluation (M&E) of medicine stock levels at any health facility and by each supply source
- A storage database from which reports can be produced that can have an impact on future policy and NTP strategies and decisions

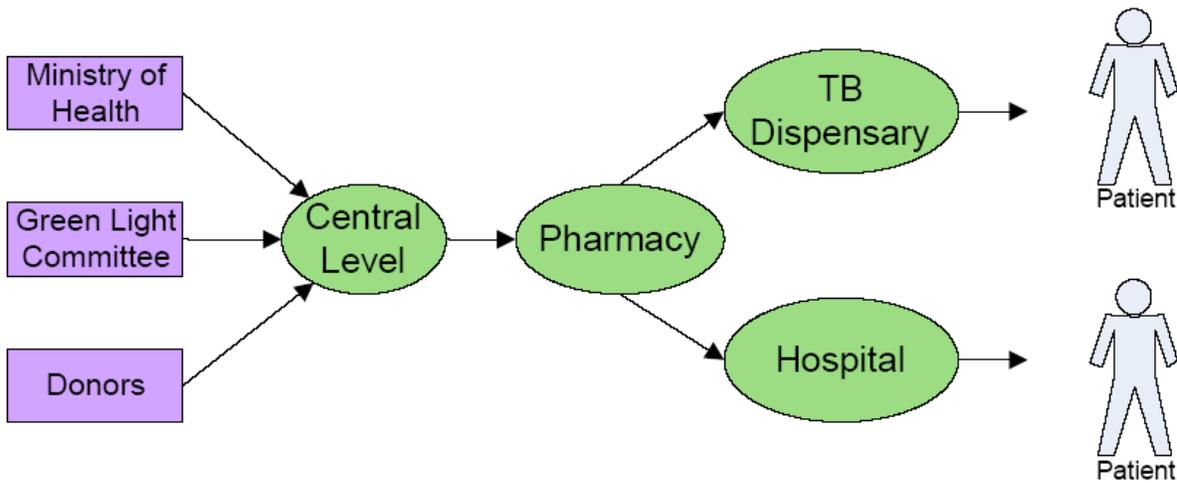


Figure 1

Tracking first- and second-line medicines through the system

Who Will Benefit from the e-TB Manager?

All facilities, staffs, and programs involved in TB and DR-TB case management and first- and second-line TB medicine management may benefit from the new e-TB Manager, including -

- TB physicians
- Pharmacies
- Pharmaceutical warehouses
- DR-TB centers or TB hospitals
- TB coordinators from the district level
- NTP coordinator
- MoH
- National Health Insurance Plans
- Donors and partners such as WHO/GLC and the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund)

What are the e-TB Manager's Technical Characteristics?

e-TB Manager is a computer application, which is accessible over the Internet and which can be used at all levels by designated facilities, such as the central warehouse, TB and DR-TB reference centers, or pharmacies and by TB physicians and health centers in charge of authorizing and validating medicine orders. Every user has access to the system depending on his or her level of participation in medicine management.

To use the application, the user must to be equipped with-

- A computer with Internet capabilities
- A network connection to the system (Internet access is required only if the system is based on an Internet server)
- An HTML browser (e.g., Google Chrome, Internet Explorer, or Mozilla FireFox)

What Are Users' Responsibilities?

Pharmaceutical warehouse staff responsibilities are to—

- Register medicines received from external sources
- Monitor stock position
- Register delivery of medicine to pharmacies
- Record movements and adjustments of stock (e.g., returns, medicine expiry)

NTP staff responsibilities are to—

- Authorize orders from pharmacies (consolidated by TB units related to pharmacies)
- Monitor the stock positions of the pharmaceutical warehouse, pharmacies, and TB units
- Confirm data for patients enrolled in cohorts

Pharmacy staff responsibilities are to—

- Document receipt of medicines from the pharmaceutical warehouse
- Issue medicines ordered by TB units
- Monitor its stock position and the stock position of related TB units
- Record stock movements and adjustments (e.g., in case of returned medicines to the pharmaceutical warehouse or medicines expiration)
- Send new medicine orders to the pharmaceutical warehouse
- Check the status of sent orders

TB physician responsibilities are to—

- Register new TB or DR-TB cases in the system (including medicines used, doses, and frequency and duration of treatment) and register patient transfers from one TB unit to another
- Modify the treatment scheme of TB/DR-TB cases (i.e., medicines or doses substitution)
- Register medicines dispensed to patients
- Place new medicine orders with the pharmacy
- Receive medicines sent by the pharmacy

CHAPTER 2. e-TB MANAGER STRUCTURE

The e-TB Manager consists of four modules -

- Cases
- Medicines
- Management
- Administration

The **Cases** module allows the user to search, notify, follow-up, exclude, close, transfer, and validate cases.

The **Medicines** module allows the user to record, search, follow, and authorize the receiving, ordering, transferring, dispensing, movements, and stock positions of medicines.

The **Management** module allows the user to generate, search, and print reports, indicators, medicine forecasting, and data exportation records.

The **Administration** module allows the system administrator to manage the system to include, remove, and change users, health system structure, medicines, treatment regimens, and other elements.

CHAPTER 3. USING THE SYSTEM

Launching the Browser

The e-TB Manager is a Web-based system, so you will need a Web browser to run this application. Several Internet navigators (browsers) are available, and each one offers specific characteristics and resources. To have the system working properly, you must enable Java-script in your browser. If it's not enabled, please contact your system administrator.

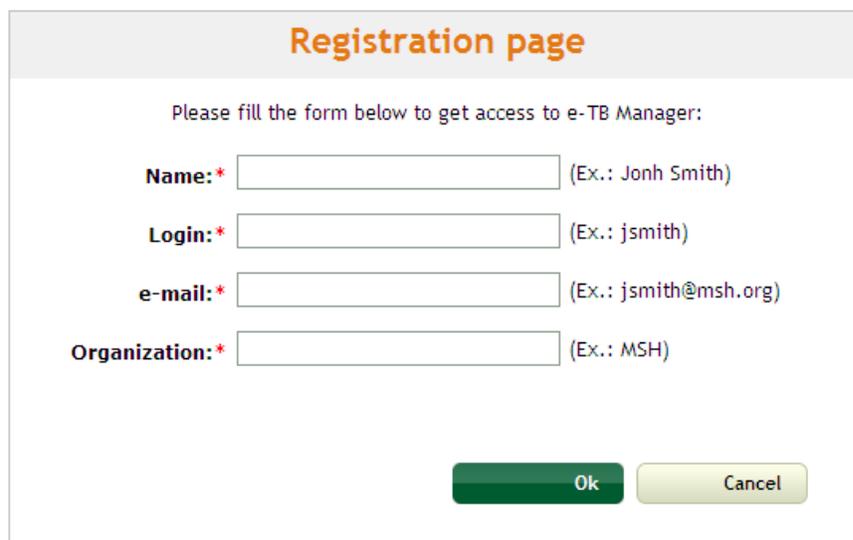
To start the application, open your browser and enter the system URL. If you don't know the system URL, contact the NTP representatives for instructions.

Note 1. What is a URL?

URL is the abbreviation for *uniform resource locator*. It's a global address of documents and other resources on the World Wide Web. The URL of the e-TB manager depends on where it was installed. MSH maintains a demonstration version of the system at the URL <http://www.etbmanager.org>, but check with your technical support for the right URL of the system in use.

When you enter the correct URL, the system shows you the login page. The login page is used to authenticate the user in the system.

To enter into the system, you'll need a user login and password. If you don't have one, you can receive a new one by clicking on the link **Click here** below the sentence **Don't have a user name?** displayed at the login page. Fill in the **Registration page** (Figure 2); clicking the OK button the system automatically sends a user login and password to your e-mail address as registered in the e-TB Manager. Once you have entered your user account and password, click **ENTER** (Figure 3). If you need technical support, contact MSH using this e-mail address: info@etbmanager.org.



The image shows a web form titled "Registration page" in orange text. Below the title, it says "Please fill the form below to get access to e-TB Manager:". There are four input fields, each with a label and an asterisk, and an example in parentheses: "Name: * [input] (Ex.: Jonh Smith)", "Login: * [input] (Ex.: jsmith)", "e-mail: * [input] (Ex.: jsmith@msh.org)", and "Organization: * [input] (Ex.: MSH)". At the bottom right, there are two buttons: a green "Ok" button and a light green "Cancel" button.

Figure 2

Figure 3

The system will check for the **User Account** and **Password**. If you have not entered a valid login or password, an error message will be displayed (Figure 4). In this case, repeat the operation.

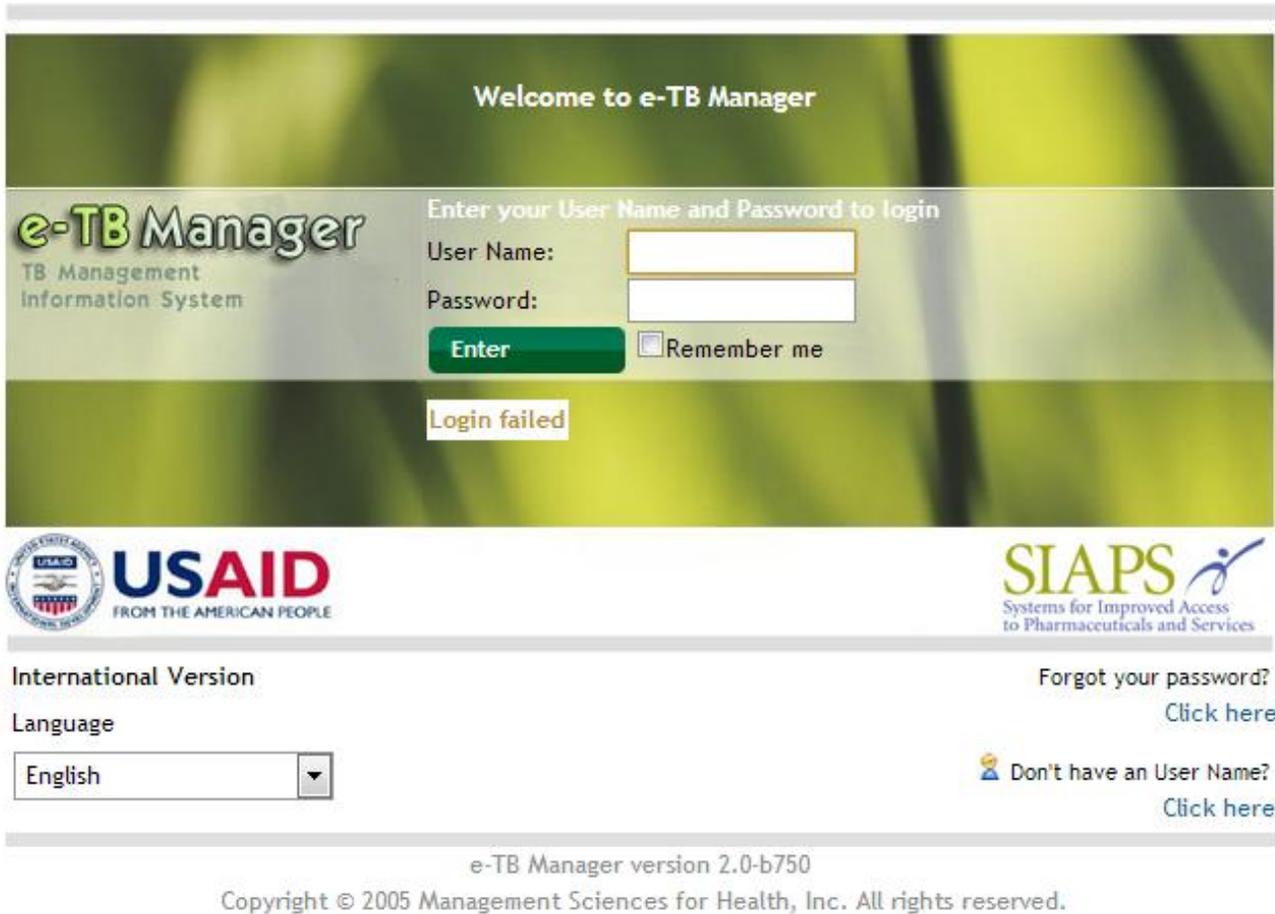


Figure 4

Language Selection

The system is available in several languages. If the language selected is not the one you want, on the left side of the login page, you'll find the language selector (Figure 5).

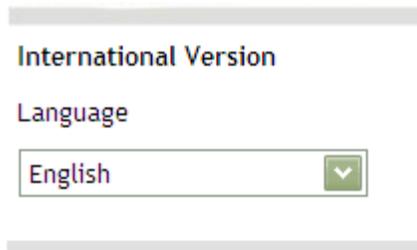


Figure 5

When you select the language you want from the drop-down menu, the system will update the login page with the selected language.

Forgot Your Password?

If you have forgotten your password, you can receive a new one by clicking on the link **Click here** below the sentence **Forgot your password?** displayed at the login page. The system will ask for your e-mail address assigned to your user login (Figure 6).

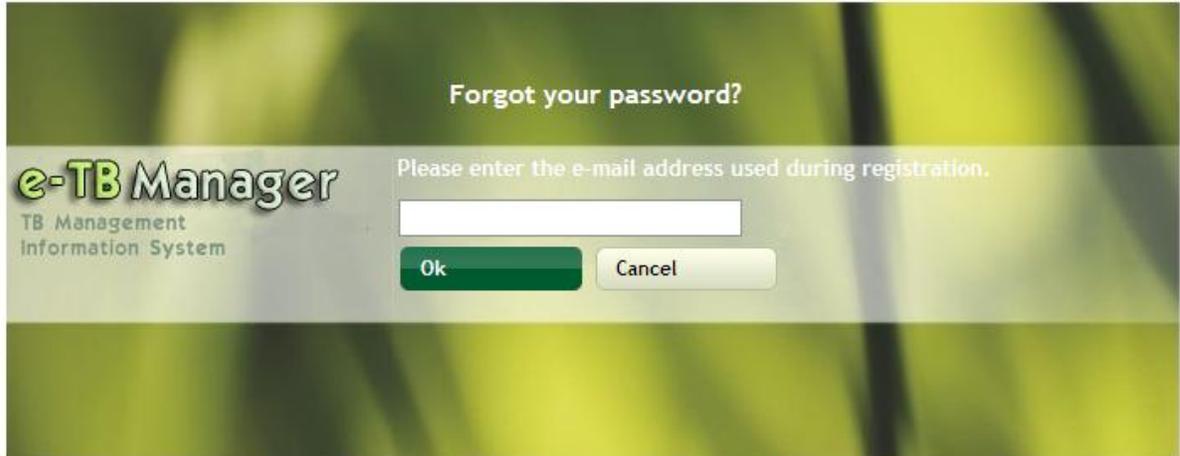


Figure 6

Enter your e-mail address, click on the **OK** button, and a new password will be generated by the system and will be sent to the user's e-mail address. Otherwise, click on **CANCEL** to cancel the operation.

The Home Page

After you complete the login page, the system will welcome and redirect you to the home page. On the home page, you'll find the system's main menu (Figure 7).

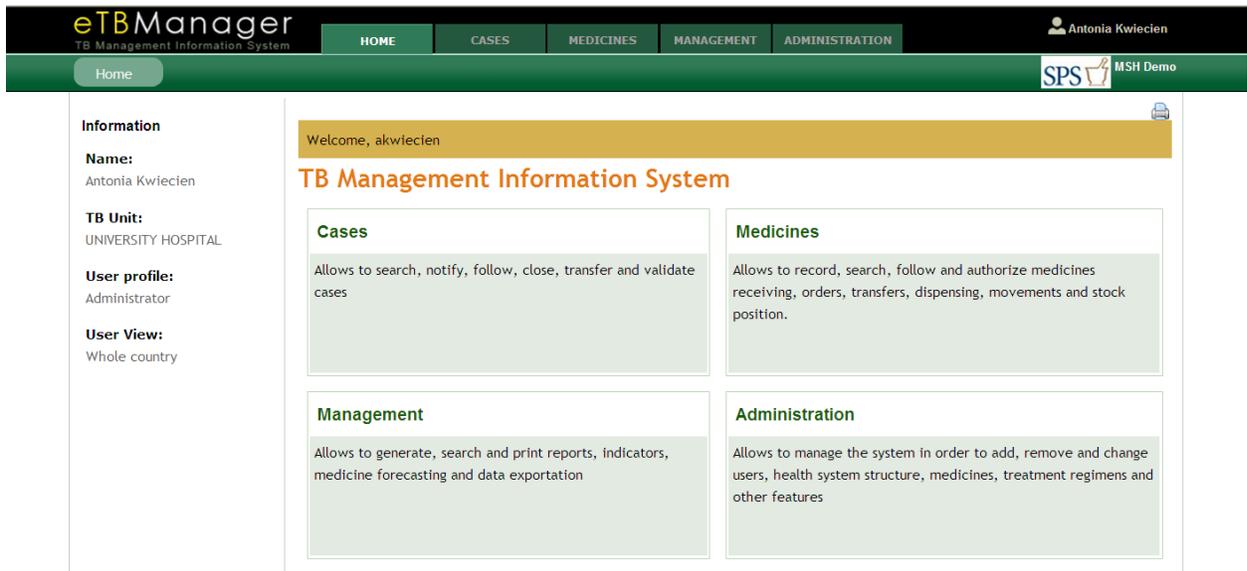


Figure 7

The main menu contains the four main functionalities of the system and the **Settings** and **workspace** links —

- **Cases** - Allows the user to search, notify, follow-up, exclude, close, transfer, and validate cases.
- **Medicines** - Allows the user to record, search, follow, and authorize the receiving, ordering, transferring, dispensing, movements, and stock positions of medicines.
- **Management** - Allows the user to generate, search, and print reports, indicators, medicine forecasting and data exportation records.
- **Administration** - Allows the system administrator to manage the system to include, remove, and change users, health system structure, medicines, treatment regimens, and other elements.

You can select any of the five functions above by clicking on the displayed links at the system's main menu (Figure 7).

User Interface

As you browse the system, you'll notice that the pages follow a standard layout. For example, at the top of each page you find links to the four main modules of the system (Figure 8).



Figure 8

These options are the same ones you've seen on the home page above. They are shortcuts that save you time; for instance, if you are in the **Management** module and want to go to the **Cases** module, just click on the appropriate menu tab. You have the same options going back to the home page by clicking on the **e-TB Manager** logo of the system (top left corner of the page).

At the left side of the page you'll find an **Information** block about your session in the system. The block shows your **Name**, your **TB Unit**, your **User Profile**, and your **User View**, (Figure 9).

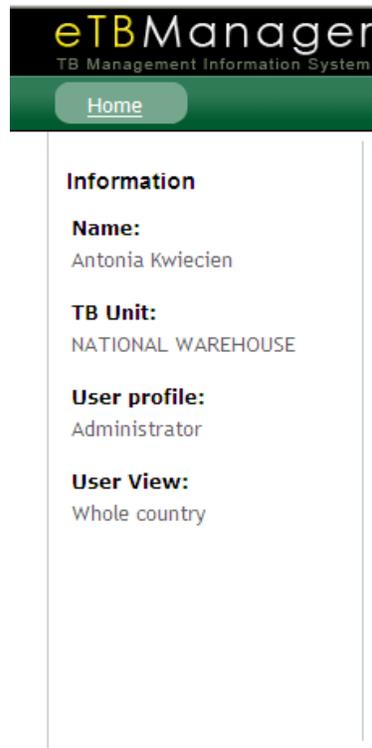


Figure 9

Changing Your Settings

Place the cursor on **your name** on the upper right side of each page to see a drop-down menu. You will be able to modify your personal settings (Figure 10).



Figure 10

Preferences

Click on the **Preferences** link in the drop-down menu (red circle on Figure 10). The **Preferences** page will appear. Preferences allows you to change your name (i.e., the name displayed by the system), your e-mail address (i.e., the e-mail the system uses to communicate with you), and the time zone you are in now. Adjusting the time zone allows the system to display the correct date and time according to where you are in the world.

To change your preferences, just modify your information and click the **SAVE** button to confirm (Figure 11 at the bottom of the page) or **CANCEL** to undo it.



Figure 11

Password

Click on Change password from the drop-down menu (blue rectangle on Figure 10). The **Change password** page will appear (Figure 12). Your password must be at least six characters long and contain both letters and numbers.

For security reasons, to change your password you must enter your password in the **Password in use** field, then enter a new password in the **New password** field and retype it in the **Confirm new password** field. Make sure you write your new password correctly in both fields. Click the **SAVE** button to confirm or **CANCEL** (at the bottom of the page) to undo it.

Figure 12

When you click the **SAVE** button shown above, and all the information is validated (accepted) by the system, the message **The password was successfully changed** will be shown on the main page (Figure 13).

Figure 13

Theme

To change the theme (that is the physical appearance of the system; color, font, etc.) click on Select theme from the drop-down (red rectangle on Figure 10) then select the theme you want from the options available (Figure 14).

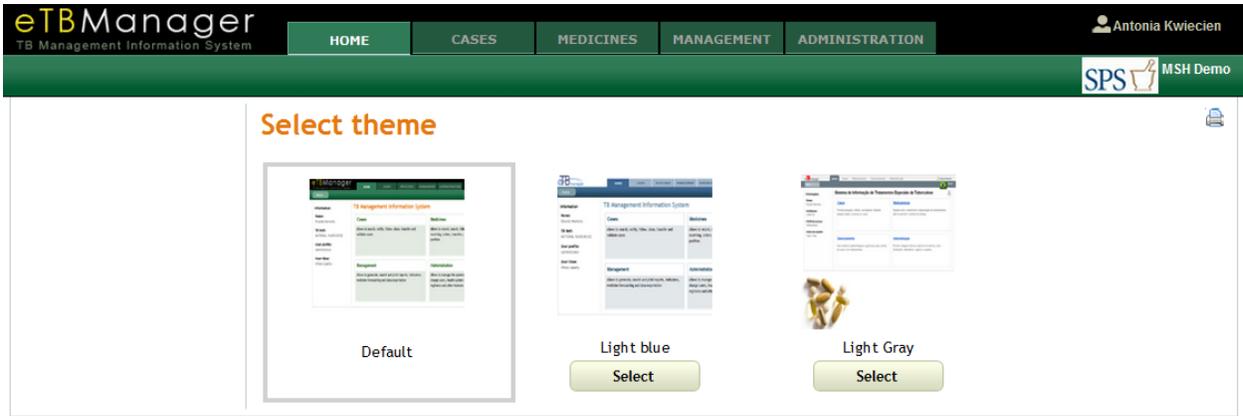


Figure 14

Exit

To exit from the system, click **Exit** on the drop-down menu (blue circle on Figure 10) and you will be redirected to the *sign in* page (Figure 15).

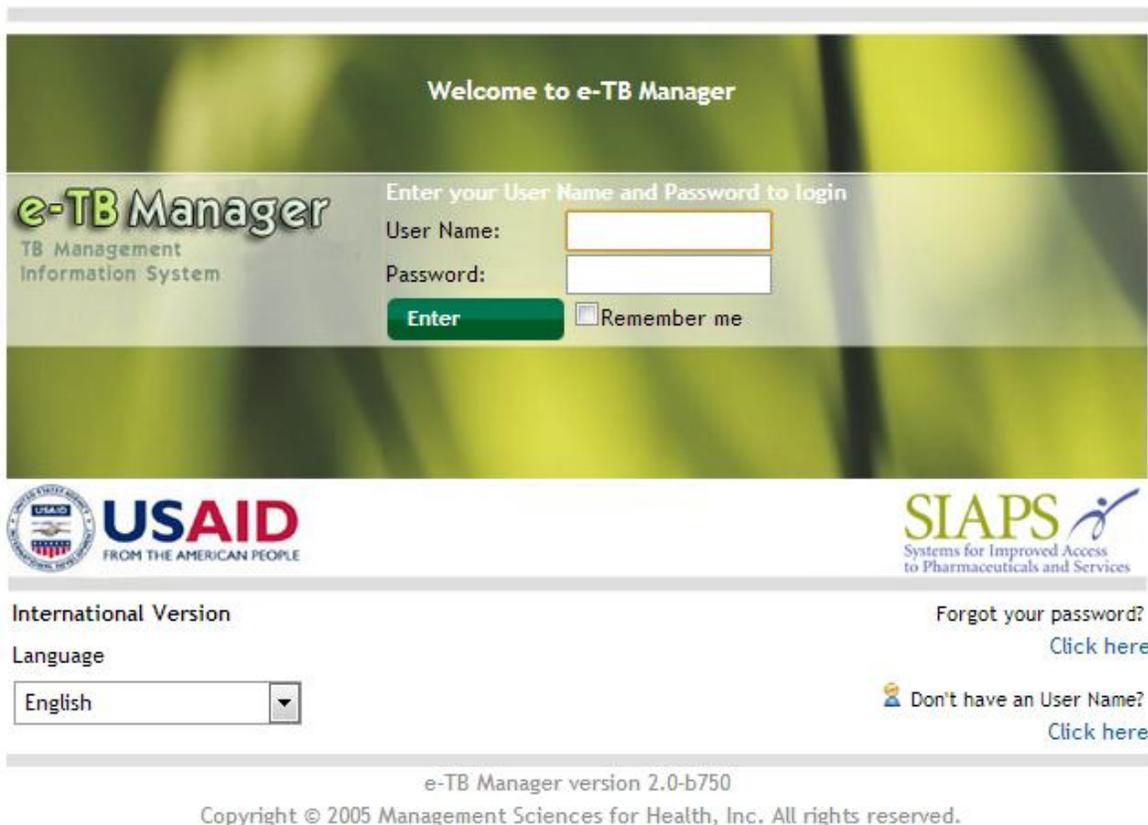


Figure 15

Language

To change the language in use, click on the language you want to work in from the drop-down menu (green circle on Figure 10).

Changing Your Workspace

To change to a new workspace, click on the workspace icon on the upper right side of the page (red circle on Figure 16) and select the workspace you want (blue rectangle on Figure 16)



Figure 16

Icons and Conventions Used by the e-TB Manager System

The following symbols and icons are used in the e-TB Manager system. Icons labeled in the system do not appear on this list.

Symbol/Icon/Convention	Description
	Click on the logo to return to the home page
	Workspace icon (image set by the workspace administrator)
	Warehouse
	TB Treatment Center
	Laboratory
	<ul style="list-style-type: none"> • Drug Management not yet initiated, or • Batch expired, or • Clear expired batches in the Forecasting
	Gender - Female
	Gender - Male
	User
	Medicine Batch
	Warning
	Resistant to medicine tested
	Susceptible to medicine tested
	Specimen contaminated
	Medicine
	Print page or Print specified list
Blue Text	Clickable link
Orange Text	Page title
	Click on heading to sort items in the column
	Value required
 (mm/dd/yyyy)	Click on icon to show interactive calendar
	Show additional information
	Hide additional information
	Delete or Remove
	Edit

CHAPTER 4. CASES MODULE

The **Cases** module allows you to search, notify, follow up, close, transfer, and validate cases. Click on **Cases** on the system's main page (highlighted with a red circle and rectangle in **Figure 17**), and the *Cases* module's main page will appear (**Figure 18**).

The screenshot shows the eTBManager interface. At the top, the logo 'eTBManager' and 'TB Management Information System' are visible. A navigation bar contains 'HOME', 'CASES', 'MEDICINES', 'MANAGEMENT', and 'ADMINISTRATION'. The 'CASES' button is highlighted with a red circle and rectangle. Below the navigation bar, there is a 'Home' button and a 'SPS MSH Demo' logo. The main content area is titled 'TB Management Information System' and contains a sidebar with user information and a grid of four module descriptions:

Module	Description
Cases	Allows to search, notify, follow, close, transfer and validate cases
Medicines	Allows to record, search, follow and authorize medicines receiving, orders, transfers, dispensing, movements and stock position.
Management	Allows to generate, search and print reports, indicators, medicine forecasting and data exportation
Administration	Allows to manage the system in order to add, remove and change users, health system structure, medicines, treatment regimens and other features

Figure 17

How to Notify a Case

To notify a case, follow the procedure described below. To notify a new suspect case, see the section “**How to Notify a New Suspect Case**” and follow the steps there.

1. Click on the **New case** button (circled in red on **Figure 18**) to record data into the system about a patient who has a diagnosis of TB or DR-TB.

The screenshot shows the eTB Manager interface. The top navigation bar includes 'HOME', 'CASES', 'MEDICINES', 'MANAGEMENT', and 'ADMINISTRATION'. The 'CASES' tab is active. On the left sidebar, the 'New case' button is circled in red. Below it are buttons for 'New suspect', 'Registered cases', 'Validation Status', and 'Case tags'. The main content area shows a search bar, an 'Advanced Search' button, and two tables for 'On-going cases' in 'Region A' and 'Region B'.

Region A					
Health Unit	Cases notified	On treatment	Transferred in	Transferred out	
HEALTH CENTER 1	109	60	-	3	Treatment progress
NATIONAL WAREHOUSE	1	-	-	-	Treatment progress
UNIVERSITY HOSPITAL	1	-	-	-	Treatment progress

Region B					
Health Unit	Cases notified	On treatment	Transferred in	Transferred out	
HEALTH CENTER 6	73	61	1	-	Treatment progress

Figure 18

2. In the **New Case** box that appears, choose the appropriate case classification based on bacteriological results and previous TB treatments, or click on the **CANCEL** button to undo the operation (**Figure 19**).

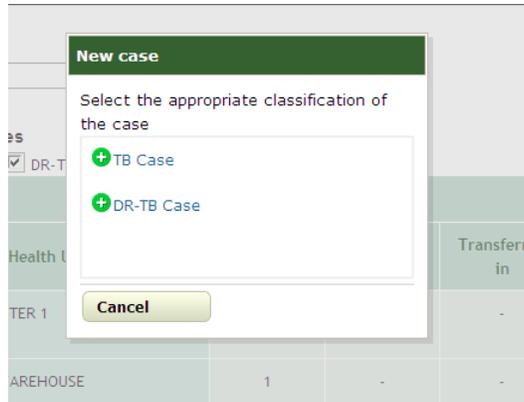


Figure 19

3. Before recording a new case, you must check whether the patient is already recorded in the system. Enter the patient's name and birth date, and then click on the **Search** button. Using both pieces of information, the system will search for the case in the database (Figure 20).
4. Click the **CANCEL** button to return to the previous page.

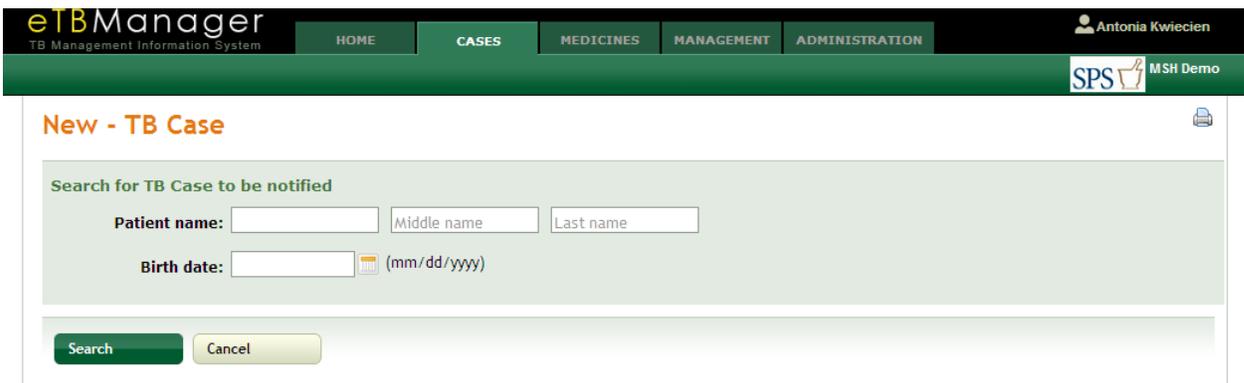


Figure 20

5. If either or both pieces of information (name and birth date) are already recorded in the database, the system will show all similar patients (see the example in Figure 21).
6. If you want to notify a new case of a previously recorded patient (i.e., a new TB or DR-TB case), click on the **Patient's Name** (Figure 21).

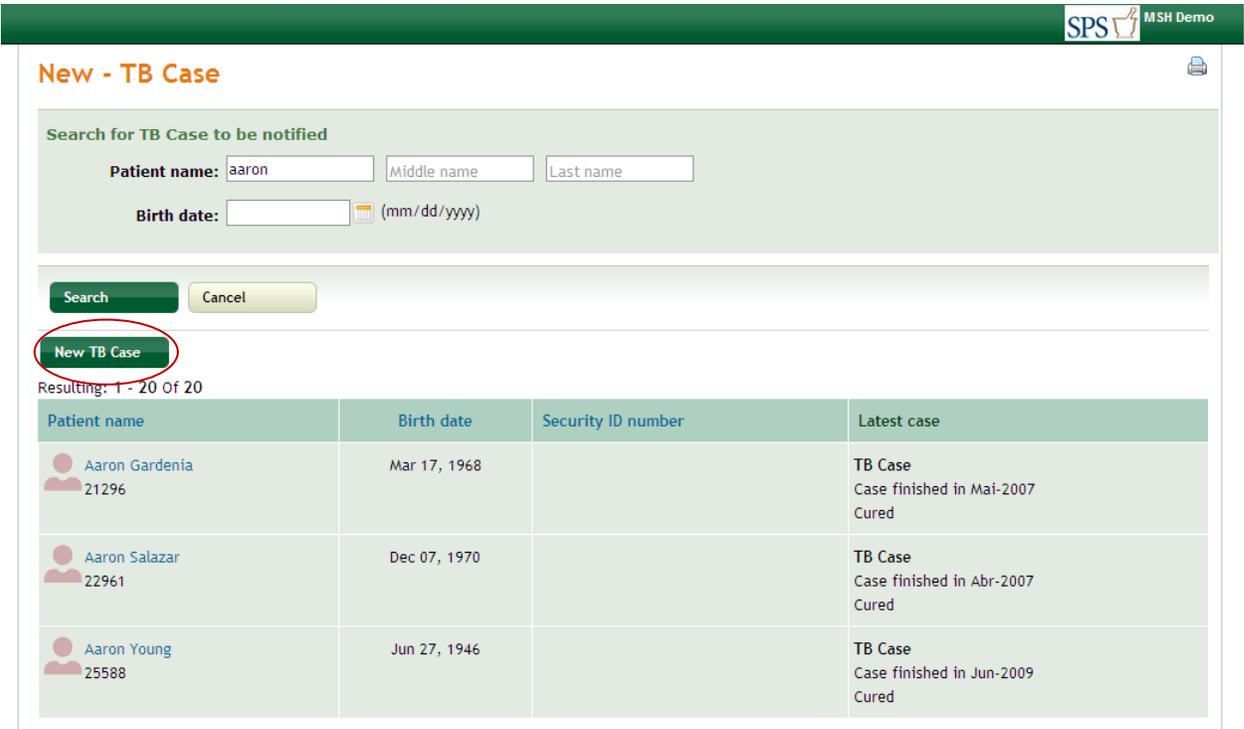


Figure 21

7. When you select an already recorded patient, the new case notified will be added to the patient list of cases registered. Notice also that when the notification form is displayed, the patient data section is already filled in with the patient data selected. You may update this information if you want (Figure 22).
8. Once you enter data about the patient, click the **SAVE** button to register a new case or **CANCEL** to undo it (Figure 22).
9. If you want to record a new patient, click on **NEW TB Case** on the *New – TB Case* page (red circle on Figure 21).
10. The name and birth date (optional) are shown, and you can complete other information regarding the case.
11. Click on the **SAVE** button to generate a new case or **CANCEL** to undo it (Figure 22).

New notification - TB Case

Patient data

Patient name: * aaron Middle name Last name

Security ID number: Gender: * -

Birth date: (mm/dd/yyyy) Age: *

Mother's name:

Nationality: -

Patient address at the moment of notification

Address: *

Province / Region: * Region A

City: City A

Village: Village A

District: District 1

Zip code

Current address is different from the notification address?: No

Phone number: Mobile number:

Case data

Notification health unit

Province / Region: * Region A

Name: * UNIVERSITY HOSPITAL

Registration date: * (mm/dd/yyyy)

Diagnosis date: * (mm/dd/yyyy)

Type of patient: -

Site of Disease: -

Previous TB treatments

Number of previous TB treatments: 0

Medical consultation

Date: * (mm/dd/yyyy)

Professional responsible for patient examination: *

Height: cm

Weight: * Kg

Comments:

Save Cancel * Value is required

Figure 22

How to Find Notified Cases

To find a notified case, follow this procedure:

1. To search cases already recorded in the system, click the **Advanced Search** link (red rectangle on **Figure 18**). The system will display the *New Search* page a new search form with filters (**Figure 23**).

New search

Patient address at the moment of notification
Province / Region: -

Health Unit
Province / Region: -

Case data
Patient name: First name Middle name Last name
Record Number:
Classification: -
Case status: -
Validation Status: -
Type of patient: -
Site of Disease: -
Type of diagnostic: -

Case search by dates
 Registration date Diagnosis date Start treatment date Outcome date
Initial month/year: - -
Final month/year: - -

Search **Cancel**

Figure 23

2. You may fill in the filters (i.e., different fields with a down arrow such as **Province / Region** or **Classification**) on the new search form and the system will display all cases that match the criteria you entered. If no filters are filled in, the system will display all cases registered in the database (**Figure 24**).

Case search results 

Resulting: 1 - 19 Of 19

TB/DR-TB number	Classification	Notification health unit	Registration date
Gender	Patient name	Region/Province -City (Patient address)	Treatment duration
	Age	Case status	Validation Status
 New case	DR-TB Case senira medes de oliveira silva oliveira 27 years	HEALTH CENTER 1 Region A - City A Waiting to start treatment	Oct 04, 2011 Treatment not started Waiting validation
 14561-2	TB Case Karran de Oliveira 23 years	HEALTH CENTER 1 Region A - City A Cured	Nov 10, 2000 8 Months, 1 day Validated
 14817-2	TB Case Pedro de Oliveira 23 years	HEALTH CENTER 1 Region A - City B Cured	Sep 27, 2000 8 Months, 1 day Validated
 16804	TB Case Racheal de Oliveira 6 years	HEALTH CENTER 1 Region A - City A Failed	Mar 22, 2002 7 Months, 1 day Validated

Figure 24

- Based on the information you enter, the recorded cases are listed on the *Case search results* page (**Figure 25**). Click the column titles of the table header (e.g., Age; red circle on **Figure 24**) to change the ordering of the case search results list (**Figure 25**).

Case search results 

Resulting: 1 - 19 Of 19

TB/DR-TB number	Classification	Notification health unit	Registration date
Gender	Patient name	Region/Province -City (Patient address)	Treatment duration
	Age	Case status	Validation Status
 20049	TB Case Airton de Oliveira 26 years	HEALTH CENTER 1 Region A - City A Treatment completed	Aug 31, 2004 6 Months, 1 day Validated
 20049-2	TB Case Airton de Oliveira 26 years	HEALTH CENTER 1 Region A - City C Died	Mar 24, 2005 2 Months, 1 day Validated
 17996-2	TB Case Arnaldo de Oliveira 72 years	HEALTH CENTER 1 Region A - City C Cured	Jun 29, 2004 8 Months, 1 day Validated
 17622	TB Case Benjamin de Oliveira 43 years	HEALTH CENTER 1 Region A - City C Cured	Dec 18, 2002 8 Months, 1 day Validated

Figure 25

4. If you want to perform another case search, click on the **New Search** button above the table on the right side of the page (red circle on **Figure 25**).
5. In the *New search* page displayed (same as in Figure 23), you can again create a combination of any filters (i.e., different fields with a down arrow such as **Province / Region** or **Classification**) to get the results you want from the searching.
6. Click on the **patient number** link to show case details for cases already validated or on the **New case** link for cases waiting for validation (red circles on Figure 26).

Case search results



Resulting: 1 - 10 Of 10

TB/DR-TB number Gender	Classification Patient name Age	Notification health unit Region -City (Patient address) Case status	Registration date Treatment duration Validation Status
New case 	DR-TB Case Kenilworth Sam 55 years	HEALTH CENTER 1 Region A - District 1 Waiting to start treatment	Mar 01, 2012 Treatment not started Waiting validation
16942-2 	TB Case Samuel Dagian 49 years	HEALTH CENTER 1 Region A - City A Defaulted	Oct 24, 2002 Treatment not started Validated
16628-3 	TB Case Samuel DAvona 35 years	HEALTH CENTER 6 Region B - City E Cured	May 19, 2003 8 Months, 1 day Validated

Figure 26

On the *Case details* page the system shows recorded information concerning **Case data**, **Exams**, **Treatment**, **Medical consultation**, **Additional information**, and **Drugogram**. Click on the respective link to see details for these options (circled in red on **Figure 27**, **Figure 28**, **Figure 29**, Figure 30, Figure 31, and Figure 32).

Case details - DR-TB suspect



 Nicky Breslin
New case

Waiting to start treatment

Validation Status:
Pending [Show details](#) [Post pendings](#)

Case data

Exams

Treatment

Medical consultation

Additional information

Drugogram

Patient data

Security ID number:

Gender: Male

Birth date: Nov 28, 1952

Age: 59 years

Nationality: Native

Mother's name: Irene

Patient address at the moment of notification

Address: 3729 Eglington Ave

Region: Region A

City: City A

Case data

Notification health unit: HEALTH CENTER 1

Registration date: Mar 17, 2012

Diagnosis date:

Type of diagnostic: Suspect

Comments

Add a comment

Figure 27

The screenshot shows the 'Case details - DR-TB suspect' page for a user named Nicky Breslin. The page title is 'Case details - DR-TB suspect' and the status is 'Waiting to start treatment'. The user's name 'Nicky Breslin' and 'New case' are displayed. The 'Validation Status' is 'Pending', with links for 'Show details' and 'Post pendings'. A navigation bar contains tabs for 'Case data', 'Exams', 'Treatment', 'Medical consultation', 'Additional information', and 'Drugogram'. The 'Exams' tab is selected and circled in red. Below the tabs, there are sections for 'HIV exams', 'Microscopy exam', 'Culture exam', 'Drug susceptibility testing', and 'X-Ray', each with a 'New' button and the text 'No result found'. At the bottom, there is a 'Comments' section with a text input field and an 'Add a comment' button.

Figure 28

The screenshot shows the 'Case details - DR-TB suspect' page for a user named Nicky Breslin. The page title is 'Case details - DR-TB suspect' and the status is 'Waiting to start treatment'. The user's name 'Nicky Breslin' and 'New case' are displayed. The 'Validation Status' is 'Pending', with links for 'Show details' and 'Post pendings'. A navigation bar contains tabs for 'Case data', 'Exams', 'Treatment', 'Medical consultation', 'Additional information', and 'Drugogram'. The 'Treatment' tab is selected and circled in red. Below the tabs, the text 'Treatment not started' is displayed, and there is a 'Start treatment' button.

Figure 29

Case details - DR-TB suspect 

 **Nicky Breslin** Waiting to start treatment
New case

Validation Status:
Pending [Show details](#) [Post pendings](#)

[Case data](#) [Exams](#) [Treatment](#) **Medical consultation** [Additional information](#) [Drugogram](#)

[New](#)

Apr 02, 2012 [Edit](#) [Delete](#)

Weight: 50.00Kg **Height:** 166.00cm
BMI: 18.1

Medical appointment: Scheduled

Is patient taking the prescribed medicines correctly?: No **Reason:** Waiting to start treatment

Figure 30

Case details - DR-TB suspect 

 **Nicky Breslin** Waiting to start treatment
New case

Validation Status:
Pending [Show details](#) [Post pendings](#)

[Case data](#) [Exams](#) [Treatment](#) [Medical consultation](#) **Additional information** [Drugogram](#)

Comorbidities and associated factors [Edit](#)
No result found

Contacts Evaluation [New](#)
No result found

Adverse Reactions to Medicines [Edit](#)
No result found

Comments [Add a comment](#)

Figure 31

Case details - DR-TB suspect



 **Nicky Breslin**
New case

Waiting to start treatment

Validation Status:
Pending [Show details](#) [Post pendings](#)

- Case data
- Exams
- Treatment
- Medical consultation
- Additional information
- Drugogram**

Month	Date	Sample ID	Microscopy exam	Culture exam	S	R	H	E	Z	Rfb	Km
Before TB Diagnosis	May 01, 2012		+		S	R	R	C	S	S	S

Figure 32

Case Management Workflow

The case management workflow is composed of several steps. Figure 33 displays the status of a case workflow.

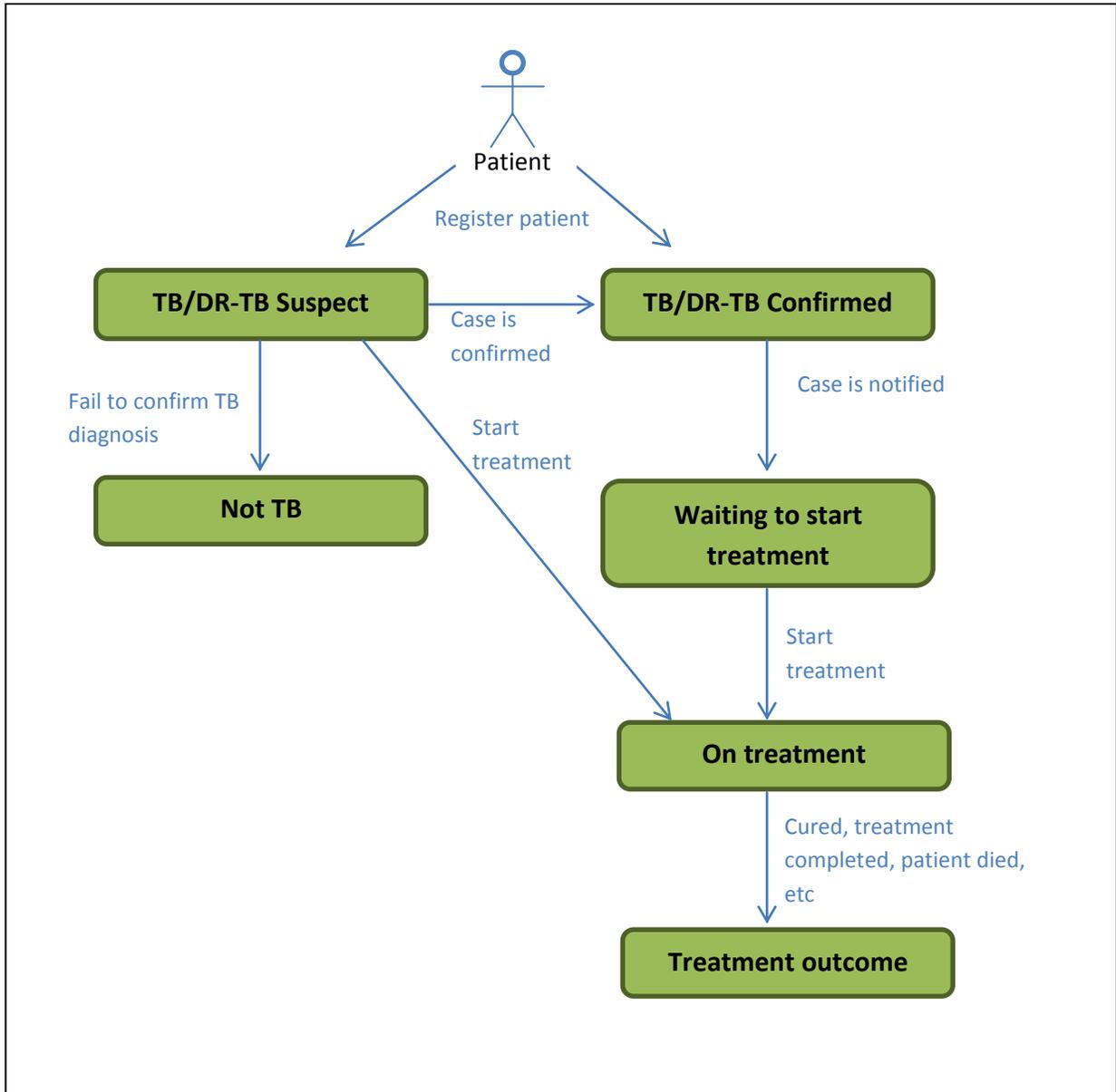


Figure 33

TB/DR-TB Case flow

At the moment you notify a new case, this case is registered in the system and assigned **Waiting to begin treatment** and **Waiting validation** statuses. Because a patient may begin treatment before all of the information can be validated in the system, the software has two workflows: the case management flow and the validation flow.

- The case management flow follows these steps: notification, awaiting treatment, on treatment, and outcome.
- The validation flow is intended to ensure that the information in the system corresponds to the diagnosis of the case. The flow is described in **Figure 34** . This flow may be more useful for DR-TB cases.

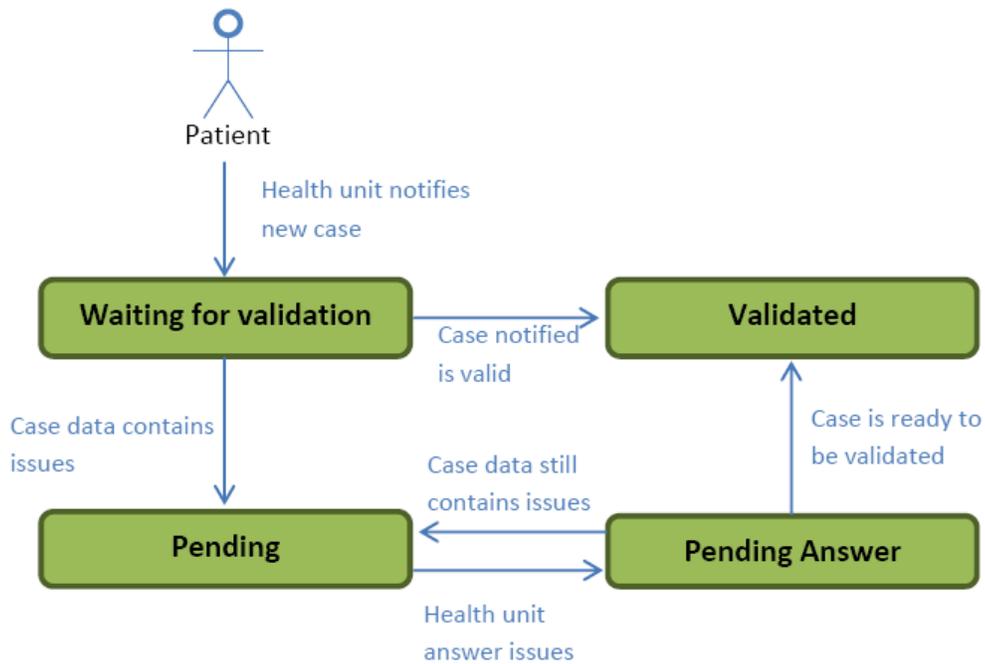


Figure 34

Case Validation Flow

If for some reason information is still missing and the case cannot be validated, the case will move to “pending” status, with annex information describing why the case could not be validated (e.g., exam results missing at the moment of validation). As soon as the pending issues are resolved, the case can move again to “Waiting validation” status, allowing it to be validated again.

It may happen that, during analysis of the case, it is considered neither a TB nor a DR-TB case, so it can be moved to the final status of **Diagnosis Changed** or **Not Confirmed**. The information about this case remains in the database just for registration purposes, but it will never be included in statistics or management of cases.

How to Validate New Cases

To validate a new case, follow this procedure:

1. Enter the **Case details** by selecting a specific **New case** at the *Case search results* page (**Figure 26**).
2. The system displays the *Case details* page for the patient with the **Waiting validation status**. Click on the **Validate case** link (red circle on **Figure 35**) to enter the relevant details.

Case details - DR-TB suspect



 **Mike Green**
 New case

Waiting to start treatment

Validation Status:

Waiting validation
Validate case
Post pendings

Figure 35

2. Enter information all the required fields on the *Validate case* page appears (Figure 36).

Validate case

Please confirm the information below before validate the case

Diagnosis date: * (mm/dd/yyyy)

Type of diagnostic: * Suspect

Type of patient: * -

DrugResistanceTypes: * -

Site of Disease: * -

* Fields with this symbol beside are required fields

Figure 36

- Click on the **VALIDATE CASE** button, and the validation status changes to **Validated** confirming the new information was recorded into the system (red circle on Figure 37).
- If a field is incomplete, click **CANCEL** (Figure 36) to return to the *Case details* page.

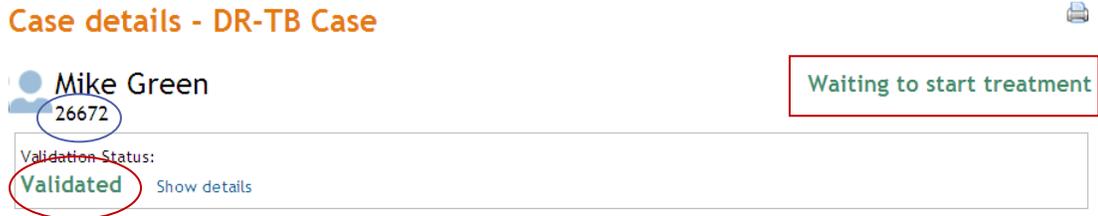


Figure 37

- After validation, the case receives a unique identification number that is automatically generated by the system (blue circle in Figure 37), and the case status changes to **Waiting to start treatment** (red rectangle in Figure 37).
- If an additional case is validated for a patient previously recorded in the system, this case receives the same number generated for the first validated case complete with the digit corresponding to the number of notifications that have occurred. For example, showing the *Case search results* page, the second notification for RaDonna Xavier received the digit number **-2** at the end of the case number (Figure 38).

Case search results

Resulting: 1 - 5 Of 5

TB/DR-TB number	Classification	Notification health unit	Registration date
Gender	Patient name	Region/Province -City (Patient address)	Treatment duration
	Age	Case status	Validation Status
24726-2	TB Case RaDonna Xavier 80 years	HEALTH CENTER 1 Region A - City B Cured	Sep 06, 2008 8 Months, 1 day Validated
24726	TB Case RaDonna Xavier 80 years	HEALTH CENTER 1 Region A - City C Cured	Dec 25, 2007 8 Months, 1 day Validated
22352	TB Case RaDonna Eisenhower 75 years	HEALTH CENTER 6 Region B - City E Cured	Oct 24, 2006 8 Months, 1 day Validated

Figure 38

7. Figure 35 shows the link to **Post Pending** (circled in blue). Click it to enter issues about the case (e.g., that the microscopy results have not been received). See Figure 39.
8. Click the **SAVE** button to save the information or **CANCEL** to undo it.

Post pendings



Mike Green
New case

Waiting to start treatment

Enter the field below with the description of the pending:

Waiting for microscopy results

Save Cancel

Figure 39

9. The Validation status changes to **Pending** (blue circle in Figure 40).
10. If a case has pending issues, you may view them by clicking the **Show details** link (red circle in Figure 40) so that they display on the page (circled in red on Figure 41). Note that the **Show details** link is replaced by the **Hide details** link when clicked (green circle **Figure 41**).

Case details - DR-TB suspect



Mike Green
New case

Waiting to start treatment

Validation Status:
Pending Show details Post pendings

Figure 40

11. The TB unit can reply to the pending issue by clicking the **Answer pendings** button (blue rectangle on **Figure 41**).

Case details - DR-TB suspect

Mike Green
New case

Waiting to start treatment

Validation Status:
Pending [Hide details](#) [Post pendings](#)

Answer pendings

Antonia Kwiecien
May 14, 2012 5:48:25 PM
Waiting for microscopy results

Antonia Kwiecien
May 14, 2012 5:46:27 PM
Waiting for first line DST results

UNIVERSITY HOSPITAL
Village A District 1

Figure 41

12. On the *Answer pendings* page that appears (Figure 42) enter an answer to the issue.
13. Click the **SAVE** button to save the information or **CANCEL** to undo it.

Answer pendings

Mike Green
New case

Waiting to start treatment

Last issue posted

Antonia Kwiecien
May 14, 2012 6:00:05 PM
Waiting for second-line DST results

UNIVERSITY HOSPITAL
Village A District 1

Enter an answer to the issue above

Save Cancel

Figure 42

- The validation status changes to **Pending answered** when a reply to the issue has been submitted (circled in red on Figure 43). At this point, the case can be validated or new issues can be entered. The program tracks the case's status.

Case details - DR-TB suspect



Mike Green Waiting to start treatment
 New case

Validation Status:
Pending answered
[Show details](#)
[Validate case](#)
[Post pendencies](#)

Figure 43

How to Change Case Data

Once you have a registered case, it is common to want the data to be updated (e.g., data that were not available at the moment of the notification). To do so, follow these instructions:

- Click on the **Edit** link on the *Case details* page (circled in red on **Figure 44**).

Case details - DR-TB Case



Mike Green Waiting to start treatment
 26672

Validation Status:
 Validated [Show details](#)

[Case data](#) [Exams](#) [Treatment](#) [Medical consultation](#) [Additional information](#) [Drugogram](#)

Patient data Edit

Security ID number: **Gender:** Male
Birth date: Oct 12, 1985 **Age:** 26 years
Nationality: Native

Patient address at the moment of notification

Address: Kettler Complex
Region: Region A
City: City A
Village: Village A
District: District 1

Figure 44

2. On the *Edit case* page, you can change any recorded information and complete or insert new information in specific fields (**Figure 45**).
3. Click the **SAVE** button to keep the changes you made or **CANCEL** to undo them.

Edit case - DR-TB Case



Patient data

Patient name: * Mike Middle name Green

Security ID number:

Birth date: 10/12/1985 (mm/dd/yyyy)

Mother's name:

Nationality: Native

Gender: * Male

Age: * 26

Patient address at the moment of notification

Address: * Kettler Complex

Province / Region: * Region A

City: City A

Village: Village A

District: District 1

Zip code

Current address is different from the notification address?: No

Phone number:

Mobile number:

Case data

Notification health unit

Province / Region: * Region A

Name: * UNIVERSITY HOSPITAL

Registration date: * 05/01/2012 (mm/dd/yyyy)

Type of diagnostic: * Confirmed

Diagnosis date: * 05/11/2012 (mm/dd/yyyy)

Type of TB drug resistance: -

Type of patient: * New

Site of Disease: * Pulmonary

Pulmonary forms: -

Previous TB treatments

Number of previous TB treatments: 0

Save

Cancel

* Value is required

Figure 45

Note 2. Message Boxes

Successfully updated

On all **Case details** pages, after editing some information and clicking the **SAVE** button, a confirmation message appears to confirm that the new information was recorded into the system. If, however, after clicking **SAVE**, you remain at the edit page, check the message displayed by the system. It will ask you for more information that perhaps you forgot to enter into a required field or indicate that you entered invalid data. Modify the data as needed, check it, then click **SAVE** once again to save the changes you made.

How to Record Exam Results

By clicking on the **Exams** tab of the *Case details* page (**Figure 28**), you will find the results of the selected case for the following five laboratory exams: **HIV exams, Microscopy, Culture, Drug susceptibility testing, and X-Ray.**

Follow the instructions below to register laboratory exam results:

1. For the correct laboratory exam click on the **New** button (circled in red on **Figure 46**) to enter a new exam result.
2. Click on the **SAVE** button to confirm or **CANCEL** to undo it.
3. Repeat the same procedure for each exam you add (**Figure 47, Figure 48, Figure 49, Figure 50, Figure 51**).

Case details - DR-TB Case

 Mike Green
26672

Waiting to start treatment

Validation Status:
Validated [Show details](#)

[Case data](#) [Exams](#) [Treatment](#) [Medical consultation](#) [Additional information](#) [Drugogram](#)

HIV exams

[New](#)

Date collected	Laboratory	Result	Comments
Before TB Diagnosis May 04, 2009		Negative	Delete

Figure 46

HIV exams



 Mike Green
26672

Waiting to start treatment

Date of release: *  (mm/dd/yyyy)

Result: *

Laboratory:

Comments:

[Save](#) [Cancel](#) * Value is required

Figure 47

Microscopy exam



Mike Green
26672

Waiting to start treatment

Collected sample identification

Date collected: * (mm/dd/yyyy)

Sample ID number:

Laboratory: *

Exam result information

Date of release: (mm/dd/yyyy)

Result: *

Comments:

* Value is required

Figure 48

Culture exam



Mike Green
26672

Waiting to start treatment

Collected sample identification

Date collected: * (mm/dd/yyyy)

Sample ID number:

Laboratory: *

Exam result information

Date of release: (mm/dd/yyyy)

Result: *

Method applied:

Comments:

* Value is required

Figure 49

Drug susceptibility testing



Mike Green
26672

Waiting to start treatment

Collected sample identification

Date collected:* (mm/dd/yyyy)

Sample ID number:

Laboratory:* -

Exam result information

Date of release: (mm/dd/yyyy)

Method applied:

Comments:

Medicine	Result
Streptomycin (S)	Not done <input type="text"/>
Rifampicin (R)	Not done <input type="text"/>
P-Aminosalicylic Acid (PAS)	Not done <input type="text"/>

* Value is required

Figure 50

X-Ray



Mike Green
26672

Waiting to start treatment

Date:* (mm/dd/yyyy)

X-Ray

Presentation:*

Succeeding x-ray:

Comments:

* Value is required

Figure 51

To modify exam results:

1. At the patient's *Case Details* page, click on the **Exams** tab.
2. In the section for the exam you want to modify (e.g., HIV exam), in the **date collected** column, click on the link for the **date** the exam to be modified was collected (blue rectangle in **Figure 46**).
3. On the *Exam* page that appears, make changes in the fields provided.
4. Click on the **Save** button to keep the changes, or **Cancel** to undo it.

To delete exam results:

1. At the patient's *Case Details* page, click on the **Exams** tab.
2. On the *Exam* page that appears, click on the **Delete** link (red rectangle in **Figure 46**) in the column to the right of the specific exam you want to delete.
3. In the confirmation box displayed, click on the **OK** button to confirm or **CANCEL** to undo it.

How to Start a Treatment Regimen

Normally, only validated cases (i.e., displayed with the status **Waiting to start treatment**) will be able to start treatment. If you have configured e-TB Manager to allow it, un-validated cases may also begin treatment.

Standardized Regimen

To start a standardized regimen for a case, follow this procedure:

1. Go to the *Case details* page for the case to start treatment.
2. Click the **Treatment** tab (red circle in Figure 52).
3. On the *Treatment* page displayed, click the **Start Treatment** button (blue rectangle in Figure 52).

Case details - DR-TB Case



 **Mike Green**
26672

Waiting to start treatment

Validation Status:
Validated [Show details](#)

Case data

Exams

Treatment

Medical consultation

Additional information

Drugogram

Treatment not started

[Start treatment](#)

Figure 52

4. The *Select the treatment regimen* box will be displayed asking for the type of treatment regimen – a **Standardized regimen** or an **Individualized regimen** (Figure 53).

Select the treatment regimen:

[Standardized regimen](#)

[Individualized regimen](#)

Figure 53

5. Click on the **Standardized regimen** link, the *Treatment regimen* page for standardized regimens will be displayed (Figure 54). For an **Individualized regimen**, skip to the next section.

Standardized regimen

mike green
26675

Waiting to start treatment

Diagnosis date: May 11, 2012

Health Unit

Region / Province:*

Start treatment date:*

Standardized regimen:*

Save Cancel

Figure 54

6. Select the **Province / Region** by clicking the down arrow and selecting from the drop-down menu.
7. After a province or region is selected, the **Name** field will display. Using the down arrow, select the name of the TB unit where the case will be treated.
8. Next in the **Start treatment date** field enter the date the treatment started.
9. Using the down arrow, select the correct **Standardized regimen** (only those regimens already set in the administration module for your TB unit will be available in the drop-down menu - see Figure 55).

Province / Region: Region A

Treatment regimens

Treatment Regimen:

- Category IV - 1
- Category IV - 2
- Category IV - 3
- Category IV - 4
- Category IV - 5
- Category IV - 6
- Standardized DR-TB A

Figure 55

10. Use the down arrows to select the appropriate **dose unit**, **frequency**, and **medicine source** for each medicine in the regimen (**Figure 56**).

Treatment regimens



Mike Green
26672

Waiting to start treatment

Diagnosis date: May 11, 2012

Health Unit

Province / Region: * Region A

Name: * HEALTH CENTER 1

Start treatment date: * 05/16/2012 (mm/dd/yyyy)

Standardized regimen: * Category IV - 1

Intensive Phase
Period: 6 Months

Medicine	Dose unit	Frequency	Medicine Source
Capreomycin 1000mg (Powder/Vial)	1	5/7	GLC
Cycloserine 250mg (Tablet or Capsule)	3	7/7	GLC
Ethionamide 250mg (Tablets)	3	7/7	GLC
Levofloxacin 500mg (Tablet)	2	7/7	GLC
P-Aminosalicylic Acid 4000mg (Granules/Packet)	2	7/7	GLC
Pyrazinamide 500mg (Tablet)	3	7/7	GLC

Continuous Phase
Period: 12 Months

Medicine	Dose unit	Frequency	Medicine Source
Cycloserine 250mg (Tablet or Capsule)	3	7/7	GLC
Ethionamide 250mg (Tablets)	3	7/7	GLC
Levofloxacin 500mg (Tablet)	2	7/7	GLC
P-Aminosalicylic Acid 4000mg (Granules/Packet)	2	7/7	GLC

Save Cancel

Figure 56

11. Click the **SAVE** button to confirm the operation or **CANCEL** to undo it.
12. The case will move to the **On treatment** status (circled in red on **Figure 57**) showing the medicines prescribed according to the regimen selected (Figure 58).

Case details - DR-TB Case



Mike Green
26672

On treatment

Validation Status:
Validated [Show details](#)

- Case data
- Exams
- Treatment**
- Medical consultation
- Additional information
- Drugogram

Figure 57

Case details - DR-TB Case



Mike Green
26672

On treatment

Validation Status:
Validated [Show details](#)

- Case data
- Exams
- Treatment**
- Medical consultation
- Additional information
- Drugogram

Options

Initial regimen: Category IV - 1

Current regimen: Individualized regimen

Period	Feb 14, 2012	18 Months	Aug 13, 2013
Treatment health units	HEALTH CENTER 1	TB FREE CLINIC	
Regimen Phase	Intensive Phase (6 Months)		Continuous Phase (12 Months)
Am 1000mg Powder/Vial	1 (6/7)	1 (6/7)	
Cs 250mg Tablet or Capsule	3 (7/7)	3 (7/7)	3 (7/7)
Eto 250mg Tablets	3 (7/7)	3 (7/7)	3 (7/7)
Lfx 500mg Tablet	2 (7/7)	2 (7/7)	2 (7/7)
PAS 4000mg Granules/Package	2 (7/7)	2 (7/7)	2 (7/7)
Z 500mg Tablet	3 (7/7)	3 (7/7)	

Figure 58

13. To get more information about a medicine, click on the colored bar next to the medicine's name, and the system will display a dialogue box about the medicine (Figure 59).



Figure 59

14. Click on the **RED X** to close the dialogue box.

Individualized Regimen

To start an **Individualized regimen** for a case, follow this procedure:

1. Go to the *Case details* page for the case to start treatment.
2. Click the **Treatment** tab (red circle in Figure 52).
3. On the *Treatment* page displayed, click the **Start Treatment** button (blue rectangle in Figure 52).
4. Click on the **Individualized regimen** link (Figure 54).
5. The *Individualized regimen* page will be displayed (Figure 60).
6. Select the **Province / Region, Name** of treatment TB unit
7. Enter **Start treatment date**.

Individualized regimen



Mike Green
26672

Waiting to start treatment

Diagnosis date: May 11, 2012

Health Unit

Province / Region: * Region A

Name: *

Start treatment date: * (mm/dd/yyyy)

Intensive Phase
No medicine selected

Continuous Phase
No medicine selected

Save Cancel

Add Medicine...
Add Medicine...

Figure 60

- For each phase (**Intensive and Continuous**), click the **Add Medicine** button.
- In the **Add Medicines** box that appears (**Figure 61**), select the medicines prescribed in the phase by clicking on the checkbox to the left of the medicine name.

Add Medicines

Select all

Oral

<input type="checkbox"/>	Cycloserine 250mg (Tablet or Capsule) Second line
<input type="checkbox"/>	Ethambutol 400mg (Tablet) First line
<input type="checkbox"/>	Ethambutol 400mg28 (tabs) First line
<input type="checkbox"/>	Ethionamide 250mg (Tablets) Second line
<input type="checkbox"/>	Isoniazid 100mg (Tablet) First line

Ok Cancel

Figure 61

- Click on the **OK** button to confirm the operation **CANCEL** to undo it.

11. For each medicine selected, choose the number of **Months of prescription**, the **Dose unit**, the **Frequency**, and the **Medicine Source**, from the drop-down menus as shown in **Figure 62**.

Individualized regimen



Mike Green
26672

Waiting to start treatment

Diagnosis date: May 11, 2012

Health Unit

Region / Province:* -

Start treatment date:* (mm/dd/yyyy)

Intensive Phase Add Medicine...

Medicine	Duration of Regimen	Dose unit	Frequency	Medicine Source	
Amikacin 1000mg (Powder/Vial)	1	-	7/7	-	Delete

Continuous Phase Add Medicine...

No medicine selected

Save Cancel

Figure 62

12. Once you enter all medicines and their data, click on the **SAVE** button to start an individualized regimen for the case. The system will display the treatment regimen as shown in Figure 63.
13. Click on the Options link at the right side of the treatment panel (circled in red on Figure 63).

Case details - DR-TB Case



Mike Green
26672

On treatment

Validation Status:
Validated [Show details](#)

- Case data
- Exams
- Treatment
- Medical consultation
- Additional information
- Drugogram

Options

Initial regimen

Current regimen: Individualized regimen

Period	Feb 14, 2012	18 Months	Aug 13, 2013
Treatment health units	HEALTH CENTER 1		
Regimen Phase	Intensive Phase (6 Months)		Continuous Phase (12 Months)
Am 1000mg Powder/Vial	1 (6/7)		
Cs 250mg Tablet or Capsule	3 (7/7)		3 (7/7)
Eto 250mg Tablets	3 (7/7)		3 (7/7)
Lfx 500mg Tablet	2 (7/7)		2 (7/7)
PAS 4000mg Granules/ Packet	2 (7/7)		2 (7/7)
Z 500mg Tablet	3 (7/7)		

Figure 63

14. To get more information about a medicine, click on the colored bar next to the medicine's name, and the system will display a dialogue box about the medicine (Figure 64).

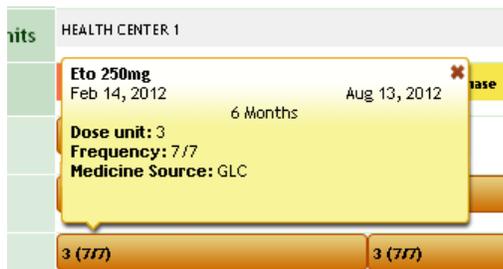


Figure 64

15. Click on the **Red X** to close the dialogue box.

How to Change a Treatment Regimen

To change a Standardized or Individualized treatment regimen, follow these procedures:

1. Click on the **Options** link at the right side of the treatment panel (circled in red on Figure 63).
2. Select **Edit** (red rectangle on Figure 65).

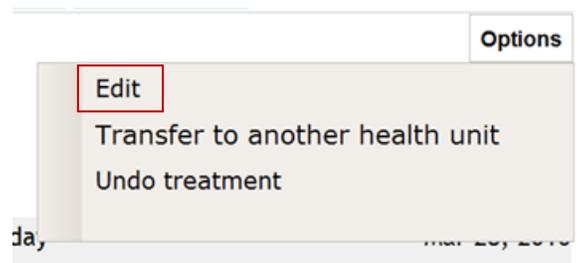


Figure 65

3. The **Treatment Regimens** page will appear (Figure 66).

To change standardized regimens:

1. Click on the **Change regimen** link (circled in red on Figure 66).

Treatment regimens



Bonifácio Young
25800-2

On treatment

Change period... Add Medicine...

Treatment Regimen: Regimen II [Change regimen...](#)

Treatment health unit

Region / Province: * Region A

Name: * HEALTH CENTER 1

Period	Nov 12, 2008	16 Months, 16 days		Mar 27, 2010
Regimen Phase	Intensive Phase (6 Months, 16 days)		Continuous Phase (10 Months)	
E 400mg Tablet	3 (7/7)		3 (7/7)	2 (1/7)
H 100mg Tablet			2 (1/7)	
HR 75/150mg Tablet	4 (7/7)		4 (7/7)	
HRZE 75/150/400/275mg Tablet			4 (7/7)	
S 1000mg Powder/Vial			1 (5/7)	

Save Cancel

Figure 66

2. Select the new regimen on the **Treatment Regimens** box that appears (Figure 67).
3. Click the **OK** button to confirm the change, or **CANCEL** to undo it.

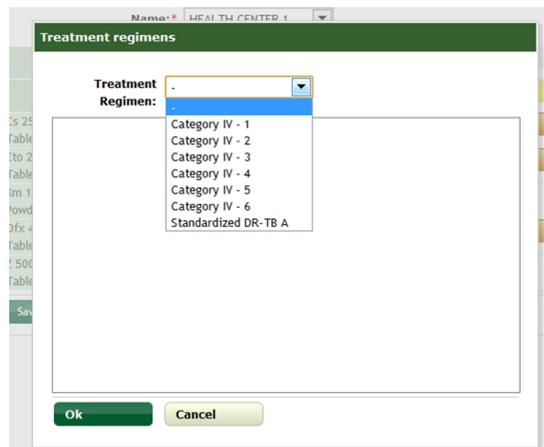


Figure 67

To change the treatment period (**Intensive Phase** and **Continuous Phase**):

1. Click on the **Change period...** button located under the patient's name (Figure 66).
2. The system will display the *Treatment Period* box shown in Figure 68.

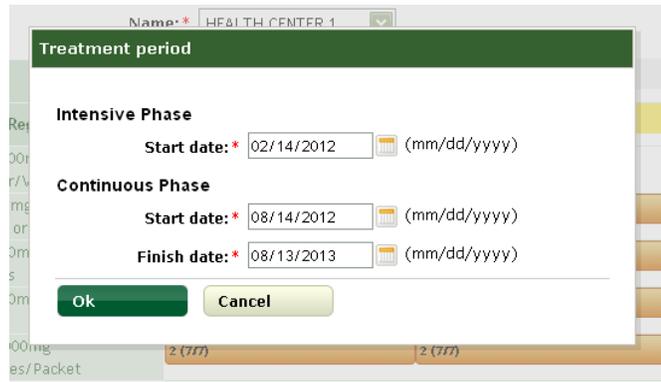


Figure 68

3. Change the dates of the treatment period.
4. When finished, confirm the operation by clicking the **OK** button or click **CANCEL** to undo it. The system will update the treatment regimen based on the new periods informed.

To add a new medicine:

1. Click on the **Add medicine...** button located under the patient's name (Figure 66).
2. The system will display the *Prescribed Medicine* box shown in Figure 69.

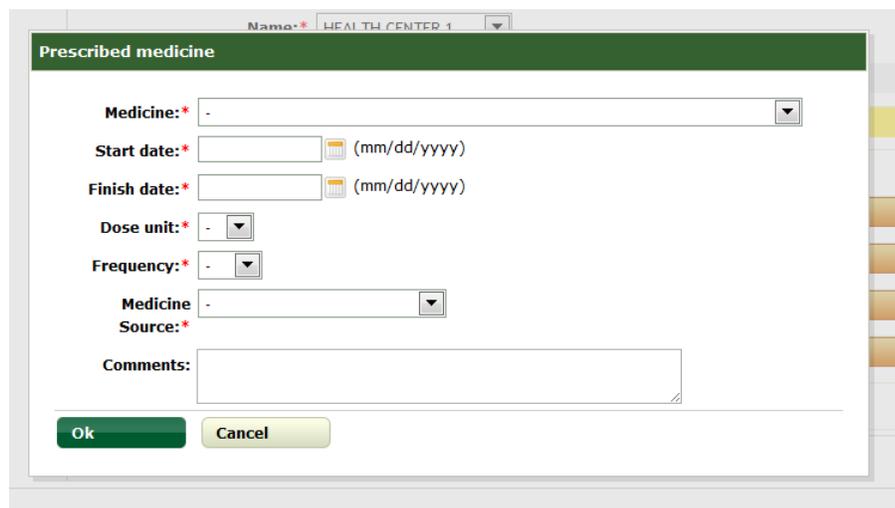


Figure 69

3. Select the **Medicine**, enter the **Start date** and **Finish date** of the treatment period, select the **Daily Dose** unit, **Frequency**, and the **Medicine Source** from the drop-down menus.
4. Optionally you may enter Comments about this prescription.
5. When done, click on the **OK** button, and the medicine will be included in the treatment panel, or click **CANCEL** to undo it.

How to Transfer a Case to Another TB Unit

Only cases on treatment need to follow this procedure.

1. To transfer a case to another TB unit, go to click on the **Options** link (red circle on Figure 63) and select **transfer to another health unit** (red rectangle on Figure 70).

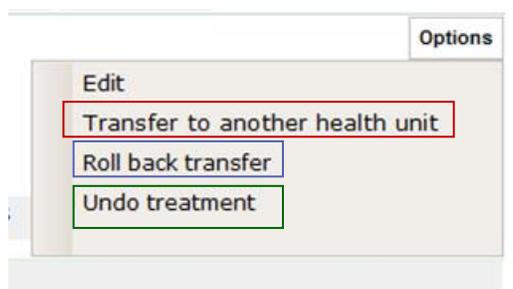


Figure 70

2. The ***Transfer to another health unit*** page will open (Figure 71).
3. Select the new **Province / Region**, and **name** of the TB unit and enter the **transfer date**.
4. Click the **SAVE** button to keep changes or **CANCEL** to undo them.

Transfer to another health unit

Mike Green
26672

On treatment

Treatment health units

Health Unit	Start date	Finish Date
HEALTH CENTER 1	Feb 14, 2012	Aug 13, 2013

Transferring information

Province / Region:*

Name:*

Transfer date:* (mm/dd/yyyy)

* Fields with this symbol beside are required fields

Figure 71

5. A new status, **Transferring to another unit**, appears (red rectangle on Figure 72).
6. To complete the transfer, when the patient starts treatment at the new unit, you must “transfer in” the patient.
7. To do this, click the **Register transfer in** link (circled in red on Figure 72).

Case details - DR-TB Case

Mike Green
26672

Transferring to another unit

Destination Unit: CENTRAL TB CLINIC

Validation Status:
Validated [Show details](#)

[Register transfer in](#)
[Roll back transfer](#)

- Case data
- Exams
- Treatment**
- Medical consultation
- Additional information
- Drugogram

Initial regimen: Category IV - 1

Current regimen: Individualized regimen

Period	Feb 14, 2012	18 Months	Aug 13, 2013
Treatment health units	HEALTH CENTER 1	CENTRAL TB CLINIC	
Regimen Phase	Intensive Phase (6 Months) Continuous Phase (12 Months)		
Am 1000mg Powder/Vial	1 (6/7)	1 (6/7)	

Figure 72

- On the **Register transfer in** page that appears enter the **date** that the patient transferred in to the new TB unit (Figure 73).
- Click the **SAVE** button to complete the transfer of the patient or **CANCEL** to undo it.

Register transfer in

Mike Green
26672

Transferring to another unit

Treatment health units

Health Unit	Start date	Finish Date
HEALTH CENTER 1	Feb 14, 2012	Jul 11, 2012

Transferring information

Destination Unit:  CENTRAL TB CLINIC

Date of transfer in:  (mm/dd/yyyy)

* Fields with this symbol beside are required fields

Save **Cancel**

Figure 73

To transfer a patient back to the TB unit that they were transferred from:

1. Click on the **Options** link (as shown in Figure 63) and select **Roll back transfer** (blue rectangle Figure 70).
2. In the *confirmation* box that appears (Figure 74), click the **OK** button to confirm the transfer, or **CANCEL** to undo it.

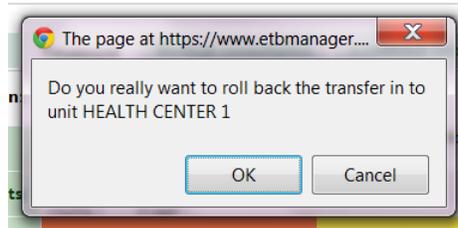


Figure 74

3. Clicking on the name of the treatment health unit displays a dialogue box (Figure 75) that gives the unit's **City, Province / Region**, and the patient's **total duration of treatment** at that center.
4. Click on the **Red X** to close the dialogue box.

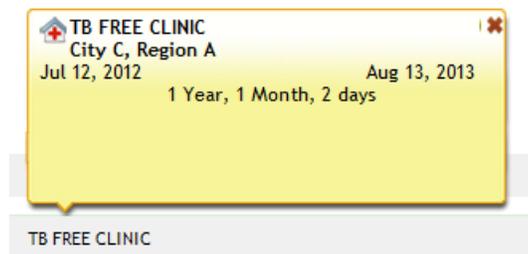


Figure 75

How to Delete a Treatment Regimen

To remove a treatment regimen:

1. Click on the **Options** link (as shown in Figure 63)
2. Click on **undo treatment** (green rectangle on Figure 70).
3. On the confirmation box that appears (Figure 76), click on the **OK** button to confirm and remove the treatment regimen, or **CANCEL** to undo it.



Figure 76

How to Register Medicine Dispensing

Only cases on treatment can register medicine dispensing. Follow this procedure:

1. At the *Case details* page, click the **Treatment** tab (red circle in Figure 77).
2. Click on the link for the **month** and **year** for which you want to register dispensing (blue circle in Figure 77).

Case details - DR-TB Case

Mike Green
26672

On treatment

Validation Status:
Validated [Show details](#)

- Case data
- Exams
- Treatment
- Medical consultation
- Additional information
- Drugogram

Options

Initial regimen: Category IV - 1

Current regimen: Individualized regimen

Period	Feb 14, 2012	18 Months	Aug 13, 2013
Treatment health units	HEALTH CENTER 1	TB FREE CLINIC	
Regimen Phase	Intensive Phase (6 Months)		Continuous Phase (12 Months)
Am 1000mg Powder/Vial	1 (6/7)	1 (6/7)	
Cs 250mg Tablet or Capsule	3 (7/7) 3 (7/7) 3 (7/7)		
Eto 250mg Tablets	3 (7/7) 3 (7/7) 3 (7/7)		
Lfx 500mg Tablet	2 (7/7) 2 (7/7) 2 (7/7)		
PAS 4000mg Granules/Packet	2 (7/7) 2 (7/7) 2 (7/7)		
Z 500mg Tablet	3 (7/7)	3 (7/7)	

Medicine intake during intensive phase

Month/Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Prescribed (days)	Administ. (days)	
Feb-2012																																	16	16
Mar-2012	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	31	31	
Apr-2012	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	30	30	
May-2012	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	31	31	
Jun-2012	o	o	o	o	o	o	o	o	o	o	o	o	o	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	30	12	

Figure 77

- In the *Register medicine intake* page that appears, mark the box or boxes according to daily medicine dispensing (Figure 78).
- Click the **SAVE** button to confirm, or **CANCEL** to undo it.

Register medicine intake



Mike Green
26672

On treatment

Start treatment date: Feb 14, 2012

Month/Year: Feb-2012

Select all

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		14 <input type="checkbox"/>	15 <input type="checkbox"/>	16 <input type="checkbox"/>	17 <input type="checkbox"/>	18 <input type="checkbox"/>
19 <input type="checkbox"/>	20 <input type="checkbox"/>	21 <input type="checkbox"/>	22 <input type="checkbox"/>	23 <input type="checkbox"/>	24 <input type="checkbox"/>	25 <input type="checkbox"/>
26 <input type="checkbox"/>	27 <input type="checkbox"/>	28 <input type="checkbox"/>	29 <input type="checkbox"/>			

Save Cancel

Figure 78

After dispensing, the system displays in the rows the **days for dispensing** (dark gray with x), **days administered** (green with circles) and, in the last columns, the number of **days prescribed** and number of **days administered** (Figure 79).

Medicine intake during intensive phase

Month/Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Prescribed (days)	Administ. (days)		
Feb-2012														o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o			16	16	
Mar-2012	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o		31	31
Apr-2012	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o		30	30
May-2012	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o		31	31
Jun-2012	o	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		30	1	
Jul-2012	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		31	0	
Aug-2012	x	x	x	x	x	x	x	x	x	x	x	x	x																				13	0	

Medicine intake during continuous phase

Month/Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Prescribed (days)	Administ. (days)	
Aug-2012														x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		18	0
Sep-2012	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		30	0
Oct-2012	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		31	0
Nov-2012	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		30	0
Dec-2012	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		31	0
Jan-2013	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		31	0
Feb-2013	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		28	0
Mar-2013	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		31	0
Apr-2013	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		30	0
May-2013	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		31	0
Jun-2013	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		30	0
Jul-2013	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		31	0
Aug-2013	x	x	x	x	x	x	x	x	x	x	x	x	x																				13	0

Comments

Figure 79

How to Change Medical Consultation Data

Follow this procedure to change the medical consultation data:

1. On the *Case details* page, click on the **Medical consultation** tab (red circle on Figure 80).

Case details - DR-TB Case

Mike Green
26672

On treatment

Validation Status:
Validated [Show details](#)

Case data Exams Treatment **Medical consultation** Additional information Drugogram

New

Mar 15, 2012 Edit Delete

Weight: 70.00Kg **Height:** 180.00cm

BMI: 21.6

Medical appointment: Scheduled

Is patient taking the prescribed medicines correctly?: **Reason:**

Figure 80

To add a new consultation:

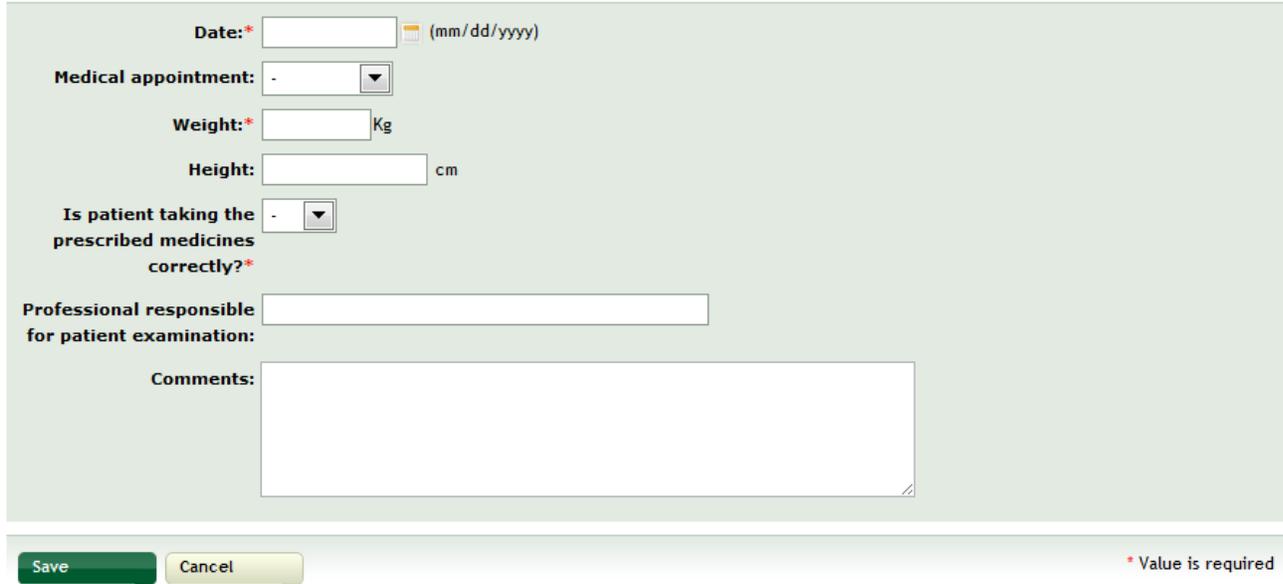
1. Click on the **New** button.
2. On the *New - Medical Consultation* page that appears (Figure 81), enter information about the consultation.

New - Medical consultation



 Mike Green
26672

On treatment



Date:* (mm/dd/yyyy)

Medical appointment: -

Weight:* Kg

Height: cm

Is patient taking the prescribed medicines correctly?* -

Professional responsible for patient examination:

Comments:

* Value is required

Figure 81

3. Click the **SAVE** button to confirm or **CANCEL** to undo it.

To **edit** a consultation already entered in the system:

1. Click on the **Edit** link to the far right of the date for the consultation you want to modify (blue rectangle on Figure 80).
2. Change the information registered in the appropriate field(s) on the **Medical Consultation** page that appears (Figure 82).
3. Click the **SAVE** button to confirm the changes or **CANCEL** to undo them.

Edit - Medical consultation



Mike Green
26672

On treatment

Date: * 02/14/2012 (mm/dd/yyyy)

Medical appointment: Scheduled

Weight: * 70 Kg

Height: cm

Is patient taking the prescribed medicines correctly? * No

Reason: Reason cannot be empty

Professional responsible for patient examination: Dr. Benjamin Shaffer

Comments:

Save Cancel * Value is required

Figure 82

To delete a consultation registered in the system:

1. Click on the **Delete** link to the far right of the date for the consultation you want to remove (green circle in Figure 80).
2. In the *confirmation box* that appears (Figure 83), click on the **OK** button to confirm or **CANCEL** to undo it.

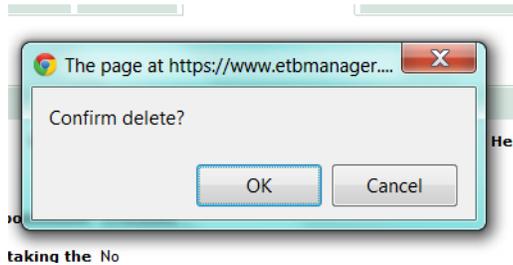


Figure 83

How to Change Additional Information Data

Follow this procedure to change the additional information data:

1. At the *Case details* page, click on the **Additional information** tab (red rectangle on **Figure 85**).

Comorbidities and Associated Factors

To **add** or **edit** Comorbidities and associated factors:

1. Click on the **Edit** button.
2. The *Comorbidities and associated factors* page that appears (Figure 84) displays a table with the name of the **comorbidity** or **associated factor**, its **duration**, and **comments** as well as the **possible source of infection**. The items that appear in the **Name** column of the table are set by the administrator of your TB unit.

Comorbidities and associated factors - DR-TB Case 

Mike Green On treatment
26672

Comorbidities and associated factors		
Name	Duration (months)	Comments
<input type="checkbox"/> Alcoholism		
<input type="checkbox"/> Cancer Disease		
<input checked="" type="checkbox"/> Detained/Imprisoned	1 ▾	<input type="text"/>
<input type="checkbox"/> HIV/AIDS		
<input type="checkbox"/> Mental disorders		
<input type="checkbox"/> Neurologic Disorders		
<input type="checkbox"/> Organ transplant		
<input type="checkbox"/> Other		
<input checked="" type="checkbox"/> Prolonged cortisone therapy	2 ▾	<input type="text"/>
<input type="checkbox"/> Test		
<input type="checkbox"/> Diabetes		

Possible Source of Infection: Patient name:

Figure 84

3. Click on the box beside the **name** of the item you want to add or edit.
4. Select the **duration** from the drop-down menu.

5. Enter a **comment** in the field provided if needed.
6. Click the **SAVE** button to confirm the changes or **CANCEL** to undo them.

To **remove** a Comorbidity or associated factor recorded for the case:

1. On the *Comorbidities and associated factors* page (Figure 84), click on the box beside name of the item to uncheck the box and remove the item from the case record.
2. Click the **SAVE** button to confirm the change or **CANCEL** to undo it.

Contacts Evaluation

To **add** Contacts Evaluations:

1. Click the **New** button to the right of **Contacts Evaluations** (circled in red on Figure 85).

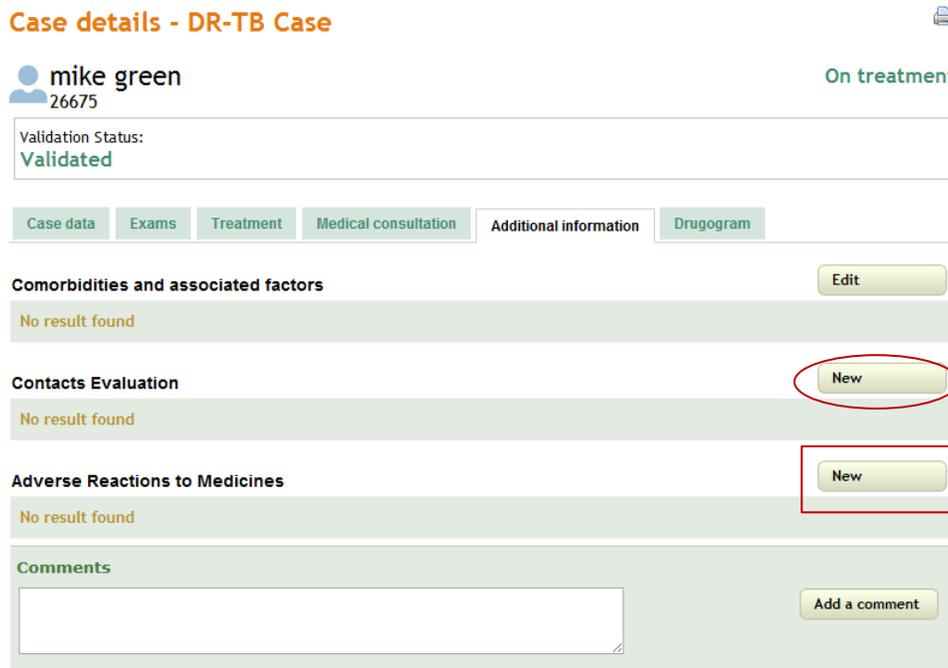


Figure 85

2. Enter new information in the fields provided on the *Contacts Evaluation* page that appears (Figure 86).

Contacts Evaluation 

 Mike Green On treatment
26672

Contact's name: *

Gender: -

Age:

Type of contact: Community

Examined: No

Action Plan: -

Evaluation Date: (mm/dd/yyyy)

Comments:

* Value is required

Figure 86

3. Click on the **Save** button to register the information, or **Cancel** to undo it.

To **edit** a Contacts evaluation:

1. Click on the **name** of the contact you need to edit (circled in red on Figure 87).

Contacts Evaluation

Kate Green	<input type="button" value="Delete"/>
Gender: Female	Age: 57
Type of contact: Household	Examined: No
Action Plan:	

Figure 87

2. On the *Contacts Evaluation* page that appears (as in **Figure 86**), revise the information as necessary.
3. Click on the **OK** button to confirm the change, or **Cancel** to undo it.

To **delete** a Contacts evaluation:

1. Click on the delete link to the far right of the name of the contact red rectangle on Figure 87).

2. In the **confirmation** box that appears (Figure 88), click on the **OK** button to delete the contact evaluation, or **Cancel** to undo it.

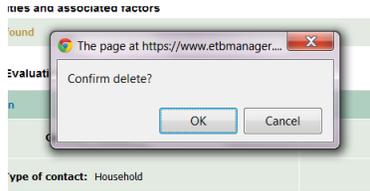


Figure 88

Adverse Reaction to Medicines

To **add** an Adverse Reaction to Medicines:

1. Click the **New** button to the right of Adverse Reactions to Medicines (red rectangle on Figure 85).
2. On the **Adverse Reactions to Medicines** page that appears (Figure 89), select the adverse reaction, the **Medicine generic name** that caused the reaction (can select two medicines) and the month of treatment when the reaction occurred.
3. You have the option to add comments in the **Comments** field.
4. Click on the **Save** button to register the information, or cancel to undo it.

Adverse Reactions to Medicines

A screenshot of the "Adverse Reactions to Medicines" form. At the top left, there is a user profile for "mike green" with ID "26675". At the top right, there is a "Print" icon and the text "On treatment". The form contains several fields: "Adverse Reaction:" with a dropdown menu showing "-"; "Medicine generic name:" with a dropdown menu showing "-"; another "Medicine generic name:" field with a dropdown menu showing "-"; "Month of treatment:*" with a dropdown menu showing "-"; and a "Comments:" text area. At the bottom of the form, there are two buttons: "Save" (green) and "Cancel" (yellow).

Figure 89

To **edit** an Adverse Reaction to Medicines:

1. Click on the **name** of the adverse reaction you need to edit (circled in red on Figure 90).

Adverse Reactions to Medicines		New
Adverse Reaction	Comments	
Dizziness Month of treatment: 1 Medicine generic name: Am Cfx		Delete

Figure 90

4. On the *Adverse Reactions to Medicines* page that appears (as in Figure 89), revise the information as necessary.
5. Click on the **OK** button to confirm the change, or **Cancel** to undo it.

To **delete** an Adverse reaction to Medicines recorded for a case:

1. Click on the delete link to the far right of the name of the adverse reaction (red rectangle on Figure 90).
2. In the *confirmation* box that appears (as in Figure 88), click on the **OK** button to delete the adverse reaction to medicine recorded, or **Cancel** to undo it.

Comments

You have the option to add general comments on the *Additional Information* page.

To **add** a comment:

1. Enter a comment in the **comments box** at the bottom of the page (Figure 91)

Comments
<input type="text"/>
Add a comment

Figure 91

2. Click on the **Add a comment button** next to the comments box. (Figure 91).
3. The comment will appear below the comments box indicating (Figure 92) the name of the person who entered the comment, and the time and date the comment was entered.



Figure 92

To **delete** a comment:

1. Click on the delete link under the comment you want deleted.

How to Read the Drugogram

Click on the **Drugogram** tab (red circle on **Figure 32**).

The system will display a table showing all susceptibility tests done during patient treatment, the treatment **Month** the sample was collected, the **Date** the sample was collected, the **Sample ID** (if applicable) and the respective test results (**Figure 93**). The table also shows **Microscopy** and **Culture** exam results.

This page is for information only, and no data can be entered or changed on this page.

Case details - DR-TB Case 

 Mike Green On treatment
26672

Validation Status: **Validated** [Show details](#)

Case data Exams Treatment Medical consultation Additional information **Drugogram**

Month	Date	Sample ID	Microscopy exam	Culture exam	R	H	Z	S	Am	Lfx	Eto	Cs	PAS
Before TB Diagnosis					R	H		S					
1													
2													
3													
4	May 15, 2012		++										
5													
6													

Figure 93

The medicines are listed in abbreviated form across the top of the table. They are selected and defined in the **Administration** tab under the **Medicine Generic Names** option.

The test results are shown in colored circles below the medicines, as follows:

- C (yellow): contaminated
- R (red) : resistant
- S (green): susceptible

Dark green boxes in the Drugogram represent medicines in the patient’s current regimen.

How to Delete Cases

To delete a case, follow this procedure:

1. Go to the **Case details** page for the case you want to delete.
2. Click on the **Delete Case** link (highlighted with a red rectangle on Figure 94) to exclude a specific case from the database.
3. In the dialogue box that appears, click the **OK** button to confirm or **CANCEL** to undo it.

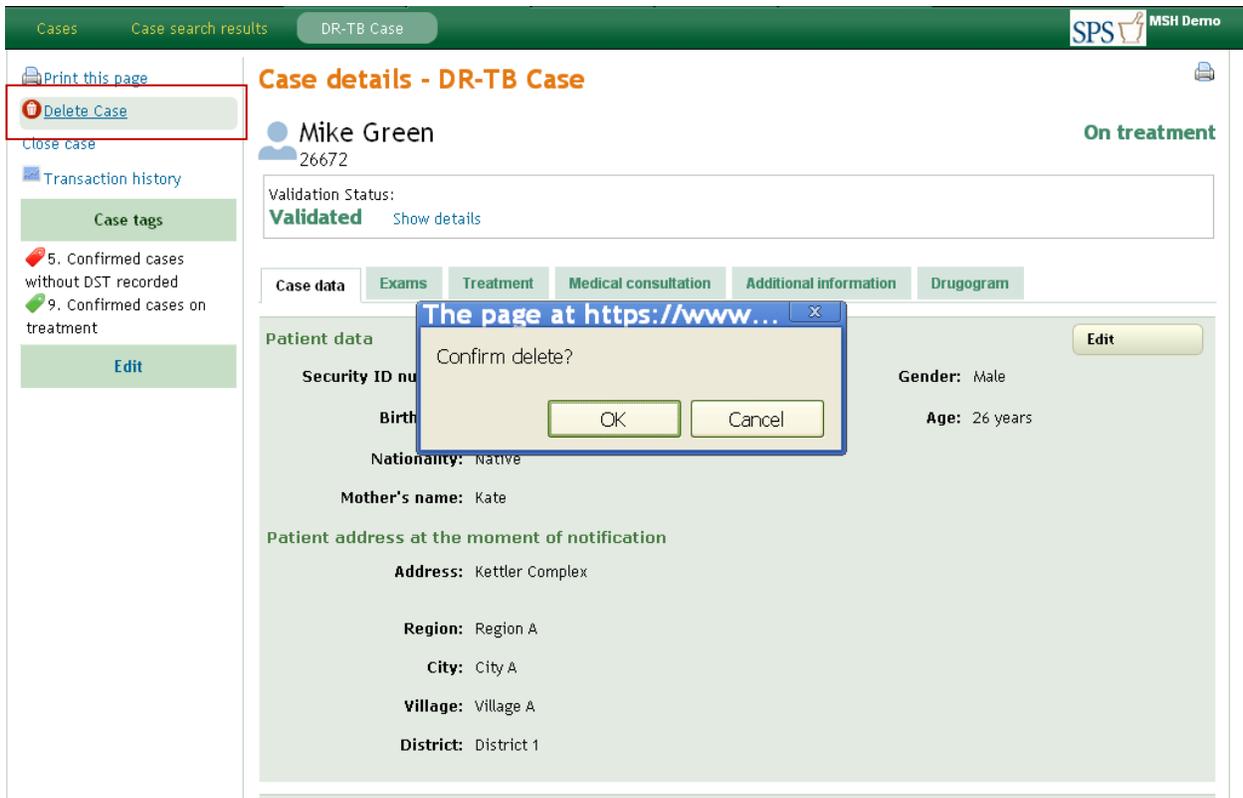


Figure 94

How to Close Notified Cases

To close a notified case, follow this procedure:

1. Go to the *Case Details* page (Figure 95) for the case you want to close.
2. Click on the **Close case** link (highlighted with a red rectangle on **Figure 95**).

The screenshot shows the 'Case details - DR-TB Case' page for a patient named Mike Green (ID: 26672). The page is titled 'Case details - DR-TB Case' and has a status of 'On treatment'. The validation status is 'Validated'. The page is divided into several sections: 'Case data', 'Exams', 'Treatment', 'Medical consultation', 'Additional information', and 'Drugogram'. The 'Patient data' section includes fields for Security ID number, Birth date (Oct 12, 1985), Nationality (Native), Mother's name (Kate), Gender (Male), and Age (26 years). There is an 'Edit' button next to the patient data. On the left sidebar, there are links for 'Print this page', 'Delete Case', 'Close case' (highlighted with a red rectangle), and 'Transaction history'. Below these links are 'Case tags' and a summary of confirmed cases: 5 confirmed cases without DST recorded and 9 confirmed cases on treatment. An 'Edit' button is also present at the bottom of the sidebar.

Figure 95

3. On the *Close case* page displayed (Figure 96), enter the **date** the case was closed. A closed case will only be recorded as “treated” in the system if the patient received at least 30 days of treatment.
4. Click on the button beside the **outcome** or situation observed (Figure 96).
5. Click the **OK** button to confirm closing the case, or **CANCEL** to undo it (Figure 96).

Close case 

 **Mike Green** **On treatment**
26672

Outcome date: *  (mm/dd/yyyy)

Outcome: *

- Cured
- Defaulted
- Died
- Failed
- Treatment completed
- Transferred out
- Diagnosis changed
- Other

Figure 96

How to Notify a New Suspect Case

To record data into the system on a patient who has not been confirmed to have TB or DR-TB, follow this procedure:

1. Go to the *Cases* main page and click on the **New Suspect** button (circled in red on Figure 97).

New case 

New suspect

Cases

Patient:

On-going cases
 TB Case DR-TB Case NTM Case

Region A					
Health Unit	Cases notified	On treatment	Transferred in	Transferred out	
 HEALTH CENTER 1	111	65	-	4	Treatment progress
 NATIONAL WAREHOUSE	1	-	-	-	Treatment progress
 UNIVERSITY HOSPITAL	7	-	-	-	Treatment progress

Region B					
Health Unit	Cases notified	On treatment	Transferred in	Transferred out	
 HEALTH CENTER 6	73	61	1	-	Treatment progress

Registered cases

Confirmed Not on Treatment	51
Suspect not on treatment	13
Suspect On treatment	5
Confirmed On Treatment	121
Transferring to another unit	4
Closed	1,999
Total	2,193

Validation Status

Waiting validation	43
Pending answered	1
Pending	1

Figure 97

2. In the *New Suspect* box that appears (**Figure 98**) select the appropriate classification of the case based on bacteriological results and previous TB treatments, or click the **CANCEL** button to undo it.

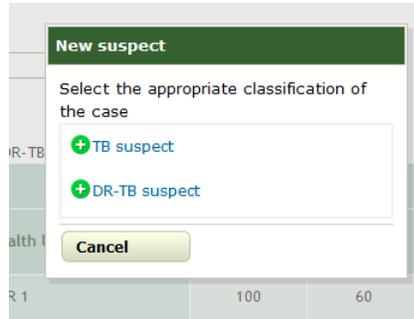


Figure 98

Before recording a new suspect, you must check whether the patient is already recorded in the system.

3. Enter the patient's name and birth date, on the *New-TB suspect* page that appears (**Figure 99**)
4. Click on the **SEARCH** button. Using both pieces of information, the system will search for the suspect in the database.
5. Click **CANCEL** to return to the previous page.

New - TB suspect



Search for TB suspect to be notified

Suspect Name: Middle name Last name

Birth date: (mm/dd/yyyy)

Figure 99

6. If either or both pieces of information (name and birth date) are already recorded in the database, the system will show all like patients (see Figure 100).

New - TB suspect



Search for TB suspect to be notified

Suspect Name: Middle name Last name

Birth date: (mm/dd/yyyy)

Resulting: 1 - 27 Of 27

Patient name	Birth date	Security ID number	Latest case
Patrick Agnaudo 20002	Jun 15, 1942		TB Case Case finished in Set-2005 Died
Patrick Dafne 26255	Jan 08, 1938		TB Case On treatment since Jul-2009
Patrick Dianno 23125	Sep 16, 1975		TB Case Case finished in Nov-2006 Treatment completed

Figure 100

- If you want to record a new patient, click the **New TB suspect** button (red circle on Figure 100).
- On the *New Notification* page that displays (**Figure 101**), record data on a patient who is not confirmed of having TB or DR-TB in the fields provided. The name and birth date (optional) are shown, and you can complete other information regarding the case.
- Click on the **SAVE** button to generate a new suspect case, or **CANCEL** to undo it.

New notification - TB suspect



Patient data

Suspect Name: * Patrick Middle name Starfish

Security ID number:

Birth date: 12/21/1993 (mm/dd/yyyy)

Mother's name:

Nationality: Native

Gender: * Male

Age: *

Patient address at the moment of notification

Address: * Bikini Bottom

Province / Region: * Region A

City: City A

Village: Village A

District: District 1

Zip code:

Current address is different from the notification address?: No

Phone number:

Mobile number:

Case data

Notification health unit

Province / Region: * Region A

Name: * UNIVERSITY HOSPITAL

Registration date: * 05/15/2012 (mm/dd/yyyy)

* Value is required

Figure 101

CHAPTER 5. MEDICINES MODULE

The **Medicines** module allows you to record, search, follow, and authorize the receiving, ordering, transferring, dispensing, movements, and stock positions of medicines.

Elements of the Medicines Module

Each of the elements below takes place during management of first- and second-line TB medicines:

- **Receiving from manufacturer**—Registers medicine received from sources (such as GDF or MoH)
- **Medicine orders** - Registers regular medicine distribution from one TB unit to another where the order is based on the number of patients, treatment regimens, and the quantity consumed
- **Medicine transfer** - Registers medicine transfers from one TB unit to another. A transfer differs from an order in that the transfer is not tied to the number of patients or the quantity necessary for the TB unit. A transfer simply registers a medicine transaction between two units.
- **Medicine Dispensing** - Records medicine dispensing to patients
- **Reports**
 - **Medicine movements** - Generates a report of medicine transactions into and out of a specific TB unit occurring during a certain period
 - **Estimated stock position** - Generates a report of the current, estimated stock position at the time the report is generated, after subtracting quantities consumed by patients currently under treatment
 - **Stock evolution** - Generates a report of the current, estimated stock quantities showing quantities received minus quantities issued for each medicine during a selected period for a particular TB unit. These elements can be reported by medicine source or for all sources.
- **Other Options**

How to Access the Medicines Module

To access the Medicines module follow this procedure:

1. Click on the **Medicines** tab on the system's main page (circled in red on Figure 102) or the *Medicines* link (red rectangle on Figure 102), on the system's main page.

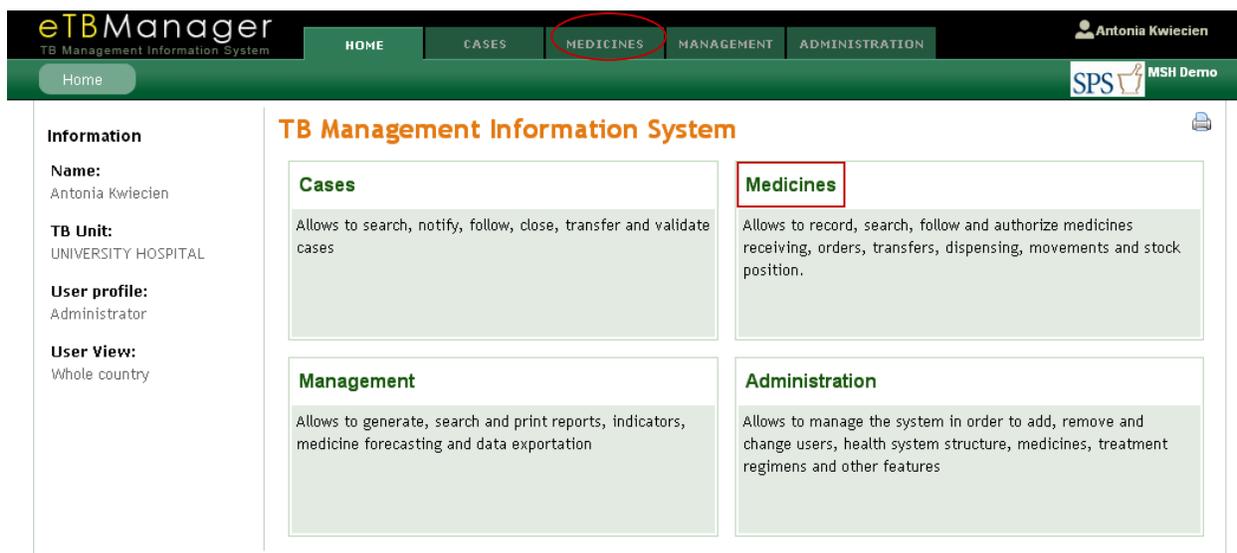


Figure 102

2. TB unit's *Inventory* page will be displayed (Figure 103) as the Medicines module *main* page.

Inventory

UNIVERSITY HOSPITAL
District 1 - Village A

Select another unit

Medicine orders

- + New medicine order
- View Orders Pending
- Order history

Medicine transfer

- + New Medicine Transfer
- View Transfers Pending
- Transfer history

Medicine dispensing

- + New Medicine Dispensing
- Dispensing history

Reports

- Medicine movements
- Estimated stock position
- Stock Transaction

Other options

- + Remove unit from medicine management

DON (Donors) [Adjust stock quantity](#)

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Date last medicine dispensing entered
+ amikacin 1000mg (Powder/Vial)	Oct 10, 2013	2,000			Feb 16, 2012
+ Capreomycin 1000mg (Powder/Vial)	Sep 09, 2015	10,000			Feb 16, 2012
+ Cycloserine 250mg (Tablet or Capsule)	Nov 11, 2015	50,000			Feb 16, 2012

GLC (Green Light Committee) [Adjust stock quantity](#)

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Date last medicine dispensing entered
+ Cycloserine 250mg (Tablet or Capsule)	Dec 12, 2016	10,000			Feb 16, 2012

Figure 103

The options shown in the left menu bar (red rectangle in Figure 103) are related to the TB unit displayed (blue rectangle in Figure 103). These options appear according to the TB units' configuration previously registered in the system's **Administration** module (see chapter 7). When working in the **Medicines** module, you will always be working with a TB unit. Initially, the TB unit selected is the one assigned to you based on your user login, but at any time you can select another unit.

The main page of the medicines module displays the **inventory**, including the **expiry date** of the next batch to expire, **available quantity**, **average monthly consumption (AMC)** for the last six month period, **estimated stock on hand**, and **last time the a stock movement for the medicine was entered** in the system. Clicking the **plus button** at the left side of each medicine (circled in red on Figure 103) displays all the batches of that medicine (circled in red on Figure 104). A  in the **Next batch to expire** column means that there are expired batched for that item.

Inventory



UNIVERSITY HOSPITAL
District 1 - Village A

Select another unit

DON (Donors)

Adjust stock quantity

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Date last medicine dispensing entered
+ amikacin 1000mg (Powder/Vial)	Oct 10, 2013	2,000			Feb 16, 2012
- Capreomycin 1000mg (Powder/Vial)	Sep 30, 2014	15,000			Mar 06, 2012
1228 Pfizer	Sep 30, 2014	5,000			
R234070 Pfizer	Sep 09, 2015	10,000			
+ Cycloserine 250mg (Tablet or Capsule)	Nov 11, 2015	50,000			Feb 16, 2012

GLC (Green Light Committee)

Adjust stock quantity

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Date last medicine dispensing entered
+ Cycloserine 250mg (Tablet or Capsule)	Dec 12, 2016	10,000			Feb 16, 2012

Figure 104

How to Change the TB Unit Displayed

Follow this procedure to change the TB unit:

1. Click on the **Select another unit** link (green rectangle in Figure 103).
2. The *Select another unit* box containing the list of available units is displayed (Figure 105). Choose a unit from the list by clicking on its name.
3. Click on the **Cancel** button if you need to undo the operation.

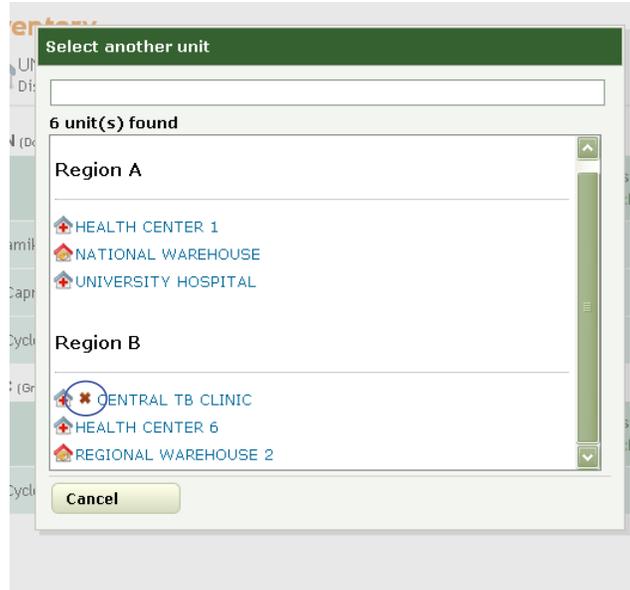


Figure 105

Medicine Management Initialization

The two primary purposes of the **Medicines** module are:

- (a) To **register transactions** (e.g., orders, transfers, and dispensing) of medicines handled in a TB unit
- (b) To **generate reports** about those transactions.

Before starting this tracking, you must **initialize the TB unit** in the **Medicines** module (i.e., tell e-TB Manager the quantity of medicines that the TB unit is storing at the moment the stock management information is entered in the system).

To start the medicine management of a TB unit:

1. Click on the **Medicines** module, and select the **TB unit** with which you want to work.

Notice that TB units that haven't started medicines management yet are displayed with the ***** icon to the left of their names (circled in blue on Figure 99). Until medicine management has been initialized for the unit, all commands are disabled, and a warning message is displayed below the unit data (red rectangle on Figure 106).



Figure 106

2. Click the **Start medicine management** button (bottom of Figure 106).
3. The system will display the *Start medicine management* page containing a form to enter the quantity of each medicine stored in the TB unit (Figure 107).

Start medicine management

Starting date of medicine management: * (mm/ dd/yyyy)

Provide the amount of each medicine batch on the start date

Donors						
Medicine	Expiration date	Number of boxes	Available quantity	Unit price	Total price	Action
Amikacin 1000mg (Powder/Vial)			0		0.00	New batch
Capreomycin 1000mg (Powder/Vial)			0		0.00	New batch
Cycloserine 250mg (Tablet or Capsule)			0		0.00	New batch
Ethambutol 400mg (Tablet)			0		0.00	New batch
Ethambutol 400mg28 (tabs)			0		0.00	New batch
Ethionamide 250mg (Tablets)			0		0.00	New batch

* Value is required

Figure 107

4. Enter the **Starting date of medicine management**.

The field **Starting date of medicine management** tells the system when the medicine inventory was done. It may be either a present date or a past date (depending on whether the inventory was done in the current day or if it is older information). This date also tells the system the starting date of the medicine control, meaning that the system won't accept medicine transactions (i.e., orders, transfers, dispensing) before this date.

The e-TB Manager controls medicine transactions by source of medicines (e.g., GDF, GLC) and batches, so for every medicine in the inventory, you must enter the batches, the source of the medicine, and the quantity available for this batch.

To register a new batch, under the appropriate source of medicine:

1. Click on the **New batch** link in the action column to the right of the medicine name.
2. The **New Batch** box displayed in Figure 108 will appear.

The screenshot shows a software interface for managing medicine batches. A dialog box titled "Edit - Batch" is open, displaying a form for entering batch details for "Amikacin 1000mg (Powder/Vial)". The form includes fields for "Batch number", "Expiration date", "Manufacturer", "Available quantity", "Quantity per box", "Unit price", and "Total price". Fields marked with a red asterisk (*) are required. The "Expiration date" field has a calendar icon and the format "(mm/dd/yyyy)". The "Available quantity" and "Quantity per box" fields have "(Powder/Vial)" next to them. At the bottom of the dialog, there is a red asterisk indicating "* Value is required" and two buttons: "Ok" and "Cancel".

Figure 108

3. Enter the batch information in the fields provided. Fields marked with a red asterisk are required fields.
4. Click the **OK** button to save the information, or click **Cancel** to undo it.
5. After you have registered all batches of the medicines available in the TB unit selected, go to the bottom of the page and click on the **OK** button or **Cancel** to undo it.
6. The TB unit shows as initialized in the medicines module, as displayed in **Figure 109**.

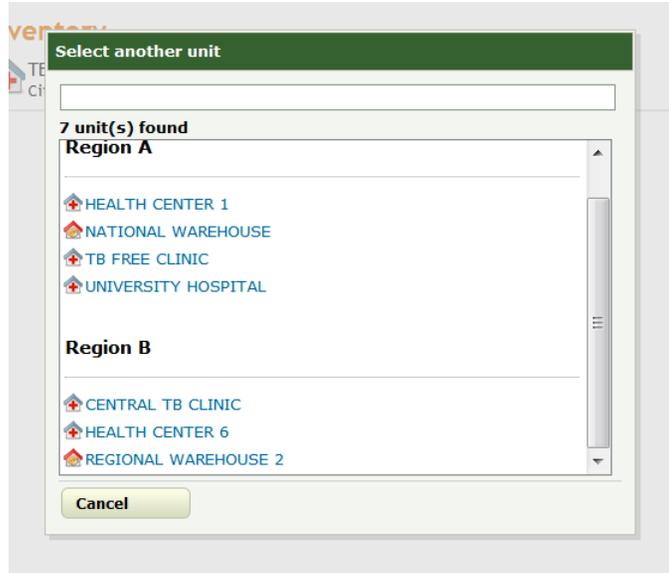


Figure 109

- Once a batch is entered, you may edit the data entered or remove a batch wrongly entered by using the **Edit** and **Delete** links located in the **Action column** for that batch (Figure 110).

Start medicine management



TB FREE CLINIC
City C - Region A

Starting date of medicine management: (mm/dd/yyyy)

Provide the amount of each medicine batch on the start date

Donors						
Medicine	Expiration date	Number of boxes	Available quantity	Unit price	Total price	Action
Amikacin 1000mg (Powder/Vial)			5,000	4.0000	1,250.00	New batch
8675309 Big Pharma	Mar 31, 2013	500 (10)	5,000	0.2500	1,250.00	Edit Delete
Capreomycin 1000mg (Powder/Vial)			0		0.00	New batch
Cycloserine 250mg (Tablet or Capsule)			0		0.00	New batch

Figure 110

8. If you later need to stop managing medicine for this unit, on the left menu bar of the **Inventory** page click on the **Remove unit from medicine management link** (red rectangle on **Figure 111**).

Inventory Select another unit

TB FREE CLINIC
City C - Region A

Medicine orders
 + New medicine order
 View Orders Pending
 Order history

Medicine transfer
 + New Medicine Transfer
 View Transfers Pending
 Transfer history

Medicine dispensing
 + New Medicine Dispensing
 Dispensing history

Reports
 Medicine movements
 Estimated stock position
 Stock Transaction

Other options
+ Remove unit from medicine management

DON (Donors) Adjust stock quantity

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Last movement
+ Amikacin 1000mg (Powder/Vial)	Mar 31, 2013	5,000			Jul 04, 2012

Figure 111

9. A **confirmation** box will appear (Figure 112). Click on the **OK** button to confirm that this is what you want to do or on **Cancel** to undo it.

Inventory Select another unit

CENTRAL TB CLINIC
City D - Region B

GLC (Green Light Committee) Adjust stock quantity

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Date last medicine dispensing entered
+ Capreomycin 1000					May 01, 2012

The page at https://www... x

Confirm removing the TB unit from the medicine management? All information related to medicine management will be erased.

Figure 112

How to Adjust Inventory Quantity

After you have registered all batches of the medicines available in the TB unit and initialized medicine management, you may need to make adjustments to reconcile the actual inventory in stock with the inventory records in the system. The user is able to **add new medicines** (and related batches) to the unit's stock, **adjust the quantity of stock** entered in the system, or **delete batches**.

1. To **add** medicine stock that was not entered in the system when the TB unit started medicine management, click on the **Adjust stock quantity** link (located to the far right of the source's name - circled in red on **Figure 113**).

Inventory Print

UNIVERSITY HOSPITAL
District 1 - Village A Select another unit

DON (Donors) Adjust stock quantity

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Date last medicine dispensing entered
amikacin 1000mg (Powder/Vial)	Oct 10, 2013	2,000			Feb 16, 2012
Capreomycin 1000mg (Powder/Vial)	Sep 30, 2014	13,500			Jun 04, 2012
Cycloserine 250mg (Tablet or Capsule)	Nov 11, 2015	50,000			Feb 16, 2012

GLC (Green Light Committee) Adjust stock quantity

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Date last medicine dispensing entered
Cycloserine 250mg (Tablet or Capsule)	Dec 12, 2016	10,000			Feb 16, 2012

Figure 113

2. The system will display the *Adjust stock quantity* page (**Figure 114**).
3. Click on the **New Batch** button (red rectangle on Figure 114).

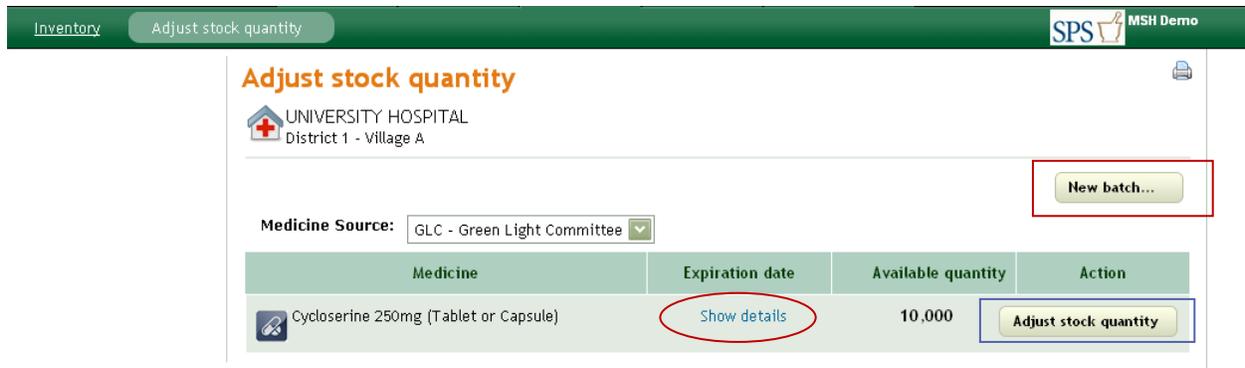


Figure 114

4. In the *New batch* page that appears (**Error! Reference source not found.**) enter the information required.

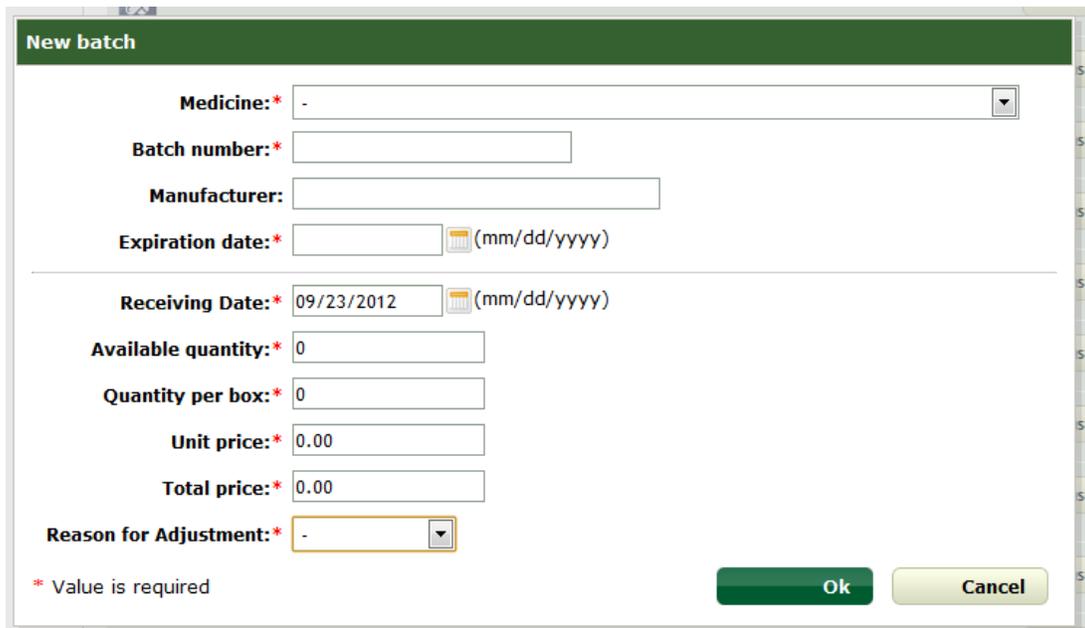


Figure 115

5. Click on the **OK** button to confirm or **Cancel** to undo it.
6. To **change** the amount of stock already entered in the system, click on the **Adjust stock quantity** button for the medicine's stock quantity you want to change located in the action column on the right hand side of the page (blue rectangle on Figure 114).
7. In the *Select batches* page that appears (
8. Figure 116**Error! Reference source not found.**) select the batch that needs the quantity adjusted and enter the revised quantity in the field under the **New quantity** column.

Select batches

Cycloserine 250mg (Tablet or Capsule)
Global Drug Facility

Reason for Adjustment: * - [v]

<input type="checkbox"/>	Batch	Expiration date	Unit price	Quantity	New quantity
<input type="checkbox"/>	53752 Lab Test	Jun 01, 2011	1.7458	50,000	Expired batch
<input checked="" type="checkbox"/>	19588 WWW Laboratories	Jan 01, 2013	0.5076	10,000	10000
<input checked="" type="checkbox"/>	70303 Lab Test	Jun 01, 2013	1.0588	50,000	50000

Ok Cancel

Figure 116

Quantities can only be changed if the medicine has not expired. The user must select the reason for adjustment from the drop-down menu before the change will be accepted by the system (red rectangle on

9. Figure 116).

10. If **Other** is selected, you must specify the reason in the field that appears (red rectangle on Figure 117).

Select batches

 **Cycloserine 250mg (Tablet or Capsule)**
Global Drug Facility

Reason for

Adjustment:*

<input type="checkbox"/>	Batch	Expiration date	Unit price	Quantity	New quantity
<input type="checkbox"/>	 53752 Lab Test	Jun 01, 2011	1.7458	50,000	Expired batch
<input checked="" type="checkbox"/>	 19588 WWW Laboratories	Jan 01, 2013	0.5076	10,000	<input type="text" value="10000"/>
<input checked="" type="checkbox"/>	 70303 Lab Test	Jun 01, 2013	1.0588	50,000	<input type="text" value="50000"/>

Figure 117

11. Click **OK** to accept the change or **Cancel** to undo it.
12. To display batches and expiration dates of a particular medicine, click on **Show details** for the medicine you want (circled in red on Figure 114). **Error! Reference source not found.** shows information displayed and the show details link changed to a **Hide details** link.

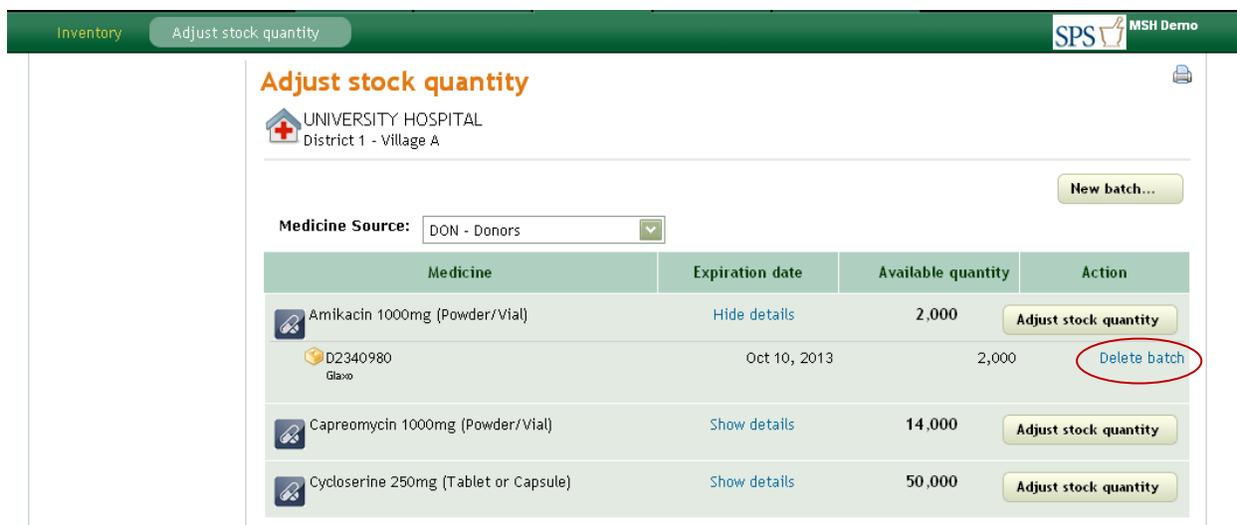


Figure 118

- To **delete** a batch of a particular medicine, click the **Show details** link for the medicine you want.
- You can only delete batches if they are no longer physically present in the TB unit. Click on the **Delete batch** link in the action column to the far right of the batch you want to delete (red circle on **Error! Reference source not found.**).

In the *Delete batch* box that appears (

- Figure 119**), enter the **Date of disposal** and **Reason for adjustment**. These are required fields.
- Click on **OK** to accept change or **Cancel** to undo it.



Figure 119

Medicine Orders

A medicine order is a regular distribution of medicines sent from one TB unit to another. The relationship between the two units is strong: one unit plays the role of medicine supplier, and the other unit places new orders to its supplier. An order is considered to occur on a regular basis (e.g., quarterly) and is based on the number of patients enrolled by the unit (directly or indirectly) and the regimen prescribed for each one. This relationship between supplier and receiver is set in the TB unit menu of the **Administration** module.

The workflow of a medicine order is composed of four steps (shown in Figure 120)

- **Waiting for authorization** — The order has been placed by the unit that needs medicines, but before the order advances to the unit supplier, it must be authorized by another unit responsible for this task (usually the NTP). This step has been programmed into the system, but it may be changed in the **Administration** module.
- **Waiting for shipment** — The order was approved and forwarded to the supplier unit. The supplier unit will package the medicines and deliver the order quantities to the destination unit.
- **Shipped** — The order was filled by the supplier and is on its way to the destination unit.
- **Received** — The order has arrived at the destination unit. This step is the final one of the order.

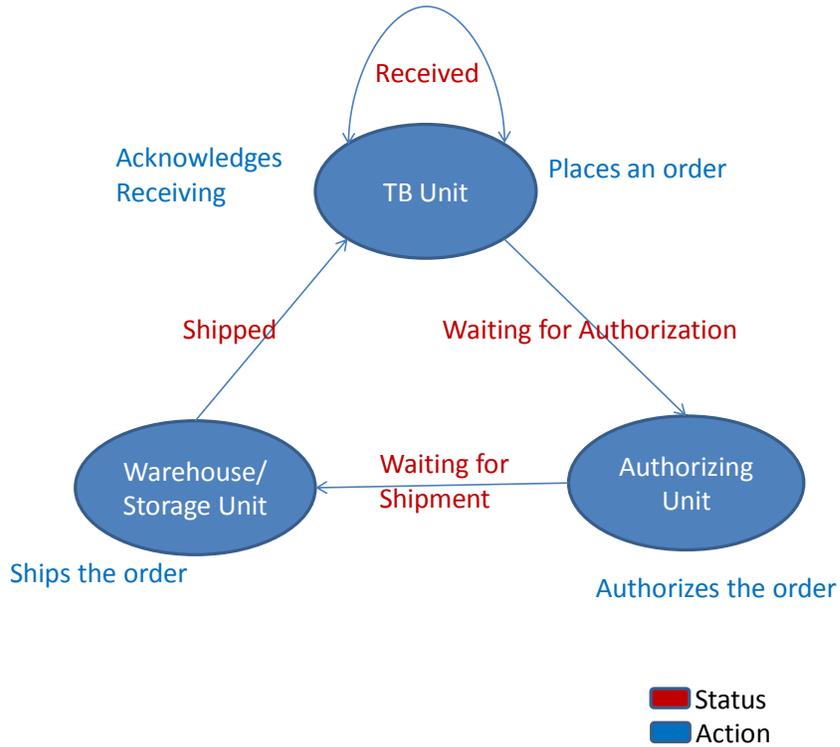


Figure 120

How to Create New Medicine Orders

Click on the **New Medicine order** link at the left menu bar on the main page of the **Medicines** module (*Inventory* page - refer back to red rectangle in Figure 103).

On the **New Medicine Order** page that displays, all sources of medicines (for example, MoH or GDF) linked to that particular TB unit will display (Figure 121).

New medicine order



TB FREE CLINIC
City C - Region A

1. MEDICINE SELECTION 2. SHIPPING ADDRESS 3. CONFIRM ORDER

To: NATIONAL WAREHOUSE
City A - Region A

Number of days for medicine consumption estimation: 120

Comments:

GLC (Green Light Committee)

Add medicine...

Item	Available in stock	Cases	Estimated Quantity	Requested Quantity
Cycloserine 250mg (Tablet or Capsule)	360	1	360	<input type="text" value="0"/>
Ofloxacin 400mg (Tablets)	51	1	54	<input type="text" value="3"/>
P-Aminosalicylic Acid 4000mg (Granules/Package)	0	1	240	<input type="text" value="240"/>
Amikacin 1000mg (Powder/Vial)	102	1	69	<input type="text" value="0"/>

Figure 121

The destination and number of days for the consumption estimation are shown. These units were previously defined during configuration of the TB unit in the system's Administration module. The **Estimated Quantity** shown is based on the number of patients under treatment and the treatment regimens in use.

Specifically, the estimated quantity (also known as estimated consumption) is based on the "number of days for the estimation of consumption" (which is defined in the administration module per TB unit) and the cases under treatment from the present date until the end of estimation period (present date + number of days of estimation). For example, if you place a new order for the next 90 days (3 months), the system will get all cases under treatment from today through the next 3 months and will estimate the quantity necessary for each medicine prescribed to each one of the patients.

You may enter the **Requested Quantity** on this page. The quantity shown by the system is the difference between what is available now in stock minus the estimated consumption. It is possible to change the value calculated by the system.

If you need to add a medicine to order from a specific source, follow these procedures:

1. At the **Medicine Selection** tab of the *New medicine order* page, click the **Add medicine** button to the right of the source for each medicine source displayed (circled in red on Figure 121).

2. In **Add Medicines** box that appears, select the specific medicines you want to add by clicking the **box** next to the medicine name (**Figure 122**).
3. Click the **OK** button to confirm or **Cancel** to undo it.

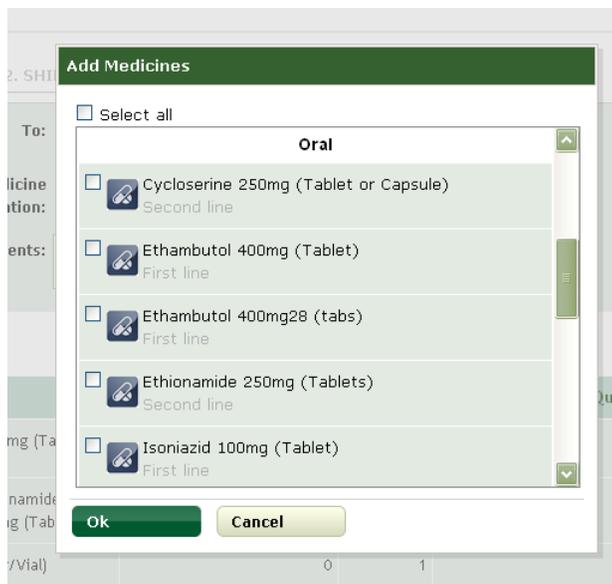


Figure 122

4. On the new row(s) of the **Medicine Selection** page that appears (red rectangle on Figure 123) enter the **Requested Quantity** in the corresponding field.

New medicine order



TB FREE CLINIC
City C - Region A

1. MEDICINE SELECTION 2. SHIPPING ADDRESS 3. CONFIRM ORDER

To: NATIONAL WAREHOUSE
City A - Region A

Number of days for medicine consumption estimation: 120

Comments:

GLC (Green Light Committee)

Add medicine...

Item	Available in stock	Cases	Estimated Quantity	Requested Quantity
Cycloserine 250mg (Tablet or Capsule)	360	1	360	<input type="text" value="0"/>
Ofloxacin 400mg (Tablets)	51	1	54	<input type="text" value="3"/>
P-Aminosalicylic Acid 4000mg (Granules/Package)	0	1	240	<input type="text" value="240"/>
Amikacin 1000mg (Powder/Vial)	102	1	69	<input type="text" value="0"/>

Figure 123

5. Click on the **Next** button to confirm the requested quantity, or click **Cancel** to undo it.
6. On the *Shipping Address* page that appears (Figure 124) you must complete all the fields with a **red star** before you can be allowed to the Confirm Order page.

New medicine order



TB FREE CLINIC
City C - Region A

1. MEDICINE SELECTION

2. SHIPPING ADDRESS

3. CONFIRM ORDER

To: NATIONAL WAREHOUSE
City A - Region A

receipt institution:*

Contact name:*
(Name of the person responsible for receiving the medicines)

Contact phone:

Shipping address

Shipping address:*

Address (cont.):

ZIP:

Region / Province:*

Figure 124

7. Once all the information is entered, click on the **Next** button to go to the **Confirm Order** page or click **Cancel** to undo it.
8. To return to the previous page, click on the **Return** button (Figure 124).
9. On the **Confirm Order** page (Figure 125) verify that order information is correct.

New medicine order



 TB FREE CLINIC
City C - Region A

1. MEDICINE SELECTION

2. SHIPPING ADDRESS

3. CONFIRM ORDER

To:  NATIONAL WAREHOUSE
City A - Region A

Number of days for medicine consumption estimation: 120

receipt institution: TB FREE CLINIC

Contact name: Utkarsh
☎ 555-1212

Shipping address: 123 Main St.
22203
Central Province Health Office

GLC (Green Light Committee)

Item	Available in stock	Cases	Estimated Quantity	Requested Quantity
Ofloxacin 400mg (Tablets)	51	1	54	3
P-Aminosalicylic Acid 4000mg (Granules/Package)	0	1	240	240

Return

Place order

Cancel

Figure 125

10. If you would like to make any changes, click on the **Return** button to go back to previous page.
11. If all the information is correct, click on the **Place order** button to complete the order or **Cancel** to undo it.
12. Once the order is placed, the *Medicine Order* page that displays will show that the order has been categorized as “**Waiting for Authorization.**” The **medicine order number** is also displayed along with **shipping details, contact information, source of medicine ordered, medicine name and quantity** (Figure 126).
13. The **Items** tab (circled in red **Figure 126**) shows the medicines ordered. For each medicine, the *Medicine Order* page displays **stock position, number of cases on treatment, estimated quantity** needed and the actual **requested quantity**. This can help the user identify if the TB unit ordered too much or too little of a medicine based on the estimated quantity needed for the total cases at the facility.

Inventory Open orders #942178 SPS MSH Demo

Delete order
Cancel order
Print order
Print patient list

Medicine Order # 942178

Waiting for authorization
Before shipping, this order must be authorized by the following unit
NATIONAL WAREHOUSE
City A - Region A

From: UNIVERSITY HOSPITAL
District 1 - Village A
Order created in **Jun 22, 2012**
Antonia Kwiecien

To: REGIONAL WAREHOUSE 2
District 7 - Village E

Number of days for medicine 120
consumption estimation:

Contact name: Melissa Hunter

Shipping address: UNIVERSITY HOSPITAL
123 Main St.
Zip code: 22903
District 1, Region A, City A, Village A

Items Cases on order

GLC (Green Light Committee)

Medicine	Stock position	Cases	Estimated Quantity	Requested Quantity
Capreomycin 1000mg (Powder/Vial)		1	72	72
Ethionamide 250mg (Tablets)		1	360	360
Levofloxacin 500mg (Tablet)		1	240	240
P-Aminosalicylic Acid 4000mg (Granules/Package)		1	240	240
Pyrazinamide 500mg (Tablet)		1	306	306

Figure 126

- Click on the second tab **Cases on order** (circled in blue on Figure 127) to show the total number of **cases** at the TB unit and the **estimated quantity** of each medicine required for the period of order. It also shows a list of the patients on each medicine.
- You can click on the **patient number** link (red circle on Figure 127) to see the case details for each patient as shown in Figure 128.

Medicine Order # 942178



Waiting for authorization

Before shipping, this order must be authorized by the following unit

NATIONAL WAREHOUSE
City A - Region A

<p>From: UNIVERSITY HOSPITAL District 1 - Village A Order created in Jun 22, 2012 Antonia Kwiecien</p>	<p>To: REGIONAL WAREHOUSE 2 District 7 - Village E</p>
--	--

Number of days for medicine consumption estimation: 120

Contact name: Melissa Hunter

Shipping address: UNIVERSITY HOSPITAL
 123 Main St.
 Zip code: 22903
 District 1, Region A, City A, Village A

Items **Cases on order**

GLC (Green Light Committee)

Medicine	Cases	Estimated Quantity
Capreomycin 1000mg (Powder/Vial)	1	72
26670 Rick Saddler		72
Ethionamide 250mg (Tablets)	1	360
26670 Rick Saddler		360
Levofloxacin 500mg (Tablet)	1	240
26670 Rick Saddler		240
P-Aminosalicylic Acid 4000mg (Granules/Package)	1	240
26670 Rick Saddler		240
Pyrazinamide 500mg (Tablet)	1	306
26670 Rick Saddler		306

Figure 127

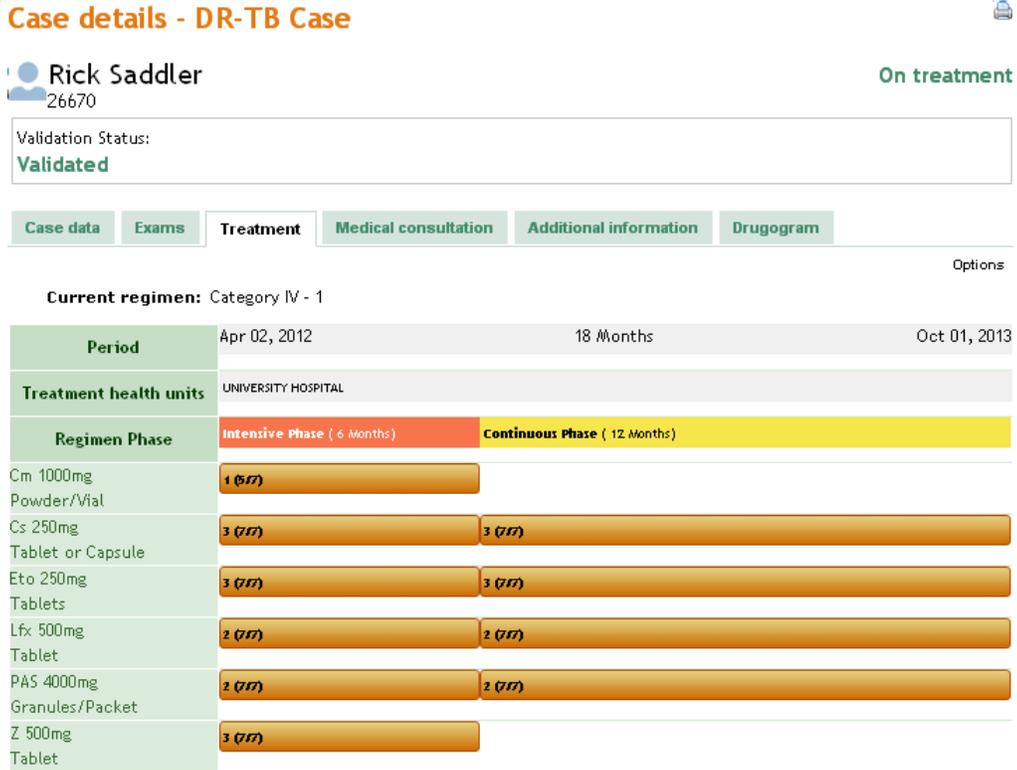


Figure 128

How to Check Details of a Medicine Order

To check the details of an order, follow this procedure:

1. Click on the **View Orders pending** link at the left menu bar on the main page of the **Medicines** module (red rectangle on Figure 129) and all orders pending will display.

Orders pending are orders that are not cancelled or yet received by the TB unit that posted it.

Orders pending are classified into three categories in the system:

- **Orders to authorize** – Only available if the unit authorize orders
 - **Orders to be shipped** – Only available if the unit is in charge of shipping medicine orders to other units
 - **Orders from this unit** – Orders posted by the unit that are pending
2. At **Medicine Orders** page that displays, click on the **Show details** link to display the detailed information about the order (circled in red on Figure 129).

The screenshot displays the 'Medicine orders' interface. On the left, a navigation menu includes sections for 'Medicine orders' (with a '+ New medicine order' link and a 'View Orders Pending' link highlighted in a red rectangle), 'Medicine transfer' (with a '+ New Medicine Transfer' link), 'Medicine dispensing' (with a '+ New Medicine Dispensing' link), 'Reports' (with links for 'Medicine movements', 'Estimated stock position', and 'Stock Transaction'), and 'Other options' (with a 'Remove unit from medicine management' link). The main content area is titled 'Medicine orders' and shows the current unit as 'TB FREE CLINIC City C - Region A'. Below this, there is a table of 'Orders from this unit' with columns for 'To', 'Order date', and 'Order status'. One order is listed from 'NATIONAL WAREHOUSE City A - Region A' dated 'Sep 24, 2012' with a status of 'Waiting for shipment'. A 'Show details' link is circled in red.

Figure 129

3. The *Medicine Order* page that appears shows the **order number** for the specific order selected (red circle on Figure 130) and the **TB unit responsible for authorization** before the medicine can ship (red rectangle on Figure 130).
4. For a detailed report, click the **Print order** or **Print Patient list** links (blue circles on Figure 130) to see medicines ordered, stock position, the number of cases, requested quantity, and estimated quantities required.

Delete order

Cancel order

Print order

Print patient list

Medicine Order # 942171

Waiting for authorization

Before shipping, this order must be authorized by the following unit

HEALTH CENTER 1
 City A - Region A

From: TB FREE CLINIC
City C - Region A

To: NATIONAL WAREHOUSE
City A - Region A

Order created in **Jun 20, 2012**

Antonia Kwiecien

Number of days for medicine consumption estimation: 120

Contact name: Barney Gumble

Shipping address: TB FREE CLINIC
742 Evergreen Terrace
Springfield Tavern
District 6, Region A, City C, Village D

Items Cases on order

GLC (Green Light Committee)

Medicine	Stock position	Cases	Estimated Quantity	Requested Quantity
Cycloserine 250mg (Tablet or Capsule)		1	360	360
P-Aminosalicylic Acid 4000mg (Granules/Packet)		2	480	480
Ofloxacin 400mg (Tablets)		1	51	51

Figure 130

How to Authorize a Medicine Order

When an order is created, the supplier settings in the **Administration** module may require that the order be authorized by the unit responsible for authorization. When authorizing, the quantity requested can be revised and changed and will then become the quantity approved to be delivered by the supplier.

To authorize an order, follow the instructions below:

1. On the main page of the Medicines Module (**Inventory** page) for the TB unit responsible for authorizing the order, click on the **View Orders Pending** link (red rectangle on Figure 131).

The screenshot shows the eTBManager interface. The top navigation bar includes 'HOME', 'CASES', 'MEDICINES', 'MANAGEMENT', and 'ADMINISTRATION'. The user is logged in as 'Antonia Kwiecien'. The 'Inventory' section is active, showing 'NATIONAL WAREHOUSE' for 'City A - Region A'. There are two tables of inventory data: one for 'GLC (Green Light Committee)' and one for 'GDF (Global Drug Facility)'. The left sidebar contains sections for 'Medicine orders', 'Medicine transfer', 'Reports', and 'Other options'. The 'View Orders Pending' link in the 'Medicine orders' section is highlighted with a red box.

Medicine orders

- [+ New medicine order](#)
- [View Orders Pending](#)
- [Order history](#)

Medicine transfer

- [+ New Medicine Transfer](#)
- [View Transfers Pending](#)
- [Transfer history](#)

Reports

- [Medicine movements](#)
- [Estimated stock position](#)
- [Stock Transaction](#)

Other options

- [+ Remove unit from medicine management](#)

Inventory

NATIONAL WAREHOUSE
City A - Region A

Select another unit

GLC (Green Light Committee) [Adjust stock quantity](#)

Medicine	Next batch to expire	Available quantity	Total price	Unit price	Last movement
Amikacin 1000mg (Powder/Vial)	Feb 01, 2013	19,747	19,120.50	0.97	Jun 20, 2012
Ethambutol 400mg (Tablet)	May 02, 2013	100,000	30,000.00	0.30	Sep 24, 2011

GDF (Global Drug Facility) [Adjust stock quantity](#)

Medicine	Next batch to expire	Available quantity	Total price	Unit price	Last movement
Amikacin 1000mg (Powder/Vial)	⚠ Jul 08, 2013	50,000	29,036.90	0.79	Jun 12, 2012
Capreomycin 1000mg (Powder/Vial)	⚠ Dec 01, 2012	58,900	100,430.39	1.48	Feb 02, 2012
Cycloserine 250mg (Tablet or Capsule)	⚠ Jan 01, 2013	64,000	60,046.40	1.29	Sep 24, 2011

Figure 131

2. On the *Medicine Orders* page that appears, in the **Orders to authorize** section, click on the **Show details** link to open the detail page of a specific order (red circle on Figure 132).

Medicine orders Select another unit

NATIONAL WAREHOUSE
City A - Region A

Medicine orders
+ New medicine order
View Orders Pending
Order history

Medicine transfer
+ New Medicine Transfer
View Transfers Pending
Transfer history

Reports
Medicine movements
Estimated stock position
Stock Transaction

Other options
Remove unit from medicine management

Orders to authorize

From	Order date	Created by	
UNIVERSITY HOSPITAL District 1 - Village A	Jun 22, 2012 38 min 28 sec ago	Antonia Kwiecien	Show details

orders to be shipped

From	Order date	Created by	
REGIONAL WAREHOUSE 2 District 7 - Village E	Mar 23, 2012 2 Months, 30 days ago	Utkarsh Srivastava	Show details

Figure 132

3. The system will display the *Medicine order* page for the order selected (Figure 133).

[Authorize order](#)

[Print order](#)

[Print patient list](#)

Medicine Order # 942178

Waiting for authorization
 Before shipping, this order must be authorized by the following unit:
 NATIONAL WAREHOUSE
 City A - Region A

From:
 UNIVERSITY HOSPITAL
 District 1 - Village A

To:
 REGIONAL WAREHOUSE 2
 District 7 - Village E

Order created in **Jun 22, 2012**
 Antonia Kwiecien

Number of days for medicine consumption estimation: 120

Contact name: Melissa Hunter

Shipping address: UNIVERSITY HOSPITAL
 123 Main St.
 Zip code: 22903
 District 1, Region A, City A, Village A

[Items](#)

[Cases on order](#)

GLC (Green Light Committee)

Medicine	Stock position	Cases	Estimated Quantity	Requested Quantity
Capreomycin 1000mg (Powder/Vial)		1	72	72
Ethionamide 250mg (Tablets)		1	360	360
Levofloxacin 500mg (Tablet)		1	240	240
P-Aminosalicylic Acid 4000mg (Granules/Package)		1	240	240
Pyrazinamide 500mg (Tablet)		1	306	306

Figure 133

- Click on the **Authorize order** link at on the left menu bar (red circle on **Figure 133**) and the *Medicine order – Authorize order* page will appear (Figure 134).

Medicine Order - Authorize order



From: UNIVERSITY HOSPITAL

To: REGIONAL WAREHOUSE 2

Order date: Jun 22, 2012

Items

Green Light Committee				
Medicine	Cases	Estimated Quantity	Requested Quantity	Approved Quantity
Capreomycin 1000mg (Powder/Vial)	1	72	72	<input type="text" value="72"/>
Ethionamide 250mg (Tablets)	1	360	360	<input type="text" value="360"/>
Levofloxacin 500mg (Tablet)	1	240	240	<input type="text" value="240"/>
P-Aminosalicylic Acid 4000mg (Granules/ Packet)	1	240	240	<input type="text" value="240"/>
Pyrazinamide 500mg (Tablet)	1	306	306	<input type="text" value="306"/>

Figure 134

5. Change the **Approved Quantity** displayed if applicable (red rectangle on Figure 134).
6. Click on the **OK** button to authorize the order or **Cancel** to undo it.
7. Once authorized, the status of the order changes to **Waiting for shipment** as shown in Figure 135.

Print order
 Print patient list

Medicine Order # 942178



Waiting for shipment

From: UNIVERSITY HOSPITAL District 1 - Village A Order created in Jun 22, 2012 Antonia Kwiecien	To: REGIONAL WAREHOUSE 2 District 7 - Village E
---	--

Approval date: Jun 22, 2012 **By:** NATIONAL WAREHOUSE

Number of days for medicine 120
consumption estimation:

Contact name: Melissa Hunter

Shipping address: UNIVERSITY HOSPITAL
 123 Main St.
 Zip code: 22903
 District 1, Region A, City A, Village A

Items **Cases on order**

GLC (Green Light Committee)

Medicine	Stock position	Cases	Estimated Quantity	Requested Quantity	Approved Quantity
Capreomycin 1000mg (Powder/Vial)		1	72	72	75
Ethionamide 250mg (Tablets)		1	360	360	400
Levofloxacin 500mg (Tablet)		1	240	240	250
P-Aminosalicylic Acid 4000mg (Granules/Package)		1	240	240	250
Pyrazinamide 500mg (Tablet)		1	306	306	325

Figure 135

How to Notify Shipment of a Medicine Order (and Select Batches)

When the supplier unit ships medicines to the unit that ordered them, the supplier unit must enter the medicines into the system and notify the recipient that the shipment will take place. You (or the user doing the notification) must select the batches for each medicine. The system will automatically choose a batch for each medicine in the order by using the **FEFO** (first expiry, first out) criterion, but you may choose a different batch if appropriate.

To notify shipment of a medicine order, follow the instructions below:

1. On the **Medicines** Module main page (*Inventory* page) for the TB unit responsible for shipping the medicines (the supplier unit), click on the **View Orders Pending** link (under the **Medicine orders** section of the left menu bar - red rectangle on Figure 136).

The screenshot shows the 'Inventory' page for 'REGIONAL WAREHOUSE 2, District 7 - Village E'. The left sidebar contains several sections: 'Medicine orders' with a red rectangle around 'View Orders Pending', 'Medicine transfer', 'Reports', and 'Other options'. The main content area displays two tables of medicine inventory.

GDF (Global Drug Facility)

Medicine	Next batch to expire	Available quantity	Total price	Unit price	Last movement
Amikacin 1000mg (Powder/Vial)	Jul 18, 2013	490	1,470.00	3.00	Mar 14, 2012
Capreomycin 1000mg (Powder/Vial)	Mar 31, 2013	1,000	14,240.00	14.24	Jun 22, 2012
Ethambutol 400mg28 (tabs)	Jun 07, 2014	100	12.00	0.12	Jun 08, 2012
Ethionamide 250mg (Tablets)	Jun 07, 2013	500	125.00	0.25	Jun 22, 2012
P-Aminosalicylic Acid 4000mg (Granules/Package)	Sep 30, 2014	4,000	2,000.00	0.50	Jun 22, 2012
Pyrazinamide 500mg (Tablet)	Jan 31, 2016	2,000	100.00	0.05	Jun 22, 2012

GLC (Green Light Committee)

Medicine	Next batch to expire	Available quantity	Total price	Unit price	Last movement
Capreomycin 1000mg (Powder/Vial)	Oct 31, 2012	1,000	15,500.00	15.50	Apr 01, 2012
Ethionamide 250mg (Tablets)	Jul 31, 2013	2,000	1,000.00	0.50	Jun 22, 2012
Levofloxacin 500mg (Tablet)	Apr 30, 2014	500	500.00	1.00	Jun 22, 2012
P-Aminosalicylic Acid 4000mg (Granules/Package)	Dec 31, 2012	4,000	3,000.00	0.75	Jun 22, 2012
Pyrazinamide 500mg (Tablet)	Aug 30, 2014	1,000	250.00	0.25	Jun 22, 2012

Figure 136

2. On the *Medicine orders* page that appears, under the **Orders to be shipped** section of the page, select the particular order you want to notify by clicking on the **Show details** link to the right of that medicine order (red circle on Figure 137).

Medicine orders

[+ New medicine order](#)

[View Orders Pending](#)

[Order history](#)

Medicine transfer

[+ New Medicine Transfer](#)

[View Transfers Pending](#)

[Transfer history](#)

Reports

[Medicine movements](#)

[Estimated stock position](#)

[Stock Transaction](#)

Other options

[+ Remove unit from medicine management](#)

Medicine orders 🖨️

REGIONAL WAREHOUSE 2 [Select another unit](#)

District 7 - Village E

orders to be shipped

From	Order date	Created by	
HEALTH CENTER 6 <small>City D - Region B</small>	Mar 23, 2012 <small>2 Months, 30 days ago</small>	Utkarsh Srivastava	Show details
HEALTH CENTER 6 <small>City D - Region B</small>	Mar 28, 2012 <small>2 Months, 25 days ago</small>	Luiz Fernando Avelino Reziolino	Show details
UNIVERSITY HOSPITAL <small>District 1 - Village A</small>	Jun 08, 2012 <small>14 days ago</small>	Antonia Kwiecien	Show details
UNIVERSITY HOSPITAL <small>District 1 - Village A</small>	Jun 22, 2012 <small>1 hours 48 min ago</small>	Antonia Kwiecien	Show details

Orders from this unit

To	Order date	Order status	
NATIONAL WAREHOUSE <small>City A - Region A</small>	Mar 23, 2012 <small>2 Months, 30 days ago</small>	Waiting for shipment	Show details

Figure 137

- On the *Medicine Order* page that appears with details of the order selected, click on the **Notify shipment** link at the left menu bar (red rectangle on Figure 138).

Notify shipment

[Print order](#)
[Print patient list](#)

Medicine Order # 942178

Waiting for shipment

From:
 UNIVERSITY HOSPITAL
 District 1 - Village A

Order created in **Jun 22, 2012**
 Antonia Kwiecien

To:
 REGIONAL WAREHOUSE 2
 District 7 - Village E

Approval date: Jun 22, 2012 **By:** NATIONAL WAREHOUSE

Number of days for medicine consumption estimation: 120

Contact name: Melissa Hunter

Shipping address: UNIVERSITY HOSPITAL
 123 Main St.
 Zip code: 22903
 District 1, Region A, City A, Village A

Items

Cases on order

GLC (Green Light Committee)

Medicine	Stock position	Cases	Estimated Quantity	Requested Quantity	Approved Quantity
Capreomycin 1000mg (Powder/Vial)		1	72	72	75
Ethionamide 250mg (Tablets)		1	360	360	400
Levofloxacin 500mg (Tablet)		1	240	240	250
P-Aminosalicylic Acid 4000mg (Granules/Package)		1	240	240	250
Pyrazinamide 500mg (Tablet)		1	306	306	325

Figure 138

4. At the *Notify shipment* page that appears (Figure 139), enter the **Shipping date**.
5. Confirm the shipping notification by clicking on the **OK** button; otherwise click on **CANCEL** to undo it.

Notify shipment



From: UNIVERSITY HOSPITAL

To: REGIONAL WAREHOUSE 2

Order date: Jun 22, 2012

Approval date: Jun 22, 2012

Shipping Date: * (mm/dd/yyyy)

* Value is required

Items:

Green Light Committee					
Medicine	Approved Quantity	Shipped Quantity	Action		
Capreomycin 1000mg (Powder/Vial)	75	75	Select batches		
<table border="1"> <tr> <td> Manufacturer : Big Pharma Batch number : 124564575 Expiration date :Oct 31, 2012 </td> <td> Quantity :75 Unit price :15.5000 Total price :1,162.50 </td> </tr> </table>				Manufacturer : Big Pharma Batch number : 124564575 Expiration date :Oct 31, 2012	Quantity :75 Unit price :15.5000 Total price :1,162.50
Manufacturer : Big Pharma Batch number : 124564575 Expiration date :Oct 31, 2012	Quantity :75 Unit price :15.5000 Total price :1,162.50				
Ethionamide 250mg (Tablets)	400	400	Select batches		
<table border="1"> <tr> <td> Manufacturer : Big Pharma Batch number : 1598498978645 Expiration date :Jul 31, 2013 </td> <td> Quantity :400 Unit price :0.5000 Total price :200.00 </td> </tr> </table>				Manufacturer : Big Pharma Batch number : 1598498978645 Expiration date :Jul 31, 2013	Quantity :400 Unit price :0.5000 Total price :200.00
Manufacturer : Big Pharma Batch number : 1598498978645 Expiration date :Jul 31, 2013	Quantity :400 Unit price :0.5000 Total price :200.00				
Levofloxacin 500mg (Tablet)	250	250	Select batches		
<table border="1"> <tr> <td> Manufacturer : Big Pharma Batch number : 458676134 Expiration date :Apr 30, 2014 </td> <td> Quantity :250 Unit price :1.0000 Total price :250.00 </td> </tr> </table>				Manufacturer : Big Pharma Batch number : 458676134 Expiration date :Apr 30, 2014	Quantity :250 Unit price :1.0000 Total price :250.00
Manufacturer : Big Pharma Batch number : 458676134 Expiration date :Apr 30, 2014	Quantity :250 Unit price :1.0000 Total price :250.00				
P-Aminosalicylic Acid 4000mg (Granules/Packet)	250	250	Select batches		
<table border="1"> <tr> <td> Manufacturer : Big Pharma Batch number : 178-9797 Expiration date :Dec 31, 2012 </td> <td> Quantity :250 Unit price :0.7500 Total price :187.50 </td> </tr> </table>				Manufacturer : Big Pharma Batch number : 178-9797 Expiration date :Dec 31, 2012	Quantity :250 Unit price :0.7500 Total price :187.50
Manufacturer : Big Pharma Batch number : 178-9797 Expiration date :Dec 31, 2012	Quantity :250 Unit price :0.7500 Total price :187.50				
Pyrazinamide 500mg (Tablet)	325	325	Select batches		
<table border="1"> <tr> <td> Manufacturer : Big Pharma Batch number : 457897878 Expiration date :Aug 30, 2014 </td> <td> Quantity :325 Unit price :0.2500 Total price :81.25 </td> </tr> </table>				Manufacturer : Big Pharma Batch number : 457897878 Expiration date :Aug 30, 2014	Quantity :325 Unit price :0.2500 Total price :81.25
Manufacturer : Big Pharma Batch number : 457897878 Expiration date :Aug 30, 2014	Quantity :325 Unit price :0.2500 Total price :81.25				

Ok Cancel

Figure 139

6. The status of the order changes from **Waiting for shipment** to **Shipped** (Figure 140).

Print order

Print patient list

Medicine Order # 942178

Shipped

From:
 UNIVERSITY HOSPITAL
 District 1 - Village A
 Order created in **Jun 22, 2012**
 Antonia Kwiecien

To:
 REGIONAL WAREHOUSE 2
 District 7 - Village E

Approval date: Jun 22, 2012 **By:** NATIONAL WAREHOUSE

Shipping Date: Jun 22, 2012

Number of days for medicine consumption estimation: 120

Total price: 7,968.75

Contact name: Melissa Hunter

Shipping address: UNIVERSITY HOSPITAL
 123 Main St.
 Zip code: 22903
 District 1, Region A, City A, Village A

Items

Cases on order

Batches

GLC (Green Light Committee)

Medicine	Stock position	Cases	Estimated Quantity	Requested Quantity	Approved Quantity	Shipped Quantity	Total price
Capreomycin 1000mg (Powder/Vial)		1	72	72	75	500	7,250.00
Ethionamide 250mg (Tablets)		1	360	360	400	400	200.00
Levofloxacin 500mg (Tablet)		1	240	240	250	250	250.00
P-Aminosalicylic Acid 4000mg (Granules/ Packet)		1	240	240	250	250	187.50
Pyrazinamide 500mg (Tablet)		1	306	306	325	325	81.25

Figure 140

The system automatically selects a batch to fill the order using the **FEFO** (first expiry, first out) criterion.

8. Click on the **Batches** tab (circled in red on **Figure 140**) to see a summary table with the **medicine name, expiration date, number of boxes, shipped quantity, received quantity, unit price and total price** for the order shipped as shown in Figure 141.

Medicine Order # 942178



Received

<p>From:</p>  <p>UNIVERSITY HOSPITAL District 1 - Village A</p> <p>Order created in Jun 22, 2012</p>  <p>Antonia Kwiecien</p>	<p>To:</p>  <p>REGIONAL WAREHOUSE 2 District 7 - Village E</p>
--	--

Approval date: Jun 22, 2012 **By:** NATIONAL WAREHOUSE

Shipping Date: Jun 22, 2012

Receiving date: Jun 25, 2012

Number of days for medicine consumption estimation: 120

Total price: 7,968.75

Contact name: Melissa Hunter

Shipping address: UNIVERSITY HOSPITAL
123 Main St.
Zip code: 22903
District 1, Region A, City A, Village A

Items
 Cases on order
 Batches

GLC (Green Light Committee)

Medicine	Expiration date	Number of boxes	Shipped Quantity	Received Quantity	Unit price	Total price
Capreomycin 1000mg (Powder/Vial)			500	500	14.50	7,250.00
 3297845 Big Pharma	Oct 31, 2013	50 (10)	500	500	14.50	7,250.00
Ethionamide 250mg (Tablets)			400	400	0.50	200.00
 1598498978645 Big Pharma	Jul 31, 2013	40 (50)	400	400	0.50	200.00
Levofloxacin 500mg (Tablet)			250	250	1.00	250.00
 458676134 Big Pharma	Apr 30, 2014	5 (100)	250	250	1.00	250.00
P-Aminosalicylic Acid 4000mg (Granules/Package)			250	250	0.75	187.50
 178-9797 Big Pharma	Dec 31, 2012	40 (100)	250	250	0.75	187.50
Pyrazinamide 500mg (Tablet)			325	325	0.25	81.25
 457897878 Big Pharma	Aug 30, 2014	10 (100)	325	325	0.25	81.25

Figure 141

You have the option to choose a different batch, or change the quantity to ship if appropriate. To choose a different batch or change the quantity to ship, follow these procedures:

1. Click on the **Select batches** link in the **Action** column (circled in red on Figure 139).
2. In the *Select batches* box that appears (**Figure 142**), click the box next to the batch you want used to fill the order.
3. In the field next to the quantity, change the amount shipped if appropriate.

Notify shipment

From: MAYBERRY SANITORIUM To: NATIONAL WAREHOUSE

Order date: Sep 24, 2012

Approval date:

Shipping Date:* (mm/dd/yyyy)

* Value is required

Select batches

Capreomycin 1000mg (Powder/Vial)
Donors

<input type="checkbox"/>	Batch	Expiration date	Unit price	Quantity	Quantity to ship
<input checked="" type="checkbox"/>	5467815-HAK Lilly	Sep 30, 2012	14.5000	830	<input type="text" value="200"/>
<input type="checkbox"/>	64971-HAK Lilly	Apr 30, 2013	14.7500	400	

Ok **Cancel**

Figure 142

4. Click on the **OK** button to confirm, or **Cancel** to undo it.
5. On the *Notify shipment* page that appears (as in Figure 139) enter the **Shipping date** then confirm the shipping notification by clicking on the **OK** button; otherwise click on **CANCEL** to undo it.
5. The status of the order changes from **Waiting for shipment** to **Shipped** as in Figure 136.

How to Notify Receipt of a Medicine Order

The last step of the order flow is when the medicines arrive at the unit that initially placed the order. This unit must enter into the system and, thus, notify the system (and the sender) of receipt of the order. To do so, follow the instructions below:

1. On the main page of the Medicine Module (**Inventory** page) for the TB unit that placed the medicine order and is now receiving it, click on the **View orders pending** link (under the **Medicine orders** section on the left menu bar - red rectangle on Figure 143).

The screenshot shows the 'Inventory' page for 'UNIVERSITY HOSPITAL District 1 - Village A'. The left sidebar contains several sections: 'Medicine orders' (with 'View Orders Pending' highlighted in a red box), 'Medicine transfer', 'Medicine dispensing', 'Reports', and 'Other options'. The main content area is titled 'Inventory' and includes a 'Select another unit' link. Below this, there are two tables: 'DON (Donors)' and 'GLC (Green Light Committee)'. Both tables have columns for 'Medicine', 'Next batch to expire', 'Available quantity', 'AMC', 'Estimated stock on hand', and 'Last movement'.

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Last movement
Amikacin 1000mg (Powder/Vial)	Oct 10, 2013	2,000			Feb 16, 2012
Capreomycin 1000mg (Powder/Vial)	Sep 30, 2014	13,500			Jun 04, 2012
Cycloserine 250mg (Tablet or Capsule)	Nov 11, 2015	50,000			Feb 16, 2012

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Last movement
Cycloserine 250mg (Tablet or Capsule)	Dec 12, 2016	10,000			Feb 16, 2012

Figure 143

2. On the **Medicine orders** page that displays, click on the **Show details** link to the far right of the order for which you want to notify receipt (circled in red on Figure 144).

Medicine orders Select another unit

UNIVERSITY HOSPITAL
District 1 - Village A

Orders from this unit

To	Order date	Order status	
REGIONAL WAREHOUSE 2 District 7 - Village E	Jun 06, 2012 19 days ago	Shipped	Show details
REGIONAL WAREHOUSE 2 District 7 - Village E	Jun 08, 2012 17 days ago	Waiting for shipment	Show details
REGIONAL WAREHOUSE 2 District 7 - Village E	Jun 22, 2012 3 days ago	Shipped	Show details

Medicine orders
+ New medicine order
View Orders Pending
Order history

Medicine transfer
+ New Medicine Transfer
View Transfers Pending
Transfer history

Medicine dispensing
+ New Medicine Dispensing
Dispensing history

Reports
Medicine movements
Estimated stock position
Stock Transaction

Other options
Remove unit from medicine management

Figure 144

- On the **Medicine Order** page for the order selected that appears, click on the **Notify receiving** link on the left menu bar (red rectangle on **Figure 145**).

Notify receiving

Print order

Print patient list

Medicine Order # 942178

Shipped

From:
 UNIVERSITY HOSPITAL
 District 1 - Village A

Order created in **Jun 22, 2012**
 Antonia Kwiecien

To:
 REGIONAL WAREHOUSE 2
 District 7 - Village E

Approval date: Jun 22, 2012 **By:** NATIONAL WAREHOUSE

Shipping Date: Jun 22, 2012

Number of days for medicine consumption estimation: 120

Total price: 7,968.75

Contact name: Melissa Hunter

Shipping address: UNIVERSITY HOSPITAL
 123 Main St.
 Zip code: 22903
 District 1, Region A, City A, Village A

Items
Cases on order
Batches

GLC (Green Light Committee)

Medicine	Stock position	Cases	Estimated Quantity	Requested Quantity	Approved Quantity	Shipped Quantity	Total price
Capreomycin 1000mg (Powder/Vial)		1	72	72	75	500	7,250.00
Ethionamide 250mg (Tablets)		1	360	360	400	400	200.00
Levofloxacin 500mg (Tablet)		1	240	240	250	250	250.00
P-Aminosalicylic Acid 4000mg (Granules/ Packet)		1	240	240	250	250	187.50
Pyrazinamide 500mg (Tablet)		1	306	306	325	325	81.25

Figure 145

4. On the **Notify receiving** page that appears (**Figure 146**), enter the **receiving date**, and check whether the **received quantity** is the same as the **shipped quantity**.
5. If the quantity is different, enter the correct quantity in the field provided (red rectangle on **Figure 146**).
6. In the **Comments** field, enter a reason for the difference (blue rectangle on **Figure 146**).
7. Confirm the order receipt by clicking **OK**; otherwise click **CANCEL** to undo it (**Figure 146**).

Notify receiving



From: UNIVERSITY HOSPITAL

To: REGIONAL WAREHOUSE 2

Order date: Jun 22, 2012

Order date: Jun 22, 2012

Receiving date: * (mm/dd/yyyy)

* Value is required

Items:

Green Light Committee			
Medicine	Shipped Quantity	Total price	Received Quantity
Capreomycin 1000mg (Powder/Vial)	500	7,250.00	
Comments <input type="text"/>			
3297845 Big Pharma Expiration date: Oct 31, 2013	Shipped Quantity: 500 Unit price: 14.5000 Total price: 7,250.00		<input type="text" value="500"/>
Medicine	Shipped Quantity	Total price	Received Quantity
Ethionamide 250mg (Tablets)	400	200.00	
Comments <input type="text"/>			
1598498978645 Big Pharma Expiration date: Jul 31, 2013	Shipped Quantity: 400 Unit price: 0.5000 Total price: 200.00		<input type="text" value="400"/>
Medicine	Shipped Quantity	Total price	Received Quantity
Levofloxacin 500mg (Tablet)	250	250.00	
Comments <input type="text"/>			
458676134 Big Pharma Expiration date: Apr 30, 2014	Shipped Quantity: 250 Unit price: 1.0000 Total price: 250.00		<input type="text" value="250"/>
Medicine	Shipped Quantity	Total price	Received Quantity
P-Aminosalicylic Acid 4000mg (Granules/Package)	250	187.50	
Comments <input type="text"/>			
178-9797 Big Pharma Expiration date: Dec 31, 2012	Shipped Quantity: 250 Unit price: 0.7500 Total price: 187.50		<input type="text" value="250"/>
Medicine	Shipped Quantity	Total price	Received Quantity
Pyrazinamide 500mg (Tablet)	325	81.25	
Comments <input type="text"/>			
457897878 Big Pharma Expiration date: Aug 30, 2014	Shipped Quantity: 325 Unit price: 0.2500 Total price: 81.25		<input type="text" value="325"/>

Ok Cancel

Figure 146

How to Cancel a Medicine Order

Only orders with the **Waiting for authorization** or **Waiting for shipment** status may be canceled from the system by its requester.

The supplier of the order can cancel an order that has a **Waiting for shipment** status, once he or she justifies the reason for cancellation. The order will be canceled, but its information will not be erased from the system database. All transactions (shipment or receipt) associated with the order will be canceled too, and the order will be available in the system with the status "canceled" for auditing reasons.

To **Cancel** a medicine order, follow this procedure:

1. On the main page of the **Medicines Module (Inventory page)** click on the **View Orders Pending** link (red rectangle on Figure 147) and all orders pending will be displayed (**Figure 148**).

The screenshot shows the 'Inventory' page for 'UNIVERSITY HOSPITAL District 1 - Village A'. The left sidebar contains several menu items: 'Medicine orders' (with 'View Orders Pending' highlighted in a red box), 'Medicine transfer', 'Medicine dispensing', 'Reports', and 'Other options'. The main content area is divided into two sections: 'DON (Donors)' and 'GLC (Green Light Committee)'. Each section contains a table with columns for 'Medicine', 'Next batch to expire', 'Available quantity', 'AMC', 'Estimated stock on hand', and 'Last movement'.

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Last movement
Amikacin 1000mg (Powder/Vial)	Oct 10, 2013	2,000			Feb 16, 2012
Capreomycin 1000mg (Powder/Vial)	Sep 30, 2014	13,500			Jun 04, 2012
Cycloserine 250mg (Tablet or Capsule)	Nov 11, 2015	50,000			Feb 16, 2012

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Last movement
Capreomycin 1000mg (Powder/Vial)	Oct 31, 2013	500			Jun 25, 2012
Cycloserine 250mg (Tablet or Capsule)	Dec 12, 2016	10,000			Feb 16, 2012
Ethionamide 250mg (Tablets)	Jul 31, 2013	400			Jun 25, 2012
Levofloxacin 500mg (Tablet)	Apr 30, 2014	250			Jun 25, 2012
P-Aminosalicylic Acid 4000mg (Granules/ Packet)	Dec 31, 2012	250			Jun 25, 2012
Pyrazinamide 500mg (Tablet)	Aug 30, 2014	325			Jun 25, 2012

Figure 147

Medicine orders Select another unit

UNIVERSITY HOSPITAL
District 1 - Village A

Orders from this unit

To	Order date	Order status	
REGIONAL WAREHOUSE 2 District 7 - Village E	Jun 06, 2012 19 days ago	Shipped	Show details
REGIONAL WAREHOUSE 2 District 7 - Village E	Jun 08, 2012 17 days ago	Waiting for shipment	Show details

Medicine orders
[+ New medicine order](#)
[View Orders Pending](#)
[Order history](#)

Medicine transfer
[+ New Medicine Transfer](#)
[View Transfers Pending](#)
[Transfer history](#)

Medicine dispensing
[+ New Medicine Dispensing](#)
[Dispensing history](#)

Reports
[Medicine movements](#)
[Estimated stock position](#)
[Stock Transaction](#)

Other options
[Remove unit from medicine management](#)

Figure 148

2. The status for all pending orders is displayed on the **Medicine orders** page (red rectangle on **Figure 148**).
3. Click on **Show details** link for the medicine order to be canceled (blue circle on **Figure 148**).
4. The details for the medicine order will be displayed on the *Medicine Order* page for the order selected (**Figure 149**).

[Cancel order](#)
[Print order](#)
[Print patient list](#)

Medicine Order # 942086

Waiting for shipment

From: UNIVERSITY HOSPITAL
 District 1 - Village A
 Order created in **Jun 08, 2012**
 Antonia Kwiecien

To: REGIONAL WAREHOUSE 2
 District 7 - Village E

Number of days for medicine consumption estimation: 120
Contact name: Melissa Hunter
Shipping address: UNIVERSITY HOSPITAL
 123 Main St.
 Zip code: 22903
 District 1, Region A, City A, Village A

[Items](#) [Cases on order](#)

GDF (Global Drug Facility)

Medicine	Stock position	Cases	Estimated Quantity	Requested Quantity
Isoniazid + Rifampicin 75/150mg (Tablet)		2	404	404
Isoniazid + Rifampicin + Pirazinamide + Ethambutol 75/150/400/275mg (Tablet)		2	641	641
Streptomycin 1000mg (Powder/Vial)		1	114	114
Ethambutol 400mg (Tablet)		1	105	105

Figure 149

- In the left menu bar click on the **Cancel order** link to cancel the order (red rectangle on **Figure 149**).
- In the *Medicine Order - Cancel order* page that appears, enter the reason for cancelling the order.
- Click the **OK** button to confirm or **Cancel** to undo it (**Figure 150**).

eTBManager TB Management Information System

HOME CASES **MEDICINES** MANAGEMENT ADMINISTRATION

Antonia Kwiecien SPS MSH Demo

Medicine Order - Cancel order

From: UNIVERSITY HOSPITAL **To:** REGIONAL WAREHOUSE 2
Order status: Waiting for shipment
Order date: Jun 08, 2012
Cancellation reason: *

Figure 150

How to Delete a Medicine Order

Only orders in the **Waiting for authorization** or **Waiting for shipment** status may be deleted from the system by their requester.

To delete a medicine order, follow this procedure:

1. On the main page of the Medicines Module (*Inventory* page) click on the **View Orders Pending** link (red rectangle on Figure 147) and all orders pending will be displayed (Figure 151).

Medicine orders 

 UNIVERSITY HOSPITAL
District 1 - Village A Select another unit

Medicine orders
[+ New medicine order](#)
[View Orders Pending](#)
[Order history](#)

Medicine transfer
[+ New Medicine Transfer](#)
[View Transfers Pending](#)
[Transfer history](#)

Medicine dispensing
[+ New Medicine Dispensing](#)
[Dispensing history](#)

Reports
[Medicine movements](#)
[Estimated stock position](#)
[Stock Transaction](#)

Other options
[+ Remove unit from medicine management](#)

Orders from this unit

To	Order date	Order status	
 NATIONAL WAREHOUSE City A - Region A	Jun 28, 2012 22 days ago	Shipped	Show details
 NATIONAL WAREHOUSE City A - Region A	Jun 28, 2012 22 days ago	Waiting for shipment	Show details
 NATIONAL WAREHOUSE City A - Region A	Jul 20, 2012 8 sec ago	Waiting for authorization	Show details

Figure 151

2. Click on the **Show details** link for the order you want to delete (circled in red on Figure 151).
3. In the menu bar on the left side of the *Medicine Order* page for the order selected that appears, click on the **Delete order** link (red rectangle on Figure 152).

Delete order

Cancel order

Print order

Print patient list

Medicine Order # 942191

Waiting for authorization

Before shipping, this order must be authorized by the following unit
 REGIONAL WAREHOUSE 2
 District 7 - Village E

From:

UNIVERSITY HOSPITAL
District 1 - Village A

Order created in Jul 20, 2012

Antonia Kwiecien

To:

NATIONAL WAREHOUSE
City A - Region A

Number of days for medicine consumption estimation: 120

Contact name: Melissa Hunter

Shipping address: UNIVERSITY HOSPITAL
123 Main St.
Zip code: 22903
District 1, Region A, City A, Village A

Items
Cases on order

GLC (Green Light Committee)

Medicine	Stock position	Cases	Estimated Quantity	Requested Quantity
Ofloxacin 400mg (Tablets)			0	250

Figure 152

4. In the *confirmation* box that appears (Figure 153) click on the **OK** button to confirm or **Cancel** to undo it.

From:

UNIVERSITY HOSPITAL
District 1 - Village A

Order created in Jul 20, 2012

Antonia Kwiecien

To:

NATIONAL WAREHOUSE
City A - Region A

Number of days for medicine consumption estimation: 120

Contact name: Melissa Hunter

Shipping address: UNIVERSITY HOSPITAL
123 Main St.
Zip code: 22903
District 1, Region A, City A, Village A

The page at <https://www.etbmanager...>

Confirm delete?

OK
Cancel

Figure 153

How to View Medicine Order History

The order history page displays all orders that are **canceled** or **received**.

To view order history of a particular TB unit follow this procedure:

1. Go to the main **Medicines** module page for the TB unit you need (**Inventory** page as shown in **Figure 154**).

The screenshot shows the 'Inventory' page for 'UNIVERSITY HOSPITAL District 1 - Village A'. The left sidebar contains several menu items, with 'Order history' highlighted by a red rectangle. The main content area is divided into two sections: 'DON (Donors)' and 'GLC (Green Light Committee)'. Each section contains a table with columns for 'Medicine', 'Next batch to expire', 'Available quantity', 'AMC', 'Estimated stock on hand', and 'Last movement'.

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Last movement
Amikacin 1000mg (Powder/Vial)	Oct 10, 2013	2,000			Feb 16, 2012
Capreomycin 1000mg (Powder/Vial)	Sep 30, 2014	13,500			Jun 04, 2012
Cycloserine 250mg (Tablet or Capsule)	Nov 11, 2015	50,000			Feb 16, 2012

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Last movement
Capreomycin 1000mg (Powder/Vial)	Oct 31, 2013	500			Jun 25, 2012
Cycloserine 250mg (Tablet or Capsule)	Dec 12, 2016	10,000			Feb 16, 2012
Ethionamide 250mg (Tablets)	Jul 31, 2013	400			Jun 25, 2012
Levofloxacin 500mg (Tablet)	Apr 30, 2014	250			Jun 25, 2012
P-Aminosalicylic Acid 4000mg (Granules/ Packet)	Dec 31, 2012	250			Jun 25, 2012
Pyrazinamide 500mg (Tablet)	Aug 30, 2014	325			Jun 25, 2012

Figure 154

2. On the left menu bar click on the **Order history** link (red rectangle on **Figure 154**).
3. All orders placed by the TB unit that have been received or cancelled will display on the **Order History** page as shown in **Figure 155**.

Order history

UNIVERSITY HOSPITAL
District 1 - Village A

Month / Year: - -
Order status: -

ID	Order date	From	To	Order status
942178	Jun 22, 2012 3 days ago	UNIVERSITY HOSPITAL District 1 - Village A	REGIONAL WAREHOUSE 2 District 7 - Village E	Received
942177	Jun 22, 2012 3 days ago	UNIVERSITY HOSPITAL District 1 - Village A	REGIONAL WAREHOUSE 2 District 7 - Village E	Cancelled
942176	Jun 20, 2012 5 days ago	UNIVERSITY HOSPITAL District 1 - Village A	REGIONAL WAREHOUSE 2 District 7 - Village E	Cancelled
942175	Jun 20, 2012 5 days ago	UNIVERSITY HOSPITAL District 1 - Village A	REGIONAL WAREHOUSE 2 District 7 - Village E	Cancelled
942174	Jun 20, 2012 5 days ago	UNIVERSITY HOSPITAL District 1 - Village A	REGIONAL WAREHOUSE 2 District 7 - Village E	Cancelled
942091	Jun 11, 2012 14 days ago	UNIVERSITY HOSPITAL District 1 - Village A	REGIONAL WAREHOUSE 2 District 7 - Village E	Cancelled

Figure 155

- Click on the order **ID number** link (circled in red on **Figure 155**) to see details of the order selected.
- You may filter the list of orders by selecting the **Month** and **Year** or **Order status** from the drop-down menus (**Figure 155**).

Medicine Transfer

This option allows a TB unit that does not normally ship medicines to register a medicine transfer to another TB unit. The transfer is done in two steps: first, the TB unit that is delivering the medicines registers a new transfer, in which the system creates a new medicine transfer record in the **Waiting for receiving** function of the system. Second, when the medicines arrive at the destination TB unit, this unit must complete the **Medicine transfer** function in the system after the medicines have arrived, concluding the transfer process.

Only medicines that have **not yet expired** may be transferred.

The process is depicted in Figure 156.

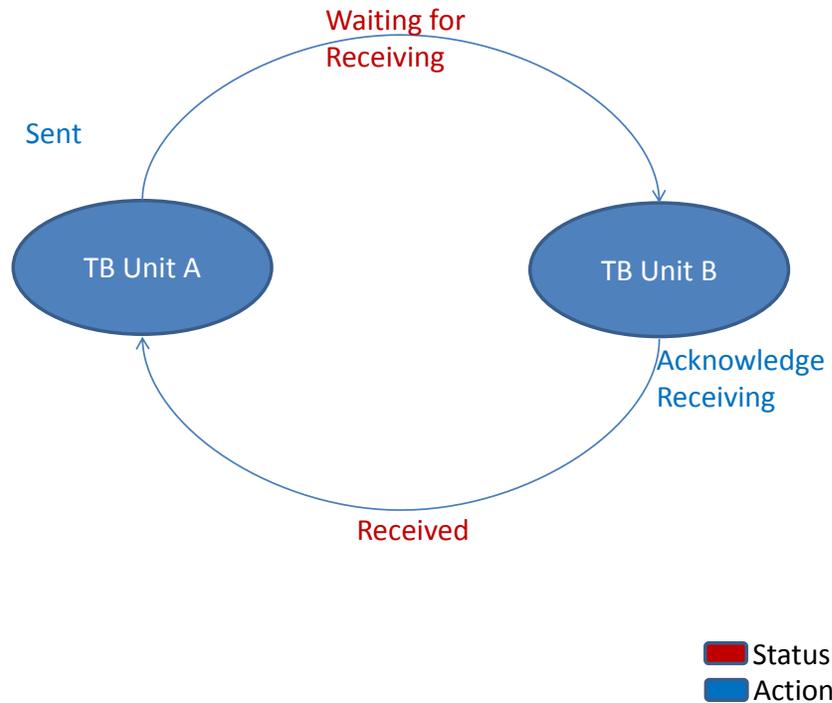


Figure 156

How to Record a New Medicine Transfer

This option allows a TB unit that does not normally ship medicines to register a medicine transfer to another TB unit. The transfer is done in two steps: first, the TB unit that is delivering the medicines registers a new transfer, in which the system creates a new medicine transfer record in the **Waiting for receiving** function of the system. Second, when the medicines arrive at the destination TB unit, this unit must complete the **Medicine transfer** function in the system after the medicines have arrived, concluding the transfer process.

To access a medicine transfer, follow this procedure:

1. On the main page of the Medicines Module (**Inventory** page) for the TB unit you select, click on **New Medicine Transfer** link on the left menu bar (red rectangle on Figure 157).

Inventory SPS MSH Demo

Inventory UNIVERSITY HOSPITAL
District 1 - Village A Select another unit

Medicine orders
 + New medicine order
 View Orders Pending
 Order history

Medicine transfer
 + **New Medicine Transfer**
 View Transfers Pending
 Transfer history

Medicine dispensing
 + New Medicine Dispensing
 Dispensing history

Reports
 Medicine movements
 Estimated stock position
 Stock Transaction

Other options
 Remove unit from medicine management

DON (Donors) Adjust stock quantity

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Last movement
+ Amikacin 1000mg (Powder/Vial)	Oct 10, 2013	2,000			Feb 16, 2012
+ Capreomycin 1000mg (Powder/Vial)	Sep 30, 2014	13,500			Jun 04, 2012
+ Cycloserine 250mg (Tablet or Capsule)	Nov 11, 2015	50,000			Feb 16, 2012

GLC (Green Light Committee) Adjust stock quantity

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Last movement
+ Capreomycin 1000mg (Powder/Vial)	Oct 31, 2013	500			Jun 25, 2012
+ Cycloserine 250mg (Tablet or Capsule)	Dec 12, 2016	10,000			Feb 16, 2012
+ Ethionamide 250mg (Tablets)	Jul 31, 2013	400			Jun 25, 2012
+ Levofloxacin 500mg (Tablet)	Apr 30, 2014	250			Jun 25, 2012
+ P-Aminosalicylic Acid 4000mg (Granules/Packet)	Dec 31, 2012	250			Jun 25, 2012
+ Pyrazinamide 500mg (Tablet)	Aug 30, 2014	325			Jun 25, 2012

Figure 157

- On the *New Medicine Transfer* page that appears (Figure 158), enter the **destination unit** information; the **province / region** the medicine is sent to, **name** of health facility for transfer and the **reference date** (specific date related to the transfer) which are mandatory fields for this page.

New Medicine Transfer HEALTH CENTER 1
City A - Region A

Destination Unit

Province / Region: * Region A

Name: * UNIVERSITY HOSPITAL

Reference date: * 06/21/2012 (mm/dd/yyyy)

Comments:

Transferred medicines Select medicines

Ok Cancel

* Value is required

Figure 158

3. Click on the **Select medicines** button (circled in red on **Figure 158**) to select the medicines you would like to transfer.
4. On the *New Medicine Transfer* box that appears, the medicines are categorized according to their sources. **Check the boxes** of the medicines you want to select (Figure 159).



Figure 159

5. On the *New Medicine Transfer* page that appears, click on the **Select batches** link (circled in red on Figure 160).

New Medicine Transfer

HEALTH CENTER 1
City A - Region A

Destination Unit

Province / Region: * Region A

Name: * HEALTH CENTER 1

Reference date: * 06/22/2012 (mm/dd/yyyy)

Comments:

Transferred medicines Select medicines

Global Drug Facility					
Medicine	Expiration date	Quantity	Unit price	Total price	
Amikacin 1000mg (Powder/Vial)		0	0.0000	0.00	Select batches Delete
Capreomycin 1000mg (Powder/Vial)		0	0.0000	0.00	Select batches Delete

Ok Cancel

* Value is required

Figure 160

- On the *Select batches* box that appears, click on the box next to the **batch number** of the particular batch of the medicine you want to transfer (Figure 161).

Select batches					
Amikacin 1000mg (Powder/Vial) Global Drug Facility					
<input type="checkbox"/>	Batch	Expiration date	Unit price	Quantity	
<input type="checkbox"/>	1546A Lab MSH	Jan 01, 2012	1.8000	2,390	Expired batch
<input type="checkbox"/>	59798 WWW Laboratories	Jul 01, 2012	1.0793	58,900	Expired batch
<input type="checkbox"/>	654564 Glaxo	Jul 08, 2013	1.2000	50	

Ok Cancel

Figure 161

7. Once the box is checked for the batch, you have an option to adjust the quantity of the medicine you want to transfer (red rectangle on Figure 162).

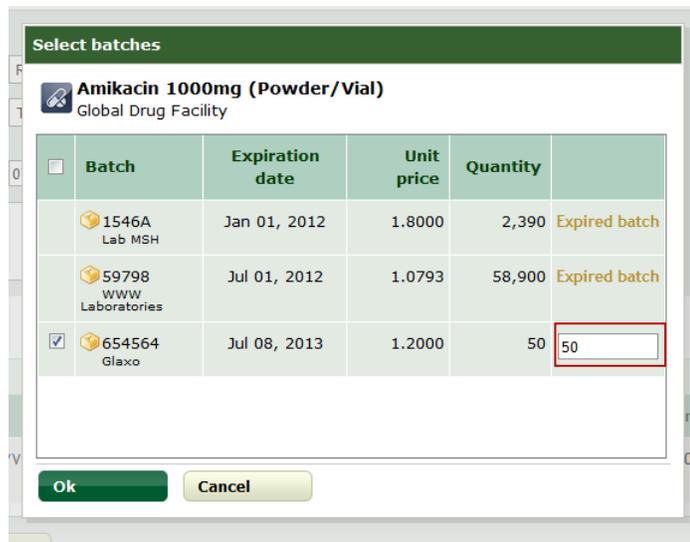


Figure 162

8. Click the **OK** button to keep the change or **Cancel** to undo it.
9. To delete a particular medicine selected; click on the **Delete** link (circled in blue on Figure 160).
10. When you have completed medicine selection for transfer, click the **OK** button to keep the changes or **Cancel** to undo them (Figure 160).

How to Access Medicine Transfers in Progress

To access medicine transfers in progress, follow this procedure:

1. On the main page of the **Medicines** Module (*Inventory* page), click on the **View Transfers Pending** link on the left menu bar (red rectangle on Figure 163).

Inventory

SPS MSH Demo

TB FREE CLINIC
City C - Region A

Select another unit

Medicine orders
+ New medicine order
View Orders Pending
Order history

Medicine transfer
+ New Medicine Transfer
View Transfers Pending
Transfer history

Medicine dispensing
+ New Medicine Dispensing
Dispensing history

Reports
Medicine movements
Estimated stock position
Stock Transaction

Other options
Remove unit from medicine management

DON (Donors) Adjust stock quantity

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Last movement
+ Amikacin 1000mg (Powder/Vial)	Mar 31, 2013	4,900			Jul 06, 2012

Figure 163

- The *View Transfers Pending* page that displays (Figure 164) categorizes all pending transfers into **Received transfers** (into the TB unit) and **Sent transfers** (from the TB unit).
- On the *View Transfers Pending* page, you have the option to **select another unit** (red circle on Figure 164).

View Transfers Pending

TB FREE CLINIC
City C - Region A

Select another unit

Received transfers

From	Shipping date	Created by	
HEALTH CENTER 1 City A - Region A	Jul 16, 2012 3 days ago	Antonia Kwiecien	Show details

Sent transfers

To	Shipping date	Created by	
UNIVERSITY HOSPITAL District 1 - Village A	Jul 06, 2012 13 days ago	Antonia Kwiecien	Show details

Figure 164

How to Notify Receipt of Transferred Medicine

To record receipt of transferred medicine, follow this procedure:

1. At the **View Transfers Pending** page for your TB unit, click on the **Show details** link for the transfer you want (circled in blue on Figure 164).
2. The **Transfer details** page (Figure 165) will appear. The transfer status is **waiting for receiving** (circled in red on Figure 165).

Medicines View Transfers Pending #940922 SPS MSH Demo

Notify transfer receiving

Transfer details

From: HEALTH CENTER 1
City A - Region A

To: TB FREE CLINIC
City C - Region A

Shipping date: Jul 16, 2012
By: Antonia Kwiecien

Transfer status: Waiting for receiving

Transferred medicines

Global Drug Facility					
Medicine	Expiration date	Shipped Quantity	Unit price	Total price	Received Quantity
Amikacin 1000mg (Powder/Vial)		10	1.2000	12.00	0
654564 Glaxo	Jul 08, 2013	10	1.2000	12.00	

Figure 165

3. Click on the **Notify transfer receiving** link (red rectangle in Figure 165).
4. On the page that appears, check if the **Received Quantity** (red rectangle on Figure 166) is the same as the **Shipped Quantity** (blue circle on Figure 166) registered in the transfer record.

Notify transfer receiving



From:
 TB FREE CLINIC
 City C - Region A

To:
 NATIONAL WAREHOUSE
 City A - Region A

Shipping date: Jul 24, 2012
 Yee-Ling Elaine Chim

Transfer status: Waiting for receiving

Receiving date: * (mm/dd/yyyy)

Comments from the receiving unit:

Transferred medicines

Global Drug Facility

Medicine	Expiration date	Shipped Quantity	Unit price	Total price	Received Quantity
Amikacin 1000mg (Powder/Vial)		2	1.2000	2.40	
654564 Glaxo	Jul 08, 2013	2	1.2000	2.40	<input type="text" value="2"/>

Ok Cancel

Figure 166

- If the quantities are not identical, adjust the **Received Quantity** (red rectangle on Figure 166), and record the reason for the difference in the **Comments from the receiving unit** field (green rectangle on Figure 166).
- Enter the **Receiving date** (blue rectangle on Figure 166).
- Click on the **OK** button to confirm the operation and the respective transfer will change to **Received** status (circled in red on Figure 167). Otherwise, click on **CANCEL** to undo it.

Transfer details 

From:
 HEALTH CENTER 1
 City A - Region A

To:
 TB FREE CLINIC
 City C - Region A

Shipping date: Jul 16, 2012
 By: Antonia Kwiecien

Receiving date: Jul 19, 2012
 By: Antonia Kwiecien

Transfer status: Received

Transferred medicines

Global Drug Facility					
Medicine	Expiration date	Shipped Quantity	Unit price	Total price	Received Quantity
 Amikacin 1000mg (Powder/Vial)		10	1.2000	12.00	10
 654564 Glaxo	Jul 08, 2013	10	1.2000	12.00	10

Figure 167

How to Access Medicine Transfer History

1. On the left menu bar of the *Inventory* page, click on **Transfer History** to display all transfers **received** or **canceled** for the particular TB unit you are viewing (red rectangle on Figure 168).

Transfer history

HEALTH CENTER 1
City A - Region A

Month / Year: - -
Transfer status: All transfers

ID	Shipping date	From	To	Transfer status
940919	Jun 22, 2012 3 days ago	HEALTH CENTER 1 City A - Region A	HEALTH CENTER 1 City A - Region A	Received
940920	Jun 01, 2012 24 days ago	HEALTH CENTER 1 City A - Region A	NATIONAL WAREHOUSE City A - Region A	Canceled
940915	May 25, 2012 1 Month ago	NATIONAL WAREHOUSE City A - Region A	HEALTH CENTER 1 City A - Region A	Received
940880	Feb 17, 2012 4 Months, 8 days ago	HEALTH CENTER 1 City A - Region A	HEALTH CENTER 1 City A - Region A	Canceled
940876	Feb 15, 2012 4 Months, 10 days ago	HEALTH CENTER 1 City A - Region A	HEALTH CENTER 6 City D - Region B	Received
940873	Feb 14, 2012 4 Months, 11 days ago	NATIONAL WAREHOUSE City A - Region A	HEALTH CENTER 1 City A - Region A	Canceled
940874	Feb 07, 2012 4 Months, 18 days ago	NATIONAL WAREHOUSE City A - Region A	HEALTH CENTER 1 City A - Region A	Received

Figure 168

2. Use the filters on the top of the page (circled in red on Figure 168) to select the **month/year** or the **transfer status** you want to view for that particular facility.
3. On the *Transfer History* page that displays, click on the ID number link (blue circle on Figure 169) to view details of the transfer

Transfer details 

From:
 NATIONAL WAREHOUSE
 City A - Region A

To:
 HEALTH CENTER 1
 City A - Region A

Shipping date: Sep 03, 2012
By: Luiz Fernando Avelino Reaciolino

Receiving date: Sep 03, 2012
By: Luiz Fernando Avelino Reaciolino

Transfer status: Received

Transferred medicines

Global Drug Facility					
Medicine	Expiration date	Shipped Quantity	Unit price	Total price	Received Quantity
 Amikacin 1000mg (Powder/Vial)		900	1.2000	1,080.00	900
 654564 Glaxo	Jul 08, 2013	900	1.2000	1,080.00	900

Figure 169

Medicine Dispensing

The **Medicine dispensing** menu allows you to check and record medicine dispensing to patients. Medicine dispensing can be done in two ways depending on the configuration in the administration module of the system. The option is set up for each TB Unit but you must use one or the other (not both) for each unit.

1. Quantity dispensed per patient in a day
2. Consolidated by the total quantity dispensed in a day

How to Record New Medicine Dispensing

A. Per patient in a day

To enter new dispensing information by patient, follow this procedure:

1. On the left menu bar of the Inventory page, click on the **New Medicine Dispensing** link (red rectangle on **Figure 170**).

Inventory

HEALTH CENTER 1
City A - Region A

GDF (Global Drug Facility)

Medicine	Next batch to expire	Available quantity	AMC	Estimated stock on hand	Last movement
Amikacin 1000mg (Powder/Vial)	Jul 01, 2012	58,950	300	1 Year, 12 days	Jun 26, 2012
Capreomycin 1000mg (Powder/Vial)	Dec 01, 2012	100	200	3 days	Jun 08, 2012
Cycloserine 250mg (Tablet or Capsule)		0	0		Feb 15, 2012
Ethambutol 400mg (Tablet)	Jul 01, 2012	1,900	83	5 days	Jun 08, 2012
Ethambutol 400mg28 (tabs)		0	0		Aug 05, 2011
Ethionamide 250mg (Tablets)	Sep 01, 2012	5,900	100	2 Months, 6 days	Jun 08, 2012
Isoniazid + Rifampicin 75/150mg (Tablet)		0	56		Dec 14, 2011

Figure 170

- The *Enter dispensing* page shows the list of all patients on treatment, the treatment regimens, and last dispensing registered date (Figure 171).

Enter dispensing

UNIVERSITY HOSPITAL
District 1 - Village A

Patient	Treatment Regimen	Last dispensing registered
Arshad Mahmood Khan New case	Category I	Register dispensing
Rick Saddler 26670	Category IV - 1	Register dispensing
Sandra Tavares 26674	Regimen II	Register dispensing

Figure 171

- To record dispensing, click on the **Register Dispensing** link (circled in red on Figure 171). The *Enter dispensing* page that displays shows the treatment status of the patient and all the medicines the patient is on (Figure 172).

Enter dispensing

Rick Saddler
26670

On treatment

Dispensing date: * (mm/dd/yyyy)

Treatment Regimen: Category IV - 1

DON - Donors

Medicine	Batch	Expiration date	Available qty		Dispensed quantity
			Batch	Total	
Amikacin 1000mg (Powder/Vial)	D2340980 Glaxo	Oct 10, 2013	2,000	2,000	<input type="text"/>
Capreomycin 1000mg (Powder/Vial)	1228 Pfizer	Sep 30, 2014	4,000	13,500	<input type="text"/>
	R234070 Pfizer	Sep 09, 2015	9,500		<input type="text"/>
Cycloserine 250mg (Tablet or Capsule)	F2384979 Merck	Nov 11, 2015	50,000	50,000	<input type="text"/>

GLC - Green Light Committee

Medicine	Batch	Expiration date	Available qty		Dispensed quantity
			Batch	Total	
Capreomycin 1000mg (Powder/Vial)	3297845 Big Pharma	Oct 31, 2013	500	500	<input type="text"/>
Cycloserine 250mg (Tablet or Capsule)	F23470 Pfizer	Dec 12, 2016	10,000	10,000	<input type="text"/>
Ethionamide 250mg (Tablets)	1598498978645 Big Pharma	Jul 31, 2013	400	400	<input type="text"/>
Levofloxacin 500mg (Tablet)	458676134 Big Pharma	Apr 30, 2014	250	250	<input type="text"/>
P-Aminosalicylic Acid 4000mg (Granules/Packet)	178-9797 Big Pharma	Dec 31, 2012	250	250	<input type="text"/>
Pyrazinamide 500mg (Tablet)	457897878 Big Pharma	Aug 30, 2014	325	325	<input type="text"/>

Save

Cancel

Figure 172

- Enter the dispensing date in the space provided and the dispensing quantity for each medicine you want to dispense (red rectangle on **Figure 172**).
- Click the **Save** button to accept changes or **Cancel** to undo them.

B. By total quantity dispensed in a day

To enter consolidated new dispensing information, follow this procedure:

1. Click on the **New Medicine Dispensing** link (red rectangle on **Figure 170**).
2. The **Enter dispensing** page shows the list of **medicines, batches, expiration dates, available quantities** and a space to enter **dispensed quantities** (**Figure 173**).

Enter dispensing



Dispensing date: * (mm/dd/yyyy)

DON - Donors

Medicine	Batch	Expiration date	Available qty		Dispensed quantity
			Batch	Total	
Amikacin 1000mg (Powder/Vial)	D2340980 Glaxo	Oct 10, 2013	2,000	2,000	<input type="text"/>
Capreomycin 1000mg (Powder/Vial)	1228 Pfizer	Sep 30, 2014	4,000	13,500	<input type="text"/>
	R234070 Pfizer	Sep 09, 2015	9,500		<input type="text"/>
Cycloserine 250mg (Tablet or Capsule)	F2384979 Merck	Nov 11, 2015	50,000	50,000	<input type="text"/>

GLC - Green Light Committee

Medicine	Batch	Expiration date	Available qty		Dispensed quantity
			Batch	Total	
Capreomycin 1000mg (Powder/Vial)	3297845 Big Pharma	Oct 31, 2013	500	500	<input type="text"/>
Cycloserine 250mg (Tablet or Capsule)	F23470 Pfizer	Dec 12, 2016	10,000	10,000	<input type="text"/>
Ethionamide 250mg (Tablets)	1598498978645 Big Pharma	Jul 31, 2013	400	400	<input type="text"/>
Levofloxacin 500mg (Tablet)	458676134 Big Pharma	Apr 30, 2014	250	250	<input type="text"/>
P-Aminosalicylic Acid 4000mg (Granules/ Packet)	178-9797 Big Pharma	Dec 31, 2012	250	250	<input type="text"/>
Pyrazinamide 500mg (Tablet)	457897878 Big Pharma	Aug 30, 2014	325	325	<input type="text"/>

Figure 173

- To record dispensing, enter the **Dispensing Date** (circled in red on Figure 173) and the **dispensed quantities** for each medicine you want to dispense (circled in blue on Figure 173).
- Click the **Save** button to accept changes or **Cancel** to undo them.

How to View Dispensing History

- To view dispensing history for a particular TB unit, click on the **Dispensing History** link on the left menu bar of the medicines page (blue rectangle on Figure 170).
- In the *Dispensing history* page that displays, you can filter the dispensing history you want to view according to **month/year**. Depending on which dispensing method is used for that TB unit (by patients or consolidated) a list of **medicines** showing the **source, batch and dispensed quantity** will display (Figure 174).

Dispensing history

UNIVERSITY HOSPITAL
District 1 - Village A

Select another unit

Month / Year: Jun 2012

Rick Saddler
26670

Show details

Medicine Source	Medicine	Batch	Dispersed quantity	
			Batch	Total
DON	Amikacin 1000mg (Powder/Vial)	D2340980 Glaxo	33	33
DON	Cycloserine 250mg (Tablet or Capsule)	F2384979 Merck	100	100
GLC	Ethionamide 250mg (Tablets)	1598498978645 Big Pharma	100	100
GLC	Levofloxacin 500mg (Tablet)	458676134 Big Pharma	66	66
GLC	P-Aminosalicylic Acid 4000mg (Granules/ Packet)	178-9797 Big Pharma	66	66
GLC	Pyrazinamide 500mg (Tablet)	457897878 Big Pharma	100	100

Medicine orders
+ New medicine order
View Orders Pending
Order history

Medicine transfer
+ New Medicine Transfer
View Transfers Pending
Transfer history

Medicine dispensing
+ New Medicine Dispensing
Dispensing history

Reports
Medicine movements
Estimated stock position
Stock Transaction

Other options
Remove unit from medicine management

Figure 174

How to Adjust Dispensing Quantities

To adjust dispensing quantities, follow this procedure:

1. Click the **Dispensing history** link on the left menu bar of the medicines page (blue rectangle on **Figure 170**).
2. In the **Dispensing history** page that displays, click on the **show details** link for the particular medicine or patient you want (red circle on Figure 174).
3. In **Medicine dispensing** page that displays, click on the **Edit** link (circled in red on Figure 175) to display the page where you can make changes.

The screenshot shows the 'Medicine dispensing' interface for University Hospital, District 1 - Village A. The user is Rick Saddler (ID 26670). The date is May 01, 2012. The table below lists the dispensed medicines:

Medicine Source	Medicine	Batch	Dispersed quantity	
			Batch	Total
DON	Amikacin 1000mg (Powder/Vial)	D2340980 Glaxo	33	66
		642897 Big Pharma	33	
DON	Cycloserine 250mg (Tablet or Capsule)	F2384979 Merck	100	200
		F23470 Pfizer	100	
GLC	Ethionamide 250mg (Tablets)	2679769L Big Pharma	100	100
GLC	Levofloxacin 500mg (Tablet)	626789175-88 Big Pharma	66	66
GLC	P-Aminosalicylic Acid 4000mg (Granules/Packet)	24532085 Big Pharma	66	66
GLC	Pyrazinamide 500mg (Tablet)	269716 Big Pharma	100	100

Figure 175

4. On the **Enter dispensing** page that appears, enter new information and click the **Save** button to retain or **Cancel** to undo it (**Figure 176**).

Enter dispensing



UNIVERSITY HOSPITAL
District 1 - Village A

Rick Saddler
26670

On treatment

Dispensing date: * 05/01/2012 (mm/dd/yyyy)

Treatment Regimen: Category IV - 1

DON - Donors

Medicine	Batch	Expiration date	Available qty		Dispensed quantity
			Batch	Total	
Amikacin 1000mg (Powder/Vial)	D2340980 Glaxo	Oct 10, 2013	1,934	1,934	33
Capreomycin 1000mg (Powder/Vial)	1228 Pfizer	Sep 30, 2014	4,000	13,500	
	R234070 Pfizer	Sep 09, 2015	9,500		
Cycloserine 250mg (Tablet or Capsule)	F2384979 Merck	Nov 11, 2015	49,800	49,800	100

GLC - Green Light Committee

Medicine	Batch	Expiration date	Available qty		Dispensed quantity
			Batch	Total	
Amikacin 1000mg (Powder/Vial)	642897 Big Pharma	Jun 30, 2014	967	967	33
Capreomycin 1000mg (Powder/Vial)	3297845 Big Pharma	Oct 31, 2013	500	500	
Cycloserine 250mg (Tablet or Capsule)	6428975/B Big Pharma	Aug 31, 2012	500	10,400	
	F23470 Pfizer	Dec 12, 2016	9,900		100
Ethionamide 250mg (Tablets)	1598498978645 Big Pharma	Jul 31, 2013	300	1,200	
	2679769L Big Pharma	Dec 31, 2014	900		100
Levofloxacin 500mg (Tablet)	626789175-88 Big Pharma	Apr 30, 2012	934	1,118	66
	458676134 Big Pharma	Apr 30, 2014	184		
P-Aminosalicylic Acid 4000mg (Granules/Package)	178-9797 Big Pharma	Dec 31, 2012	184	1,118	
	24532085 Big Pharma	Jan 31, 2013	934		66
Pyrazinamide 500mg (Tablet)	457897878 Big Pharma	Aug 30, 2014	500	900	
	269716 Big Pharma	Aug 31, 2014	400		100

Save Cancel

Figure 176

Medicine Movements Report

The **Medicine movements** report allows you to check all stock movements that have occurred in the selected TB unit in chronological order. It is a good way to track every medicine transaction from a specific date back. You also have the option to display this report as movements by specific medicine batches in more detail.

How to Access the Medicine Movements Report

To access medicine movements report, follow this procedure:

1. At the ***Inventory*** page for the TB unit you want, click on the **Medicine movements** link (circled in red on **Figure 170**).
2. On the ***Medicine Movements*** page that appears the system will show a table with the **date** of the movement, **medicine name**, **medicine source**, **movement type**, **movement quantity**, **unit price**, **total price**, and **stock quantity at previous month end**.
3. You may change the displayed TB unit by clicking on the **Select another unit** link.
4. To change the displayed information, select filter options from the **drop-down menus** (red rectangles on Figure 177).
5. Click the arrow in each box next to the filters (blue circles on Figure 177) to mark the specific information you want displayed, and click on the **UPDATE** button.
6. The **Reference date** determines which records are displayed, since only the medicine movements before that date are shown.

Medicine orders

- [+ New medicine order](#)
- [View Orders Pending](#)
- [Order history](#)

Medicine transfer

- [+ New Medicine Transfer](#)
- [View Transfers Pending](#)
- [Transfer history](#)

Medicine dispensing

- [+ New Medicine Dispensing](#)
- [Dispensing history](#)

Reports

- [Medicine movements](#)
- [Estimated stock position](#)
- [Stock Transaction](#)

Other options

- [+ Remove unit from medicine management](#)

Medicine movements

UNIVERSITY HOSPITAL
District 1 - Village A

[Select another unit](#)

Medicine: ▼

Medicine Source: ▼

Movement type: ▼

Start date: (mm/dd/yyyy)

Finish date: (mm/dd/yyyy)

Batch number:

Display batches:

* Value is required

Resulting: 1 - 8 Of 8

Date	Medicine	Medicine Source	Movement type	Movement quantity	Unit price	Total price	Stock quantity at previous month end
Jun 01, 2012	Amikacin 1000mg (Powder/Vial)	DON	Medicine dispensing to patient	-33	2.00	66.00	1,934
Jun 01, 2012	Cycloserine 250mg (Tablet or Capsule)	DON	Medicine dispensing to patient	-100	10.00	1,000.00	49,800
May 01, 2012	Amikacin 1000mg (Powder/Vial)	DON	Medicine dispensing to patient	-33	2.00	66.00	1,967
May 01, 2012	Cycloserine 250mg (Tablet or Capsule)	DON	Medicine dispensing to patient	-100	10.00	1,000.00	49,900
Mar 06, 2012	Capreomycin 1000mg (Powder/Vial)	DON	Adjustment	5,000	1.50	7,500.00	15,000
Feb 16, 2012	Amikacin 1000mg (Powder/Vial)	DON	Medicine management initialization	2,000	2.00	4,000.00	2,000

Figure 177

All movements that have occurred up to the reference date are listed in chronological order. The quantities received are displayed in black and the quantities issued are displayed in red as negative numbers.

How to Check Estimated Stock Position

When medicine dispensing is entered in real time, the system shows the stock quantity after the last stock movement and, for the patients under treatment, estimates the consumption and stock position up to the current date for each medicine available at the selected TB unit.

To check the estimated stock position, follow this procedure:

1. Click on the **Estimated Stock Position** link (green rectangle on **Figure 170**) for the list of available medicines by source.

- The system displays the *Estimated stock position* page that shows a table with the **medicine name**, **stock quantity at previous month end**, **last movement** (date the medicine was last issued or received), **number of days for estimating**, **number of cases** under treatment, for cases under treatment the **estimated consumption** and the **quantity in stock today** for each medicine available at the selected TB unit (Figure 178).

Estimated stock position

UNIVERSITY HOSPITAL
District 1 - Village A

Medicine Source: -

* Value is required

Update

Medicine	Stock quantity at previous month end	Last movement	Number of days for estimating	Number of Cases	Estimated consumption	Estimated quantity in stock today
Amikacin 1000mg (Powder/Vial)	2,901	Jun 01, 2012	56	-	0	2,901
Capreomycin 1000mg (Powder/Vial)	14,500	Jun 25, 2012	1	1	1	14,499
Cycloserine 250mg (Tablet or Capsule)	60,200	Jun 01, 2012	56	1	75	60,125
Ethionamide 250mg (Tablets)	1,200	Jun 25, 2012	1	1	3	1,197
Levofloxacin 500mg (Tablet)	1,118	Jun 25, 2012	1	1	2	1,116
P-Aminosalicylic Acid 4000mg (Granules/Package)	1,118	Jun 25, 2012	1	1	2	1,116
Pyrazinamide 500mg (Tablet)	900	Jun 26, 2012	0	-	0	900

Figure 178

- You can filter by **Medicine Source** (red rectangle on Figure 178).
- Click the **UPDATE** button to display the filtered information.
- Change the TB unit by clicking on the **Select another unit** link (red circle on Figure 178) if needed.

Stock Transaction Report

The stock transaction report provides a summary of medicines that have come in and gone out of the unit.

To check stock transactions, follow this procedure:

1. Click on the **Stock Transaction** link (blue circle on **Figure 170**) to display the list of available medicines by source shown in Figure 179.

On the **Stock Transaction** page that appears the system shows a table. In the rows of the table each medicine available at the selected TB unit is listed and, in the columns, the **Initial quantity**, the **Input** (i.e., quantities received), and **Output** (i.e., quantities transferred, shipped, or dispensed during the selected period) is provided. The last column shows the **Final quantity**, which is the current existing quantity in stock in the TB unit selected.

Stock Transaction

UNIVERSITY HOSPITAL
District 1 - Village A

Medicine Source: -

Initial month/year: * Mar 2012

Final month/year: * Jun 2012

* Value is required

Medicine	Initial quantity	Input	Output	Final quantity
Amikacin 1000mg (Powder/Vial)	2,000	0	66	1,934
Amikacin 1000mg (Powder/Vial)	0	1,000	33	967
Capreomycin 1000mg (Powder/Vial)	10,000	5,000	1,500	13,500
Capreomycin 1000mg (Powder/Vial)	0	500	0	500
Cycloserine 250mg (Tablet or Capsule)	50,000	0	200	49,800
Cycloserine 250mg (Tablet or Capsule)	10,000	500	100	10,400
Ethionamide 250mg (Tablets)	0	1,400	200	1,200
Levofloxacin 500mg (Tablet)	0	1,250	132	1,118
P-Aminosalicylic Acid 4000mg (Granules/Package)	0	1,250	132	1,118
Pyrazinamide 500mg (Tablet)	0	1,100	200	900

Figure 179

2. Filter the list by selecting the **Medicine Source** from the drop-down menu (red rectangle on Figure 179).

3. Click the **UPDATE** button to show the desired information.
4. Change the **period** to be analyzed by entering the **Initial month/year** and **Final month/year** (blue rectangle on Figure 179)
5. Click the **UPDATE** button to show the desired information.
6. Change the unit by clicking on the **Select another unit** link (red circle on Figure 179).

How to Remove a Unit from Medicine Management

This function should only be used if you want to delete all the medicine management information for a particular TB unit.

To perform this function, follow the procedure below:

1. Click on the **Remove Unit from Medicine Management** link (black arrow on **Figure 170**).
2. In the *confirmation* box that pops up; click on the **OK** button to confirm that you want to delete all medicine management information for that particular TB unit or **Cancel** to keep it the way it is (Figure 180).

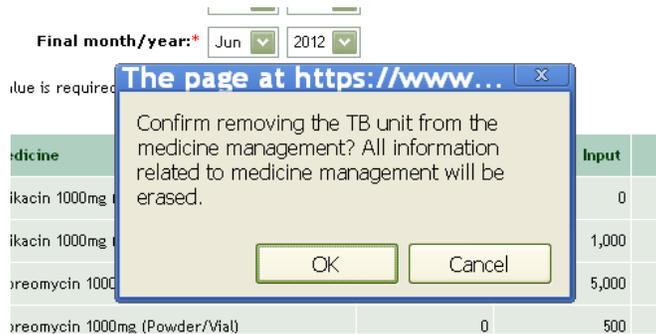


Figure 180

Receivings from Manufacturers

This function will only be available to you if your unit receives an order from a medicine source (e.g., GLC, GDF, or MOH). Every time a new medicine order is received from a medicine source, it must be registered in the system. Medicine receiving is registered by the TB unit that received the medicines (usually a central or district warehouse). The registration process gathers information about the medicine source, the date received, and the medicines and batches received. Once medicine receiving registration is completed, the system will increase the stock position for the new quantities in the TB unit.

How to Access Medicine Receiving

1. Click on the **View all receivings** link in the left menu bar on the main page of the Medicines Module (*Inventory* page - red rectangle on Figure 181) for the TB unit you want.

The screenshot shows the 'Inventory' page for 'NATIONAL WAREHOUSE City A - Region A'. The sidebar on the left contains several menu items: 'Receivings from manufacturer' (with a sub-item 'New medicine receiving' and a red rectangle around 'View all receivings'), 'Medicine orders', 'Medicine transfer', 'Reports', and 'Other options'. The main content area displays two tables of inventory data for 'GLC (Green Light Committee)' and 'GDF (Global Drug Facility)'. Each table has columns for Medicine, Next batch to expire, Available quantity, Total price, Unit price, and Last movement.

GLC (Green Light Committee) Adjust stock quantity						
Medicine	Next batch to expire	Available quantity	Total price	Unit price	Last movement	
+ Amikacin 1000mg (Powder/Vial)	Feb 01, 2013	19,867	19,300.50	0.97	Jun 13, 2012	
+ Ethambutol 400mg (Tablet)	May 02, 2013	100,000	30,000.00	0.30	Sep 24, 2011	

GDF (Global Drug Facility) Adjust stock quantity						
Medicine	Next batch to expire	Available quantity	Total price	Unit price	Last movement	
+ Amikacin 1000mg (Powder/Vial)	⚠ Jul 08, 2013	50,000	29,036.90	0.79	Jun 12, 2012	
+ Capreomycin 1000mg (Powder/Vial)	⚠ Dec 01, 2012	58,900	100,430.39	1.48	Feb 02, 2012	
+ Cycloserine 250mg (Tablet or Capsule)	⚠ Jan 01, 2013	64,000	60,046.40	1.29	Sep 24, 2011	
+ Ethambutol 400mg (Tablet)	⚠ Jul 01, 2012	116,000	545,243.00	3.38	Feb 16, 2012	

Figure 181

On the *Receivings from manufacturer* page that appears, all receivings registered in the system for the selected TB unit are shown in Figure 182, and are arranged by receiving date.

2. By selecting the **Medicine source** from the drop-down menu (red rectangle on Figure 182) you can filter the list to show only receivings from the source selected.

Receivings from manufacturer

[+ New medicine receiving](#)

[View all receivings](#)

Medicine orders

[+ New medicine order](#)

[View Orders Pending](#)

[Order history](#)

Medicine transfer

[+ New Medicine Transfer](#)

[View Transfers Pending](#)

[Transfer history](#)

Reports

[Medicine movements](#)

[Estimated stock position](#)

[Stock Transaction](#)

Other options

[+ Remove unit from medicine management](#)

Receivings from manufacturer

Select another unit

Medicine Source: - ▼

Resulting: 1 - 9 Of 9

Receiving Date	Medicine Source	Total price
Jun 06, 2012	MoH Ministry of Health	15,000.00
Jun 05, 2012	MoH Ministry of Health	232,800.00
Feb 21, 2012	GDF Global Drug Facility	20.00
Feb 16, 2012	GDF Global Drug Facility	650,000.00
Sep 24, 2011	GLC Green Light Committee	45,000.00
Aug 01, 2011	GDF Global Drug Facility	2,300,000.00
Jul 15, 2011	MoH Ministry of Health	6,000.00
Jul 11, 2011	GDF Global Drug Facility	1,200.00
Jul 01, 2011	GDF Global Drug Facility	2,108,360.00

Figure 182

How to Record New Medicine Receiving

Follow this procedure to record new medicines received:

1. Click on the **New medicine receiving** link on the left menu bar of the *Inventory* page (red circle on Figure 182) for the TB unit you want.
2. At the *New medicine receiving* page, enter the **Medicine Source** and **Receiving Date** (Figure 183).

New medicine receiving



NATIONAL WAREHOUSE
City A - Region A

Medicine Source: * -

Receiving Date: * (mm/dd/yyyy)

Received medicines New batch...

No medicine selected

Save Cancel * Value is required

Figure 183

3. Click on the **New batch** button (Figure 183) to select the medicines received.
4. In the **New Batch** box displayed, select the medicine you want to add from the drop-down menu (Figure 184).
5. Enter the rest of the information on the page including the **batch number**, **expiration date**, **manufacturer**, **quantity received**, **number of boxes**, **quantity per box**, and **unit price** or **total price**.
6. Click on the **OK** button to confirm or **Cancel** to undo it.
7. Repeat this procedure for each medicine you want to add.

New medicine receiving

NATIONAL WAREHOUSE
City A - Region A

New - Batch

Medicine: * -

Batch number: *

Manufacturer:

Expiration date: * (mm/dd/yyyy)

Received qty: * 0

Number of boxes: * 0

Quantity per box: * 0

Unit price: * 0.00

Total price: * 0.00

Ok Cancel * Value is required

Figure 184

How to Change Already Recorded Medicines Received

Follow this procedure the change information about medicines that have already been received:

1. At the main page of the **Medicines** Module (*Inventory* page) click on the **View all receivings** link on the left menu bar of the medicines page (red rectangle on Figure 181) to see all medicines received for that TB unit (Figure 182).
2. Click on a specific **receiving date** link (red circle on Figure 182) to display all medicine and batches received on that date (shown in Figure 185).
3. On the **Receivings from manufacturer** page (Figure 185) click on **Delete** (in the red rectangle on Figure 185) to delete the entire order received. In the confirmation box that appears, click on **OK** to confirm or **CANCEL** to undo it.

Box 3.

You cannot delete a medicine receiving entry if any of its stock is already in use.

Medicine	Expiration date	Number of boxes	Quantity	Unit price	Total price
Ethambutol 400mg (Tablet)			6,000	79.17	475,000.00
A57587 Pfizer	Sep 09, 2013	50 (100)	5,000	80.00	400,000.00
LH49982 Pfizer	Jun 30, 2014	10 (100)	1,000	75.00	75,000.00
Levofloxacin 500mg (Tablet)			20,000	8.00	160,000.00
B598598 Merck	Oct 10, 2014	50 (400)	20,000	8.00	160,000.00
Isoniazid + Rifampicin + Pirazinamide + Ethambutol 75/150/400/275mg (Tablet)			10,000	9.00	90,000.00
F97897 Merck	Dec 12, 2014	40 (250)	10,000	9.00	90,000.00

Figure 185

- Click on the **Edit** link (blue rectangle in Figure 185) to complete or change information regarding receiving transactions for the displayed medicine.
- At the *Edit medicine receiving* page that displays (**Figure 186**) you can change the **Medicine Source** and **Receiving Date** fields (red rectangles on **Figure 186**) to filter information for the selected order received.

Edit medicine receiving 🖨️

NATIONAL WAREHOUSE
 City A - Region A

Medicine Source: * GDF - Global Drug Facility ▼

Receiving Date: * 02/16/2012 📅 (mm/dd/yyyy)

Received medicines New batch...

Medicine	Expiration date	Number of boxes	Quantity	Unit price	Total price	Action
Ethambutol 400mg (Tablet)			6,000	79.17	475,000.00	
A57587 Pfizer	Sep 09, 2013	50 (100)	5,000	80.00	400,000.00	Edit Delete
LH49982 Pfizer	Jun 30, 2014	10 (100)	1,000	75.00	75,000.00	Edit Delete
Levofloxacin 500mg (Tablet)			20,000	8.00	160,000.00	
B598598 Merck	Oct 10, 2014	50 (400)	20,000	8.00	160,000.00	Edit Delete
Isoniazid + Rifampicin + Pirazinamide + Ethambutol 75/150/400/275mg (Tablet)			10,000	9.00	90,000.00	
F97897 Merck	Dec 12, 2014	40 (250)	10,000	9.00	90,000.00	Edit Delete

Save
Cancel
* Value is required

Figure 186

- To **add** a medicine to the order received click on the **New batch** link (blue rectangle on **Figure 186**).
- In the *New batch* page displayed select the medicine you want to add from the drop-down menu (Figure 187).
- Enter the rest of the information on the page including the **batch number**, **expiration date**, **manufacturer**, **quantity received**, **number of boxes**, **quantity per box**, and **unit price** or **total price**.

9. Click on the **OK** button to confirm or **Cancel** to undo it.
10. Repeat this for each medicine you want to add.

The screenshot shows a web application interface for editing medicine receiving. A modal dialog box titled "New - Batch" is open over a table of received medicines. The dialog box contains the following fields:

- Medicine:** A dropdown menu with a red asterisk indicating it is required.
- Batch number:** A text input field with a red asterisk.
- Manufacturer:** A text input field.
- Expiration date:** A date picker with a red asterisk and a tooltip showing "(mm/dd/yyyy)".
- Received qty:** A numeric input field with a red asterisk, currently set to 0.
- Number of boxes:** A numeric input field with a red asterisk, currently set to 0.
- Quantity per box:** A numeric input field with a red asterisk, currently set to 0.
- Unit price:** A numeric input field with a red asterisk, currently set to 0.00.
- Total price:** A numeric input field with a red asterisk, currently set to 0.00.

At the bottom of the dialog box, there are "Ok" and "Cancel" buttons. A red asterisk and the text "* Value is required" are visible at the bottom right of the dialog box.

Figure 187

11. To **edit** a medicine in the selected order received click on the **Edit** link (red circle on **Figure 186**) in the **Action** column to the right of the batch number.
12. In the **Edit – batch** box that appears, change recorded information regarding a specific batch related to a specific medicine (Figure 188).
13. Click on the **OK** button to confirm or **CANCEL** to undo it.

ed medicines

New batch.

dicine

Amikacin 1000mg

Action

Edit

Delete

ue is requ

Edit - Batch

Medicine:* Amikacin 1000mg (Powder/Vial)

Batch number:* 102

Expiration date:* 12/31/2013 (mm/dd/yyyy)

Manufacturer:* Pfizer

Received qty:* 10000 (Powder/Vial)

Number of boxes:* 10

Quantity per box:* 1000 (Powder/Vial)

Unit price:* 1.50

Total price:* 15,000.00

Ok Cancel

* Value is required

Figure 188

14. To **delete** a specific batch of medicine in the order received, click on the **Delete** link (green circle on **Figure 186**) in the **Action** column to the right of the batch number you want to delete.
15. In the *confirmation* box that appears click the **OK** button to confirm or **CANCEL** to undo it.
16. To go back to the medicine's main page; click either on the **Inventory** link on the top menu bar or the **Medicines** Tab (circled in red on **Figure 189**).

Receivings from manufacturer

NATIONAL WAREHOUSE
City A - Region A

ID: 942168

Medicine Source: Global Drug Facility

Receiving Date: Feb 16, 2012

Total price: 725,000.00

Medicine	Expiration date	Number of boxes	Quantity	Unit price	Total price
Ethambutol 400mg (Tablet)			6,000	79.17	475,000.00
A57587 Pfizer	Sep 09, 2013	50 (100)	5,000	80.00	400,000.00
LH49982 Pfizer	Jun 30, 2014	10 (100)	1,000	75.00	75,000.00
Levofloxacin 500mg (Tablet)			20,000	8.00	160,000.00
B598598 Merck	Oct 10, 2014	50 (400)	20,000	8.00	160,000.00
Isoniazid + Rifampicin + Pirazinamide + Ethambutol 75/150/400/275mg (Tablet)			10,000	9.00	90,000.00
F97897 Merck	Dec 12, 2014	40 (250)	10,000	9.00	90,000.00

Figure 189

CHAPTER 6. MANAGEMENT MODULE

The **Management** module allows you to generate, search and print reports, indicators, medicine forecasting, and to export data.

How to Access the Management Module

Click on the **Management** tab or **Management** link on the system's main page (red rectangles on Figure 190), and the **Management** module's main page will appear (Figure 191).

The screenshot shows the eTBManager TB Management Information System interface. At the top, there is a navigation bar with tabs for HOME, CASES, MEDICINES, MANAGEMENT, and ADMINISTRATION. The MANAGEMENT tab is highlighted with a red rectangle. Below the navigation bar, there is a sidebar on the left with user information: Name: Antonia Kwiecien, TB Unit: UNIVERSITY HOSPITAL, User profile: Administrator, and User View: Whole country. The main content area features a welcome message and a grid of four modules: Cases, Medicines, Management, and Administration. The Management module link is highlighted with a red rectangle. The Management module description is: "Allows to generate, search and print reports, indicators, medicine forecasting and data exportation".

Figure 190

At the **Management** main page you will find **Reports, Indicators, and Tools** available in the system (Figure 191).

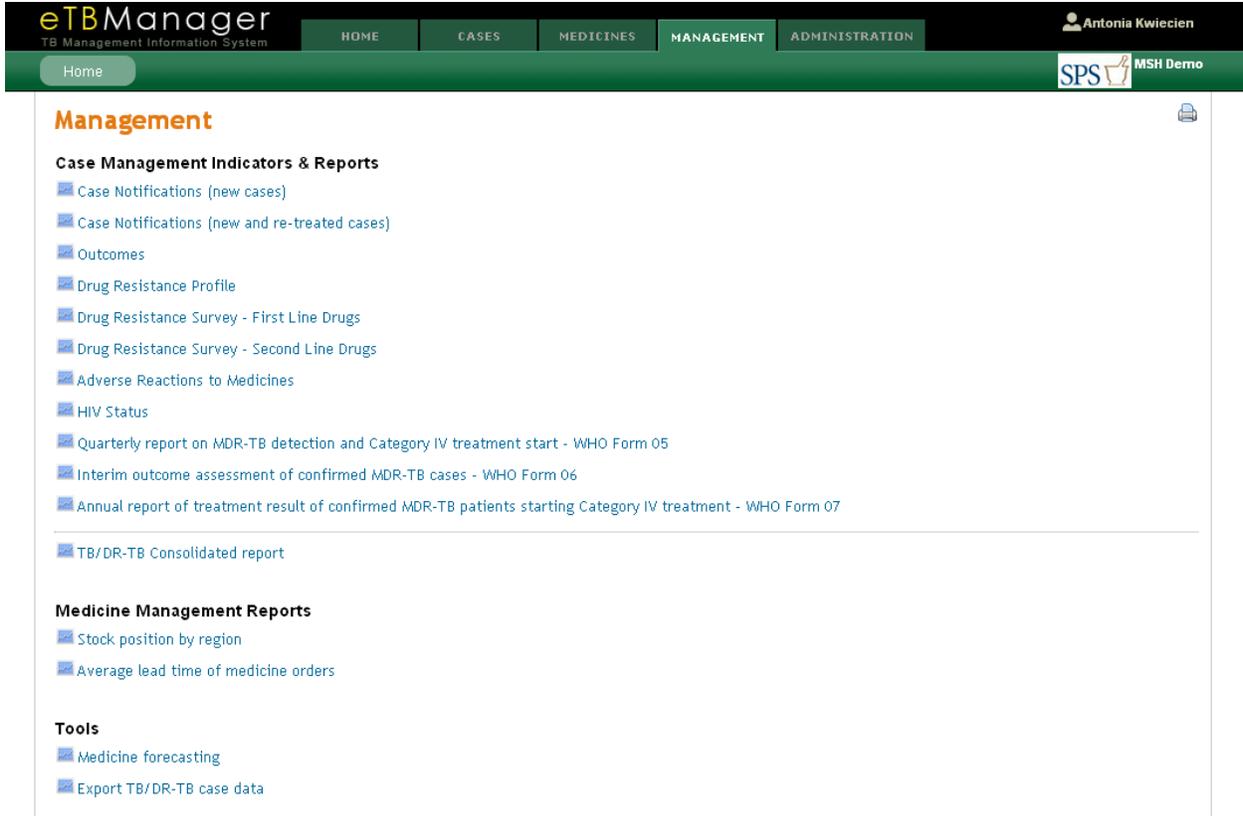


Figure 191

Case Management Indicators and Reports

Figure 191 contains a complete list of the indicators, reports, and tools available in this module. The list is subdivided into three groups: the **Case Management Indicators & Reports** (i.e., eight indicators and four reports), the **Medicine Management Reports** (two reports), and the **Tools** (two instruments to aid in analysis and forecasting). Just click on the link of the specific report you want, and the system will display a page with options to generate this report.

How to Access the Indicators and Reports

The e-TB Manager contains 12 TB indicators and two reports, as shown on Figure 191. Each is discussed below.

Case Notifications (new cases)

1. Click on the **Case Notifications (new cases)** link (Figure 191), and the **Case Notifications (new cases)** page shown in Figure 192 appears.

Management SPS MSH Demo

Case Notifications (new cases) 🖨️

Classification: - All -

Context: Treatment site Patient residence site

Province / Region: -

Period for case selection

Registration date Diagnosis date Start treatment date

Initial month/year: - -

Final month/year: - -

Other filters

Type of patient: - All -

Treatment Regimen: - All -

Site of Disease: - All -

Microscopy result: - All -

Type of diagnostic: - All -

HIV testing result: - All -

Gender: - All -

Medicine Source: - All -

Age range: - All -

Culture result: - All -

Type of TB drug resistance: - All -

Output selection

Rows: Province / Region

Update

Figure 192

2. Select the **Classification**, **Context**, **Province / Region**, **Period for case selection**, **Other filters**, and the **Output selection** by clicking the applicable option button, check boxes, and drop-down menus.
3. Click on the **UPDATE** button to show the information in Figure 193.

Province / Region	Number of cases	Percentage
Region A	1,152	53.6%
Region B	997	46.4%
Total	2,149	100%

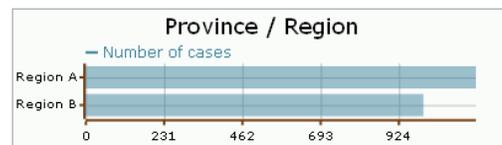


Chart type: Horizontal bar

Figure 193

For the selected period, the system generates a table with the distribution according to the output selected (with a percentage of the total) and a related chart. If no province or region is selected, the system calculates the response for the whole country. If a province or region is chosen, the system calculates the response by locality.

4. In the **Chart type** drop-down menu at the bottom of the page (Figure 193), select the desired type of chart, and click on the **UPDATE** button. The data will be exhibited as a horizontal bar chart (Figure 193) or a pie chart (Figure 194). If you hover the cursor over the chart, it will display the detail of the data.

Region / Province	Number of cases	Percentage
Region A	1,144	53.4%
Region B	997	46.6%
Total	2,141	100%

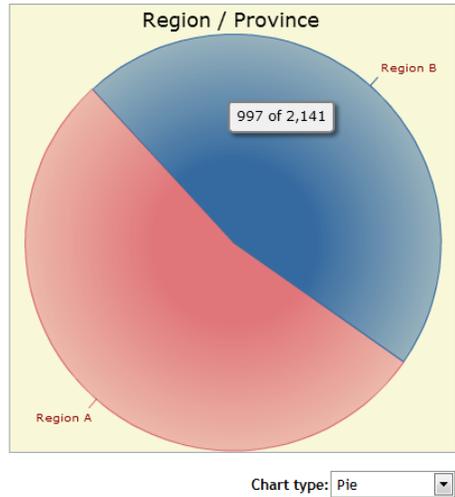


Figure 194

5. Click on the **Management** link at the top of the page to return to the *Management* module's main page.

Case Notifications (new and re-treated cases)

1. Click on the **Case Notifications (new and re-treated cases)** link (Figure 191), and the *Case Notifications (new and re-treated cases)* page shown in **Figure 195** appears.

Figure 195

2. Select the **Classification**, **Context**, **Province / Region**, **Period for case selection**, **Other filters** as needed, and the **Output selection** by clicking the applicable option button, check boxes, and drop-down menus.
3. Click on the **UPDATE** button to show the information in Figure 196.

Case Notifications (new and re-treated cases)	Number of cases	Percentage
Region A	1,144	53.4%
Region B	997	46.6%
Total	2,141	100%

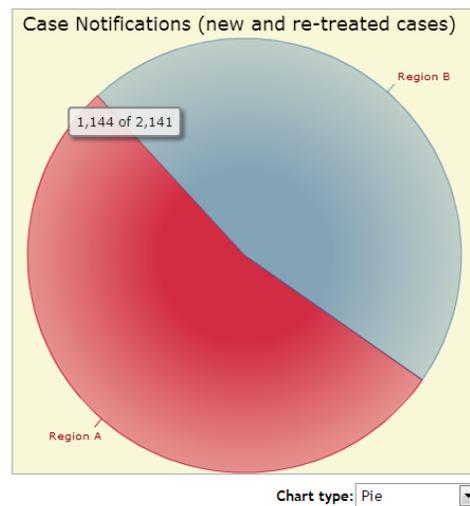


Figure 196

For the selected period, the system generates a table with the distribution according to the output selected (with a percentage of the total) and a related chart. If no province or region is selected, the system calculates the response for the whole country. If a region is chosen, the system calculates the response by locality.

4. In the **Chart type** drop-down menu at the bottom of the page (Figure 196), select the desired type of chart, and click on the **UPDATE** button. The data will be exhibited as a **pie chart** (Figure 196) or as a **horizontal bar chart** (Figure 197).

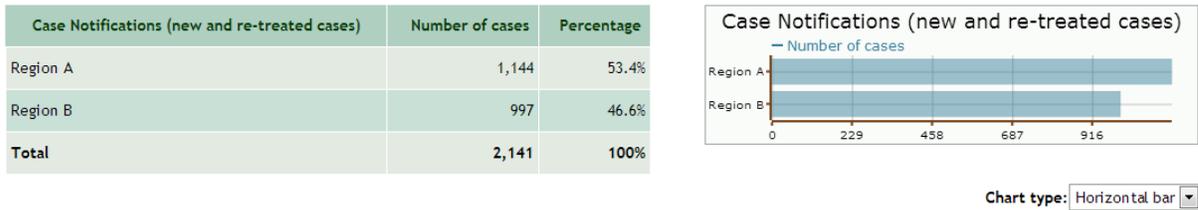


Figure 197

5. Click on the **Management** link at the top of the page to return to the *Management* module's main page.

Outcomes

1. Click on the **Outcomes** link (Figure 191), and the **Outcomes** page in Figure 198 appears.

Outcomes



Classification: - All -

Context: Treatment site Patient residence site

Region / Province: -

Period for case selection

Registration date Diagnosis date Start treatment date

Initial month/year: - - Final month/year: - -

Other filters

Type of patient: - All -

Treatment Regimen: - All -

Site of Disease: - All -

Microscopy result: - All -

Type of diagnostic: - All -

HIV testing result: - All -

Gender: - All -

Medicine Source: - All -

Age range: - All -

Culture result: - All -

Type of TB drug resistance: - All -

Show as percentage

Update

Number of patients who started treatment during the period

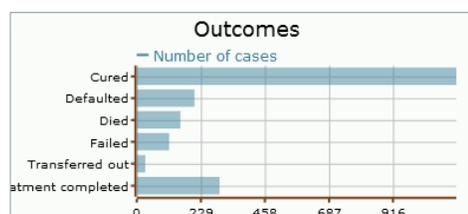
Figure 198

2. Select the **Classification, Context, Province / Region, Period for case selection**, and **Other filters** by clicking the applicable option button, check boxes, and drop-down menus.
3. Click on the **UPDATE** button to show the information in Figure 199.

Number of patients who started treatment during the period

Type of patient	Waiting to start treatment	On treatment	Transferring to another unit	Cured	Treatment completed	Failed	Defaulted	Died	Transferred out	Diagnosis changed	Other	Category IV (DR-TB)	Total	Success rate
New	1.52%	5.78%	0%	53%	13.94%	5.13%	10.04%	6.93%	1.37%	1.23%	1.08%	0%	100%	66.93%
Relapse	0.62%	3.12%	0%	51.25%	13.75%	10.62%	8.75%	8.12%	0.62%	0%	3.12%	0%	100%	65%
After default	1.01%	6.04%	0%	54.03%	13.09%	5.03%	9.4%	6.38%	2.35%	0.67%	1.34%	0.67%	100%	67.11%
Failure re-treatment	0.95%	4.76%	0.95%	53.33%	15.24%	4.76%	4.76%	10.48%	1.9%	1.9%	0.95%	0%	100%	68.57%
Failure 1st treatment	0%	6.87%	0%	56.49%	10.69%	4.58%	7.63%	10.69%	1.53%	0.76%	0.76%	0%	100%	67.18%
Other	0%	9.09%	0%	63.64%	18.18%	0%	4.55%	4.55%	0%	0%	0%	0%	100%	81.82%
Transferred in	0%	8.33%	0%	47.92%	16.67%	4.17%	18.75%	4.17%	0%	0%	0%	0%	100%	64.58%
Total	1.21%	5.72%	0.05%	53.23%	13.77%	5.4%	9.59%	7.26%	1.44%	1.02%	1.21%	0.09%	100%	-

Outcomes	Number of cases	Percentage
Cured	1,143	58.7%
Defaulted	206	10.6%
Died	156	8.0%
Failed	116	6.0%
Transferred out	31	1.6%
Treatment completed	296	15.2%
Total	1,948	100%



Success rate: 73.87%

Chart type:

Figure 199

For the selected period the system generates a table with the number of patients who started treatment during the period, a table with the distribution of cases by outcomes (with a percentage of the total), and related charts. The success rate is shown at the bottom of the page. If no province or region is selected, the system calculates the response for the whole country.

- In the **Chart type** drop-down menu at the bottom of the page (Figure 199), select the desired type of chart, and click on the **UPDATE** button. The data will be exhibited as a **horizontal bar chart** (Figure 199) or a **pie chart** (Figure 200).

Outcomes	Number of cases	Percentage
Cured	1,143	58.7%
Defaulted	206	10.6%
Died	156	8.0%
Failed	116	6.0%
Transferred out	31	1.6%
Treatment completed	296	15.2%
Total	1,948	100%

Success rate: 73.87%

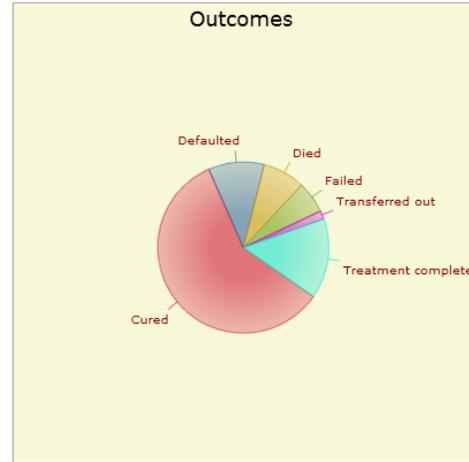


Chart type: Pie

Figure 200

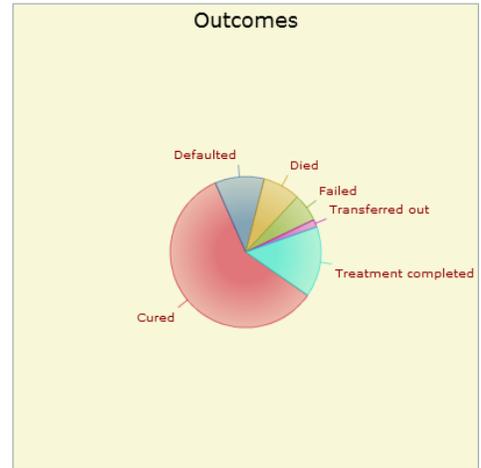
- Click on the **Show as percentage** box at the bottom of the page (Figure 199), and click on the **UPDATE** button. The data will be exhibited as percentages (Figure 201).

Number of patients who started treatment during the period

Type of patient	Waiting to start treatment	On treatment	Transferring to another unit	Cured	Treatment completed	Failed	Defaulted	Died	Transferred out	Diagnosis changed	Other	Category IV (DR-TB)	Total	Success rate
New	1.45%	5.43%	0.14%	53.12%	13.99%	5.14%	10.07%	6.96%	1.38%	1.23%	1.09%	0%	100%	67.1%
Relapse	0.62%	3.12%	0%	51.25%	13.75%	10.62%	8.75%	8.12%	0.62%	0%	3.12%	0%	100%	65%
After default	1.01%	6.04%	0%	54.03%	13.09%	5.03%	9.4%	6.38%	2.35%	0.67%	1.34%	0.67%	100%	67.11%
Failure re-treatment	0.96%	4.81%	0%	53.85%	15.38%	4.81%	4.81%	10.58%	1.92%	1.92%	0.96%	0%	100%	69.23%
Failure 1st treatment	0%	6.15%	0%	56.92%	10.77%	4.62%	7.69%	10.77%	1.54%	0.77%	0.77%	0%	100%	67.69%
Other	0%	9.09%	0%	63.64%	18.18%	0%	4.55%	4.55%	0%	0%	0%	0%	100%	81.82%
Transferred in	0%	6.38%	0%	48.94%	17.02%	4.26%	19.15%	4.26%	0%	0%	0%	0%	100%	65.96%
Total	1.17%	5.42%	0.09%	53.39%	13.83%	5.42%	9.62%	7.29%	1.45%	1.03%	1.21%	0.09%	100%	-

Number of patients who started treatment during the period

Outcomes	Number of cases	Percentage
Cured	1,143	58.7%
Defaulted	206	10.6%
Died	156	8.0%
Failed	116	6.0%
Transferred out	31	1.6%
Treatment completed	296	15.2%
Total	1,948	100%



Success rate: 73.87%

Chart type: Pie

Figure 201

- Click on the **Management** link at the top of the page to return to the *Management* module's main page.

Drug Resistance Profile

1. Click on the **Drug Resistance Profile** link (Figure 191), and the *Drug Resistance Profile* page appears (Figure 202).
2. Select the **Classification, Context, Province / Region, Period for case selection, and Other** filters by clicking the applicable option button, check boxes, and drop-down menus.
3. Click on the **UPDATE** button to show the information in Figure 202.

Drug Resistance Profile



Classification: DR-TB Case
Context: Treatment site Patient residence site
Province / Region: -
Period for case selection
 Registration date Diagnosis date Start treatment date
Initial month/year: - -
Final month/year: - -
Other filters
Type of patient: - All -
Treatment Regimen: - All -
Site of Disease: - All -
Microscopy result: - All -
Type of diagnostic: - All -
HIV testing result: - All -
Gender: - All -
Medicine Source: - All -
Age range: - All -
Culture result: - All -
Type of TB drug resistance: - All -

Edit resistance profiles

Drug Resistance Profile	Number of cases	Percentage
Am	0	0.0%
Am Cfx H	0	0.0%
Am Km	0	0.0%
Cs	0	0.0%
H R	4	2.3%
H R S Z	0	0.0%
Other combinations	169	97.1%
R	1	0.6%
Total	174	100%

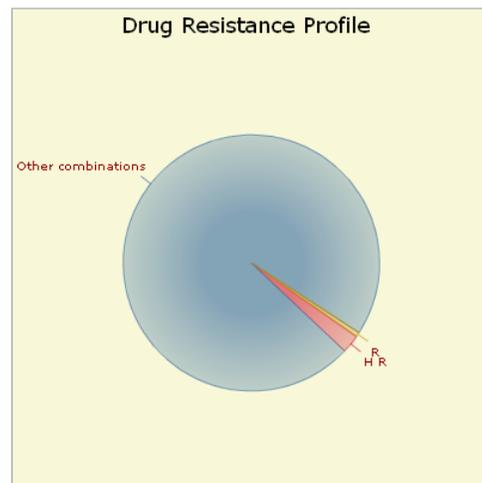


Chart type: Pie

Figure 202

For the selected period the system generates a table with the distribution of cases by resistance profile (with a percentage of the total) and a related chart.

- In the **Chart type** field at the bottom of the page (**Figure 202**), select the desired type of chart, and click on the **UPDATE** button. The data will be exhibited as a **pie chart** (**Figure 202**) or as a **horizontal bar chart** (**Figure 203**).

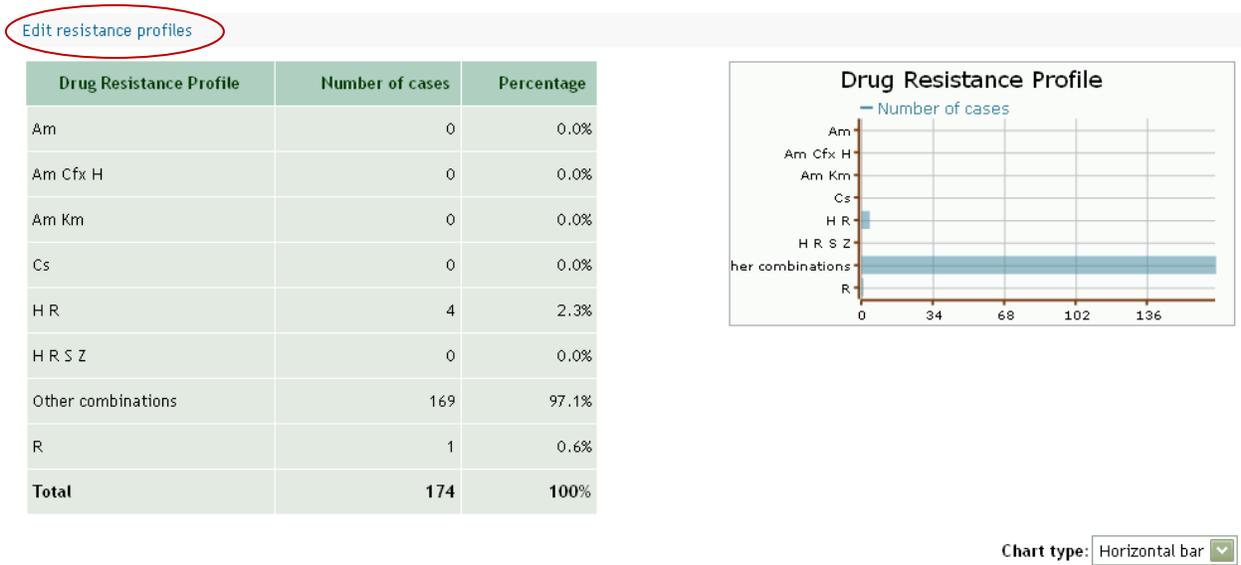


Figure 203

- Click on the **Management** link at the top of the page to return to the *Management* module's main page.

To make a **new** drug resistance profile:

- Click on the **Edit resistance profiles** link (red circle on **Figure 203**).
- Click on the **NEW** button (**Figure 204**).

Drug Resistance Profile



Drug Resistance Profile	Action
Am Cfx H	Edit Delete
H R	Edit Delete
H R S Z	Edit Delete
R	Edit Delete
Am	Edit Delete
Am Km	Edit Delete
Cs	Edit Delete
Gati Lfx Mfx Ofx	Edit Delete

Figure 204

- In the *Select Medicines* box that appears (Figure 205), click on the **checkbox** next to the medicines you want to compose a specific drug resistance profile.

Select medicines

Select the medicines to compose the resistance profile:

<input type="checkbox"/>	Abbreviated Medicine Name	Medicine
<input type="checkbox"/>	Am	amikacin
<input type="checkbox"/>	ASA	aspirin
<input type="checkbox"/>	Cfx	ciprofloxacin
<input type="checkbox"/>	Cm	capreomycin
<input type="checkbox"/>	Cs	cycloserine
<input type="checkbox"/>	E	ethambutol
<input type="checkbox"/>	Eto	ethionamide

Ok

Cancel

Figure 205

- Click on the **OK** button to accept the changes or **CANCEL** to undo them.
- The new profile appears as shown highlighted by the red rectangle in Figure 206.

Drug Resistance Profile



Drug Resistance Profile	Action
Am Cfx H	Edit Delete
H R	Edit Delete
H R S Z	Edit Delete
R	Edit Delete
Am	Edit Delete
Am Km	Edit Delete
Cs	Edit Delete
Gati Lfx Mfx Ofx	Edit Delete
Gati Lfx Mfx	Edit Delete

Figure 206

6. Click on the **Management** link at the top of the page to return to the *Management* module's main page.

To **edit** an existing drug resistance profile:

1. Click on the **edit** link (red circle on **Figure 206**).
2. On the form that appears (**Figure 207**) **select** or **deselect** medicines to compose the revised drug resistance profile.

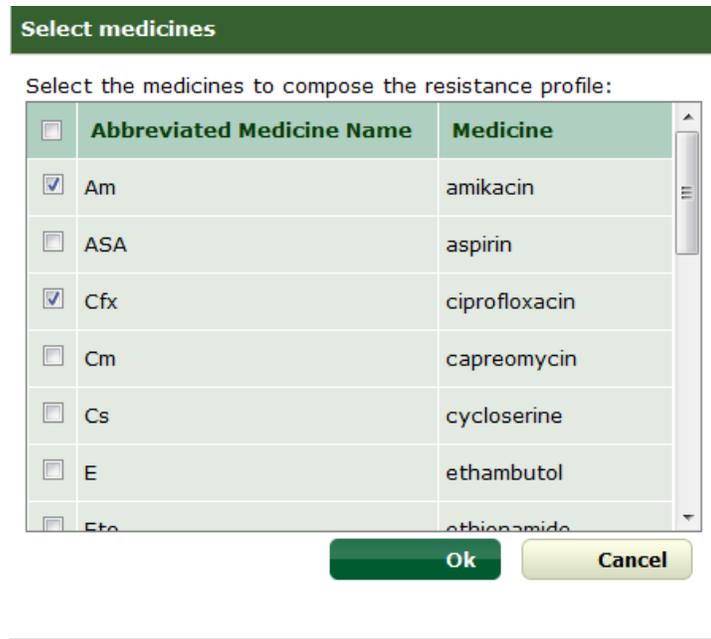


Figure 207

3. Click on the **OK** button to accept the changes or **CANCEL** to undo them.
4. Click on the **Management** link at the top of the page to return to the *Management* module's main page.

Drug Resistance Survey – First Line Drugs

1. Click on **Drug Resistance Survey – First Line Drugs** (Figure 191), and the *Drug Resistance Survey – First Line Drugs* page appears (Figure 208)

Management SPS MSH Demo

Drug Resistance Survey - First Line Drugs 🖨️

Classification:

Context: Treatment site Patient residence site

Province / Region:

Period for case selection

Registration date Diagnosis date Start treatment date

Initial month/year:

Final month/year:

Other filters

Type of patient:

Treatment Regimen:

Site of Disease:

Microscopy result:

Type of diagnostic:

HIV testing result:

Gender:

Medicine Source:

Age range:

Culture result:

Type of TB drug resistance:

Figure 208

2. Select the **Classification**, **Context**, **Province / Region**, **Period for case selection**, and **Other filters** by clicking the applicable option button, check boxes, and drop-down menus.
3. Click on the **UPDATE** button to show the information in Figure 209.

DST Results

	Never Treated	Never Treated (%)	Previously Treated	Previously Treated (%)	Total
Any Resistance to E	299	172%	197	123%	513
Any Resistance to H	458	263%	307	190%	791
Any Resistance to R	446	256%	300	184%	768
Any Resistance to S	39	22%	86	52%	130

Mono-resistance Results

	Never Treated	Never Treated (%)	Previously Treated	Previously Treated (%)	Total
Resistance to only E	258	148%	105	64%	370
Resistance to only H	404	232%	199	122%	617
Resistance to only R	390	224%	192	117%	593

Multi-Drug Resistance (MDR) Results

	Never Treated	Never Treated (%)	Previously Treated	Previously Treated (%)	Total
H+R	3	2%	0	0%	3
H+R+E	0	0%	0	0%	0
H+R+S	0	0%	0	0%	0
H+R+E+S	0	0%	0	0%	0

Poly-resistance Results (other than MDR)

	Never Treated	Never Treated (%)	Previously Treated	Previously Treated (%)	Total
H+E	0	0%	0	0%	0
H+S	0	0%	0	0%	0
H+E+S	0	0%	0	0%	0
R+E	1	1%	0	0%	1
R+S	0	0%	0	0%	0
R+E+S	0	0%	0	0%	0
E+S	1	1%	0	0%	1

Previously Treated Cases

	Total	Relapse	Failure of an initial treatment course with first-line drugs	Failure of retreatment course	Return after default, other retreatment or unknown retreatment
Any resistance to H	106	19	20	33	34
H+R	0	0	0	0	0
H+R+E	0	0	0	0	0
H+R+S	0	0	0	0	0
H+R+E+S	0	0	0	0	0

Figure 209

For the selected period the system generates a table with the distribution of cases by DST resistance profile (with a percentage of the total). The table also categorizes the results according to **Mono-resistance**, **Multi-drug resistance (MDR)**, **Poly-resistance (other than MDR)**, and **Previously treated cases**.

4. To **add** or **edit** a drug resistance profile, follow the procedures as outlined in the **Drug Resistance Profile** section above.
5. Click on the **Management** link at the top of the page to return to the *Management* module's main page.

Drug Resistance Survey – Second-Line Drugs

1. Click on **Drug Resistance Survey – Second Line Drugs** (Figure 191), and the *Drug Resistance Survey – Second Line Drugs* page in Figure 210 appears.

[Edit resistance profiles](#)

Figure 210

2. Select the **Classification**, **Context**, **Province / Region**, **Period for case selection**, and **Other filters** by clicking the applicable option button, check boxes, and drop-down menus.
3. Click on **UPDATE** to show the information in Figure 211.

For the selected period the system generates a table with the distribution of cases by DST resistance profile (with a percentage of the total) and by previously treated cases.

[Edit resistance profiles](#)

DST Results

	Never Treated	Never Treated (%)	Previously Treated	Previously Treated (%)	Total
Any Resistance to Am Cfx H	0	0%	0	0%	0
Any Resistance to H R	52	30%	106	61%	158
Any Resistance to H R S Z	29	17%	77	44%	106
Any Resistance to R	54	31%	106	61%	160
Any Resistance to Am	35	20%	88	51%	123
Any Resistance to Am Km	31	18%	71	41%	102
Any Resistance to Cs	33	19%	80	46%	113
Any Resistance to Gati Lfx Mfx Ofx	0	0%	0	0%	0

Previously Treated Cases

	Total	Relapse	Failure of an initial treatment course with first-line drugs	Failure of retreatment course	Return after default, other retreatment or unknown retreatment
Any Resistance to Am Cfx H	0	0	0	0	0
Any Resistance to H R	106	19	20	33	34
Any Resistance to H R S Z	77	10	13	28	26
Any Resistance to R	106	19	20	33	34
Any Resistance to Am	88	16	19	27	26
Any Resistance to Am Km	71	14	14	21	22
Any Resistance to Cs	80	12	14	25	29
Any Resistance to Gati Lfx Mfx Ofx	0	0	0	0	0

Figure 211

- To **add** or **edit** a drug resistance profile, follow the procedures as outlined in the **Drug Resistance Profile** section above.
- Click on the **Management** link at the top of the page to return to the *Management* module's main page.

Adverse Reactions to Medicines

1. Click on the **Adverse Reactions to Medicines** link (Figure 191), and the *Adverse Reactions to Medicines* page in Figure 212 appears.

The screenshot shows the 'Adverse Reactions to Medicines' filter interface. It includes the following elements:

- Classification:** A dropdown menu set to '- All -'.
- Context:** Radio buttons for 'Treatment site' (selected) and 'Patient residence site'.
- Province / Region:** A dropdown menu set to '-'.
- Period for case selection:** Checkboxes for 'Registration date', 'Diagnosis date', and 'Start treatment date'. Below these are two date pickers for 'Initial month/year' and 'Final month/year', both set to '-'.
- Other filters:** A collection of dropdown menus for:
 - Type of patient: - All -
 - Treatment Regimen: - All -
 - Site of Disease: - All -
 - Microscopy result: - All -
 - Type of diagnostic: - All -
 - HIV testing result: - All -
 - Gender: - All -
 - Medicine Source: - All -
 - Age range: - All -
 - Culture result: - All -
 - Type of TB drug resistance: - All -
- Update:** A green button at the bottom right.

Figure 212

2. Select the **Classification**, **Context**, **Province / Region**, **Period for case selection (Initial month/year)**, and **Other filters** by clicking the applicable option button, check boxes, and drop-down menus.
3. Click on the **UPDATE** button to show the information in Figure 213.

Distribution of cases by incidence of adverse reactions

Adverse Reactions to Medicines	Number of cases	Percentage
No	2,142	99.7%
Yes	7	0.3%
Total		100%

Distribution of cases among adverse reactions types

Adverse Reactions to Medicines	Number of cases	Percentage
Dizziness	1	9.1%
Gastro-intestinal intolerance	2	18.2%
Headache	1	9.1%
Hearing loss and vestibular disturbances	1	9.1%
Joint pain	1	9.1%
Mental disorder	1	9.1%
Peripheral Neuropathy	2	18.2%
Renal insufficiency	1	9.1%
Seizures	1	9.1%

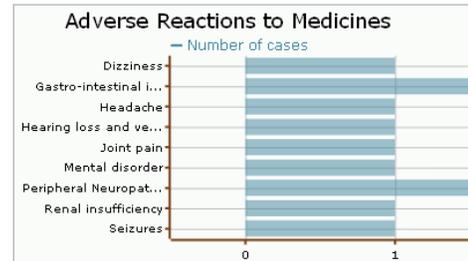


Chart type:

Figure 213

For the selected period, the system generates a table with the **distribution of cases by incidence of adverse reactions** (with a percentage of the total), distribution of cases among adverse reaction types (with a percentage of the total) and a related chart.

- In the **Chart type** drop-down menu at the bottom of the page (Figure 213), select the desired type of chart, and click on the **UPDATE** button. The data will be exhibited as a **horizontal bar chart** (Figure 213) or as a **pie chart** (Figure 214).

Distribution of cases by incidence of adverse reactions

Adverse Reactions to Medicines	Number of cases	Percentage
No	2,142	99.7%
Yes	7	0.3%
Total		100%

Distribution of cases among adverse reactions types

Adverse Reactions to Medicines	Number of cases	Percentage
Dizziness	1	9.1%
Gastro-intestinal intolerance	2	18.2%
Headache	1	9.1%
Hearing loss and vestibular disturbances	1	9.1%
Joint pain	1	9.1%
Mental disorder	1	9.1%
Peripheral Neuropathy	2	18.2%
Renal insufficiency	1	9.1%
Seizures	1	9.1%

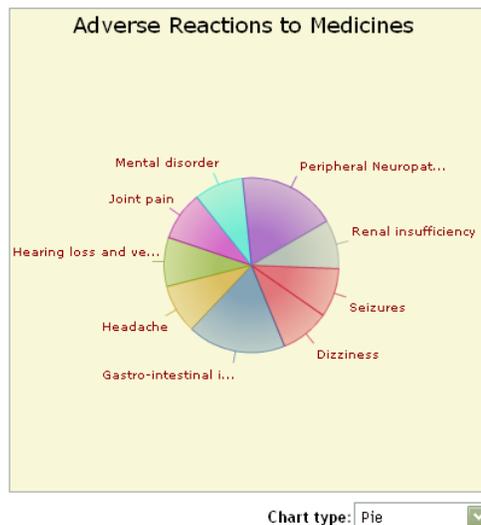


Figure 214

5. Click on the **Management** link at the top of the page to return to the *Management* module's main page.

HIV Status

1. Click on the **HIV Status** link (Figure 191), and the *HIV Status* page in Figure 215 appears.

Management SPS MSH Demo

HIV Status 🖨️

Classification:

Context: Treatment site Patient residence site

Province / Region:

Period for case selection

Registration date Diagnosis date Start treatment date

Initial month/year: Final month/year:

Other filters

Type of patient:

Treatment Regimen:

Site of Disease:

Microscopy result:

Type of diagnostic:

HIV testing result:

Gender:

Medicine Source:

Age range:

Culture result:

Type of TB drug resistance:

Figure 215

2. Select the **Classification**, **Context**, **Province / Region**, Period for case selection (**Initial month/year**), and **Other filters** by clicking the applicable option button, check boxes, and drop-down menus.
3. Click on the **UPDATE** button to show the information in **Figure 216**.

Distribution of cases by HIV test performed

HIV Test Performed?	Number of cases	Percentage
No	22	1.0%
Yes	2,127	99.0%
Total	2,149	100%

Distribution of cases by HIV test result

HIV Test Result	Number of cases	Percentage
Negative	1,677	78.8%
Positive	451	21.2%
Result pending	1	0.0%

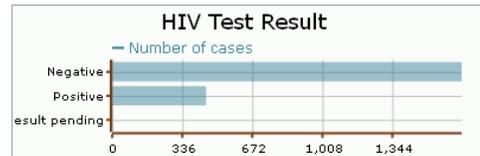


Chart type: Horizontal bar

Distribution of HIV positive Cases by ART & CPT status

	Started on ART ?	Started on ART (%)	Started on CPT ?	Started on CPT (%)
Yes	2	0%	2	0%
No	2,125	100%	2,125	100%

Figure 216

For the selected period, the system generates a table with the **distribution of cases by HIV test performed** (with a percentage of the total); distribution of cases by HIV test result (with a percentage of the total) and a related chart; **distribution of HIV positive cases by anti-retroviral therapy (ART) & co-trimoxazole preventive treatment (CPT) status** (with a percentage of the total).

4. In the **Chart type** drop-down menu at the bottom of the page (**Figure 216**), select the desired type of chart, and click on the **UPDATE** button. The data will be exhibited as a **horizontal bar chart** (**Figure 216**) or as a **pie chart** (**Figure 217**).

Distribution of cases by HIV test performed

HIV Test Performed?	Number of cases	Percentage
No	22	1.0%
Yes	2,127	99.0%
Total	2,149	100%

Distribution of cases by HIV test result

HIV Test Result	Number of cases	Percentage
Negative	1,677	78.8%
Positive	451	21.2%
Result pending	1	0.0%

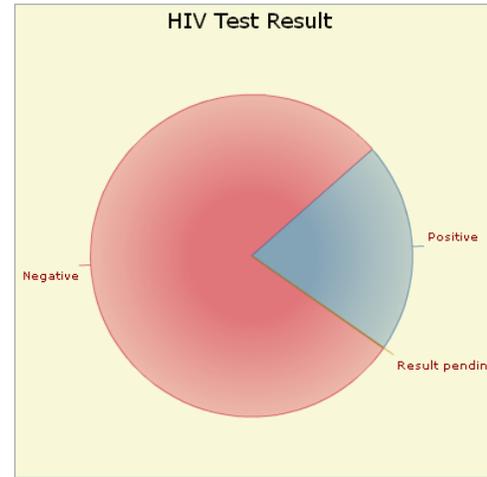


Chart type: Pie

Distribution of HIV positive Cases by ART & CPT status

	Started on ART ?	Started on ART (%)	Started on CPT ?	Started on CPT (%)
Yes	2	0%	2	0%
No	2,125	100%	2,125	100%

Figure 217

5. Click on the **Management** link at the top of the page to return to the *Management* module's main page.

Quarterly Report on MDR-TB Detection and Category IV Treatment Start — WHO Form 05

1. Click on the **Quarterly Report on MDR-TB Detection and Category IV Treatment Start - WHO Form 05** link (Figure 191), and the *Quarterly Report on MDR-TB Detection and Category IV Treatment Start - WHO Form 05* page in Figure 218 appears.

Figure 218

2. Select the **Context**, **Province / Region**, Period for case selection (**Initial month/year** and **Final month/year**) and all the **Other filters** by clicking the applicable option button, check boxes, and drop-down menus.
3. Click on the **UPDATE** button to generate a table with all information requested (based on the WHO model) in **Figure 219**.

Number of patients detected during the period

Type of TB drug resistance	Number of cases	Percentage
Extensive drug-resistance	128	70.3%
Mono-resistance	2	1.1%
Multidrug-resistance	39	21.4%
Poly-resistance	1	0.5%
Undefined	12	6.6%
Total	182	100%

Number of patients who started treatment during the period

	Total
Total	0

Figure 219

For the selected period, the system generates a table that shows the **type of TB drug resistance** (by number of patients detected during the period and percentage of total cases) and the **number of cases** that started treatment during the selected period.

- Click on the **Management** link at the top of the page to return to the **Management** module's main page.

Interim Outcome Assessment of Confirmed MDR-TB Cases - WHO Form 06

- Click on the **Interim outcome assessment of confirmed MDR-TB cases —WHO Form 06** link (Figure 191), and the *Interim outcome assessment of confirmed MDR-TB cases —WHO Form 06* page in Figure 220 appears.

Figure 220

- Select the number of **Months for Interim Outcome**, **Classification**, **Context**, **Province / Region**, **Period for case selection (Initial month/year)**, and all the **Other filters** by clicking the applicable option button, check boxes, and drop-down menus.

- Click on the UPDATE button in Figure 220 to generate a table with all of the information requested (based on the WHO model).

The results show for the period selected, the **number of cases that started treatment** with **negative, positive, and unknown** bacteriological results; and the number **no longer on treatment** distributed by the following outcomes: **died, defaulted, or transferred out**.

Cases that started treatment	Bacteriological result at 1 months of treatment			No longer on treatment		
	Negative (smear and culture negative)	Positive (smear and/or culture)	Unknown	Died	Defaulted	Transferred out
173	5	141	28	26	15	1

Figure 221

- Click on the **Management** link at the top of the page to return to the *Management* module's main page.

Annual Report of Treatment Result of Confirmed MDR-TB Patients Starting Category IV Treatment - WHO Form 07

- Click on the **Annual Report of Treatment Result of confirmed MDR-TB Patients Starting Category IV Treatment - WHO form 07** link (Figure 191), and the *Treatment Result of confirmed MDR-TB Patients Starting Category IV Treatment - WHO form 07* page in **Figure 222** appears.

Annual report of treatment result of confirmed MDR-TB patients starting Category IV treatment - WHO Form 07

Classification: DR-TB Case

Context: Treatment site Patient residence site

Region / Province: -

Period for case selection

Registration date Diagnosis date Start treatment date

Initial month/year: - - Final month/year: - -

Other filters

Type of patient: - All -

Treatment Regimen: - All -

Site of Disease: - All -

Microscopy result: - All -

Type of diagnostic: - All -

HIV testing result: - All -

Gender: - All -

Medicine Source: - All -

Age range: - All -

Culture result: - All -

Type of TB drug resistance: - All -

Update

Show as percentage

Figure 222

2. Select the **Classification, Context, Province / Region**, period for case selection (**Initial month/year** and **Final month/year**) and all the **Other filters** by clicking the applicable option button, check boxes, and drop-down menus.
3. Click on the **UPDATE** button to generate a table with all information requested (based on the WHO model) in Figure 223.

Type of patient	Waiting to start treatment	On treatment	Cured	Treatment completed	Failed	Defaulted	Died	Diagnosis changed	Other	Transferring to another unit	Transferred out	Total
New	3	18	18	6	3	5	4	5	1	-	-	63
Previously treated with both first- and second-line drugs	3	35	58	17	18	15	26	6	2	1	1	182
Previously treated with first-line drugs only	-	-	-	-	-	-	-	-	-	-	-	0
Total	6	53	76	23	21	20	30	11	3	1	1	245

Figure 223

The report shows a table with the number of cases that are **new**, **previously treated with both first- and second-line drugs**, and **previously treated with first-line drugs only**, according to their treatment outcome.

4. Click on the **Show as percentage** box at the bottom of the page (Figure 222), and click on the **UPDATE** button. The data will be exhibited as percentages (Figure 224).

Type of patient	Waiting to start treatment	On treatment	Cured	Treatment completed	Failed	Defaulted	Died	Diagnosis changed	Other	Transferring to another unit	Transferred out	Total
New	4.76%	28.57%	28.57%	9.52%	4.76%	7.94%	6.35%	7.94%	1.59%	0%	0%	100%
Previously treated with both first- and second-line drugs	1.65%	19.23%	31.87%	9.34%	9.89%	8.24%	14.29%	3.3%	1.1%	0.55%	0.55%	100%
Previously treated with first-line drugs only	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Total	2.45%	21.63%	31.02%	9.39%	8.57%	8.16%	12.24%	4.49%	1.22%	0.41%	0.41%	100%

Figure 224

5. Click on the **Management** link at the top of the page to return to the **Management** module's main page.

TB/DR-TB Consolidated Report

1. Click on the **TB/DR-TB Consolidated report** link (Figure 191), and the **TB/DR-TB Consolidated report** page in Figure 225 appears.

Figure 225

2. Select the **Classification**, **Context**, **Province / Region**, the Period for case selection (**Initial month/year** and **Final month/year**), **Other filters** as needed, the Output selection for the **Rows** and **Columns**, by clicking the applicable option button, check boxes, and drop-down menus.
3. Click on the **UPDATE** button to show the information in Figure 226.

Province / Region	Notification health unit				Total
	HEALTH CENTER 1	HEALTH CENTER 6	NATIONAL WAREHOUSE	UNIVERSITY HOSPITAL	
Region A	1,148	-	1	3	1,152
Region B	-	997	-	-	997
Total	1,148	997	1	3	2,149

Figure 226

The report can analyze the data in multiple ways, since the options for the columns and rows are **Province / Region**, **Notification health unit**, **Gender**, **Type of patient**, **Site of Disease**, **Nationality**, **Age range**, **Pulmonary**, and **Extra-pulmonary**.

- Click on the **Show as percentage** box at the bottom of the page (Figure 225), and click on the **UPDATE** button. The data will be exhibited as percentages (Figure 227).

Province / Region	Notification health unit				Total
	HEALTH CENTER 1	HEALTH CENTER 6	NATIONAL WAREHOUSE	UNIVERSITY HOSPITAL	
Region A	99.65%	0%	0.09%	0.26%	100%
Region B	0%	100%	0%	0%	100%
Total	53.42%	46.39%	0.05%	0.14%	100%

Figure 227

- Click on the **Management** link at the top of the page to return to the *Management* module's main page.

How to Access the Medicine Management Reports

Stock Position by Region

- Click on the **Stock position by region** link (Figure 191), and the *Stock position by region* page in Figure 228 appears.

Region/Province / TB Unit	Am 1000 mg	E 400 mg	Eto 250 mg	Ofx 400 mg	Lfx 500 mg	Cs 250 mg	Z 500 mg	Cm 1000 mg	Km 1000 mg	PAS 4000 mg	E 400mg 28	HR 75/150 mg	HRZE 75/150/400/275 mg	S 1000 mg	H 100 mg	OD1 100 mg	R 300 mg
Region B	1,503	0	2,100	0	250	0	2,675	2,000	0	7,750	100	0	0	0	100	0	0
CENTRAL TB CLINIC	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEALTH CENTER 6	13	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0
REGIONAL WAREHOUSE 2	490	0	2,100	0	250	0	2,675	2,000	0	7,750	100	0	0	0	0	0	0
Region A	166,648	269,731	135,951	160,895	93,589	178,131	141,880	137,107	80,820	133,285	42,190	150,925	130,928	3,140,071	10,119,500	110,000	110,000
HEALTH CENTER 1	61,410	3,731	10,751	20,895	10,471	3,931	8,980	2,707	720	2,167	2,190	925	928	71	0	0	0
NATIONAL WAREHOUSE	102,337	266,000	124,000	140,000	82,000	114,000	132,000	119,900	80,000	130,000	40,000	150,000	130,000	3,140,000	10,119,500	110,000	110,000
TB FREE CLINIC	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0
UNIVERSITY HOSPITAL	2,901	0	1,200	0	1,118	60,200	900	14,500	0	1,118	0	0	0	0	0	0	0
Total	168,151	269,731	138,051	160,895	93,839	178,131	144,555	139,107	80,820	141,035	42,290	150,925	130,928	3,140,071	10,119,600	110,000	110,000

Figure 228

- Select the **Medicine Source** and **Province / Region** from the drop-down menus, and click on the **Generate** button to show the information.

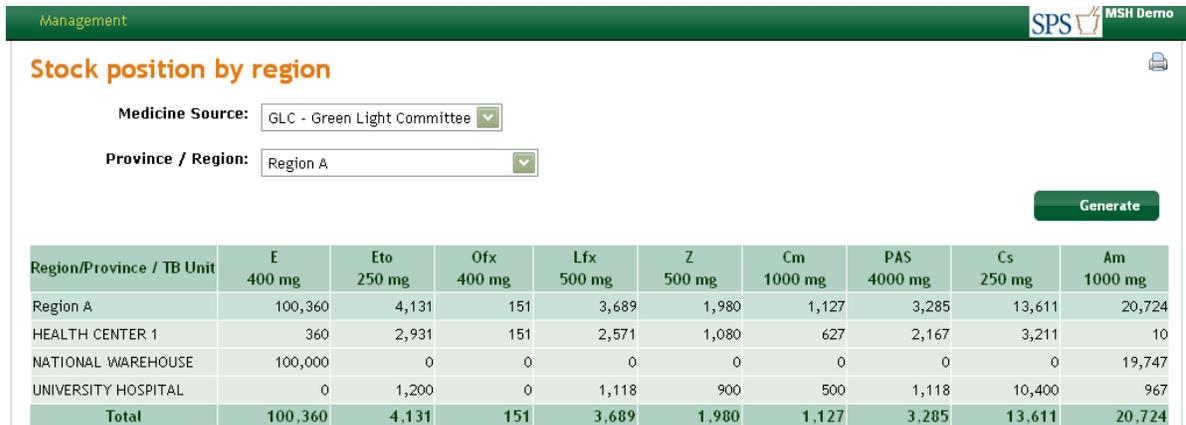


Figure 229

In the example shown in the system displays the selected region with its related TB units (in rows) combined with all medicines supplied by the selected medicine source (in columns).

3. Click on the **Management** link at the top of the page to return to the *Management* module's main page.

Average Lead Time of Medicine Orders

1. Click on **Average lead time of medicine orders** (Figure 191), and the *Average lead time of medicine order* page in Figure 230 appears.



Figure 230

2. Select the **Province / Region**, **Name of health facility** (Figure 230) and reference period (**Initial month/year** and **Final month/year**) from the drop-down menus, and click on the **Generate** button to show the information.

In the example shown in Figure 231 for the selected TB unit, the system shows the average time spent (in days) and the number of orders for **authorizing**, **shipping**, and **receiving** medicines. The % column shows the percentage of the orders included in the average calculation.

Order event	Days (average)	Number of orders	%
Authorizing	12	8	75
Shipping	3	6	19
Receiving	1	2	6

Figure 231

3. Click on the **Management** link at the top of the page to return to the *Management* module's main page.

How to Access the Tools

Medicine Forecasting

The system quantifies needs of first- and second-line TB pharmaceuticals according to the number of patients under treatment and the estimated number of new cases (categorized by treatment regimen) for the planning period. This tool is a single form to project your future procurement and budget needs, organized by medicine sources.

1. Click on the **Medicine Forecasting** link (Figure 191).

When starting a new forecasting the system displays the *New Forecasting* page to enter variables. The page is divided into four sections (Figure 232):

- Parameters
- Cases under treatment
- New cases
- Medicines

Medicine forecasting



New forecasting

Execute

Cancel

Options

Parameters

Medicines: - All -

Context: Whole country

Other Parameters

Edit

Reference date: Sep 25, 2012

Lead time: 3 (Months)

Review period: Mar 01, 2013 ...Feb 28, 2014 (1 Year)

Buffer stock: 3 (Months)

Cases under treatment

How to get the cases on treatment?: Cases already registered in the system

Number of cases on treatment: 9

New cases

Percentage of new cases per treatment regimen		Estimated number of new cases per month					
Treatment Regimen	% of new cases	Sep-2012	Oct-2012	Nov-2012	Dec-2012	Jan-2013	Feb-2013
Category I	0.0	0	0	0	0	0	0
Category IV - 1	0.0	0	0	0	0	0	0
Category IV - 2	0.0	0	0	0	0	0	0
Category IV - 3	0.0	0	0	0	0	0	0
Category IV - 4	0.0	0	0	0	0	0	0
Category IV - 5	0.0	0	0	0	0	0	0
Category IV - 6	0.0	0	0	0	0	0	0
Pediatric Regimen One 0 to 10 kg	0.0	0	0	0	0	0	0
Regimen II	0.0	0	0	0	0	0	0
Regimen III	0.0	0	0	0	0	0	0
Standardized DR-TB A	0.0	0	0	0	0	0	0

Medicines

Clear Load from medicine module

Medicine	Stock on hand	Unit price	Batches details	Stock on order																		
Amikacin 1000mg (Powder/Vial)	85,090	75.00	<p>New batch</p> <table border="1"> <thead> <tr> <th>Expiration date</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>Dec 06, 2012</td> <td>73</td> </tr> <tr> <td>Feb 01, 2013</td> <td>9,517</td> </tr> <tr> <td>Mar 31, 2013</td> <td>5,000</td> </tr> <tr> <td>Jul 08, 2013</td> <td>950</td> </tr> <tr> <td>Sep 01, 2013</td> <td>49,000</td> </tr> <tr> <td>Sep 20, 2013</td> <td>550</td> </tr> <tr> <td>Dec 31, 2013</td> <td>10,000</td> </tr> <tr> <td>Jun 03, 2016</td> <td>10,000</td> </tr> </tbody> </table>	Expiration date	Quantity	Dec 06, 2012	73	Feb 01, 2013	9,517	Mar 31, 2013	5,000	Jul 08, 2013	950	Sep 01, 2013	49,000	Sep 20, 2013	550	Dec 31, 2013	10,000	Jun 03, 2016	10,000	New order
Expiration date	Quantity																					
Dec 06, 2012	73																					
Feb 01, 2013	9,517																					
Mar 31, 2013	5,000																					
Jul 08, 2013	950																					
Sep 01, 2013	49,000																					
Sep 20, 2013	550																					
Dec 31, 2013	10,000																					
Jun 03, 2016	10,000																					

Figure 232

Parameters

Figure 233 shows the possible Medicine forecasting **Parameters** to select.

Medicine forecasting 

New forecasting **Execute** **Cancel** Options

Parameters

Medicines: First line ▾

Context: Whole country ▾

Other Parameters **Edit**

Reference date: Sep 25, 2012

Lead time: 3 (Months)

Review period: Mar 01, 2013 ...Feb 28, 2014 (1 Year)

Buffer stock: 3 (Months)



Figure 233

Parameters consist of the following:

- **Medicines**—Select the medicine line for the forecasting. The options are **All**, **First line**, or **Second line**. When you select an option, the system automatically filters the list of medicines according to your selection.
- **Context**—Select the context of the forecasting from these options—
 - **Whole country** (i.e., the context of the forecasting is the whole country)
 - **Administrative unit** (i.e., the context of the forecasting is an administrative unit of the country, such as a region or locality). When selecting this option, you must select a specific administrative unit of the country.
 - **TB unit** (i.e., the forecasting will be based on a specific TB unit of the country)

When the **Update** command is executed, the calculations are driven by the context of the cases under treatment (if the forecasting is using the cases registered in the database) and by the medicines.

2. To change the **Other Parameters** variables, click on the **Edit** button (circled in red on Figure 233) and the **Other Options** box will appear (Figure 234).

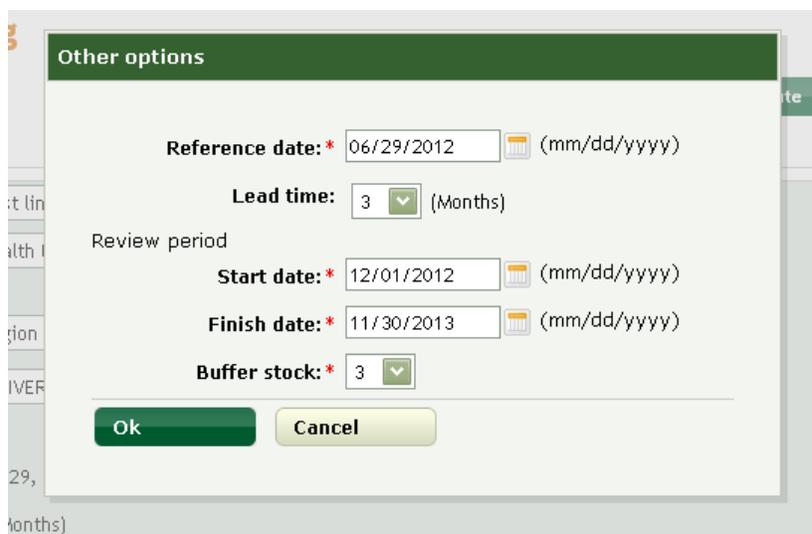


Figure 234

Other Options include:

- **Reference date**—Normally you will enter today's date. It refers to the stock position of the medicines on that date.
- **Lead time**—From the drop-down menu select the number of months expected to elapse between ordering medicines and receiving them.
- **Review period**—Input the period that the forecasting will cover in estimating the quantity to be ordered. You must enter the **start** and **finish** dates of the review period.
- **Buffer stock**— From the drop-down menu select how much stock (in months) you want to keep on hand as buffer.

Cases Under Treatment

Use these variables to set which cases under treatment are considered in the forecasting calculations. You have two possibilities available. From the drop-down menu select **Cases already registered in the system** (red rectangle on Figure 235) or **Provide total number of cases that started treatment per month** (red rectangle on Figure 236).

When the forecasting uses the cases already registered in the **Cases** module the system displays the number of cases on treatment in the database (circled in red on Figure 235), and during execution, the forecasting will estimate the consumption of each case by the medicines prescribed for them.

As an alternative, you can provide the total number of cases that started treatment per month (red rectangle on Figure 236). In this option, you must enter the total number of cases that started treatment in a past month for each of the regimens available in the system. The forecasting will estimate the consumption of medicine for each of the regimens and multiply by the number of cases entered, considering the period of treatment of the regimen.

Cases under treatment

How to get the cases on treatment?:

Number of cases on treatment:

Figure 235

Cases under treatment

How to get the cases on treatment?:

Previous

Treatment Regimen	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
Category I	<input type="text"/>											
Pediatric Regimen One 0 to 10 kg	<input type="text"/>											
Regimen II	<input type="text"/>											
Regimen III	<input type="text"/>											

Figure 236

New Cases

These variables allow you to specify the estimated number of new cases that will start treatment in the future (Figure 237). The forecasting displays a table containing future months starting from the reference date and finishing in the last month of the forecasting (end of the review period plus months of buffer stock).

New cases

Percentage of new cases per treatment regimen		Estimated number of new cases per month					
Treatment Regimen	% of new cases	Jun-2012	Jul-2012	Aug-2012	Sep-2012	Oct-2012	Nov-2012
Category I	<input type="text" value="0,0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Pediatric Regimen One 0 to 10 kg	<input type="text" value="0,0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Regimen II	<input type="text" value="0,0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Regimen III	<input type="text" value="0,0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
		Dec-2012	Jan-2013	Feb-2013	Mar-2013	Apr-2013	May-2013
		<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
		Jun-2013	Jul-2013	Aug-2013	Sep-2013	Oct-2013	Nov-2013
		<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
		Dec-2013	Jan-2014	Feb-2014			
		<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>			

Figure 237

The box is divided into two sections:

- **Percentage of new cases per treatment regimen**—For each of the regimens available in the system, enter the percentage of the new cases that you estimate will start treatment on that regimen in the forecasting period.
- **Estimated number of new cases per month**—Enter the absolute number of new cases that you estimate that will start treatment in the forecasting period.

During the forecasting, the program will calculate the number of new cases by regimen (according to the percentage) and calculate the consumption of medicines based on the period of treatment and quantity of medicines month by month for the regimen.

Medicines

Enter in this box information about the medicines available (shown in **Figure 238**):

- **Stock on hand**—Quantity of medicine available in the context specified in the **Parameters** section
- **Unit price**—Unit price of the medicines
- **Batches Details**—Quantity of medicines that will expire in the future
- **Stock on order**—Quantity of medicines that are going to be shipped

Medicines ✖ Clear Load from medicine module					
Medicine	Stock on hand	Unit price	Batches details	Stock on order	
 Ethambutol 400mg (Tablet)	0	0.00	New batch	New order	
 Ethambutol 400mg28 (tabs)	0	0.00	New batch	New order	
 Isoniazid 100mg (Tablet)	0	0.00	New batch	New order	
 Isoniazid + Rifampicin 75/150mg (Tablet)	0	0.00	New batch	New order	
 Isoniazid + Rifampicin + Pirazinamide + Ethambutol 75/150/400/275mg (Tablet)	0	0.00	New batch	New order	
 Pyrazinamide 500mg (Tablet)	0	0.00	New batch	New order	
 Rifampicin 300mg (Tablet or capsule)	0	0.00	New batch	New order	
 Streptomycin 1000mg (Powder/Vial)	0	0.00	New batch	New order	

Figure 238

To enter a new batch for a particular medicine:

1. Click on the **New batch** button in the **Batches Details** column next to the name of the medicine you want to enter (circled in red on **Figure 238**).
2. In the **Batch** box that appears, enter the **expiration date** and **quantity** of the medicine.
3. Click on the **OK** button to confirm entry or **Cancel** to undo it.

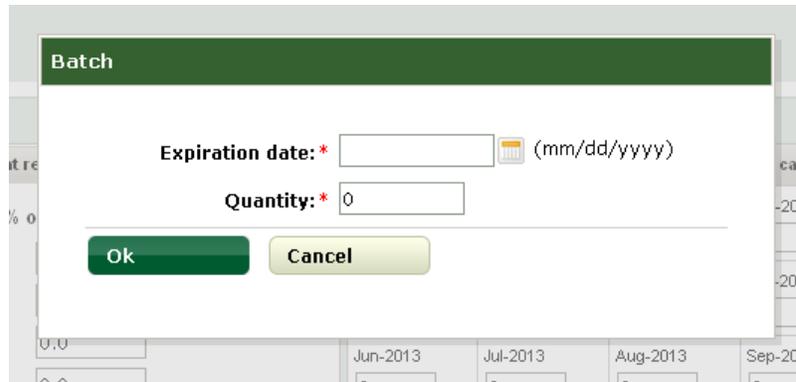


Figure 239

To enter a new order for a particular medicine:

1. Click on the **New order** button in the **Stock on Order** column next to the name of the medicine you want to enter (red rectangle on **Figure 238**).
2. In the **New Order** box that appears (**Figure 240**), enter the **receiving date** and **quantity** of the medicine.
3. Click on the **OK** button to confirm the entry or **Cancel** to undo it.

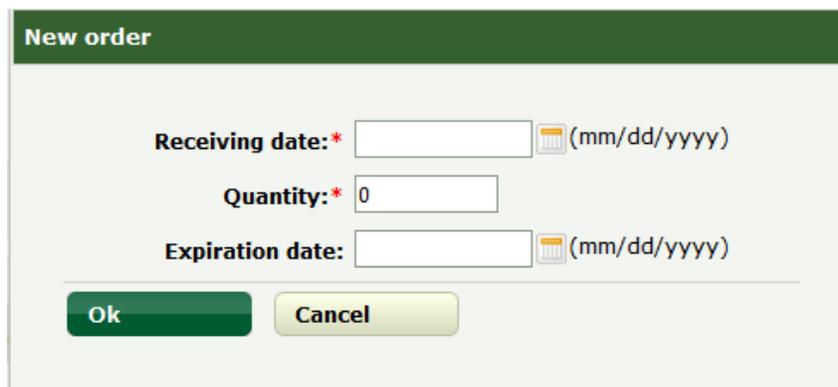


Figure 240

- If you click on the **Load from medicine module** link (blue rectangle on **Figure 238**), the system will automatically fill these fields with information registered in the database as shown in **Figure 241**.

Medicine	Stock on hand	Unit price	Batches details	Stock on order												
Ethambutol 400mg (Tablet)	184,835	0.78	<table border="1"> <thead> <tr> <th>Expiration date</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>Nov 01, 2012</td> <td>29,835</td> </tr> <tr> <td>May 02, 2013</td> <td>100,000</td> </tr> <tr> <td>Jun 13, 2013</td> <td>49,000</td> </tr> <tr> <td>Sep 09, 2013</td> <td>5,000</td> </tr> <tr> <td>Jun 30, 2014</td> <td>1,000</td> </tr> </tbody> </table>	Expiration date	Quantity	Nov 01, 2012	29,835	May 02, 2013	100,000	Jun 13, 2013	49,000	Sep 09, 2013	5,000	Jun 30, 2014	1,000	
Expiration date	Quantity															
Nov 01, 2012	29,835															
May 02, 2013	100,000															
Jun 13, 2013	49,000															
Sep 09, 2013	5,000															
Jun 30, 2014	1,000															
Ethambutol 400mg28 (tabs)	1,650	5,417.19	<table border="1"> <thead> <tr> <th>Expiration date</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>May 26, 2015</td> <td>1,650</td> </tr> </tbody> </table>	Expiration date	Quantity	May 26, 2015	1,650									
Expiration date	Quantity															
May 26, 2015	1,650															

Figure 241

If you make a change in the **Parameters** section, you must click on the **Load from medicine management** link to fill in the correct information based on the new options selected.

How to Delete Forecasting Information

To delete the information already entered and start again, click on the **Clear** link (circled in red on **Figure 241**) and all the information entered and generated will be deleted.

Forecasting Results

After you have entered all the variables, click on the **Execute** button to generate a new medicine forecast. When the execution of the forecast is finished, the system will display **five new tabs** with the results:

- Parameters:** allows you to make changes to the information already entered. If you make a change in the **Parameters** section, you must click on the **Load from medicine management** link to fill in the correct information based on the new options selected (blue rectangle on **Figure 238**).
- Summary** — Displays a summary of the forecast (Figure 242).

Home Medicine forecasting SPS MSH Demo

Medicine forecasting

New forecasting Execute Cancel Options

Options Summary Medicine consumption Cases on treatment Show details

Medicine	Stock on hand	Next procurement date	Lead time Jun 29, 2012...Nov 30, 2012 (155 days)			Review period + Buffer stock Dez 01, 2012...Feb 28, 2014 (455 days)							
			Stock on order	Dispensing quantity during lead time	Quantity lost due to expiration	Stock on hand after lead time	Stock on order	Quantity lost due to expiration	Estimated consumption (cases on treatment)	Consumption in review period (new cases)	Total quantity to be procured	Unit price	Total price
Ethambutol 400mg (Tablet)	0	Mar 29, 2012	0	0	0	0	0	0	186	0	186	0.00	0.00
Ethambutol 400mg28 (tabs)	0	Mar 29, 2012	0	0	0	0	0	0	0	0	0	0.00	0.00
Isoniazid 100mg (Tablet)	0	Mar 29, 2012	0	0	0	0	0	0	0	0	0	0.00	0.00
Isoniazid + Rifampicin 75/150mg (Tablet)	0	Mar 29, 2012	0	0	0	0	0	0	248	0	248	0.00	0.00
Isoniazid + Rifampicin + Pirazinamide + Ethambutol 75/150/400/275mg (Tablet)	0	Mar 29, 2012	0	0	0	0	0	0	0	0	0	0.00	0.00

Figure 242

Note: The unit price is a weighted average unit price, defined as the:

$$\frac{\text{Total cost of the medicine from the beginning inventory plus the cost of new medicine inventory}}{\text{Total amount of medicine from the beginning of inventory plus the total amount of new medicine inventory}}$$

- **Medicine consumption** - Displays the estimated medicine consumption from the reference date until the end of the forecasting, divided into six groups (**Figure 243**):
 - **Stock on hand** - Quantity of medicine at the end of the month, considering the consumption, stock on order, and batches to expire
 - **Quantity with expiring shelf life** - Quantity of medicine that can be stored and used during the selected period.
 - **Stock on Order** - Quantity of medicine on order at the end of the month.
 - **Consumption of previous cases** - Consumption of medicine of cases that were in treatment before the reference date

- **Consumption of new cases** - Consumption of medicines of new cases that started treatment after the reference date
- **Quantity lost due to expiration** - quantity of medicine lost due to expiration at the end of the month.

Medicine forecasting

New forecasting

Execute Cancel Options

Options		Summary		Medicine consumption			Cases on treatment			Show details												
Medicine		Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14
Ethambutol 400mg (Tablet)	Stock on hand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Quantity with expiring shelf life	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Stock on order																					
	Consumption of previous cases				90	93	90	93	93													
	Consumption of new cases																					
	Quantity lost due to expiration																					

Figure 243

- **Cases on treatment**—Displays the number of cases on treatment by month from the reference date to the end of the forecasting (Figure 244).

Medicine forecasting

New forecasting

Execute Cancel Options

Options		Summary		Medicine consumption			Cases on treatment					Show details											
Treatment Regimen		Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	
Category I	Previous cases on treatment	1	1	1	1	1	1																
	New cases on treatment																						
	Total	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pediatric Regimen One 0 to 10 kg	Previous cases on treatment																						
	New cases on treatment																						
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Regimen II	Previous cases on treatment	2	2	1	2	2	2	2	2														
	New cases on treatment																						
	Total	2	2	1	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 244

- **Show details** - Displays details of a medicine for the reference period. You must select the medicine you want details of from the drop-down menu (Figure 245).

Medicine forecasting

New forecasting

Execute Cancel Options

Options		Summary		Medicine consumption		Cases on treatment		Show details	
Medicine: Streptomycin 1000mg (Powder/Vial)									
Period	Stock on hand	Estimated consumption (on-going cases)	Estimated consumption (new cases)	Estimated consumption (Total)	Quantity with expiring shelf life	Stock on order	Quantity lost due to expiration	Missing quantities	
Jun 29, 2012...Jun 30, 2012 (2 days)	69		3	0	3	0	0	0	0
Jul 01, 2012...Jul 31, 2012 (31 days)	66		66	0	66	0	0	0	0

Figure 245

How to Save your Forecast

1. Click on the **Options** link (red rectangle on Figure 245).
2. Select **Save** from the drop-down menu (red circle on **Figure 246**) and enter a name for the forecast (**Figure 247**).
3. You can also **check the box** to make the forecasting available to other users. Click on **OK** to Save or **Cancel** to undo it.

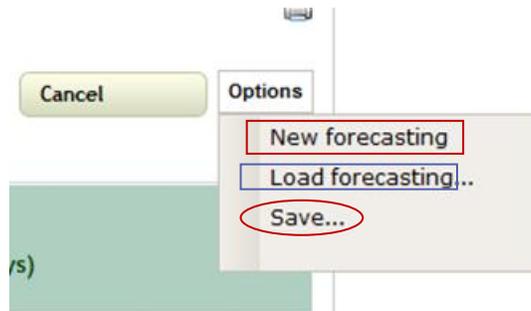


Figure 246

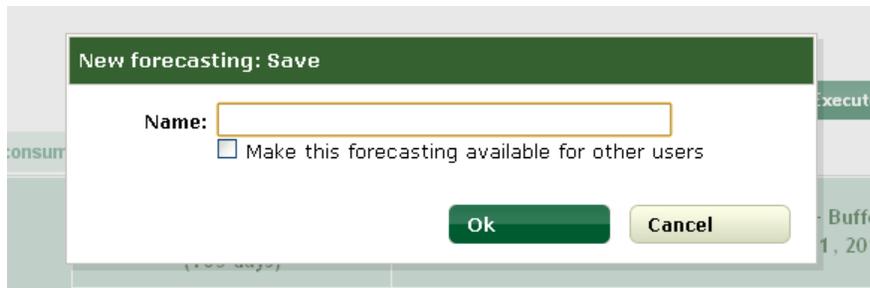


Figure 247

4. You may then access that forecast at a later date by clicking on the **Load forecasting** link (blue rectangle on **Figure 246**)
5. Clicking on the **forecast name** link (**Figure 248**) or the **Cancel** button to undo it.

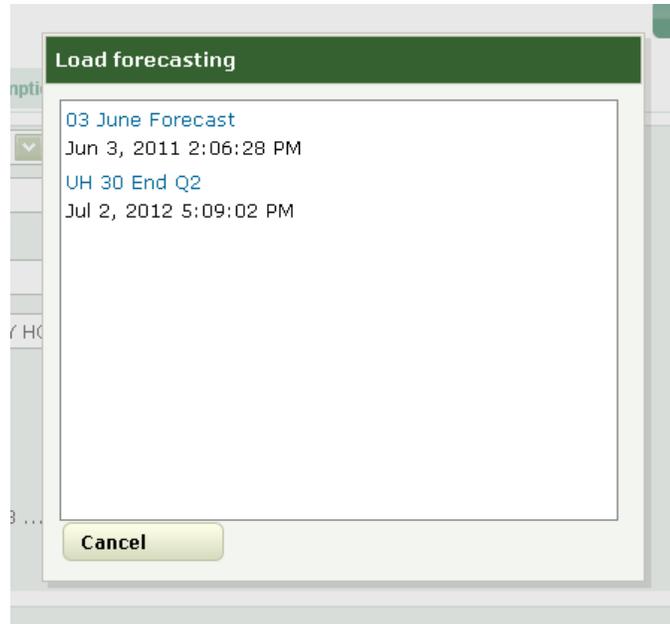


Figure 248

6. To start a new forecast, select **New Forecasting** from the drop-down menu in **Options** (Figure 246).
7. In the *confirmation* box that appears, click the **OK** button to start a new forecast or **Cancel** keep the current forecast (Figure 249).



Figure 249

8. Click on the **Management** link at the top of the page to return to the *Management* module's main page.

Export TB/DR-TB Case Data

1. Click on the **Export TB/DR-TB case data** link (Figure 191), and the *Export TB/DR-TB case data* page in Figure 250 appears.

Export TB/DR-TB case data



Data selection filters

Classification: - All -

Context: Treatment site Patient residence site

Province / Region: -

Period for case selection

Registration date Diagnosis date Start treatment date

Initial month/year: - -

Final month/year: - -

Other filters

Type of patient: - All -

Treatment Regimen: - All -

Site of Disease: - All -

Microscopy result: - All -

Type of diagnostic: - All -

HIV testing result: - All -

Gender: - All -

Medicine Source: - All -

Age range: - All -

Culture result: - All -

Type of TB drug resistance: - All -

File format and content

Destination format: /Microsoft Excel file

Content to export: Case data Laboratory exam results

Export

Figure 250

2. Select the **Data selection filters**, the **Period for case selection**, and **Other filters** by clicking the applicable option button, check boxes, and drop-down menus.
3. Click on the **EXPORT** button to show the information.
4. An Excel[®] file will be created by the system as shown in Figure 251.

	A	B	C	D	E	F	G	H	I	J	K	L	M
	Patient name	Classification	TB/DR-TB number	Case status	Gender	Birth date	Age	Patient address	Notification health unit	Registration date	Diagnosis date	Type of diagnostic	Start treatment date
1	Trish Moore	DR-TB Case	26671	On treatment	Female	Nov 10, 1958	53	888 Eighth Avenue	HEALTH CENTER 1	Feb 06, 2012	Mar 15, 2012	Confirmed	Apr 01, 2012
2	Sandra Tavares	TB Case	26674	On treatment	Female	Nov 11, 1971	40	123 Electric Avenue	HEALTH CENTER 1	Nov 11, 2011	Nov 11, 2011	Confirmed	Jun 01, 2012
3	Rick Saddler	DR-TB Case	26670	On treatment	Male	Oct 23, 1980	31	1313 Mockingbird Lane	UNIVERSITY HOSPITAL	Mar 05, 2012	Mar 05, 2012	Confirmed	Apr 02, 2012
4	Mike Green	DR-TB Case	26672	On treatment	Male	Oct 12, 1985	26	Kettler Complex	UNIVERSITY HOSPITAL	May 01, 2012	May 11, 2012	Confirmed	Feb 14, 2012
5	Jane Diefenbach	TB Case	26673	On treatment	Female	Jan 04, 1971	41	64 Columbia Pike	UNIVERSITY HOSPITAL	Mar 05, 2012	Apr 30, 2012	Confirmed	May 21, 2012
6													
7													
8													
9													
10													

Figure 251

CHAPTER 7. ADMINISTRATION MODULE

The **Administration** module allows you to manage the system to include, remove, and change users, health system structures, medicines, treatment regimens, and other features. The specific information concerning structure, planning, and activities adopted for management of TB/DR-TB patients in a country needs to be entered using the **Administration** module for satisfactory operation of the e-TB Manager.

How to Access the Administration Module

Click on the **Administration** tab or link at the system's main page (red rectangles on **Figure 252**), and the *Administration* module's main page will appear (Figure 253).

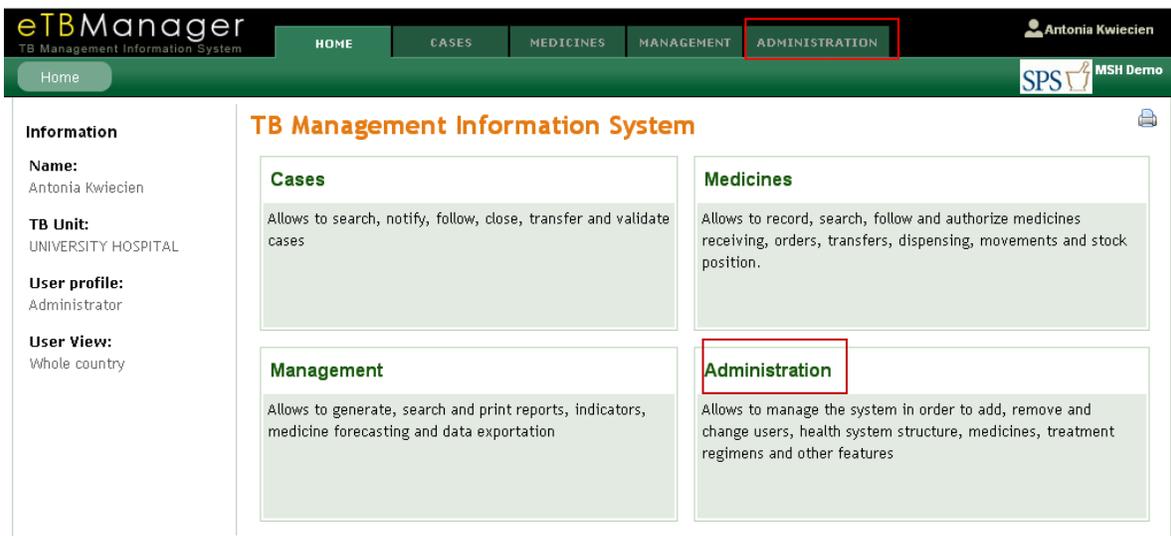


Figure 252

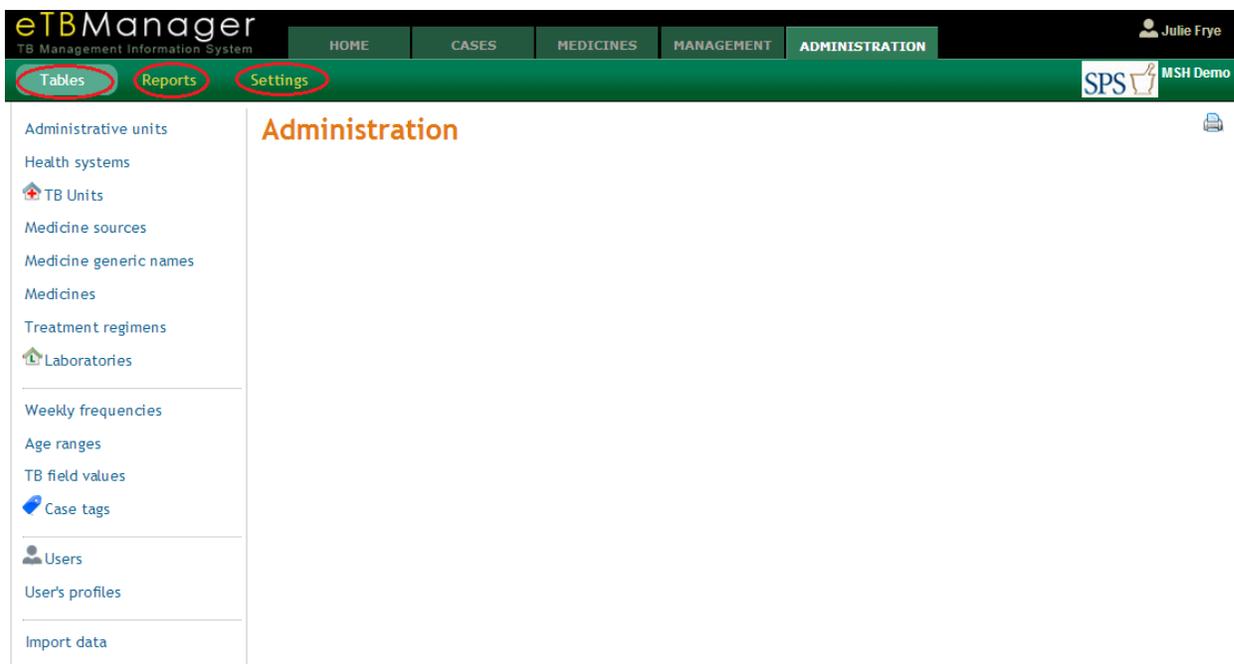


Figure 253

How to Use the Administration Options

The **Administration** page displays three tabs, **Tables**, **Reports**, and **Settings** for data configuration options (circled in red on Figure 253). The **Settings** tab is only visible and available to users with a certain level of rights.

Tables

Options for **Tables** are shown at the left menu bar (Figure 253). Click on the links and complete or change the recorded data as described under the following topics.

Administrative Units

This option shows all administrative units of the country already registered in the system (e.g., states, regions, villages, cities, or districts), and allows you to **edit**, **exclude**, or **create** new ones (**Figure 254**).

To make changes within the **Administrative unit** option, follow the procedures below.

1. At the **Administration** module main page, click on the **Administrative Units** link.

To create a **new** administrative unit:

1. On the *Administrative Units* main page that appears, click on the **NEW** button (red rectangle on **Figure 254**) to insert an administrative unit defined by the country's infrastructure.

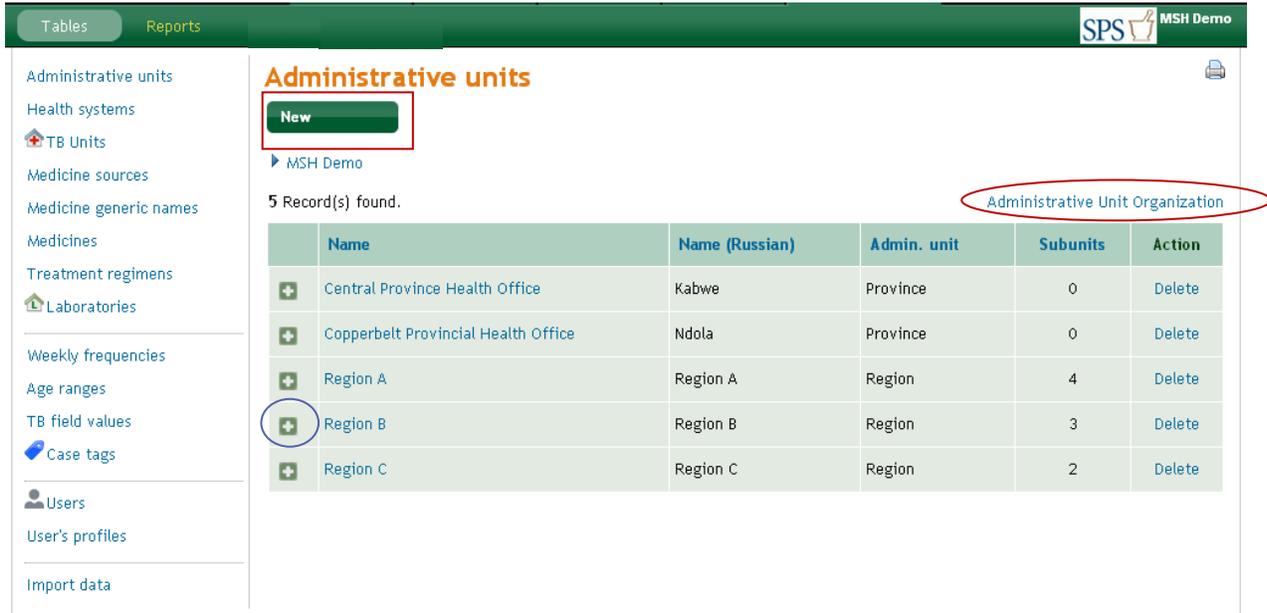


Figure 254

2. On the *New administrative unit* page, enter information in the specified fields.
3. Click on the **Save** button to confirm or **Cancel** to undo it (Figure 255).

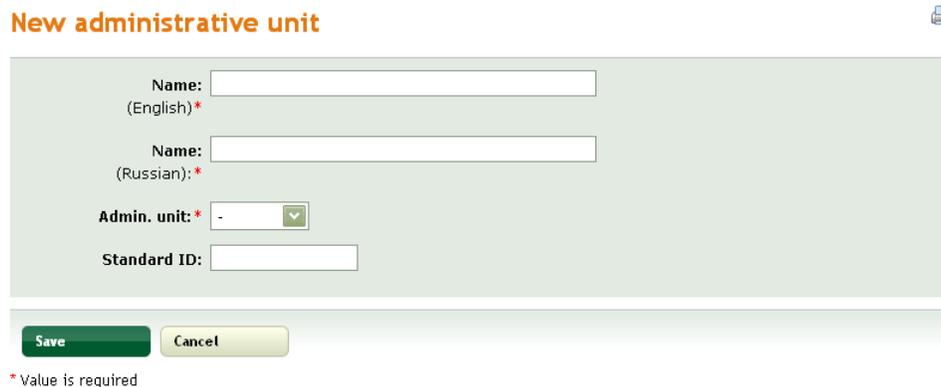


Figure 255

To **edit** an existing administrative unit:

1. From the *Administrative Units* main page, go to the page of the *Administrative unit* level page (e.g., state, region, village, city, or district) that contains the administrative unit you want to modify.
2. Click on the **Name** of the administrative unit you want to modify.
3. On the *Edit administrative unit* data page that appears, change the information displayed (Figure 256).
4. Click on **Save** to confirm or **CANCEL** to undo it.

Edit administrative unit data



ID: 950654

Level: 01E

Name: Region B
(English)*

Name: Region B
(Russian)*

Admin. unit:* Region

Standard ID:

Save Cancel

* Value is required

Figure 256

The system can separate the administrative units into a maximum of five subunit levels.

To view the existing subunits for each administrative unit:

1. Click on the **[+]** button (circled in blue on Figure 254) next to the name of the administrative unit you want to view.
2. The system will display table showing the next level of subunits and a path of links showing the workspace and the previous administration unit level (red rectangle on Figure 257).

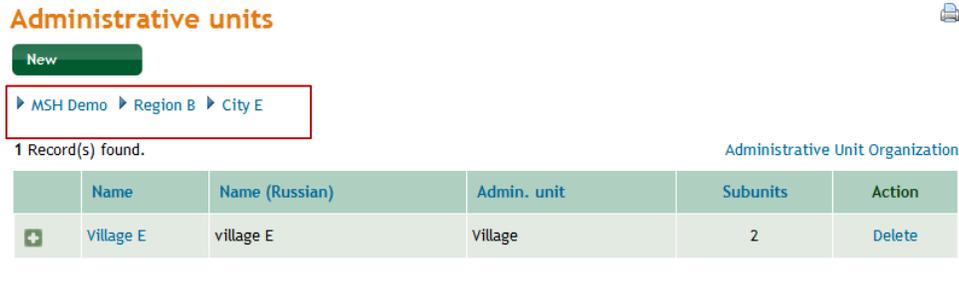


Figure 257

3. Click on the **workspace name** link to take you back to the *Administrative unit* main page, or on the **administrative unit's** name link to take you back to that administrative unit's page.

To add a sublevel of units within the within the workspace in use:

1. At the *Administrative Units* main page, click on the Administrative unit organization link (circled in red on **Figure 254**).
2. The *Administrative unit organization* page that appears displays a table showing the administrative units' sublevels.

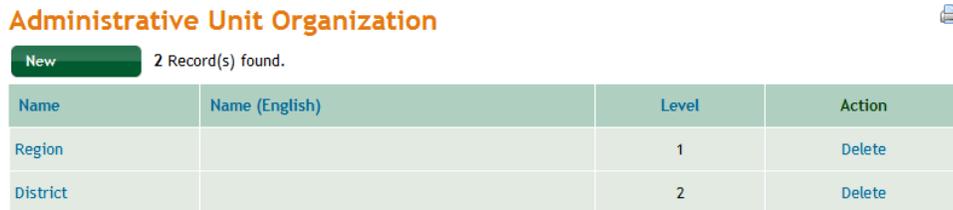


Figure 258

3. Click on the **New** button.
4. In the *New Administrative Unit Division* page that appears (Figure 259), enter the **Name** and select the **Level** of the subunit.
5. Click on **Save** to confirm or **CANCEL** to undo it.

New administrative unit division

Name:

(English)*

Name:

(Russian)*

Level:*

- 1
- 2
- 3
- 4
- 5

* Value is required

Figure 259

To **edit** an existing administrative subunit:

1. From the *Administrative Units* main page, go to the page of the *Administrative unit* level page (e.g., state, region, village, city, or district) that contains the administrative subunit you want to modify.
2. Click on the **Name** of the administrative subunit you want to modify.
3. On the *Edit administrative unit* data page that appears, change the information displayed (Figure 260).

Edit administrative unit data



ID: 1

Level: 001

Name:

(English)*

Name:

(Russian)*

Administrative unit:*

Standard ID:

* Value is required

Figure 260

To remove a registered administrative unit or subunit:

1. From the *Administrative Units* main page, go to the page of the *Administrative unit* or *Administrative subunit* level page (e.g., state, region, village, city, or district) that contains the administrative unit or subunit you want to remove.
2. Click on the **Delete** link in the **Action** column (Figure 258) to the right of the name of the administrative unit to be removed.
3. In the confirmation box displayed, click on the **OK** button to confirm or **CANCEL** to undo it (Figure 261).



Figure 261

Health Systems

This option shows all the health systems of the country already recorded in the system and allows you to **edit**, **delete**, or **add new** ones. All the recorded localities must be related to a specific region previously registered in the system.

To make changes within the **Health systems** option, follow these procedures:

1. At the *Administration* module main page, click on the **Health systems** link.

To add a **new** health system:

1. On the *Health systems* page that appears click on the **NEW** button (Figure 262).

Health systems 

New

Name	Name (Russian)	Action
Ministry of Health	National Tuberculosis & Leprosy Program	Delete
Ministry of Justice	Ministry of Justice	Delete
PPM	PPM	Delete

Figure 262

2. On the *New health system* page that appears, enter information in both fields.
3. Click on the **Save** button to confirm or **CANCEL** to undo it (Figure 263).



New health system 

Name:
(English)*

Name:
(Russian)*

Save **Cancel**

* Value is required

Figure 263

To **edit** an existing entry:

1. On the *Health systems* page click on the appropriate entry in the **Name** column of the health system (Figure 262).
2. On the *Edit health system data* page that appears, change the information displayed (Figure 264).
3. Click on the **Save** button to confirm the change, or **CANCEL** to undo it.



Edit health system data 

ID: 957

Name:
(English)*

Name:
(Russian)*

Save **Cancel**

* Value is required

Figure 264

To **delete** the specific health system:

1. Click on the **Delete** link in the **Action** column to the right of the name of the health system you want to delete (Figure 266).
2. In the *confirmation* box that appears, click the **OK** button to confirm or **Cancel** to undo it (Figure 265).



Figure 265

TB Units

This option shows all TB units defined by the country and recorded in the system and allows you to **edit**, **delete**, or **insert new** information about these TB units (Figure 266). These units include warehouses where TB medicines and commodities are stored; primary TB units, health centers, or hospitals where TB patients are treated; tuberculosis control programs; and other administrative or regulatory departments involved in TB control countrywide.

To make changes within the **TB Units** option, follow these procedures:

1. At the *Administration* module main page, click on the **TB units** link.
2. **TB Units** main page will display a table showing the **Name** of the TB units, unit's **Medicine Supplier**, and the **Functions** conducted at the unit.
3. To list the TB units from a specific province / region, select from the drop-down menu in the **Province / Region** field.
4. To list the TB units from a specific health system, select from the drop-down menu in the **Health System** field.

- Administrative units
- Health systems
- TB Units**
- Medicine sources
- Medicine generic names
- Medicines
- Treatment regimens
- Laboratories

- Weekly frequencies
- Age ranges
- TB field values
- Case tags

- Users
- User's profiles

- Import data

TB Units 🖨️

Region / Province: -

Health System: -

New

Search key: Search

Resulting: 1 - 7 Of 7

Name	Medicine supplier	Functions	Action
NATIONAL WAREHOUSE City A, Region A	2nd Line: HEALTH CENTER 1	<input type="checkbox"/> Treatment health unit <input checked="" type="checkbox"/> Unit stores medicines <input checked="" type="checkbox"/> Unit receives medicines from medicine sources <input checked="" type="checkbox"/> Allows to change the estimated quantity on orders <input checked="" type="checkbox"/> Unit is a medicine supplier	Delete
HEALTH CENTER 1 ТБ КЛИНИКЕ 1 City A, Region A		<input checked="" type="checkbox"/> Treatment health unit <input checked="" type="checkbox"/> Unit stores medicines <input type="checkbox"/> Unit receives medicines from medicine sources <input checked="" type="checkbox"/> Allows to change the estimated quantity on orders <input checked="" type="checkbox"/> Unit is a medicine supplier	Delete
HEALTH CENTER 6 HEALTH CENTER 6 City D, Region B		<input checked="" type="checkbox"/> Treatment health unit <input checked="" type="checkbox"/> Unit stores medicines <input type="checkbox"/> Unit receives medicines from medicine sources <input checked="" type="checkbox"/> Allows to change the estimated quantity on orders <input type="checkbox"/> Unit is a medicine supplier	Delete

Figure 266

To **add** a new TB unit previously defined by the country's infrastructure:

1. At the **TB Units** main page, click on the **NEW** button.
2. On the **New – TB Unit** page that appears **Figure 272**), enter information in the fields provided.
3. Click on the **Save** button to confirm or **CANCEL** to undo it.

New - TB Unit



Name: *

Name:
(Russian): *

Contact phone:

Address:

ZIP:

Region / Province: * -

Standard ID:

State: Inactive

Health System: * -

Notification health unit

Treatment health unit

Medicine management

Unit stores medicines

* Value is required

Figure 267

To **edit** an existing TB unit:

1. At the **TB Units** main page, click on the **Name** of the unit you want to modify.
2. In the **Edit - TB unit** page displayed (**Figure 268**), change the information.

Edit - TB Unit



ID: 1

Name:* NATIONAL WAREHOUSE

Name:

(Russian):*

Contact phone:

Address: London Street, 26

ZIP:

Region / Province:* Region A

City: City A

Village: -

Standard ID:

State: Active

Health System:* Ministry of Health

Notification health unit

Treatment health unit

Medicine management

Unit stores medicines

Unit receives medicines from medicine sources

Register dispensing by patient

Medicine orders

2nd line medicine supplier

Region / Province:* Region A

Name:* HEALTH CENTER 1

1st line medicine supplier

Region / Province:* -

Number of days for medicine consumption estimation: 0

Allows to change the estimated quantity on orders

Orders medicines over minimum buffer stock

Medicine order shipping

Unit is a medicine supplier

Order authorizer

Region / Province:* -

Save **Cancel**

* Value is required

Figure 268

3. Click on the **Save** button to save the changes, or **CANCEL** to undo it.

To **delete** an existing TB unit:

1. At the **TB Units** main page, click on the **Delete** link in the action column to the right of the name of the unit you want to remove (circled in red on **Figure 266**).
2. In the confirmation box that appears click on the **OK** button to confirm the deletion, or **Cancel** to undo it.

Medicine Sources

This option shows all medicine sources, that is, the international or national manufacturers and donors (e.g., WHO, GDF, GLC, MoH, NTP) connected with the country and registered in the system, and allows you to edit, exclude, or create new ones (Figure 269).

To make changes within the **Medicine sources** option, follow these procedures:

1. At the **Administration** module main page, click on the **Medicine sources** link.

To enter a **new** medicine source:

1. On the **Medicine sources** page that appears, click on the **NEW** button (Figure 269).

Name	Name (Russian)	Abbrev. name	Action
Donors	Donors	DON	Delete
Global Drug Facility		GDF	Delete
Green Light Committee		GLC	Delete
Ministry of Health		MoH	Delete

Figure 269

2. On the **New Medicine source** page that appears (Figure 270), enter information in the fields provided.

New medicine source 

English

Name: *

Abbreviated name: *

Russian

Name: *

Abbreviated name: *

* Value is required

Figure 270

3. Click on the **Save** button to confirm or **CANCEL** to undo it.

To **edit** already recorded information:

1. On the *Medicine sources* main page, click on the appropriate entry in the **Name** column (Figure 269).
2. In the *Edit medicine source* page that appears (**Figure 271**) change the information recorded.
3. Click on the **Save** button to confirm the changes, or **CANCEL** to undo it.

Edit medicine source



ID: 28796

English

Name:*

Abbreviated name:*

Russian

Name:*

Abbreviated name:*

* Value is required

Figure 271

To exclude an already recorded medicine source:

1. At the *Medicine Source* main page, click on the **Delete** link in the action column to the right of the name of the unit you want to remove (circled in red on Figure 269).
2. In the *confirmation* box that appears click on the **OK** button to confirm the deletion, or **Cancel** to undo it.

Medicine Generic Names

The medicine generic names function is used for registering susceptibility test results, registering previous TB treatments, and assigning medicines with the same active ingredients. The system allows you to **edit**, **delete**, or **create new** entries.

To make changes within the **Medicine generic names** option, follow these procedures:

1. At the *Administration* module main page, click on the **Medicine generic names** link.
2. The *Medicine generic names* page appears and displays a table with **Name**, **Display order**, **Abbreviated name**, and **Type** (first- or second-line) for each medicine.

To enter a new medicine generic name:

1. At the *Medicine generic names* page, click on the **NEW** button (Figure 272).

Medicine generic names



New

Name	Display order	Abbreviated name	Type	Action
amikacin	7	Am	Second line	Delete
aspirin	20	ASA	Other	Delete
ciprofloxacin	12	Cfx	Second line	Delete
capreomycin	8	Cm	Second line	Delete
cycloserine	16	Cs	Second line	Delete
ethambutol	2	E	First line	Delete
ethionamide	14	Eto	Second line	Delete
gatifloxacin	13	Gati	Second line	Delete
isoniazid	1	H	First line	Delete
ibuprofen	22	IBU	Other	Delete
kanamycin	6	Km	Second line	Delete
levofloxacin	9	Lfx	Second line	Delete
moxifloxacin	10	Mfx	Second line	Delete
ofloxacin	11	Ofx	Second line	Delete
p-aminosalicylic acid	18	PAS	Second line	Delete

Figure 272

2. On the *New generic name* page that appears, enter the information in all required fields (**Figure 273**).
3. Click on the **Save** button to confirm or **Cancel** to undo it.

New generic name



Abbreviated name
 (English):*

Abbreviated name
 (Russian):*

Generic Name
 (English):*

Generic Name
 (Russian):*

Include in previous treatments form

Include in DST results form

Display order:

Type:*

Save

Cancel

* Value is required

Figure 273

- To change the order of the presentation on the *Medicine Generic Names* page click on the column title links to sort by **name**, **display order**, **abbreviated name**, or **type**.

To **edit** a medicine generic name:

- At the *Medicine generic names* page, click on the **Name** of the medicine you want to edit.
- On the *Edit medicine generic* name page that appears, (**Figure 274**), change the information recorded in the fields you want to edit.
- Check or uncheck the boxes to include in **previous treatments** or **DST** (drug susceptibility testing) results forms on the *Case details* page if appropriate.
- Click on the **Save** button to confirm or **Cancel** to undo it.

Edit medicine generic name



Abbreviated name (English):*

Abbreviated name (Russian):*

Generic Name (English):*

Generic Name (Russian):*

Include in previous treatments form

Include in DST results form

Display order:

Type:*

* Value is required

Figure 274

To remove a medicine generic name:

1. At the *Medicine generic names* page, click on the **Delete** link in the **Action** column to the right of the medicine generic name (**Figure 272**).
2. In the *confirmation* box that appears, click on the **OK** button to confirm the deletion, or **Cancel** to undo it.

Medicines

This option shows all the medicines registered in the system and allows editing, deleting or creating new ones.

To make changes within the **Medicines** option, use the following procedures:

1. At the *Administration* module main page, click on the **Medicines** link.
2. The Medicines page that appears shows a table with the **Generic name, Generic name (second language), Strength/Unit, Dosage Form, Route, Category and Type** (first- or second-line) for each medicine (**Figure 275**).

To **add** a new medicine:

1. On the *Medicines* main page, click on the **NEW** button (**Figure 275**).

Generic Name	Generic Name (Russian)	Strength / Unit	Dosage Form	Abbrev. name	Category	Type	Action
Amikacin	Амикацин	1000 mg	Powder/Vial	Am	Injectable	Second line	Delete
Capreomycin	Капреомицину	1000 mg	Powder/Vial	Cm	Injectable	Second line	Delete
Cycloserine	Cycloserine	250 mg	Tablet or Capsule	Cs	Oral	Second line	Delete
Ethambutol	Ethambutol	400 mg	Tablet	E	Oral	First line	Delete
Ethambutol	Ethizide	400mg 28	tabs	E	Oral	First line	Delete
Ethionamide	Ethionamide	250 mg	Tablets	Eto	Oral	Second line	Delete
Isoniazid	Isoniazid	100 mg	Tablet	H	Oral	First line	Delete
Isoniazid + Rifampicin	Isoniazid + Rifampicin	75/150 mg	Tablet	HR	Oral	First line	Delete

Figure 275

2. On the *New Medicine* page that appears (**Figure 276**) enter information in the required fields.
3. Click on the **Save** button to confirm or **CANCEL** to undo it.

New - Medicine



Generic Name
(English):*

Generic Name
(Russian):*

Abbrev. name: *

Strength: *

Unit: *

Dosage Form: *

Category: * -

Type: * -

Standard ID:

Medicine generic name	Strength
<input type="checkbox"/> amikacin (Am)	
<input type="checkbox"/> aspirin (ASA)	
<input type="checkbox"/> capreomycin (Cm)	
<input type="checkbox"/> ciprofloxacin (Cfx)	
<input type="checkbox"/> cycloserine (Cs)	
<input type="checkbox"/> ethambutol (E)	
<input type="checkbox"/> ethionamide (Eto)	
<input type="checkbox"/> gatifloxacin (Gati)	
<input type="checkbox"/> ibuprofen (IBU)	
<input type="checkbox"/> isoniazid (H)	
<input type="checkbox"/> kanamycin (Km)	
<input type="checkbox"/> levofloxacin (Lfx)	
<input type="checkbox"/> moxifloxacin (Mfx)	
<input type="checkbox"/> ofloxacin (Ofx)	
<input type="checkbox"/> p-aminosalicylic acid (PAS)	
<input type="checkbox"/> protionamide (Pto)	
<input type="checkbox"/> pyrazinamide (Z)	
<input type="checkbox"/> rifabutin (Rfb)	
<input type="checkbox"/> rifampicin (R)	
<input type="checkbox"/> streptomycin (S)	
<input type="checkbox"/> terizidone (Trd)	

* Value is required

Figure 276

To **edit** medicines registered in the system:

1. Click on the name of the medicine you want to edit in the Generic Name column (**Figure 275**).
2. On the **Edit – Medicine** page that displays, change information in the necessary fields (**Figure 277**).
3. Click on the **Save** button to confirm or **Cancel** to undo it.

Edit - Medicine 

ID: 28779

Generic Name (English):* Amikacin

Generic Name (Russian):* Амикацин

Abbreviated name:* Am

Strength:* 1000

Unit:* mg

Dosage Form:* Powder/Vial

Category:* Injectable

Type:* Second line

Standard ID: AMI1000V

Medicine generic name	Strength
<input checked="" type="checkbox"/> amikacin (Am)	1000
<input type="checkbox"/> aspirin (ASA)	
<input type="checkbox"/> capreomycin (Cm)	
<input type="checkbox"/> ciprofloxacin (Cfx)	
<input type="checkbox"/> cycloserine (Cs)	
<input type="checkbox"/> ethambutol (E)	
<input type="checkbox"/> ethionamide (Eto)	
<input type="checkbox"/> gatifloxacin (Gati)	
<input type="checkbox"/> ibuprofen (IBU)	
<input type="checkbox"/> isoniazid (H)	
<input type="checkbox"/> kanamycin (Km)	
<input type="checkbox"/> levofloxacin (Lfx)	
<input type="checkbox"/> moxifloxacin (Mfx)	
<input type="checkbox"/> ofloxacin (Ofx)	
<input type="checkbox"/> p-aminosalicylic acid (PAS)	
<input type="checkbox"/> protionamide (Pto)	
<input type="checkbox"/> pyrazinamide (Z)	
<input type="checkbox"/> rifabutin (Rfb)	
<input type="checkbox"/> rifampicin (R)	
<input type="checkbox"/> streptomycin (S)	
<input type="checkbox"/> terizidone (Trd)	

Save **Cancel**

* Value is required

Figure 277

To **remove** an already registered medicine:

1. At the **Medicine** main page, click on the **Delete** link in the **Action** column to the right of the name of the medicine you want to remove (**Figure 275**).
2. In the **confirmation** box that appears, click on the **OK** to confirm the deletion, or **CANCEL** to undo it.

Treatment Regimens

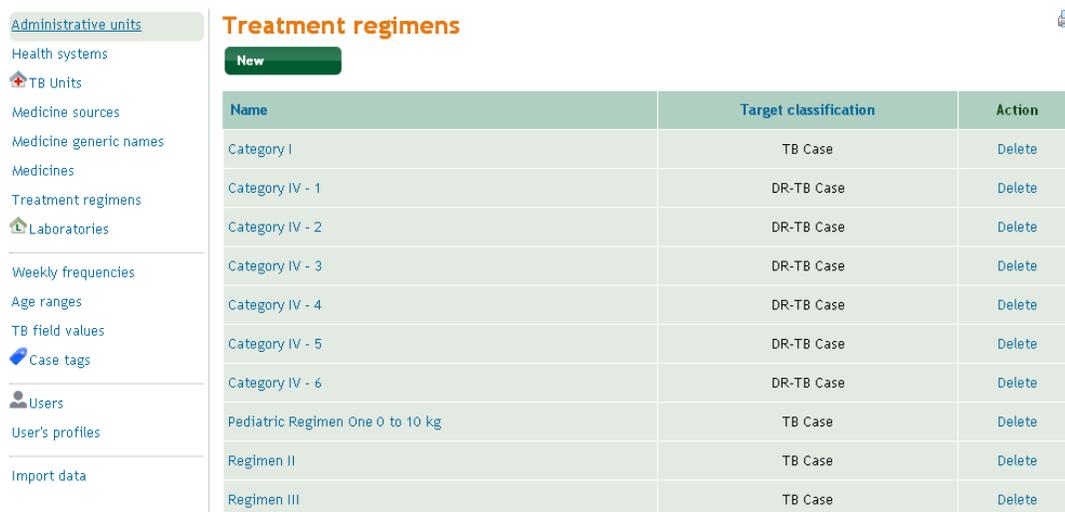
This option show all the regimens used in the country to treat TB and DR-TB cases that are already registered in the system and also allows **editing**, **excluding**, and **creating new** regimens.

Follow these procedures to make changes within the **Treatment regimens** option:

1. At the **Administration** module main page, click on the **Treatment regimens** link.
2. The **Treatment regimens** page that appears shows a table with the **Name** and **Target Classification** for each regimen entered into the system (**Figure 278**).

To enter a **new** regimen:

1. At the **Treatment regimens** main page, click on the **NEW** button (**Figure 278**).



Treatment regimens		
Name	Target classification	Action
Category I	TB Case	Delete
Category IV - 1	DR-TB Case	Delete
Category IV - 2	DR-TB Case	Delete
Category IV - 3	DR-TB Case	Delete
Category IV - 4	DR-TB Case	Delete
Category IV - 5	DR-TB Case	Delete
Category IV - 6	DR-TB Case	Delete
Pediatric Regimen One 0 to 10 kg	TB Case	Delete
Regimen II	TB Case	Delete
Regimen III	TB Case	Delete

Figure 278

2. On the *New Treatment Regimen* page that appears (**Figure 279**) enter the **Name** of the regimen.
3. Select the **Target classification** from the drop-down menu.
4. Click the **Add Medicine** button for the **intensive** phase or the **continuous** phase (**Figure 279**).

New treatment regimen

Name: *

Target classification: *

Intensive Phase

Continuous Phase

* Value is required

Figure 279

5. On the *Select medicines* box that appears, (**Figure 280**) mark the medicines to be included in the regimen,
6. Click on the **OK** button to confirm or **Cancel** to undo it.

Select medicines

Select all

Injectable

- Amikacin 1000mg (Powder/Vial)
Second line
- Capreomycin 1000mg (Powder/Vial)
Second line
- Kanamycin 1000mg (Powder/Vial)
Second line
- Streptomycin 1000mg (Powder/Vial)
First line

Oral

Figure 280

7. On the *New treatment regimen* page that appears (Figure 281), enter the **Dose**, **Duration**, **Frequencies**, and **Medicine Source** for each medicine included in the regimens adopted by the country.
8. Click on the **OK** button to confirm, or **CANCEL** to undo it.

New treatment regimen

Name: * Standardized DR-TB A

Target classification: * DR-TB Case

Intensive Phase Add Medicine...

Medicine	Default dose unit	Duration (months)	Default Frequency	Medicine Source	Action
Amikacin 1000mg (Powder/Vial)	1	6	3/7	Green Light Committee	Delete
Cycloserine 250mg (Tablet or Capsule)	2	6	7/7	Green Light Committee	Delete
Ethionamide 250mg (Tablets)	3	6	7/7	Green Light Committee	Delete
Ofloxacin 400mg (Tablets)	1	6	7/7	Green Light Committee	Delete
Pyrazinamide 500mg (Tablet)	2	6	7/7	Global Drug Facility	Delete

Continuous Phase Add Medicine...

Medicine	Default dose unit	Duration (months)	Default Frequency	Medicine Source	Action
Cycloserine 250mg (Tablet or Capsule)	2	12	7/7	Green Light Committee	Delete
Ethionamide 250mg (Tablets)	3	12	7/7	Green Light Committee	Delete
Ofloxacin 400mg (Tablets)	1	12	7/7	Green Light Committee	Delete
Pyrazinamide 500mg (Tablet)	2	12	7/7	Global Drug Facility	Delete

Save **Cancel**

* Value is required

Figure 281

9. Click on the **Add medicine** buttons (red circles on Figure 281) to include additional medicines in both phases.
10. Click on the **Delete** link (blue circles on Figure 281) in the action column to the right of the medicine name to exclude a specific medicine in each phase.

To **edit** a regimen:

1. At the *Treatment regimens* main page, click on the **Name** of the regimen you want to edit (**Figure 278**).
2. In the *Edit Treatment Regimen* page that appears (**Figure 282**), change the information in the fields as needed.
3. Click on the **Save** button to confirm or **Cancel** to undo it

Edit Treatment regimen 

ID: 22496

Name: *

Target classification: *

Intensive Phase Add Medicine...

Medicine	Default dose unit	Duration (months)	Default Frequency	Medicine Source	Action
 Isoniazid + Rifampicin + Pirazinamide + Ethambutol 75/150/400/275mg (Tablet)	<input type="text" value="4"/>	<input type="text" value="2"/>	<input type="text" value="7/7"/>	<input type="text" value="Global Drug Facility"/>	Delete

Continuous Phase Add Medicine...

Medicine	Default dose unit	Duration (months)	Default Frequency	Medicine Source	Action
 Isoniazid + Rifampicin 75/150mg (Tablet)	<input type="text" value="4"/>	<input type="text" value="4"/>	<input type="text" value="7/7"/>	<input type="text" value="Global Drug Facility"/>	Delete

* Value is required

Figure 282

To delete a registered regimen:

1. At the *Treatment Regimens* main page (**Figure 278**), click on the **Delete** link in the **Action** column to the far right of the name of the regimen you want to delete.
2. In the *confirmation* box that appears (**Figure 283**), click the **OK** button to confirm or **Cancel** to undo it.



Figure 283

Laboratories

This option shows all the laboratories registered in the system and allows editing, excluding, or creating new entries.

To make changes within the **Laboratories** option, follow these procedures:

1. At the **Administration** module main page, click on the **Laboratories** link.
2. The **Laboratories** main page will display a table showing the **Name**, **Location**, and **Standard ID** for each laboratory (Figure 284).
3. To list the laboratories from a specific province / region, select from the drop-down menu in the **Province / Region** field.
4. To list the laboratories from a specific health system, select from the drop-down menu in the **Health System** field.

Laboratories



Province / Region:

Health System:

New

7 Record(s) found.

Name	Location	Standard ID	Action
LAB 1 Laboratory 1	Village A District 2		Delete
LAB 2 Laboratory 2	Region A City B		Delete
LAB 3 Laboratory 3	Region A City C		Delete
LAB 4 Laboratory 4	Region B City E		Delete
LAB 5 Laboratory 5	Region C City G		Delete
MSH Management Sciences for Health	Region A		Delete
OPEN Open Lab	Village A District 1	1233	Delete

Figure 284

To **add** a new laboratory:

1. On the *Laboratories* main page, click on the **NEW** button (Figure 284).
2. On the *New Laboratory* page that appears (**Figure 285**) enter information in the required fields.
3. Click on the **Save** button to confirm or **CANCEL** to undo it.

New laboratory



Abbreviated name: *

Name: *

Standard ID:

Health System *

Region / Province: *

* Value is required

Figure 285

To **edit** registered laboratory information:

1. At the *Laboratories* main page, click on the **Name** of the regimen you want to edit (Figure 284).
2. In the *Edit laboratory data* page that appears (Figure 286), you can change the information in the fields as needed.
3. Click on the Save button to confirm changes or Cancel to undo them.

Edit laboratory data



ID: 935446

Abbreviated name: *

Name: *

Standard ID:

Health System *

Region / Province: *

City:

Village:

* Value is required

Figure 286

To delete a registered laboratory:

1. At the *Laboratories* main page (Figure 284), click on the **Delete** link in the **Action** column to the far right of the name of the laboratory you want to remove.
2. In the *confirmation* box that appears, click the **OK** button to confirm or **Cancel** to undo it.

Weekly Frequencies

This option shows all configurations of weekly frequencies. For example, “1/7” means one day out of seven and “3/7” means three days out of seven.

Follow these procedures to make changes within the **Weekly Frequencies** option:

1. At the *Administration* module main page, click on the **Weekly Frequencies** link.
2. On the *Weekly Frequencies* page that appears, click on the **EDIT** button (Figure 287) to modify the weekly frequencies

Weekly frequencies 

Edit

Weekly frequencies	Sun	Mon	Tue	Wed	Thu	Fri	Sat
1/7		<input checked="" type="checkbox"/>					
2/7		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
3/7		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
4/7		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
5/7		<input checked="" type="checkbox"/>					
6/7		<input checked="" type="checkbox"/>					
7/7	<input checked="" type="checkbox"/>						

Figure 287

3. On the *Edit Weekly Frequencies data* page that appears (Figure 288), tick the corresponding box to designate which day(s) of the week are included for that frequency.
4. Click on **SAVE** to confirm or **CANCEL** to undo it.

Edit Weekly frequencies data 

Weekly frequencies	Sun	Mon	Tue	Wed	Thu	Fri	Sat
1/7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2/7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3/7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4/7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5/7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6/7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7/7	<input checked="" type="checkbox"/>						

Figure 288

Age Ranges

This option shows all the age ranges registered in the system and allows you to edit, exclude, or create new ones.

To make changes within the **Age range** option, follow these procedures:

1. At the **Administration** module main page, click on the **Age Ranges** link to show the **Age Ranges** main page (**Figure 294**).

Age ranges 

Age range	Action
<= 4	Delete
5 - 14	Delete
>= 15	Delete

Figure 289

To enter a **new** age range:

1. At the **Age Ranges** main page, click on the **NEW** button (**Figure 289**).
2. In the **New Age Range** page that appears (**Figure 290**), enter information in the **Initial** and **Final** age fields.
3. To enter an age that is **less than or equal to** (\leq) the age you want, enter 0 in the initial age field.

4. To enter an age that is **greater or equal to** (\geq) the age you want, enter a number larger than 200 in the final age field.
5. Click on the **Save** button to confirm or **CANCEL** to undo it.

New age range

Initial age: * 0

Final age: * 0

Save Cancel

* Value is required

Figure 290

To **edit** the age range data:

1. At the *Age Ranges* main page, click on the age range registered in the system (**Figure 289**).
2. On the *Edit age range* page that appears, you can change information in the initial and final age fields to revise the age range (**Figure 291**).
3. Click on the **Save** button to confirm or **CANCEL** to undo it.

Edit age range

ID: 68

Initial age: * 0

Final age: * 4

Save Cancel

* Value is required

Figure 291

To **remove** an age range:

1. At the *Age Ranges* main page (**Figure 289**), click on the **Delete** link in the **Action** column to the far right of the age range you want to remove.
2. In the *confirmation* box that appears, click the **OK** button to confirm or **CANCEL** to undo it.

TB Field Values

This item allows the TB program staff to define which options should be displayed in the respective fields according to each country's needs.

To make changes within the **TB field values** option, follow these procedures:

1. At the *Administration* module main page, click on the **TB Field Values** link to show the *TB Field Values* main page (Figure 292).

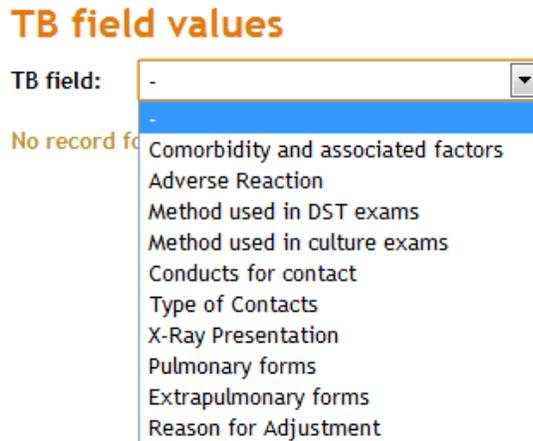


Figure 292

2. Select one option from the **TB field** drop-down menu to see the page where you may enter choices for that option (Figure 293).

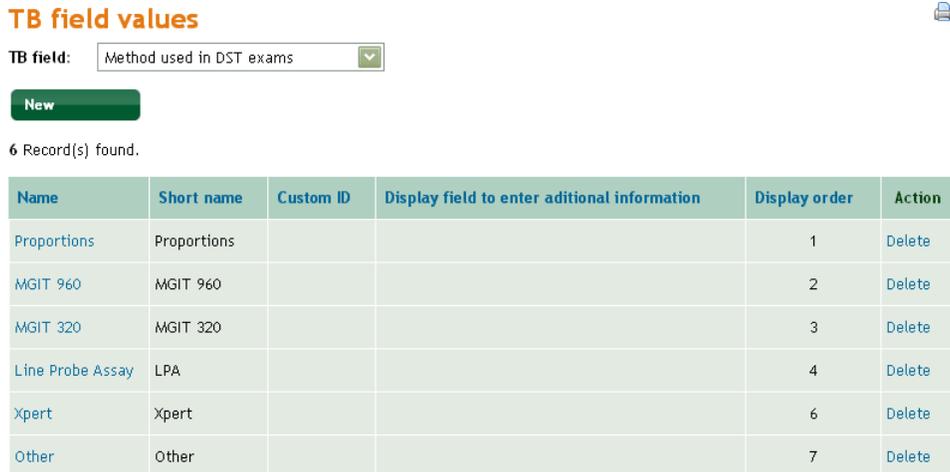


Figure 293

To add a **new** choice for the TB field selected:

1. Click on the **NEW** button (Figure 293), and the *New TB field value* page in **Figure 294** will appear.
2. Enter information in all the required fields.
3. Click on the **Save** button to confirm or **CANCEL** to undo it.

New TB field value 

TB field: Method used in DST exams

Name:*

Abbreviated name:*

Display order:

Custom ID:

Display field to enter additional information

Field label for additional information:

* Value is required

Figure 294

To **edit** a TB field value already registered in the system:

1. At the *TB Field Values* main page (**Figure 293**), click on the **Name** of the TB field value that you want to edit.
2. On the *Edit TB field value* page that appears (Figure 295), you can change information in the specified fields.
3. Click on the **Save** button to confirm or **CANCEL** to undo it.

Edit TB field value



ID: 938020

TB field: Method used in DST exams

Name:* MGIT 960

Abbreviated name:* MGIT 960

Display order: 2

Custom ID:

Display field to enter additional information

Field label for additional information:

Save Cancel

* Value is required

Figure 295

To exclude a TB field value already registered in the system:

1. At the **TB Field Values** main page (**Figure 293**), click on the **Name** of the TB field that contains the value that you want to remove.
2. Click on **Delete** in the **Action** column to the right of the name of the TB Field Value (**Figure 293**).
3. In the **confirmation** box that appears, click on **OK** to confirm or **Cancel** to undo it.

Case Tags

A case tag is a keyword or term assigned to describe a case. Tags allow the user to search the system based on the tag's key word or term. A case may have more than one tag.

In the main page of the cases module, at the left side, the system will display all tags and the quantity of cases tagged (red rectangle on **Figure 296**).

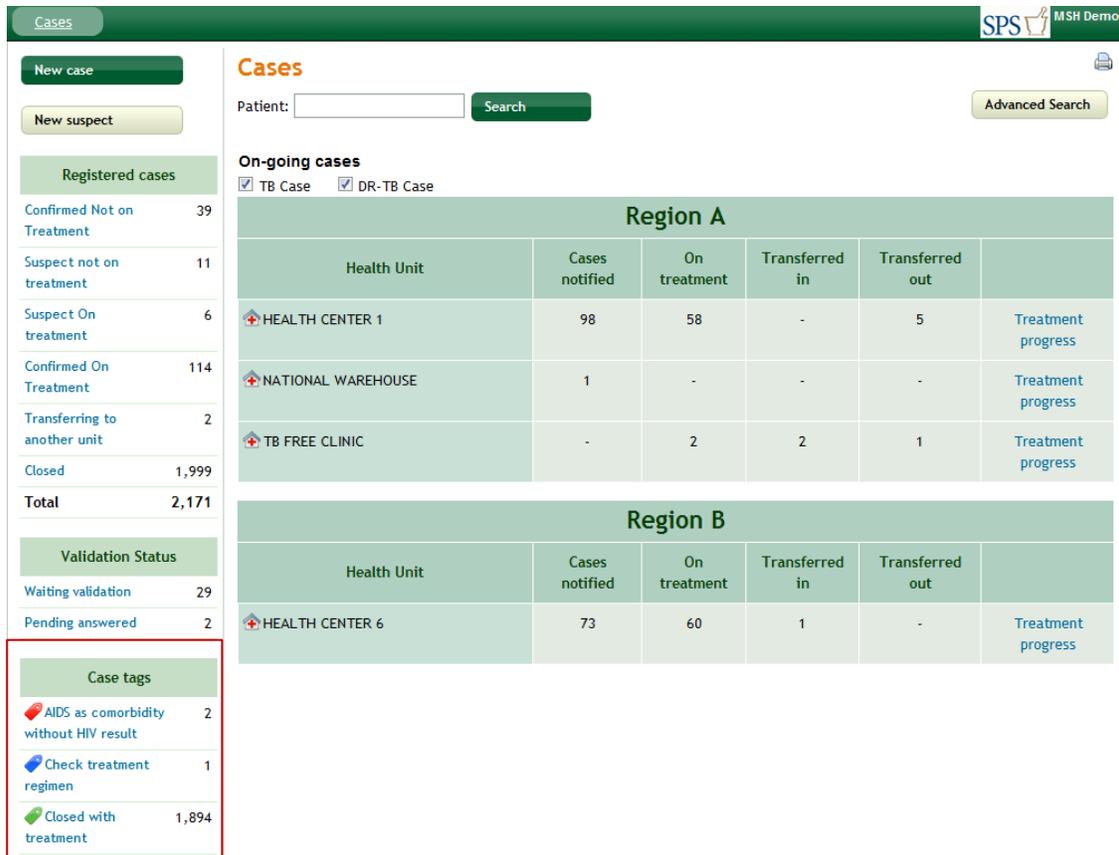


Figure 296

The three types of e-TB Manager tags are described below:

-  Blue tag – manually assigned by users to a case
-  Green tag – automatically assigned to cases by the system
-  Red tag – automatically assigned to cases by the system and checks for consistency of data assigned to the tag

Use the following procedures to make changes within the Case Tags option:

1. At the **Administration** module main page, click on the **Case Tags** link to show the **Case Tags** main page (**Figure 297**).

To enter a new case tag:

1. Click on the **NEW** button (**Figure 297**).

Case tags 

New

Name	Action
 AIDS as comorbidity without HIV result	Delete
 Check treatment regimen	Delete
 Closed with treatment	Delete
 Closed without treatment	Delete
 Confirmed cases on treatment	Delete
 Confirmed cases without DST recorded	Delete
 Defaulter	Delete
 DST result recorded without type of drug resistance	Delete
 DST result with method GeneXpert	Delete
 Genexpert exams	Delete
 HIV positive without AIDS as comorbidity	Delete
 New culture result released	Delete
 New DST result released	Delete
 On treatment and not validated	Delete
 Pediatric	Delete

Figure 297

2. On the **New Tag** page that appears (Figure 298), enter the **Name** of the tag.
3. Click on **Save** to confirm or **CANCEL** to undo it.

New tag 

Name: *

Auto generated tag

Save **Cancel**

* Value is required

Figure 298

4. If the **Auto generated tag** box is checked the additional information in Figure 299 will appear.

New tag 

Name: *

Auto generated tag
 Consistency Data Check

SQL condition:

* Value is required

Figure 299

Note: Information on how to create SQL conditions will be available in the future.

The “**consistency data check**” option will determine the color of the tags. Tags with this option checked will be displayed in red. If unchecked, tags will be displayed in green.

To **edit** a case tag:

1. On the *Case Tags* main page (**Figure 297**), click on the **Name** of the tag you want to modify.
2. On the *Edit Tags* page that appears, you can change information in the specified fields (**Figure 300**).
3. Click on the **Save** button to confirm the change, or **Cancel** to undo it.

Edit - Case tags



ID: 26

Name: *

Auto generated tag

Consistency Data Check

SQL condition:

* Value is required

Figure 300

To **delete** a case tag:

1. At the *Case Tags* main page (**Figure 297**) click on **Delete** in the **Action** column to the right of the name of the tag you want to remove.
2. In the *confirmation* box that appears, click on the **OK** button to confirm, or **Cancel** to undo it.

Users

This option shows all the users registered in the system and allows editing, excluding, or creating new entries.

The screenshot shows the 'Users' administration interface. At the top left, there is a 'New' button. Below it, the text 'Resulting: 1 - 25 Of 877' is displayed. To the right, there is a search bar with the text 'Search key:' and a 'Search' button. Below the search bar, the page navigation shows 'Page: 1 Of 36' with arrows for navigation. The main content is a table with the following columns: Name, Login, e-mail, State, TB Unit, User View, User profile, and Action. The table contains three rows of user data.

Name	Login	e-mail	State	TB Unit	User View	User profile	Action
Ricardo Memória MSH Brazil	RICARDO	rmemoria@msh.org	Active	NATIONAL WAREHOUSE	MSH Demo	Administrator	Delete
Zagorski, Andre MSH Arlington US	ANDRE	azagorski@msh.org	Active	NATIONAL WAREHOUSE	MSH Demo	Central Administrator	Delete
Luis Gustavo MSH	GUSTAVO	gustavomsh@hotmail.com	Active	NATIONAL WAREHOUSE	MSH Demo	Central Administrator	Delete

At the bottom left of the screenshot, the page navigation shows 'Page: 1 Of 36' with arrows for navigation.

Figure 301

To make changes within the **Users** option, follow these procedures:

1. At the **Administration** module main page, click on the **Users** link to show the **Users** main page (**Figure 301**).

To register a **new** user defined and authorized by the NTP or MoH:

1. At the **Users** main page (**Figure 301**), click on the **NEW** button.
2. In the **New – User** page that appears (**Figure 302**), fill in all fields displayed.

New - User

Login: *

Name: *

e-mail: *

Block system messages in certain events

State: *

Comments:

Health System:

TB Unit

Province / Region:

Name: *

Perform activities of other units

User profile: *

User View: *

Save **Cancel**

* Value is required

Figure 302

The **User Profile** selected by the administrator controls the ability of the user to view or make changes to the TB unit's data. It informs the system what the user can “see” and “do” in the database.

3. Select one of the options from the **User profile** drop-down menu (circled in red on **Figure 302**) to determine the user's to level of access to the system.
4. Check the box **Perform activities of other units** to permit the new user to change the data and perform procedures related to other TB units within his or her **User view** selected (red rectangle on Figure 302).
5. Click on the **Save** button to confirm, or **Cancel** to undo it.

An e-mail will automatically be sent to the new user with information about login, a password generated by the system, and the e-TB Manager's address. A message will appear informing that the operation was successful (**Figure 303**).



Figure 303

6. If this message does not appear click **Cancel** to undo the operation (Figure 302).

To **edit** an existing user:

1. At the *Users* main page, click on the **Name** of the user you want to modify (Figure 301).
2. On the *Edit – User* page that appears (Figure 304), you can change the information displayed in the specified fields.

The screenshot shows the 'Edit - User' form with the following fields and values:

- ID: 942337
- Login: * JFRYE
- Name: * Julie Frye
- e-mail: * jfrye@msh.org
- Block system messages in certain events
- State: * Active
- Comments: MSH
- Health System: - All -
- TB Unit
- Province / Region: Region A
- Name: * NATIONAL WAREHOUSE
- Perform activities of other units
- User profile: * Central Administrator
- User View: * MSH Demo
- Buttons: Send new password, Save, Cancel

* Value is required

Figure 304

3. Click on **SEND NEW PASSWORD** to send a new password created by the system to the user's e-mail address.
4. Click **Save** to confirm or **Cancel** to undo it.

To delete a specific registered user:

1. At the *Users* main page, click on the **Delete** link in the **Action** column to the right of the user's name (Figure 301).
2. In the confirmation box that appears click on **OK** to confirm or **CANCEL** to undo it.

User's Profiles

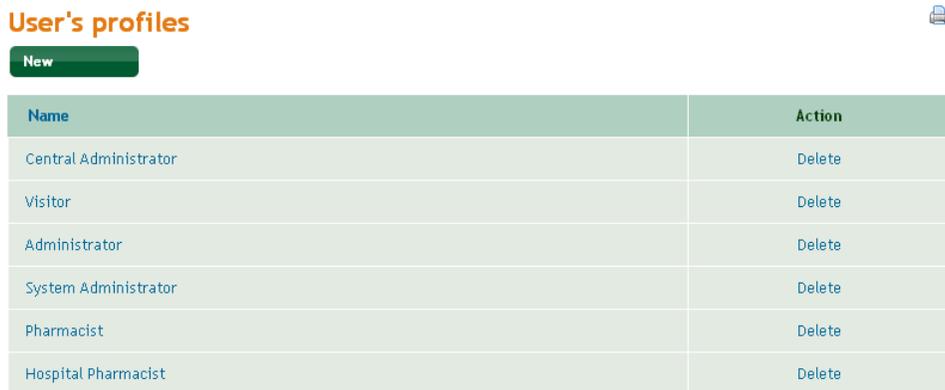
The **User's Profiles** option allows the administrator to create customized permission levels that contain only the permissions needed for the TB unit. It contains the list of operations (functions) in the system a user has permission to access. Once the administrator creates a user profile he or she may assign several users to the same profile, making it easier to control user access.

To make changes within the **User's Profiles** option, follow these procedures:

At the **Administration** module main page, click on the **User's Profiles** link to show the *User's Profiles* main page (Figure 305).

To **add** a new user profile:

1. At the *User's Profiles* main page, click on the **NEW** button (Figure 305).



Name	Action
Central Administrator	Delete
Visitor	Delete
Administrator	Delete
System Administrator	Delete
Pharmacist	Delete
Hospital Pharmacist	Delete

Figure 305

1. On the *New user profile* page that appears (**Figure 306**) enter the profile's **Name** in the specified field.
2. Mark the boxes in the two columns (**Change** and **Grant**) for each permission item that corresponds to the functions the user will be allowed to do for each of the four modules (**Cases, Medicines, Management, and Administration**) for the respective profile.
3. Click on the **Save** button to confirm or **CANCEL** to undo it.

New user profile



Name: *

Permission	Change	Grant
<input checked="" type="checkbox"/> Cases	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> TB Case - General view		
<input type="checkbox"/> DR-TB Case - General view		
<input type="checkbox"/> NTM Case - General view		
<input type="checkbox"/> Change case number (automatically generated by the system)		
<input type="checkbox"/> Medicines		
<input type="checkbox"/> Management		
<input type="checkbox"/> Administration		

* Value is required

Figure 306

To **edit** a user's profile:

At the *User's Profiles* main page, click on the **Name** of the User's profile you want to edit (Figure 305).

1. On the *Edit User's Profile* page that appears (**Figure 307**), you can change the profile's **Name** displayed, and **mark** or **unmark** the boxes for permission in the two columns (**Change** and **Grant**).
2. Click on the **Save** button to confirm the changes, or **Cancel** to undo it.

Edit User Profile



ID: 940510

Name: * Pharmacist

Permission	Change	Grant
<input checked="" type="checkbox"/> Cases	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> TB Case - General view		<input type="checkbox"/>
<input checked="" type="checkbox"/> Case data	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Treatment	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Medicine intake follow-up	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Exams	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Additional information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Drugogram		<input checked="" type="checkbox"/>
<input type="checkbox"/> Validate case		
<input type="checkbox"/> Edit/Delete case after validation		
<input type="checkbox"/> Transfer to another health unit		
<input type="checkbox"/> Close case		
<input type="checkbox"/> Reopen case		
<input checked="" type="checkbox"/> Display personal information of the patient		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Add comments to a case		<input checked="" type="checkbox"/>
<input type="checkbox"/> Remove comments of other users		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Assign tags to a case		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> DR-TB Case - General view		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Medicines		<input checked="" type="checkbox"/>
<input type="checkbox"/> Adjust stock quantity		<input checked="" type="checkbox"/>
<input type="checkbox"/> Receivings from manufacturer		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Medicine orders		<input checked="" type="checkbox"/>
<input type="checkbox"/> Medicine dispensing		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Medicine transfer		<input checked="" type="checkbox"/>
<input type="checkbox"/> Start medicine management		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Report control by unit		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Management		<input checked="" type="checkbox"/>
<input type="checkbox"/> Stock position by region		<input checked="" type="checkbox"/>
<input type="checkbox"/> Average lead time of medicine orders		<input checked="" type="checkbox"/>
<input type="checkbox"/> Case Management Indicators & Reports		<input checked="" type="checkbox"/>
<input type="checkbox"/> Export TB/DR-TB case data		<input checked="" type="checkbox"/>
<input type="checkbox"/> Medicine forecasting		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Administration		<input checked="" type="checkbox"/>
<input type="checkbox"/> On-line users		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Administrative units		<input checked="" type="checkbox"/>
<input type="checkbox"/> Medicine sources		<input checked="" type="checkbox"/>
<input type="checkbox"/> TB Units		<input checked="" type="checkbox"/>
<input type="checkbox"/> Medicines		<input checked="" type="checkbox"/>
<input type="checkbox"/> Treatment regimens		<input checked="" type="checkbox"/>
<input type="checkbox"/> Users		<input checked="" type="checkbox"/>
<input type="checkbox"/> User's profiles		<input checked="" type="checkbox"/>
<input type="checkbox"/> Laboratories		<input checked="" type="checkbox"/>
<input type="checkbox"/> Medicine generic names		<input checked="" type="checkbox"/>
<input type="checkbox"/> Weekly frequencies		<input checked="" type="checkbox"/>
<input type="checkbox"/> TB field values		<input checked="" type="checkbox"/>
<input type="checkbox"/> Health systems		<input checked="" type="checkbox"/>
<input type="checkbox"/> Age ranges		<input checked="" type="checkbox"/>
<input type="checkbox"/> Case tags		<input checked="" type="checkbox"/>
<input type="checkbox"/> Import data		<input checked="" type="checkbox"/>
<input type="checkbox"/> Setup Workspace		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Reports		<input checked="" type="checkbox"/>

Save Cancel

* Value is required

Figure 307

To exclude a registered user's profile:

1. At the *User' Profiles* main page, click on the **Delete** link in the **Action** column to the right of the user's profile name that you want to remove (Figure 305).
2. In the *confirmation* box that appears, click on the **Save** to confirm the deletion, or **CANCEL** to undo it.

Import Data

The last item under the **Tables** tab of the **Administration** menu is **Import Data**.

Currently, only CSV (comma separated value) files are supported as the source files and you can import data only to the administrative unit table, but other formats and tables will be available in the future.

A common scenario is to import the list of administrative units (e.g., regions, cities) from an Excel file to a new workspace in the system. Follow the steps below to import the data to the system.

File Format

The system reads only CSV files. The easiest way to generate a CSV file is from an Excel spreadsheet with your data. This file must follow the format described below:

- The rows of this file must contain the name of the administrative units.
- The columns must contain the groups of administrative units.
- The title row (first row shaded in gray on Example 1) of the spreadsheet must contain the name of the administrative unit structures (the types of units).

The following examples demonstrate how to construct a usable file.

Example 1

This is the simplest format. Each column is a structure of the country.

Region	City	Village/Towns
Calisto	City 1	Rio de Janeiro
Calisto	City 1	Sao Paulo
Calisto	City 2	Belo Horizonte
Eclipse	City 3	Bahia

In this example, the system will include two regions (Calisto and Eclipse), three cities (City 1, City 2, and City 3), and four villages or towns. The system supports up to five levels (columns) of country structure.

Example 2

If you want to include a standard code for each unit, separate each one into a separate row and include a new column called “ID.”

Region	City	Village/Towns	ID
Calisto			10000
	City 1		11000
		Rio de Janeiro	11001
		Sao Paulo	11002
	City 2		12000
		Belo Horizonte	12001
Eclipse			20000
	City 3		21000
		Bahia	21001

In this example the system will import the data the same way as example 1, but will also assign your ID code to each unit.

Example 3

In a same level of the country structure, you may find different naming systems. In the previous example, in the third level of the country, we may have villages and towns. The solution is to include another column with the title “Type,” as in example 3.

Region	City	Village/Towns	ID	Type
Calisto			10000	
	City 1		11000	
		Rio de Janeiro	11001	Village
		Sao Paulo	11002	Town
	City 2		12000	
		Belo Horizonte	12001	Village
Eclipse			20000	
	City 3		21000	
		Bahia	21001	Town

In the example, because the rows in the third column have specific values in the “Type” column, the system will use its names to compose the country structure, so Rio de Janeiro and Belo Horizonte will be imported as villages, but Sao Paulo and Bahia will be imported as towns.

Generating the CSV File

Once you have your Excel file ready, simply export it to a CSV format by using the Excel “**Save as...**” option, and selecting the format as **CSV**.

Importing the File

To import a file, follow the procedures below:

1. In the **Administration** module of e-TB Manager, under the **Tables** tab click on **Import data** from the left menu bar (**Figure 308**).

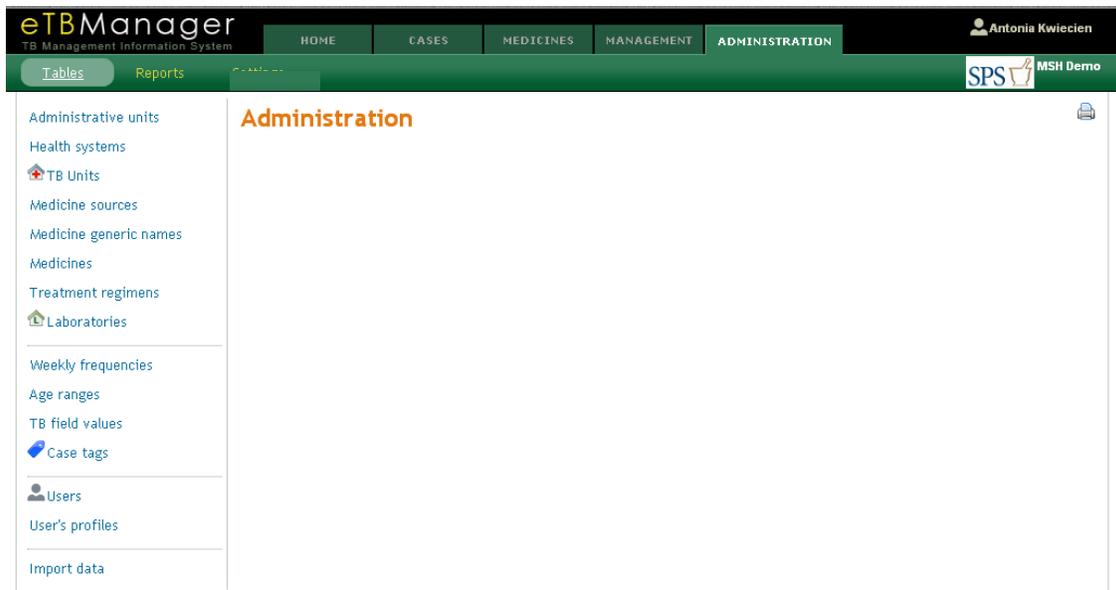


Figure 308

2. On the **Import data** page that appears (**Figure 309**), select the **Destination table**, and select the **CSV file** from your computer.
3. The default values for the Delimiter character and Charset (character set) are probably fine, but you may change them if required.

Import data 

Destination table: *

CSV File: * No file chosen

Delimiter char: *

Charset: *

Figure 309

4. To start importing the data, click on the **Import** button (**Figure 309**)

The import procedure will run as a background operation, so while it's being processed you may continue using the system. When the data import is completed, the system will send you an e-mail alerting you about the status of the import.

Reports

At the *Administration* module's main page, click on the **Reports** tab (circled in red on **Figure 310**).

To access the reports, click on the **links** shown at the left menu bar (red rectangle on **Figure 310**).

The reports are for information only, and no data can be entered or changed on the reports pages.

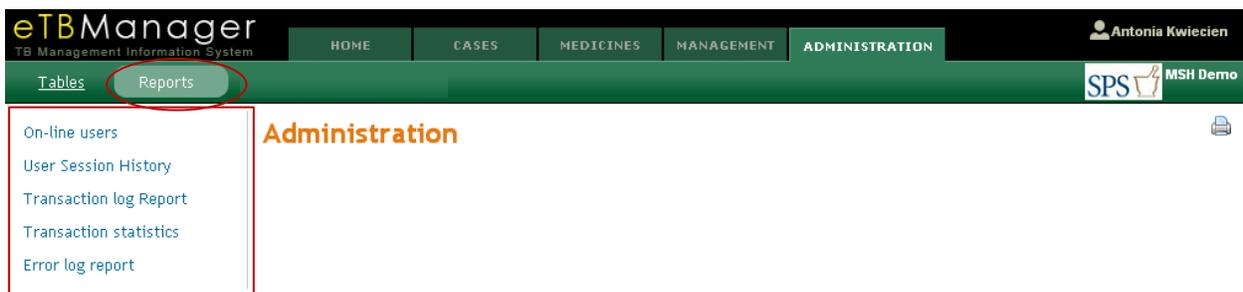


Figure 310

Online users

The report contains a listing of users currently connected to the system, including the following information (**Figure 311**):

- **ID**—A unique number generated by the system identifying the user login
- **Login date**—The date and time that the user connected to the system
- **Session time**—How long the user has been connected to the system
- **User Name**—Information about the user (login and name)
- **Last page**—The last page visited by the user
- **Last request**—The last time the user requested information from the system during the session (same time the last page was requested)
- **Idle time**—The time between the last request and the current time

On-line users



Workspace:

ID	Login date	Session time	User Name	Last page	Last request	Idle time
968115	11:31:34 AM	46 min 13 sec	Antonia Kwiecien AKWIECIEN	/admin/websessions.seam	12:17:48 PM	

Figure 311

User Session History

The **User Session History** displays a calendar with a list of the users who have logged into the system (**Figure 312**) for the date and workspace selected.

User Session History



Data selection filters

<< < July, 2012 > >>

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	1	2	3	4	5	6
28	8	9	10	11	12	13
29	15	16	17	18	19	20
30	22	23	24	25	26	27
31	29	30	31	1	2	3
32	5	6	7	8	9	10

Jul 3, 2012 Clean Today

Workspace:

Jul 03, 2012

Login ID	User	Login date	Logout date	Workspace	Session time	
967828	Ricardo Memória	10:19:56 AM	11:07:05 AM	MSH Demo	47 min 9 sec	Show details
967831	Yee-Ling Elaine Chim	10:26:12 AM	11:18:06 AM	MSH Demo	51 min 54 sec	Show details
967842	Antonia Kwiecien	2:23:32 PM	5:41:05 PM	MSH Demo	3 hour 17 min	Show details

Figure 312

The report contains a listing of users who have logged in to the system, including the following information:

- **Login ID**—A unique number generated by the system identifying the user login
- **User**—The name of the user
- **Login date**—The time the user entered into the system
- **Logout date**—The time the user was logged out of the system
- **Workspace**—The workspace used in the system
- **Session time**—The length of time the user was logged in
- **Show details**— click on the link for details including the user’s Internet provider address and browser information (**Figure 313**)

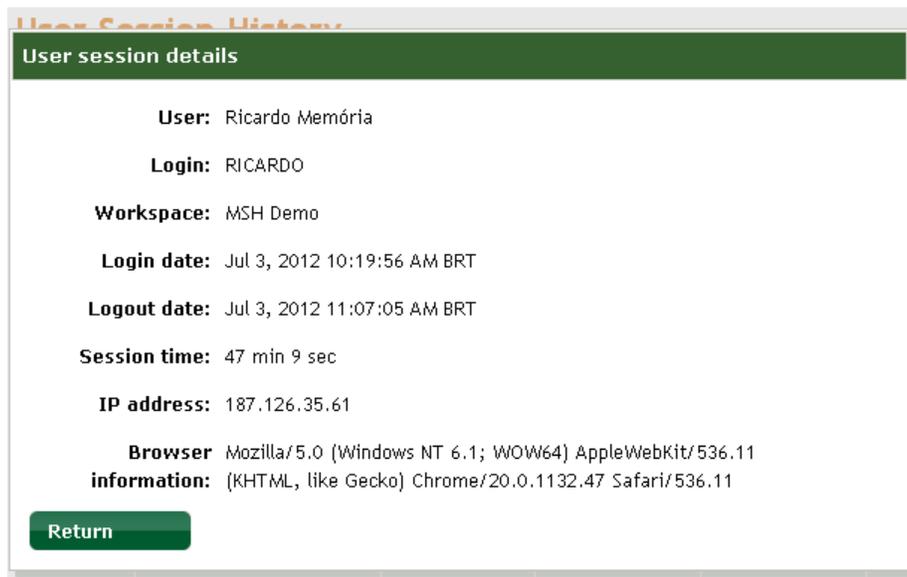


Figure 313

Transaction Log Report

The **Transaction log Report (Figure 314)** displays a record of all of the transactions made in the system, as well as which user made the change. The program allows the user to filter the data by **workspace, event, action, user, search key** and **date**.

Transaction log Report



Data selection filters

Workspace: ▾

Event: ▾

Action: ▾

User: ▾

Search key:

Start date: (mm/dd/yyyy)

Finish date: (mm/dd/yyyy)

Resulting: 1 - 40 Of 68 Page: Of 2

Edited - Treatment Elsie Muundjua Aug 2, 2012 4:42:55 AM
 Harry , Uirab Walvis Bay, Erongo 1 day ago

Field	Previous value	New value
• Start treatment date:	Apr 01, 2010	Apr 01, 2010
• Finish treatment date:	Mar 31, 2012	Apr 02, 2012

+ New - Culture exam Elsie Muundjua Aug 2, 2012 4:38:57 AM
 Harry , Uirab Walvis Bay, Erongo 1 day ago

• Culture result:	Negative
• Laboratory:	NIP-SWAK - NIP-Swakopmund
• Date collected:	Feb 07, 2012
• Method applied:	MGIT 960

Edited - Culture exam Elsie Muundjua Aug 2, 2012 4:37:44 AM
 Harry , Uirab Walvis Bay, Erongo 1 day ago

Field	Previous value	New value
• Date collected:	Sep 30, 2011	Nov 30, 2011
• Culture result:	Positive	Negative

Figure 314

Transaction Statistics

The Transaction Statistics report (**Figure 315**) is only available to users with special rights in the system. It gives a way to monitor user activity, based on the actions they have taken in the system. You can filter the report for a specific user and/or a specific event to see, for example, how many new medicine orders user X has created in a certain time period or how many DST results have been entered for health center A. If the numbers are much higher or lower than expected, it indicates that follow-up with the site or user may be necessary, e.g., to troubleshoot problems or provide retraining.

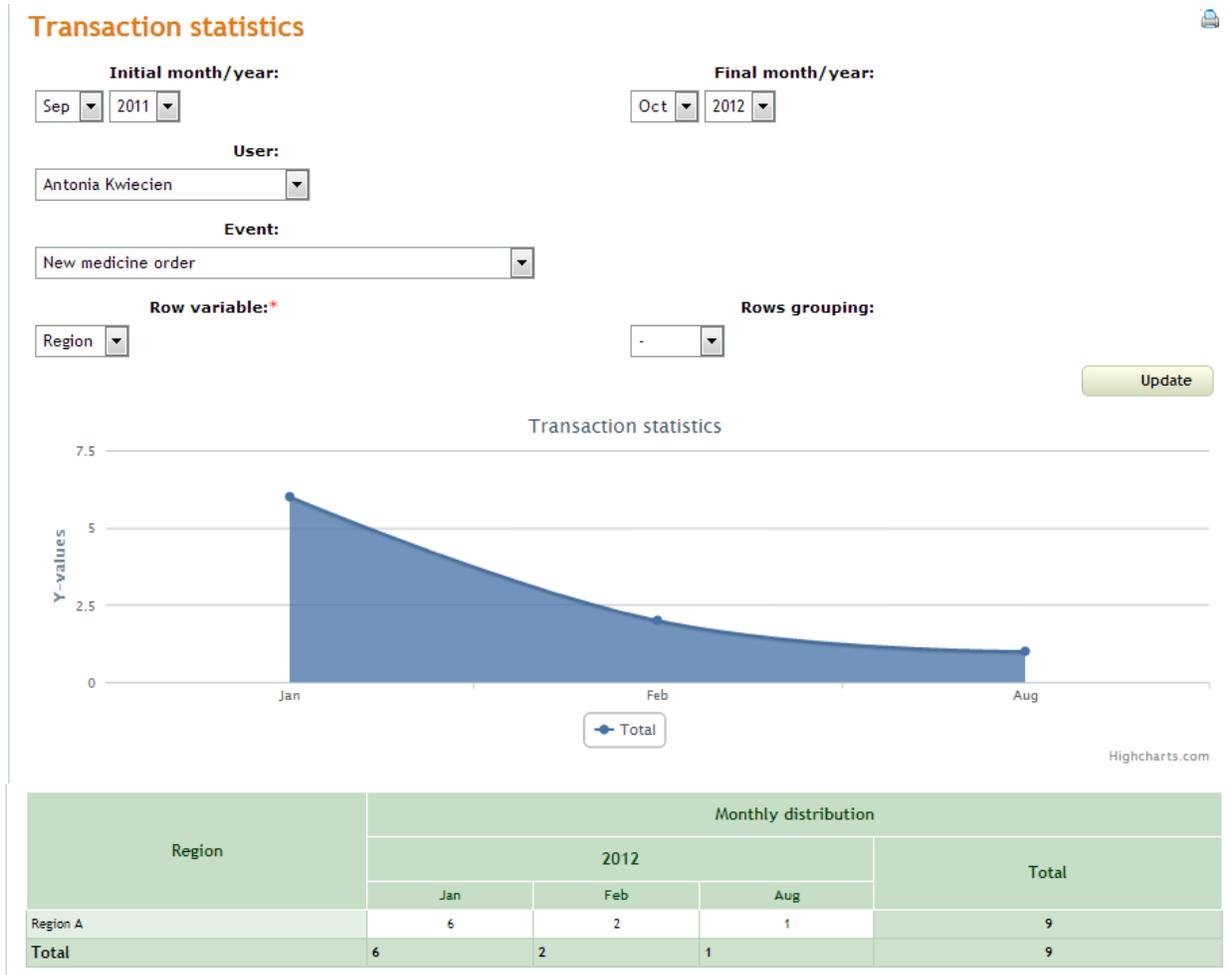


Figure 315

Error Log Report

The **Error log Report (Figure 316)** displays a record of all error messages in the system, as well as which user experienced the system error. The program allows the user to filter the data by search key and date.

Error log report 

Start date: (mm/dd/yyyy)

Finish date: (mm/dd/yyyy)

Search key:

Resulting: 1 - 50 Of 4,678 Page: 1 Of 94 

Date	Error message	User	Workspace
Jul 06, 2012 06:12:34 6 hour 19 min ago	https://www.etbmanager.org/etbmanager/newuser.seam org.jboss.seam.RequiredException @In attribute requires non-null value: userRegistrationHome.entityManager Show details		
Jul 06, 2012 00:58:05 11 hour 33 min ago	https://www.etbmanager.org/etbmanager/medicines/stockadj.seam?srcid=940521&cid=9558 java.lang.NullPointerException -No message in exception- Show details	NGUYENCHINH18 - Nguyen van chinh	Vietnam - Training
Jul 06, 2012 00:54:27 11 hour 37 min ago	https://www.etbmanager.org/etbmanager/medicines/stockadj.seam?srcid=940521&cid=9547 java.lang.NullPointerException -No message in exception- Show details	NGUYENCHINH18 - Nguyen van chinh	Vietnam - Training
Jul 06, 2012 00:44:32 11 hour 47 min ago	https://www.etbmanager.org/etbmanager/medicines/stockadj.seam?srcid=940521&cid=9530 java.lang.NullPointerException -No message in exception- Show details	NGUYENCHINH18 - Nguyen van chinh	Vietnam - Training

Figure 316

Settings

Options for **Settings** are shown at the left menu bar (Figure 317). Click on the links and complete or change the recorded data as described under the following topics. The **Settings** menu is only available to users with certain levels of rights in e-TB Manager. It is not common to make changes in the **Settings** and it should only be done by a specially trained user who understands the implications of the changes made here.

Tables Reports **Settings** 

Setup MSH Demo
e-TB Manager setup
Workspaces

Administration - Settings 

Figure 317

Setup MSH Demo

The first menu option in the Administration – Settings menu is **Setup MSH Demo**, in this example. In your system, it will be Setup Your Workspace Name. Clicking this option leads to the Setup page for the workspace (Figure 318).

This page allows you to set up the **Name, Description, Default language, Alternate language,** and **Default time zone** for your workspace. Ticking the box for **Allow system to send messages to users on certain events** permits just that.

This page also allows you to define the **patient name composition** in your system, e.g., first, middle, and last names in three separate fields, full name in a single field, etc. to customize the system to your country's name standards.

Tick the boxes for **Start TB treatment before validation** or **Start DR-TB treatment before validation** if your country's standard permits this approach. If you do not tick the boxes, e-TB Manager will not permit you to start treatment on a case before validating it.

The **Display case number** field allows you to select a system-generated number, a registration code, or no code for your patients.

The **Required levels for patient address** field allows you to state how many levels (e.g., region, city, village, street, etc.) are required to be included in the patient address.

The **Workspace picture** allows you to upload an image to represent your workspace. It will display in the top right corner of the screen under the user name.

If you make any changes on this page, click the **Save** button to keep them or the **Cancel** button to discard them.

Figure 318

e-TB Manager Setup

The e-TB Manager Setup option (Figure 319) allows you to set certain system parameters for your e-TB Manager system.

On this screen, you define the **System URL** and **Page root URL** for your e-TB Manager system.

You also enter the **System e-mail** and **System administrator e-mail(s)** (more than one can be entered). These define who is notified by the e-TB Manager system when certain things occur in the software.

Ticking the **Allow user self-registration at login page** option will enable that feature.

In the **Workspace** dropdown box, select the workspace you want to use for your e-TB Manager system. You may also select the default **TB Unit** and **User profile** for your system.

If you make any changes on this page, click the **Save** button to keep them or the **Cancel** button to discard them.

Welcome, jfrye

e-TB Manager setup

System URL: * http://www.etbmanager.org

Page root URL: * http://www.etbmanager.org/etbmanager

System e-mail: * ricardo@rmemoria.com.br

System administrator e-mail: vrao@msh.org, rmemoria@msh.org, USrivastava@msh.org

Allow user self-registration at login page

Workspace: * MSH Demo

TB Unit: * HEALTH CENTER 1

User profile: * General Profile

Save Cancel

Figure 319

Workspaces

Clicking the **Workspaces** menu option leads to a page with a list of all of the workspaces in e-TB Manager (Figure 320).

Workspaces

New

Name	Default language	Default time zone
 Azerbaijan Azerbaijan Workspace	English Azerbaijani (Azerbaijan)	Asia/Baku
 Bangladesh Bangladesh Workspace	English	Asia/Dhaka
 Brasil Área de Trabalho com dados importados do sistema TBMR	Portuguese (Brazil)	America/Sao_Paulo
 Brasil Treinamento Área de trabalho de treinamento para o Brasil	Portuguese (Brazil)	America/Bahia
 Cambodia Cambodia Demo Workspace	English	Asia/Jakarta

Figure 320

For more details on a particular workspace, click the name of the workspace (circled in red on Figure 320). A page with more information about that workspace appears (**Error! Reference source not found.**).

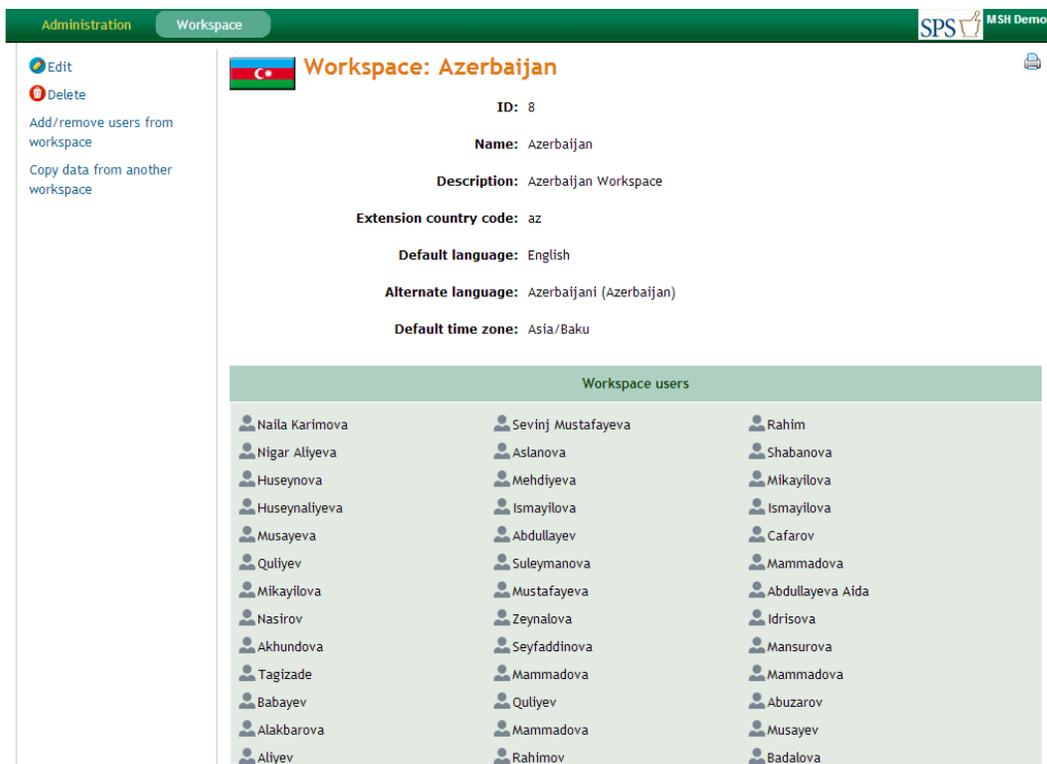


Figure 321

Editing a Workspace

To edit the workspace, click the Edit link shown in Error! Reference source not found.. The Edit workspace data page appears (Figure 322).

You may modify the workspace **Name**, **Description**, **Extension country code**, **Default language**, **Alternate language**, and **Default time zone**. You may also change the **Workspace picture**.

Click the **Save** button to keep your changes or **Cancel** to discard them.

Edit workspace data

Name: * Azerbaijan

Description: * Azerbaijan Workspace

Extension country code: az

Allow system to send messages to users on certain events

Default language: * English

Alternate language: Azerbaijani (Azerbaijan)

Default time zone: * (GMT04:00): Asia/Baku

Workspace picture: 

Clear image

New image file No file chosen

* Value is required

Figure 322

Deleting a Workspace

You can delete a workspace by clicking the **Delete** link shown in Figure 321. If you wish to delete the workspace, click **OK** in the confirmation screen that appears (Figure 323). If you are not completely certain you want to delete the workspace, click **Cancel**. Deleting a workspace is not done very often and should only be done by a high-level administrator familiar with e-TB Manager.

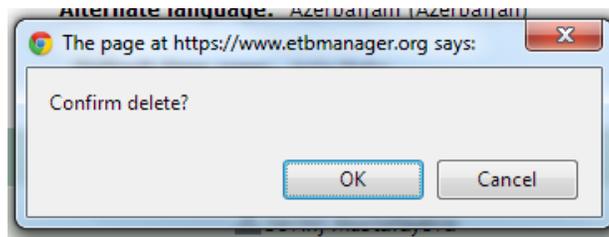


Figure 323

Add/Remove Users from Workspace

To add or remove users in a workspace, click the Add/Remove Users from Workspace link in Figure 321. The Add/remove users from workspace page will appear, as shown in Figure 324.

You may add a user by completing the **User**, **TB Unit**, **User View**, and **Profile** fields for the person, then clicking the **Add** button.

To remove a user, click the **Remove** link in the **Action** column by their name. There is no confirmation screen for this action, so be sure you want to remove the user before you click the link.

Save your changes by clicking the **Save** button or discard your changes by clicking the **Cancel** button.

Azerbaijan: Add/remove users from workspace

Users

User:

TB Unit: *

User View: *

Profile: *

Add

Save **Cancel**

Workspace users

Name	User profile	User View	Action
KARIMOVAN - Naila Karimova	Central Coordinator	Whole country	Remove
MUSTAFAYEVA - Sevinj Mustafayeva	Central Coordinator	Whole country	Remove
RAHMANOV - Rahim	TB Doctor	Whole country	Remove
NIGAR - Nigar Aliyeva	Central Coordinator	Whole country	Remove
FARIDA - Aslanova	Local sysadmin	Whole country	Remove
SABINA - Shabanova	TB Doctor	Whole country	Remove
SAADAT - Huseynova	TB Doctor	Whole country	Remove

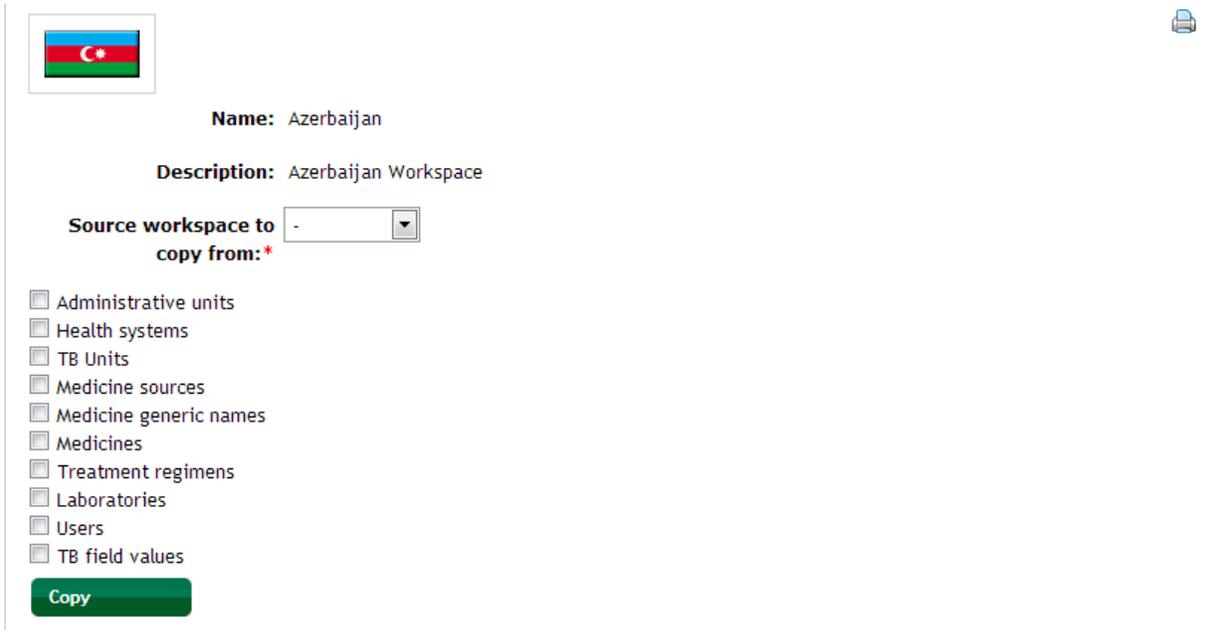
Figure 324

Copying Data from Another Workspace

If you want to copy data from one workspace to another, click the **Copy data from another workspace** link shown in Figure 321. For example, you may want to copy data to create a workspace for training. The page shown in Figure 325 will appear.



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The screenshot shows a web interface for configuring a workspace. At the top left is a flag of Azerbaijan. To the right is a printer icon. Below the flag, the text reads: **Name:** Azerbaijan. Below that, **Description:** Azerbaijan Workspace. Underneath is a label **Source workspace to copy from:*** followed by a dropdown menu showing a hyphen (-). Below the dropdown is a list of data elements, each with an unchecked checkbox: Administrative units, Health systems, TB Units, Medicine sources, Medicine generic names, Medicines, Treatment regimens, Laboratories, Users, and TB field values. At the bottom left of the form is a green button labeled **Copy**.

Figure 325

Select the workspace from which you want to copy in the dropdown window next to **Source workspace to copy from**. Tick the boxes next to the data elements you want to copy, and then click the **Copy** button. When you click the **Copy** button, you will be copying the data into the workspace listed in the **Name** field, so be sure that's what you want to do.