

Electronic Dispensing Tool

User's Guide

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CONTENTS

ACRONYMS AND ABBREVIATIONS	vii
CHAPTER 1. INTRODUCTION	1
Description	1
What the Electronic Dispensing Tool Does	1
What the Electronic Dispensing Tool Will Not Do	1
Tool Features	2
Expected Users and Required Skills	2
System Requirements	3
CHAPTER 2. INSTALLATION AND CONFIGURATION	5
Installation of the Tool	5
Configuration	12
Language	12
Calendar	13
System Configuration	13
Generic Name	13
Form	14
Unit	14
Dose	14
Product Category	15
Product Creation/Registration	15
Regimen	18
Age Groups	19
OI Category & Condition	20
Type of Treatment	20
Source of Patient	20
Reason for Visit	20
Patient Status	21
Reason for Change	22
Line	22
Patient Language	22
Malaria Age	22
State/Province	22
District	23
Supporting Organizations	23
Source/Destination of Stock	23
Type of Transaction	24
Holiday	24
Language Changes	24

Export Data	25
New Patient Information	26
Clinic ID	26
Source of Patient	27
Type of Treatment	27
Start Date	27
Transfer In	27
Family Name and First Name	27
Language	27
Gender	27
Link Patient	27
Age (years)	28
Weight	28
Height	28
BSA	28
Address, City, State/Province, District	28
Contact Person and Tel	28
Supported by	28
Regimen	28
WHO Stage/Performance	28
Other Conditions/Illnesses	29
CHAPTER 3. USING THE EDT	31
Finding Patients	31
Dispensing Products	32
Dispensing ARV and TB Medicines	32
Updating Patient Information	37
Summary of the Visit	38
Dispensing Non-ARV/Non-antimalarial Medicines	39
Reverse/Cancel Medicine Dispensing	41
Encounter Report	43
Dispensing Malaria Medicines	44
Recording Stock Movement	48
Summary Stock Information	49
Receiving Stock	51
Distributing Stock	52
Stock Graph	55
Updating Stock Levels	55
CHAPTER 4. REPORTS	57
Standard Reports	57
“New Patients by Treatment Type, Age and Weight”	58

Contents

“Chart showing patient trend per month in a given year”	59
“Number of new patients during period defined per regimen and product”	59
“Cumulative Number of ART Patients per Current Status”	61
“Active Patients per Regimen”	61
“Adult Patient Visits by Weight”	62
“Number of visits during period defined per regimen”	62
“OI summary”	63
“Number of active patients under treatment”	63
“Number of patients initiating treatment (and still active)”	64
“Number of active patients per regimen”	65
“Number of patients lost”	65
“Number of patients dropped”	66
“Morbidity Requirements by Regimen”	67
Patient Reports	68
“Daily Appointments”	69
“Calendar of Patient Visits”	70
“Missed Appointments”	70
“Inactive Patients”	71
“Active Patients”	71
“Patients Transferred In”	72
“Patients Transferred Out”	72
“Patients by Type of Product”	73
“Patients by Type of Service”	73
“Adherence”	74
Product Reports	79
“Available Stock”	79
“Product Consumption Report”	80
“List of Products Dispensed by Date”	82
“Average Monthly Consumption”	83
CHAPTER 5. SYSTEM CONFIGURATION AND MAINTENANCE	85
“System Config”	85
Login New User	87
Add New Users	87
Change Password	88
Data Preparation for Installation	88
Erasing Data	89
Importing Clinic Data	89
Upgrading from Version 1.2 Data Files	93
Distributing Validation Tables from a Central Location to Other Clinics Using the EDT	98
Archiving Transactions	101

Export Data 101

Backing Up Data 102

Problems? 105

ACRONYMS AND ABBREVIATIONS

AIDS	acquired immunodeficiency syndrome
ART	antiretroviral therapy
ARV	antiretroviral
BSA	body surface area
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
EDT	Electronic Dispensing Tool
HIV	human immunodeficiency virus
OI	opportunistic infection
PEP	postexposure prophylaxis
PMTCT	prevention of mother-to-child transmission
SMTP	simple mail transfer protocol
S-P	sulfadoxine-pyrimethamine
TB	tuberculosis
USAID	U.S. Agency for International Development
WAC	weighted average cost
WHO	World Health Organization

CHAPTER 1. INTRODUCTION

Description

The Electronic Dispensing Tool, or EDT (formerly known as the ART Dispensing Tool, or ADT), is intended for people managing products used in the fight against epidemics such as HIV/AIDS, malaria, and other complicating opportunistic infections (OIs). It allows a file to be managed for each patient to whom medicines are dispensed at a pharmacy or clinic providing care. Each patient's file includes his or her basic profile and the history of products administered. The pharmacist can access this file at the time medicines are dispensed. This tool also generates reports containing basic statistical data and information that can facilitate patient monitoring and adherence to the prescribed treatment. Please note that in this guide, the terms *product* and *medicine* are used interchangeably.

What the Electronic Dispensing Tool Does

The Electronic Dispensing Tool helps maintain basic patient profile information, medication history, and other data that are essential for the dispenser to know at the time of dispensing. This tool also generates information required to calculate pharmaceutical needs and to make other management decisions. The data captured and reports generated by the tool can briefly be summarized as follows—

- Medicines Management
 - Medicines inventory
 - Product consumption report by month/year, type of product, and type of treatment
- Dispensing
 - Dispensing history for managed medicines and supplies
 - New patients per regimen
 - Number of visits per month/year by regimen
 - Adherence reporting using indicators approved by the World Health Organization (WHO)
- Patient Management
 - Basic patient profile with contact address
 - Patient schedule
 - List of patients (supported by different donors)
 - Current status of patient (active, lost to follow-up, deceased)
 - Number of active patients by regimen
 - Age, weight, and gender distribution
 - Patient enrollment trend

What the Electronic Dispensing Tool Will Not Do

The Electronic Dispensing Tool is designed to support your reasoning. However, it cannot distinguish between accurate and erroneous data, apart from reporting some obvious

inconsistencies. It also cannot be used as a comprehensive clinical tool, because it deals with pharmaceutical services only and contains limited inventory functions. However, it can be used in conjunction with other software applications.

Tool Features

The Electronic Dispensing Tool—

- Has batch/lot and expiry date tracking for the medicines and supplies being dispensed.
- Can export data from peripheral sites and import data into a central location using the tool to provide an aggregated view of that territory's dispensing habit.
- Is designed to be simple to use and maintain.
- Has been developed in Microsoft Access (which comes bundled with Microsoft Office Professional) so no additional licenses are needed.
- Comes already equipped with various reports to support management decisions at the facility level.
- Provides user-friendly data entry through “look-up” tables and lists.
- Has a comprehensive user's guide.
- Is currently available in French and English and can be viewed in either language by simply clicking a button. Additionally, it can be readily translated in other languages.

Expected Users and Required Skills

The primary expected users of the tool are dispensers at clinics and pharmacies. The Electronic Dispensing Tool will also provide clinic and program managers with relevant information on which they can base their decisions. If aggregated at higher levels, the data can provide useful information for strategic and program planning, pharmaceutical rationalization, and financial planning.

Electronic Dispensing Tool users are expected to have basic computer skills, knowledge of treatment protocols and antiretroviral (ARV) medicines, good dispensing practices, and a basic understanding of stock management. Familiarity with Microsoft Access databases is helpful, but not required.

System Requirements

Component	Requirement
Computer CPU	Pentium-based processor
Memory	512 megabytes (MB) of RAM (minimum)
Hard disk space	500 MB of free disk space
Additional drives for backup	External schedulable hard disk or memory stick (minimum 1 gigabyte [GB]) or CD-R/W drive (if backup is to be done on CD)
Operating system	Professional version of Windows 2000 or Windows XP or higher
Application program	Professional version of MS Office 2003
Networking	Networking as necessary to connect the computers
Printer	Any Windows compatible printer—laser printer is preferred over ink jets
Power backup	Labels: Supports Brother QL-560 or QL-570 UPS minimum 500 VA (or the next highest to sufficiently cover both monitor and CPU)

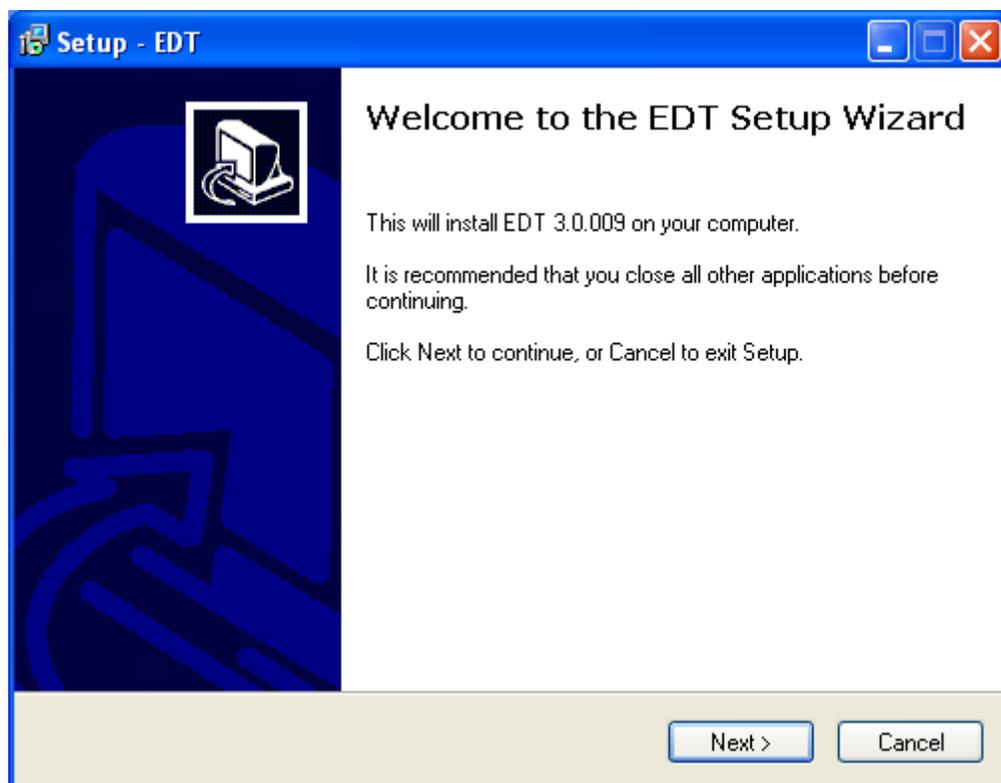
Disclaimer: Please note that the screen captures and reports in this manual contain sample and testing data and do not represent actual institutions or patients.

CHAPTER 2. INSTALLATION AND CONFIGURATION

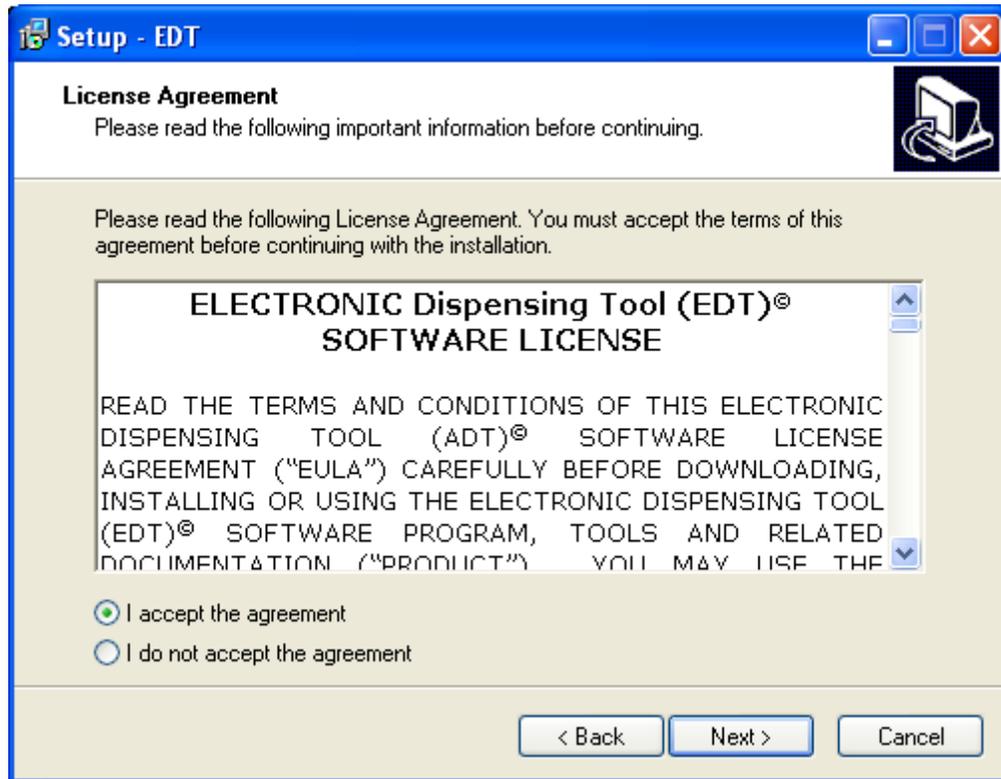
Installation of the Tool

To install the EDT software, follow these steps—

1. Double-click the EDTsetup.exe file to start the installation process.
2. Choose a language (English or French) for installation.
3. The EDT Setup Wizard will appear.

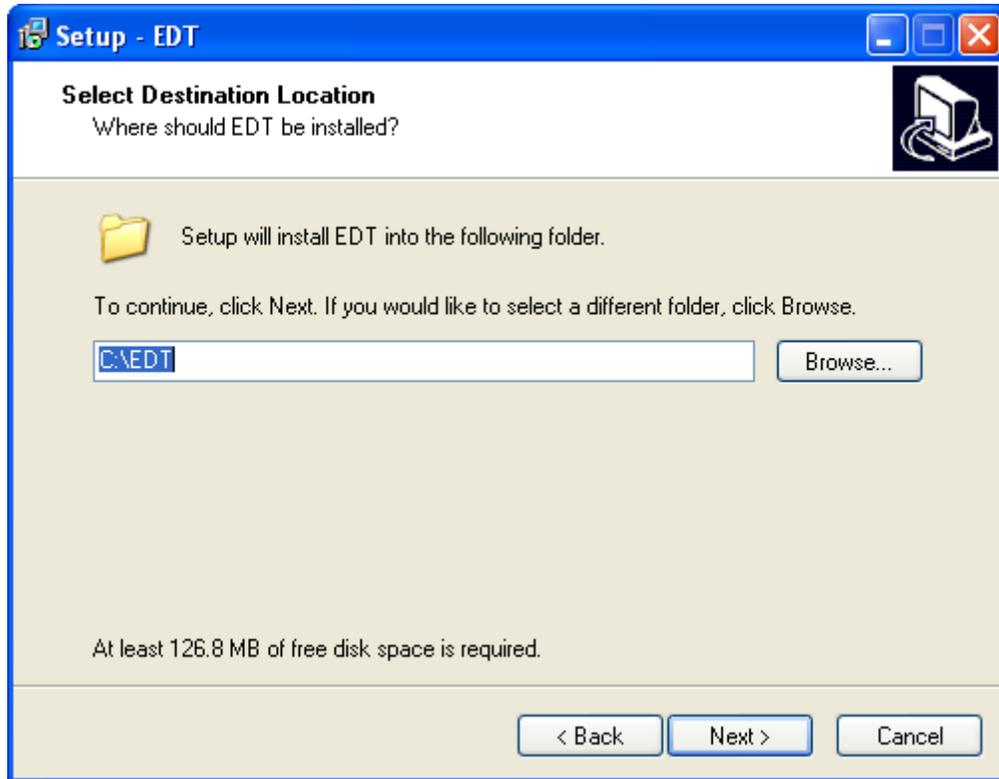


4. You must accept the license agreement before you can proceed with the installation.



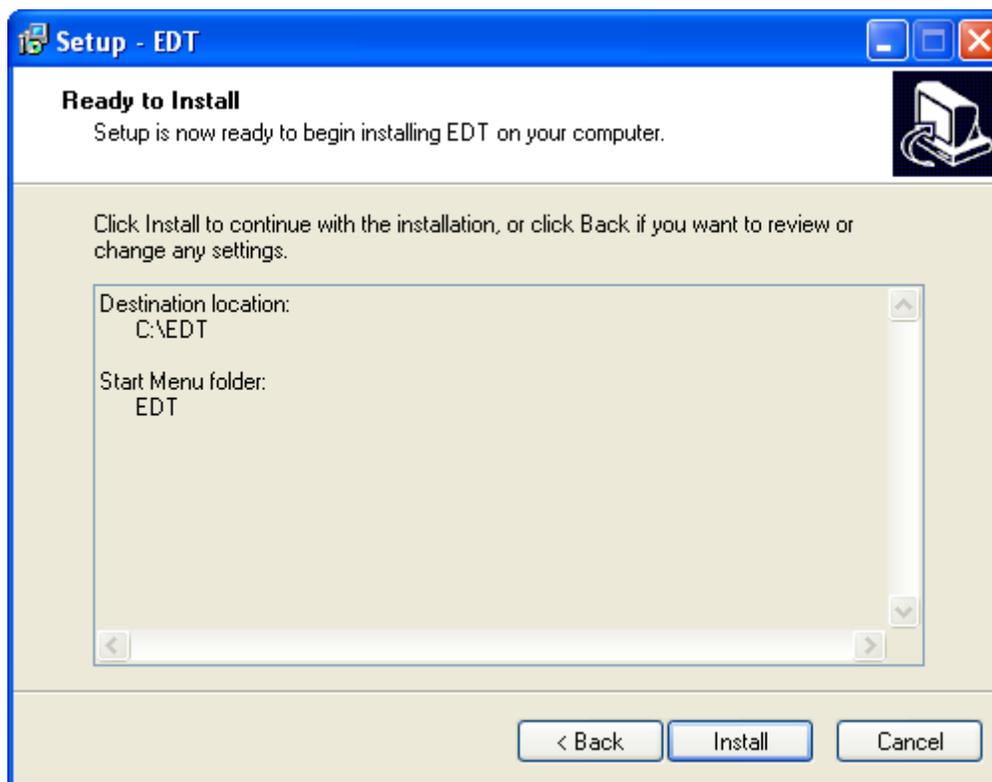
5. Select the destination location for the software. In most cases, it is best to leave the location suggested by the installation software. You must have at least 127 MB of free space available on your hard drive.

NOTE: For Windows Vista users, you must leave the destination drive as C: because of security restrictions. If the drive is changed, the software will not function correctly.



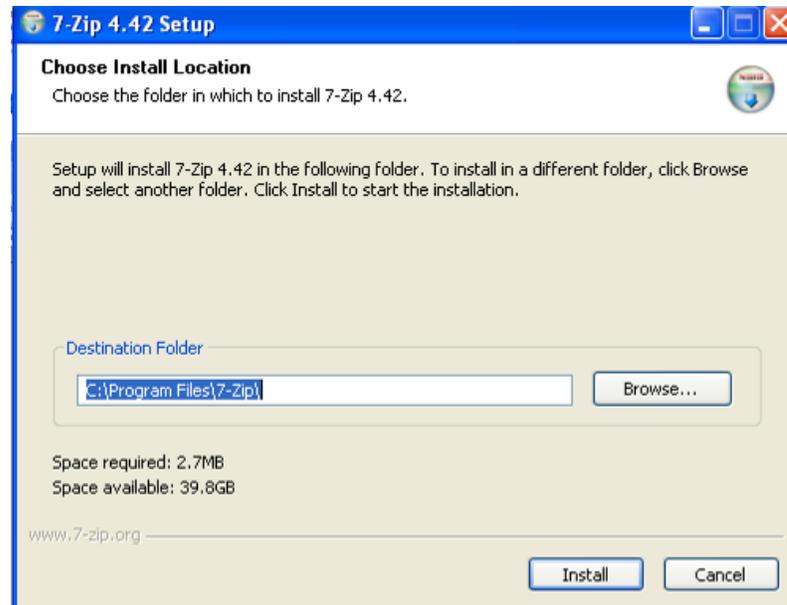
6. Specify where the setup program should place the program's shortcuts. Again, in most cases, it is best to leave the location suggested by the installation software.
7. State whether you want a desktop icon installed for the software. This will make it easy to start the software from the main screen of your computer.

8. Click the "Install" button.

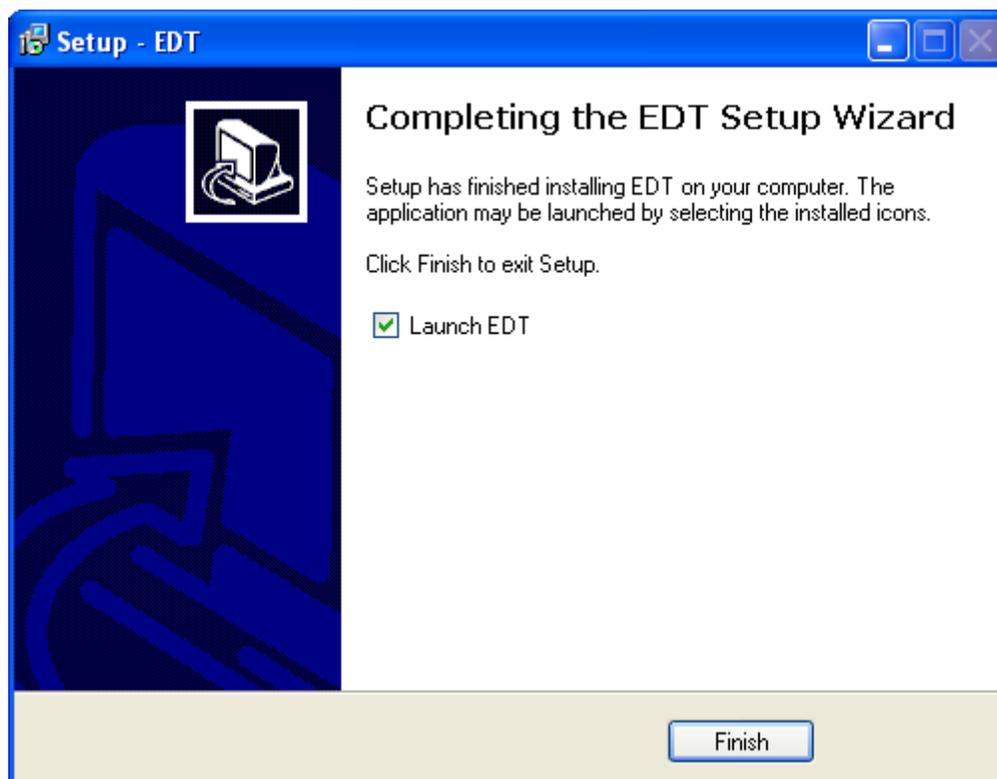


9. During installation, if a version of the EDT software is already installed on the computer, prompts will pop up, asking you to indicate whether to overwrite existing files. If the existing data and validation files are not required, answer "Yes." However, if you desire to keep the existing data and validation files, answer "No" to each of the inquiries.

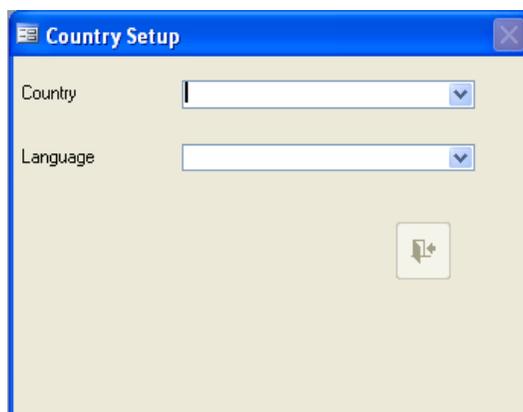
10. Choose an installation location for 7-Zip, a free compression software program that facilitates file transfers by making the files smaller. This program is used in the EDT export process and must be installed to submit data to a central location.



11. The installation is complete.



The first time you start the program, you need to choose the installation country and language (English or French).



You can choose to have the program start automatically after installation by leaving the Launch EDT box checked. Whether you start the program that way or by double-clicking the desktop icon, the following User Login window appears on the screen—

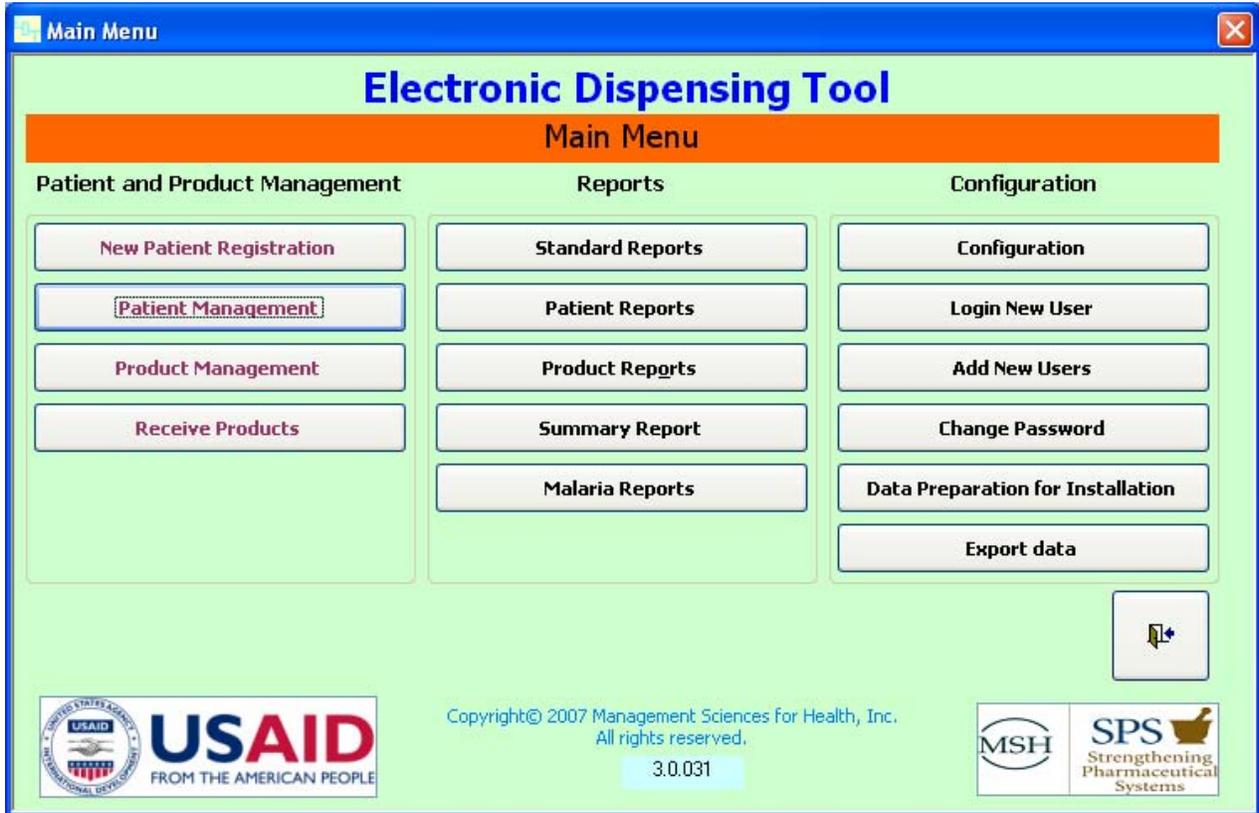


To gain access to the program, you must enter a user ID (identity) and corresponding password. The EDT has two levels of user access: users and administrators. User-level access gives the user access to the functional areas of the program and data-entry rights. Administrator access allows access to the Configuration column of the program and the various setup areas located there.

The default user-level ID and password for the program are “rpmplus.” The default administrator-level ID and password for the program are “admin” and “adtv13,” respectively.

New users can be created and deleted as necessary in the EDT. Chapter 5 discusses this procedure more extensively.

In the User Login window, enter your *user ID* and *password*. The following screen appears with the “Main Menu”—



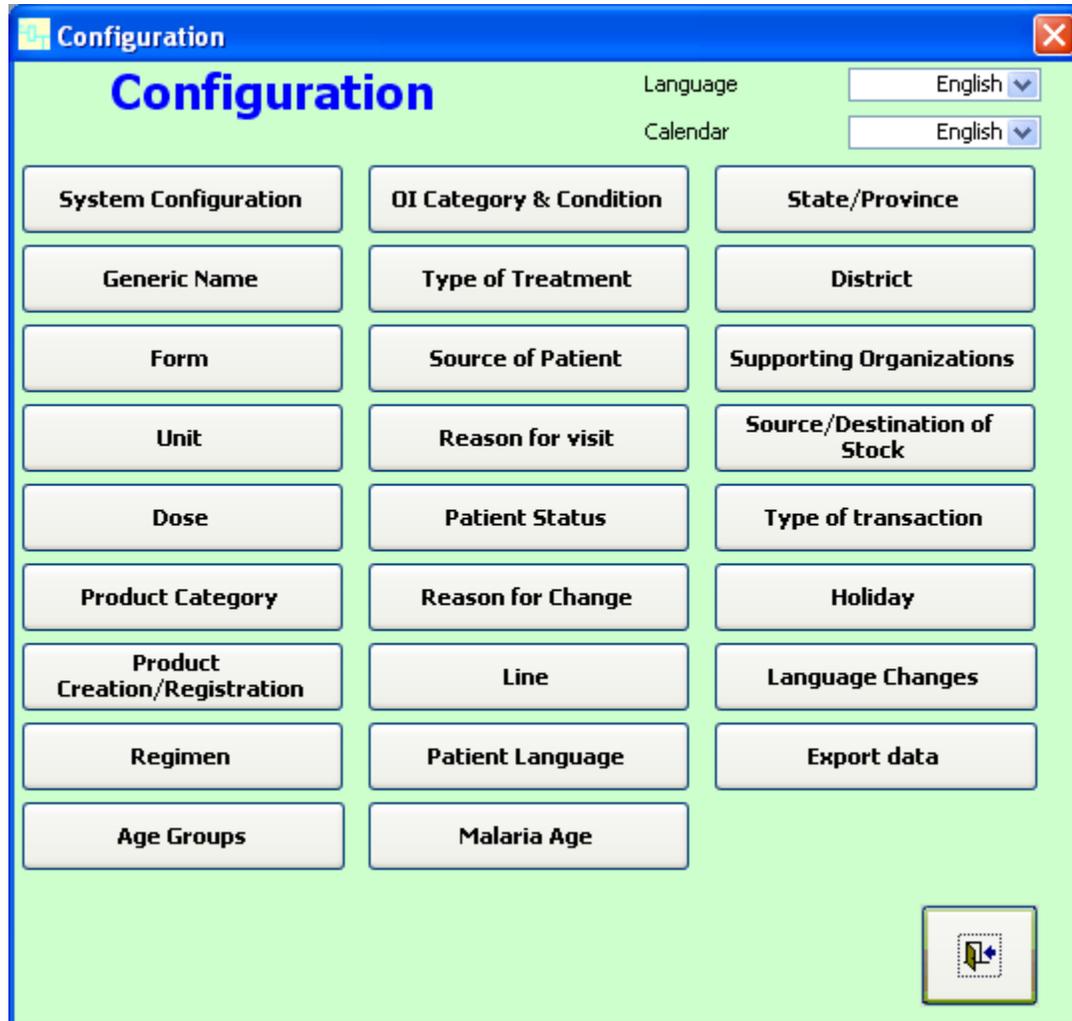
It includes three primary components—

- Patient and Product Management column
- Reports column
- Configuration column

Before you can use the tool, it must be configured to the needs of your treatment program or institution.

Configuration

The EDT is preconfigured to serve users who are not “Administrators.” Only “Administrators” can configure or change the EDT’s initial configuration. Proceed as follows to configure the tool according to the characteristics of your institution or your country’s program. The purpose of defining the information in the following sections of the program is to standardize and speed up data entry.



Language

The first option on the Configuration screen is the language in which the the program is displayed. The program comes with both English and French versions. If you require an additional language, please contact the support staff at Management Sciences for Health for help in making the conversion. If you change the language, the program will automatically close so it can be restarted.

Calendar

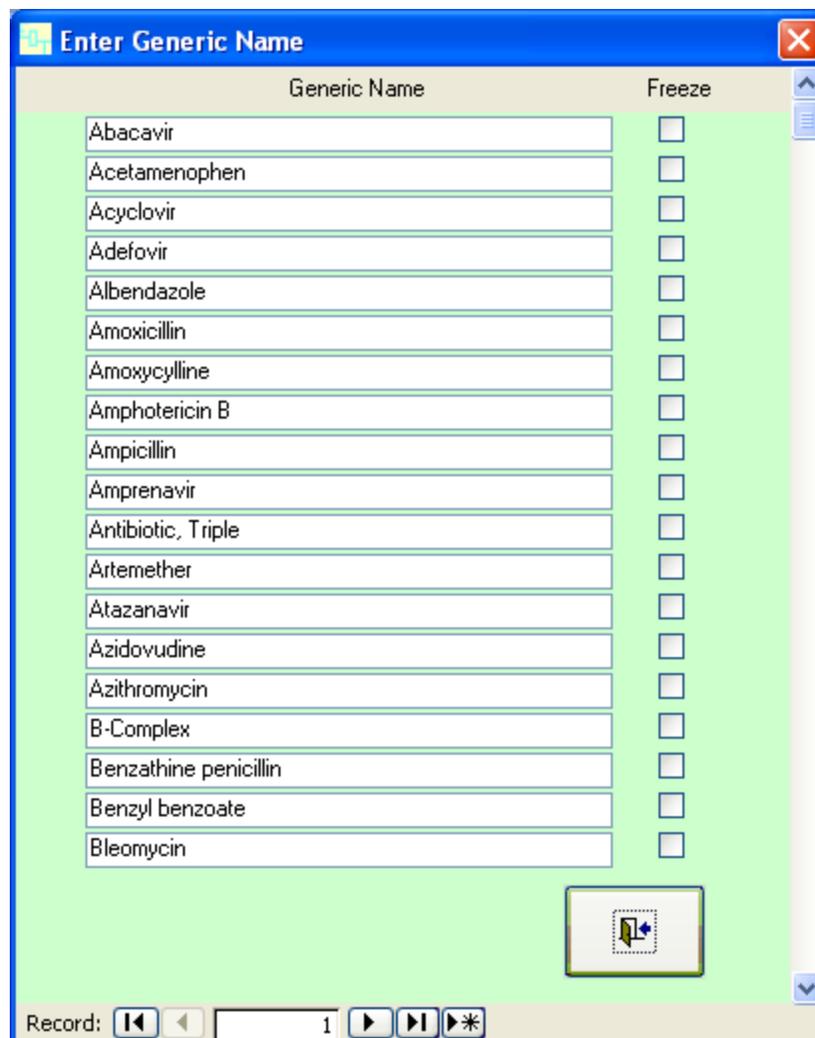
Beneath the Language option box is an option box for selecting what Calendar the program should use. As an Access-based program, by default the EDT uses and displays the English-based (Gregorian) calendar. Throughout the program, whenever a date is displayed (on a report, when dispensing, and so on) there are usually two date fields. One of these displays the numerical date (e.g., 11-21-2008) and the other displays the calendar date (Friday, November 21, 2008). However, certain countries use differing calendars, specifically the Ethiopian and Nepalese calendar. To account for this, the EDT will select the appropriate calendar date based on the numerical date entered. So, if you select “Ethiopian” from the drop-down list in the EDT Calendar options and input 1-1-2008 as your numerical date, the EDT will also display the correct Ethiopian calendar date (2000 Tahsas 22). If you change the calendar, the program will need to be closed and restarted for the changes to take effect.

System Configuration

This button is discussed in more detail in Chapter 5.

Generic Name

Enter the common generic names of the medicines that you stock in the table that appears on the Enter Generic Name screen (see next page). This table appears when you click the button “Generic Name” on the Configuration main menu. The information in this table will be used to associate a particular medicine with its generic name. If you do not want the medicine to be used, place a check mark in the Freeze box.



Form

Enter the pharmaceutical forms—for example, tablet, solution, ampoule—that you will use to define products managed by the EDT software.

Unit

Enter the pharmaceutical units—for example, bottle, dose, milligram, tablet—that you will use to define products managed by the EDT software.

Dose

Enter the dose—for example, 1 BID, 2 QID—and the number of units given per day for that dose. For example, 1 BID = 2 units per day and 2 QID = 8 units per day.

Product Category

The user can define categories such as ARVs or OI products for the medicines managed by the EDT software. These categories are used in product definitions and reporting.

Product Creation/Registration

Click the “Product Creation/Registration” button on the Configuration main menu. This will allow you to record all products used by the program or by your institution. The following screen appears and requires you to provide specific information about the product that you wish to register. The software automatically fills the yellow fields. The Active? box indicates whether the product is available for transactions in the software. By default, it is checked for all new products; uncheck it to remove the product from use in dispensing and stock transactions.

The column on the left side of the screen lists, in alphanumeric order, all the products currently in the database. The right side of the screen displays information for whichever product is selected in the left-hand column. The bottom of the column contains a field that allows the user to search the list of medicines using any character combination. For example, typing in the characters *amox* and pressing the “Search” button would display only those medicines with *amox* in their name.

- Click the “+” button  to create a new product entry, and enter the information specific to the medicine. By convention, for each product, you must include the

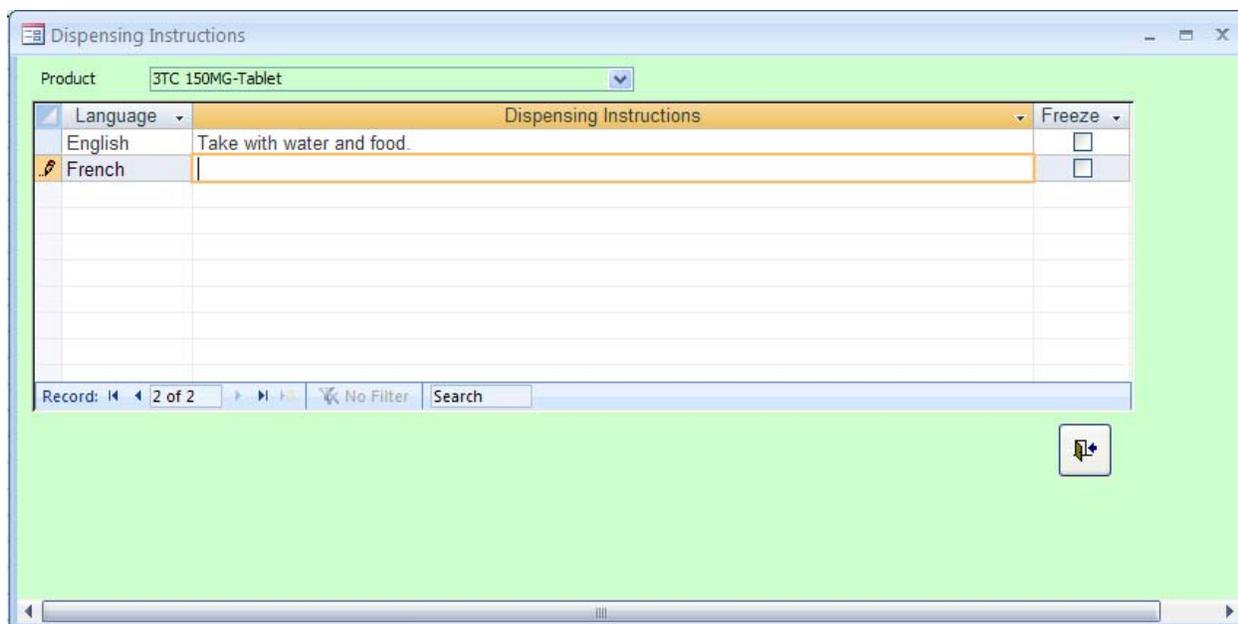
concentration and the packaging. For example, if 3TC 10 mg/ml solution comes in 100-milliliter bottles, its identification code would be 3TC 10mg/ml (100 ml). If the 3TC 10mg/ml solution also comes in 240-milliliter bottles, its code would be 3TC 10mg/ml (240 ml). Thus, the same product with two different concentrations or packages would have different identification codes. Note also that if the same product is available in other forms, such as caplets, capsules, or tablets, these forms are treated differently and different codes will be assigned to them. Later on, the different codes will make verifying the actual quantities stored in the warehouses easier.

- Choose the generic name from a drop-down list by clicking on the small arrow in the Generic Name box. If the product is a combination, enter each medicine on a separate line. [NOTE: If the required generic name is not listed, click on the “Generic Name” button in the Configuration menu and enter the generic name first.]
- Enter the product strength using the numeric field and two drop-down lists to the right of the Generic Name box. If the product has a commonly used abbreviation, enter it in the Abbrev Name box. [NOTE: The text entered in the Abbrev Name box will replace the generic name in the identification code. For example, if the product “Lamivudine 150mg/tab” is created with an abbreviated name of “3TC,” the product will be displayed in the program as “3TC 150mg/tab.”]
- If other information needs to be included regarding the product (such as “co-blistered,” “enteric-coated,” etc.), enter it in the Added Name box.
- Choose the appropriate form and unit from the drop-down lists by clicking on the small arrows in the Form and Unit boxes. [NOTE: The “Unit” field represents the *transaction unit* used by the system. For example, if you choose “Bottle,” the minimum quantity that can be dispensed or received is 1 bottle. The procedure is the same for tablets, capsules, etc.]
- Select the appropriate Product Category from the drop-down list. This information is used for reporting purposes.
- Place a check mark in the PMTCT and Pediatric boxes if the product is used for prevention of mother-to-child transmission (PMTCT) or for treating children, respectively.
- Select the type of product the medicine is from the four choices offered: ARV Product, Malaria Product, TB Product, or Other Product. This selection governs where the product is dispensed, so selecting the correct product type is important. In practice, all products with ARV Product and TB Product selected can be dispensed only through the “Dispensing” button, all products with Malaria Product selected can be dispensed only through the “Malaria Encounter” button, and all products with Other Product selected can be dispensed only through the “Non-ARV/Non-antimalarial Dispensing” button. (The “Dispensing” and “Non-ARV/Non-antimalarial Dispensing” buttons are in the Patient

and Product Management screen; the “Malaria Encounter” button is in the Find Patient screen.)

- **Default Dispensing Information:** This is current information about a product. It includes the dosage, the duration of use by the patient, and the quantity. Enter this information for each medicine. It will be displayed automatically when medicine is dispensed but can be changed if necessary.
- “Dispense Instruction”: Pressing this button brings up the Dispensing Instructions screen (see below). Because the patients that attend the clinic are very likely to speak or read multiple languages, the EDT addresses this situation using the Dispensing Instructions screen and Patient Language window (see below). (In the Patient Language window, the user indicates the various languages and dialects of the patients attending the clinic.)
 - After opening the Dispensing Instructions window, select a product from the “Product” drop-down box at the top of the window.
 - The Language column will populate with all of the language options that have been entered in the Patient Language window. Any instructions that have been filled in previously will populate the Dispensing Instructions window.
 - For each language option, enter the appropriate dispensing instructions in the correct language.
 - Repeat for any remaining medicines using the “Product” drop-down box to select each medicine.
 - When you are finished entering instructions for each product, click the exit button  to return to the Product Creation/Registration screen.

After the Dispensing Instructions and Patient Language windows are configured, selecting the language spoken or read by a new patient when entering a new patient’s data will then allow the EDT to automatically print out the dispensing instructions in the patient’s language.



- Enter the Minimum Stock Level. The minimum stock level is defined as the quantity of medicine that should always be present in the institution's pharmacy. You may also enter a Maximum Stock Level and a Security Stock level. [NOTE: As indicated by the yellow color, the Average Monthly Consumption box displays information calculated by the program. As more stock transactions occur for each product, the average monthly consumption will change accordingly.]
- Use the Comments space to enter observations or comments about the medicine if necessary.
- When all of the necessary fields for the new product have been filled in, click the "Save" button  to complete the record.

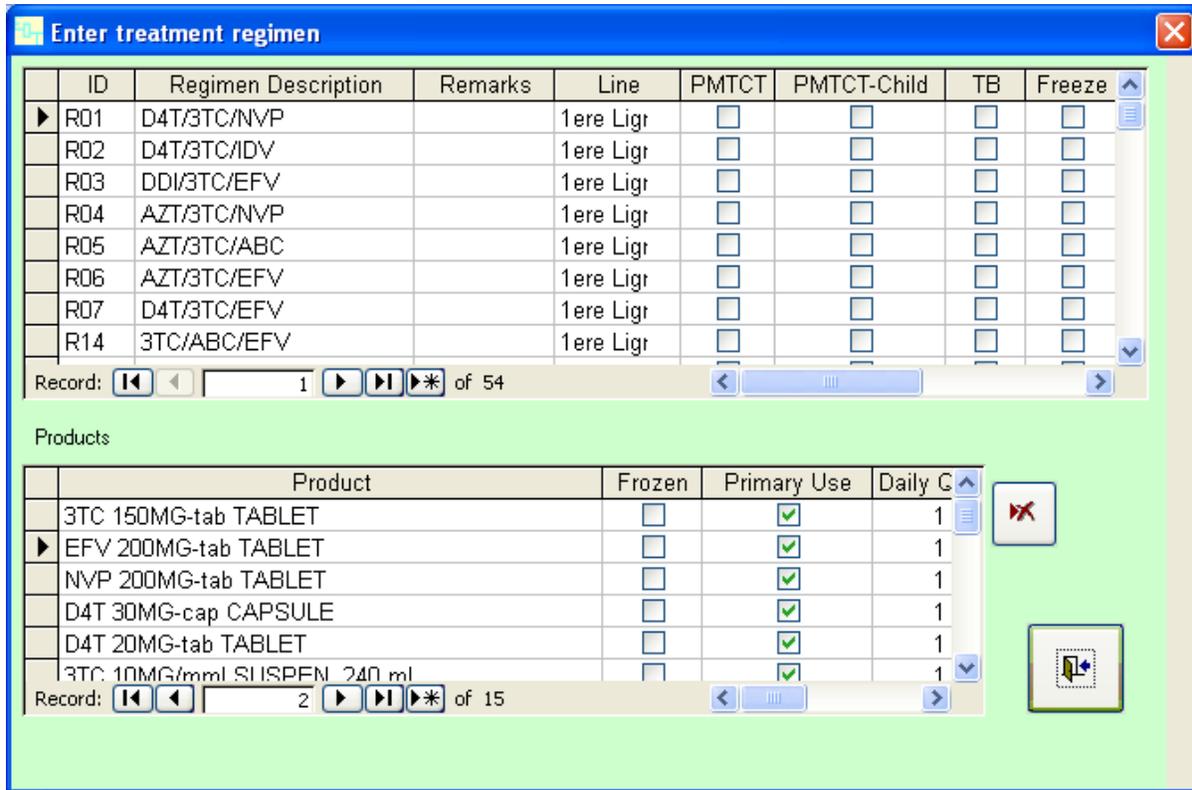
[NOTE: The system will not allow you to duplicate product identification codes. If you enter the same product twice, it will alert you to the duplicate record. Click the "Escape" <Esc> button on your computer's keyboard to exit the warning and alter the product.]

Regimen

Click on the "Regimen" button on the Configuration main menu to define regimens. The following screen appears. It allows you to record all regimens in use in the country or in your institution.

To define a new regimen, click in the first empty Regimen Description box and enter a unique description of the regimen. Fill in the following columns to define whether the regimen is first or second line, for PMTCT, PMTCT-Child, or TB. If you do not want a regimen to be available in the software, place a check mark in the Freeze box.

Next, click in the Products section in the lower portion of the screen to enter the products used in the regimen. Enter each product and its daily quantity on a separate line.



An ID code must be assigned to each regimen created. The EDT comes with 60 preexisting codes (R01–R60), which the user can alter if required. Additionally, new codes can be added after the initial allotment of 60 is completely used. NOTE: The EDT will not allow duplicate ID codes, so each existing code must be unique.

Age Groups

Enter the various age groups as defined by the institution or country. These age groups are used primarily for reporting purposes.

Age	Age	Description	Child?
0	3	child 0-3	<input checked="" type="checkbox"/>
4	15	child 4-15	<input checked="" type="checkbox"/>
16	30	adult	<input type="checkbox"/>
31	99	adult 31+	<input type="checkbox"/>
0	0		<input type="checkbox"/>

For each age group, list the corresponding beginning and ending age, enter a description of that age group, and check the Child? box if that group consists of children.

OI Category & Condition

Enter categories for opportunistic infections here, if desired. These can be used for reporting purposes.

Type of Treatment

Enter the type of treatment, such as antiretroviral therapy (ART), postexposure prophylaxis (PEP), or PMTCT, here. Place a check mark in the ART, PMTCT, and OI boxes if relevant to that treatment type. These categories are used for reporting purposes.

Source of Patient

Enter the source of the patient—for example, a transfer in, a new patient, an inpatient—here.

Reason for Visit

A patient may visit the pharmacy for different reasons, and these reasons are defined in this menu option. You will choose one of these reasons in the Type of Visit box on the Current Encounter screen when a patient comes to the clinic. When you create the list of reasons on the Configuration screen, one (and only one) Reason for Visit must be defined as an initial visit by placing a check mark in the box under the Initial Visit column.

Reason for visit	Initial Visit	Refill Visit	Freeze
Start	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Refill	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Medicine change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regimen change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dosage increase	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dosage decrease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adverse reaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Record: 7 of 30

Patient Status

Enter the list of possible patient statuses that you want to track. The EDT comes with a set of predefined statuses used in the program and five empty fields for user definition. For two of the statuses—Lost and Dropped—the program will automatically change a patient’s status to the appropriate category if the number of days since a missed appointment exceeds the number of days listed in the Auto Convert box. For example, in the screen below, the settings indicate that 30 days after missing an appointment, a patient’s status is automatically converted to “Lost.” The Patient Status column is used to define the actual status for programming purposes.

Patient Status	Auto Convert
Active	
Deceased	
Lost	30
Dropped	90
Archived	
Transferred To	
RX Stopped by Doctor	
Finished treatment	

Reason for Change

Enter the reason a patient has changed treatment regimens.

Line

Define the lines, that is, first, second, and so on, that you want to use to categorize treatment options.

Patient Language

Enter all of the languages and dialects that the institution's patient base reads and that you will use when printing labels. As described in the Product Creation section (see above), the languages entered will then be available when creating medicine labels.

Malaria Age

Enter the various age groups as defined by the institution or country's standard treatment guidelines. These age groups are used primarily for malaria reporting purposes.

State/Province

Enter the list of states or provinces relevant to your system.

District

Enter the list of districts for each state/province relevant to your system.

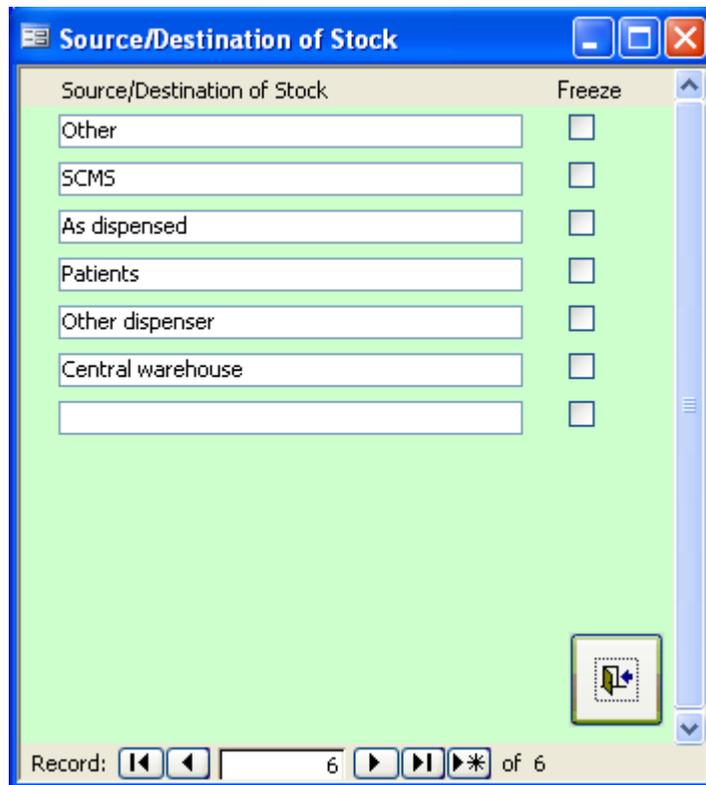
Supporting Organizations

Enter the list of supporting organizations—for example, U.S. Agency for International Development (USAID) or Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund)—for which you want to track information.

Source/Destination of Stock

It is necessary to define the source of the product used for dispensing in the pharmacy. For example, medicines may be purchased from a central warehouse or may be borrowed from another institution. Other products might be returned by another department in the clinic, such as the inpatient ward. All sources must be recorded to have a correct accounting of the products. In the same manner, medicines may be dispensed to patients, loaned to other centers or dispensing outlets, or returned to the central warehouse. In these cases, patients, other centers, dispensing outlets, and the central warehouse are treated as destinations.

Click on “Source/Destination of Stock” from the Configuration main menu. The following screen appears. Enter the appropriate source/destination as shown below. Place a checkmark in the Freeze box if you do not want this source/destination to be used in the program.



Type of Transaction

Enter the list of types of transactions—for example, purchase, return, donation, damaged—and whether it represents an increase or decrease in the stock level. One of these categories will be used for all stock transactions.

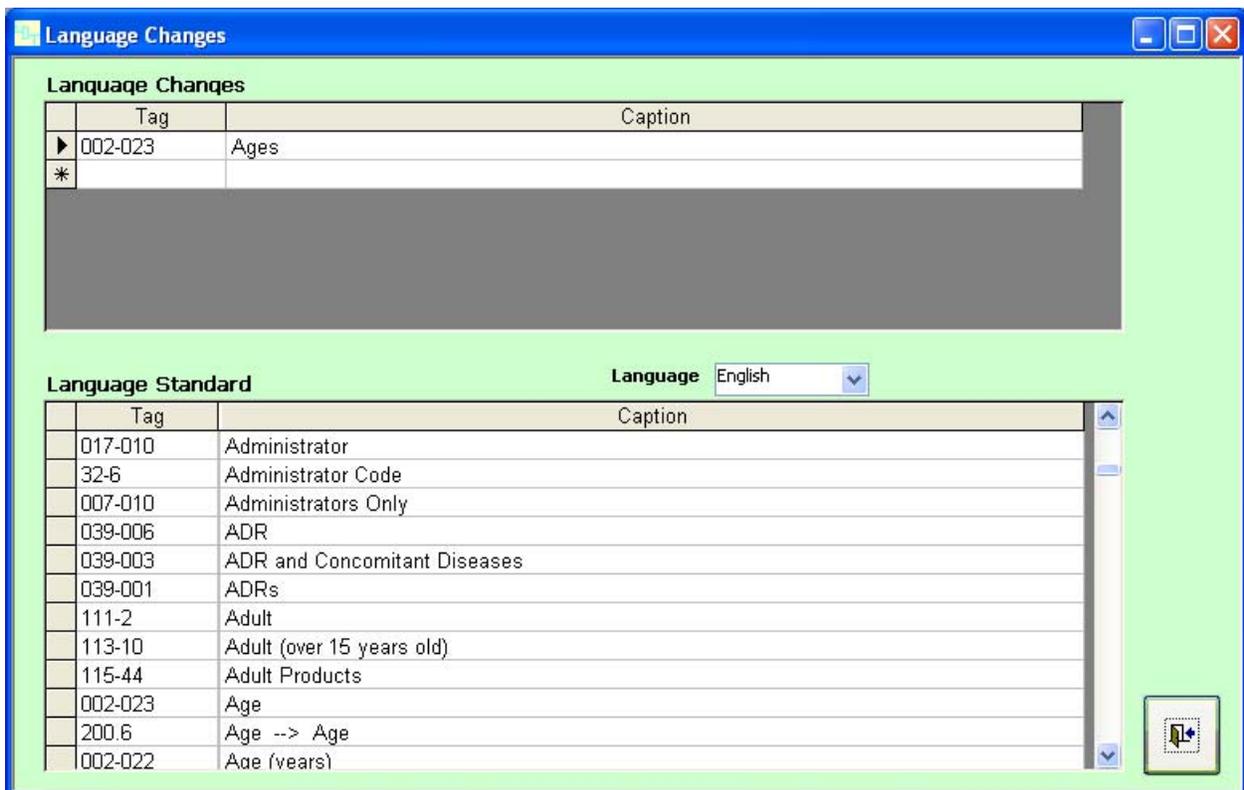
Holiday

Enter a list of holidays and their dates. When the program automatically calculates the date of a patient's next appointment, it will give a warning if that date falls on a holiday or weekend.

Language Changes

The EDT allows the flexibility to customize the captions for all labels found in the program. To do so, in the Language Standard section of the screen, select the language in which you want to change caption(s) using the Language drop-down box. Next, scroll through the list of captions in in that section to find those that need to be changed. Locate the tag (in the Tag column) for each label that needs to be changed. Then simply enter the tag to be changed in the Tag column in the Language Changes section of the screen and the corrected label in the Caption field. Only one change can be made per line. In the example below, the current English caption is listed as *Age* and is being changed to *Ages*.

User-added captions in the Language Changes section of the screen can be deleted by highlighting the specific entry and pressing the <Delete> key on the user's keyboard.



Export Data

NOTE: Depending on whether the EDT has been identified as a clinic location or a central location—see Chapter 5 for more information—the button will display either “Export Data” (for clinics) or “Import Data” (for central locations). This section covers exporting data. Chapter 5 covers importing data.

Clicking this button brings up an interactive screen where the user defines what amount of data needs to be exported and then creates a zipped file of data to send to the central level of the health system for reporting purposes. The password-protected zipped file contains patient, dispensing, and stock data.

The screenshot shows a window titled "Export data" with a light green background. At the top, there are standard window controls (minimize, maximize, close). The main area contains the following elements:

- Export End Date:** A text box containing "03/31/2009" and a yellow highlighted field to its right containing "2001 Miyazia 22".
- Number of Months of Data:** A drop-down menu showing "36".
- Start date:** A text box containing "04/01/2006".
- End Date:** A text box containing "03/31/2009".
- Below the start and end date fields are two yellow highlighted fields: "1998 Miyazia 23" and "2001 Miyazia 22".
- Select Export File Location:** A button with a dotted border on the left side.
- Export File:** A text box containing "C:\TransData_Eastern_District_Central.7z".
- At the bottom, there are four buttons: "Export data", "Email File", "Log", and a help icon (a question mark inside a square).

Enter the end date for the data to be exported in the Export End Date field. The yellow field to the right will display the date in the calendar format chosen in the Configuration window. After entering the end date, select the number of months of data that should be exported using the Number of Months of Data box drop-down list. The list contains values from 1 through 12, but any figure can be entered in the field. Next, click the “Select Export File Location” button and choose a location in which to save the export file. Finally, click the “Export data” button to produce the file. Two dialog boxes will appear: the first informs the user of the creation of a temporary file, and the second informs the user of the creation of the export file in the desired location. Click “OK” to close the boxes.

If the simple mail transfer protocol (SMTP) settings have been configured for the EDT (more on this in Chapter 5), clicking the “Email File” button will allow the user to insert the data file directly into an email with one click. The “Log” button provides a record of the transaction in case an issue arises in connection with the insertion into the email.

New Patient Information

A file must be created each time a new patient enters the institution to be enrolled in the treatment program. Click the “New Patient Registration” button from the Patient and Product Management column on the Main Menu. The following screen appears.

The screenshot shows a software window titled "New Patient Information". At the top, there are two date fields: "Date" with the value "09/22/2009" and "22-Sep-2009 Tue". Below this, the "Clinic ID" is set to "ST3572" and "Source of Patient" is "Interne". A "Type of Treatment" dropdown menu is open, showing options: 1 TAR, 2 AES, 3 PTME, 4 AS, and 5 IO. Other fields include "Start date" (09/22/2009), "Family Name", "First Name", "Language" (Francais), "Gender", "Pregnant?" (checkbox), "Weeks", "Link Patient", "Age (years)", "Month", "Child", "Weight", and "Height". There are also fields for "Address", "City", "State/Province" (Arribonite), "Contact Person", "Tel", "Supported by", "Regimen" (AZT/3TC/EFV), "WHO Stage", and "Performance". At the bottom, there is a table titled "Other Conditions/Illnesses" with the following data:

Date	Category	Condition	Date Finish	Comments
09/22/2009				

A "Save/Quit" button is located at the bottom right of the window.

Enter the patient's data. The following sections describe the information.

Clinic ID

Each patient is identified with a unique number. The number given to a patient at the outpatient clinic or any other unique number according to national recommendations may be used. It is strongly advised that you select a number that can be used to link with other files on the patient. [NOTE: The EDT is set up to automatically generate a new number for each patient or to let the user define a new identification number for each patient.]

Important: The same format must be used for every patient identification number. For example, if you choose 001, you must not confuse that with 00 1 or 0 01 or 00-1. The space between the figures 00 and 1 refers to a different identification format. Once the “Save/Quit” button is clicked and the patient record is created, the Clinic ID may *not* be changed.

Source of Patient

Select an option from the drop-down list. These choices were defined in the Configuration section of the program.

Type of Treatment

This field is used to record the type of service the patient requires. Choose from the preestablished list of treatment services provided by the institution that were defined in the Configuration section. The types of cases/service can include, for example, ART for case management; sexually transmitted infection; PEP, such as accidental exposure to blood; and viral infections. More than one type of treatment can be selected.

Start Date

This is the date when treatment was started.

Transfer In

Check this box if the patient is a transfer from another clinic or site. Enter the clinic name in the field to the right of the check box. This information is used mostly for reporting purposes.

Family Name and First Name

The information in these fields can be hidden for confidentiality reasons by checking the appropriate option in the System Config window (discussed in more detail in Chapter 5).

Language

Select the language the patient uses to read. This selection will determine what language is printed on the labels for the dispensed medications.

Gender

Choose male or female. Place a check mark in the Pregnant? box if the patient is a pregnant woman, and choose the number of weeks. Note that a woman's status may change from one visit to the next.

Link Patient

This informational field can be used, for example, to link a newborn to his or her mother by entering the mother's patient identification number here.

Age (years)

Start with the age in years at the time when the patient enters the program. The current age will be calculated automatically based on the starting age, the start date in the program, and the current date. If the age falls in the range that has been identified as *Child* in the System Configuration for the EDT, a Child label will appear next to the Months field.

Weight

Record the weight (in kilograms) of the patient at the time he or she enters the program. This information must be updated each time the patient visits the pharmacy.

Height

Enter the height (in centimeters) of the patient at the time he or she enters the program.

BSA

This is the body surface area (BSA). This information is useful only for children and therefore shown only when the patient is a child. The program will calculate the BSA when you enter the height and weight for a patient. The height and weight must be updated each time the patient visits the pharmacy.

Address, City, State/Province, District

Enter information as it pertains to each patient.

Contact Person and Tel

Enter a contact person and telephone number for the patient.

Supported by

This field records the name of the individual, organization, or donor that supports the patient's treatment. This information is obtained from a preestablished list. Click on the arrow at the right for the drop-down list.

Regimen

Choose the appropriate regimen with which the patient will begin treatment or the regimen he or she will be switching to, if applicable.

WHO Stage/Performance

If the clinic records the WHO Stage and Performance for each patient, the two drop-down boxes can be used to indicate the condition. These are optional fields.

Other Conditions/Innesses

These fields are provided to record any associated condition or illness that may be useful for the doctor or the pharmacist to know when deciding on other medicines to give to the patient. If more than one condition is recorded, use a semicolon to separate them. [NOTE: Enter the Date Finished field only if the condition or illness has been fully remedied. Entering a date into the field indicates to the system that the illness is finished and will prevent the user from dispensing medicines for the condition.]

When all the information on the patient has been entered, click on “Save/Quit” before moving to dispensing.

CHAPTER 3. USING THE EDT

Finding Patients

The first step is to locate the patient's file. Remember that the basic information on the patient must first be entered before you can dispense medicines. When you click the "Patient Management" button on the Main Menu, the following screen will appear.

	Clinic ID	Family Name	First Name	Current Status	Gender	Age (years)	Start date	Start date
▶	st00513	ZMCWI	REXOQ	Active	Male	51.12	08/12/2005	1997 Nehase
	st00552	TJUZQ	LFTUSWEF	Active	Female	60.77	12/19/2005	1998 Tahsas
	st00374	bswrlpg	NETOF LWK	Active	Female	39.77	12/20/2005	1998 Tahsas
	ST00566	MJCQ ULLPKTS	SDTLPVKI	Active	Female	34.74	12/29/2005	1998 Tahsas
	ST00570	KFFQ CBRUNW	Otzlsj	Active	Male	38.74	12/29/2005	1998 Tahsas
	ST00537	EESHU	WPWFQHG	Active	Male	45.74	12/29/2005	1998 Tahsas
	st00571	ogwjwj	oggsntk	Active	Female	38.69	01/18/2006	1998 Tir
	st00586	ifzmjqf	Gmhlt	Active	Male	41.69	01/18/2006	1998 Tir
	st00509	wkpij	otwlfvh	Active	Female	33.69	01/18/2006	1998 Tir
	st00180	nodlkn	rgxunkvg	Active	Female	51.68	01/19/2006	1998 Tir
	st00190	hjnjbtk	pysjg	Active	Female	53.68	01/20/2006	1998 Tir
	st00536	ffowjt	ecqmgn	Active	Male	45.67	01/26/2006	1998 Tir

Patients can be searched using up to four different parameters: Clinic ID, Family Name, First Name, and Patient ID. These can be used in conjunction or separately when searching. For example, if you want to search for a patient using his or her number and last name, place the cursor in the Clinic ID box, enter the value, and then do the same in the Family Name field. After entering the requisite data, click the "Lookup" button to display the patient(s) meeting the criteria. Double-click on the name of the patient in question or click the "Product Dispensing" button to bring up the patient's dispensing profile. Clicking the "Clear" button will clear the search criteria for a new search.

Additionally, if you know the clinic ID, family name, or first name, you can scan the patient list for the patient. If you know the status of the patient (Active Only, ART Active, or Inactive), click the corresponding option to help reduce the patient list.

If the patient is in to receive treatment for malaria, click the “Malaria Encounter” button to bring up the Dispensing window for malaria (see later in this chapter for more information on this feature).

Dispensing Products

When you click the “Product Dispensing” button on the Find Patient screen, the following screen will appear.

Patient and Product Management

IFZMJQF, Gmhit Status: **Active**

Clinic ID: **ST00586** Source of Patient: [] Link Patient: []

Family Name: **IFZMJQF** First Name: **GMHLT** Language: [] Type of Treatment: 1 TAR, 2 AES, 3 PTME, 4 AS, 5 []

Start date: **01/18/2006** 18-Jan-2006 Wed Age (years): **38** Month: **0**

Gender: **Male** Pregnant? Weeks: [] Height: **0**

Address: **CARREFOUR MON REPOS#44,RUE LOUVEF** City: [] State/Province: [] District: []

Contact Person: [] Tel: [] Patient ID: []

Status	Remarks	Date	Date	Supported by	Regimen	Regimen TB
Active		09-Mar-2009 Mon	13/09/2009	USAID	AZT/3TC/EFV	
Active		22-Apr-2009 Wed	14/22/2009	USAID	AZT/3TC/EFV	
Active		22-May-2009 Fri	15/22/2009	USAID	AZT/3TC/EFV	
Active		23-Jun-2009 Tue	16/23/2009	USAID	AZT/3TC/EFV	
Active		21-Jul-2009 Tue	17/21/2009	USAID	AZT/3TC/EFV	

Reverse Number of days until next visit: **62** Date of next visit: **09/21/2009** 21-Sep-2009 Mon

Date	Product	Unit	Dosage	Duration	Quantity	Remarks	Regimen
07/21/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	60	120		AZT/3TC/EFV
07/21/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	60	60		AZT/3TC/EFV
06/23/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	30	30		AZT/3TC/EFV
06/23/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	30	60		AZT/3TC/EFV
05/22/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	32	32		AZT/3TC/EFV
05/22/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	32	64		AZT/3TC/EFV
04/22/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	30	30		AZT/3TC/EFV
04/22/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	30	60		AZT/3TC/EFV

Buttons: Update Patient Information, Encounter Summary, **Dispensing**, Edit Encounter, Non-ARV/Non-antimalarial Dispensing, Current Encounter Report

After you have found the patient’s record, you can enter information about the encounter and what was dispensed. You can also update information about the patient.

Dispensing ARV and TB Medicines

To enter specific information on what was dispensed in the Patient and Product Management screen, click the right-facing triangle in the gray column to the left of the last encounter for that

patient (see red arrow in the example screen below). When selected, the row will turn black. You can also see that the “Dispensing” button is no longer grayed out and can be clicked.

Patient and Product Management

IFZMJQF, Gmht Status: **Active**

Clinic ID: **ST00586** Source of Patient: [] Link Patient: []

Family Name: **IFZMJQF** First Name: **GMHLT** Language: []

Start date: **01/18/2006** 18-Jan-2006 Wed Age (years): **38** Month: **0**

Gender: **Male** Pregnant? Weeks: [] Height: **0**

Address: **CARREFOUR MON REPOS#44,RUE LOUVEF** City: [] State/Province: [] District: []

Contact Person: [] Tel: [] Patient ID: []

	Status	Remarks	Date	Date	Supported by	Regimen	Regimen TB
	Active		09-Mar-2009 Mon	03/09/2009	USAID	AZT/3TC/EFV	
	Active		22-Apr-2009 Wed	04/22/2009	USAID	AZT/3TC/EFV	
	Active		22-May-2009 Fri	05/22/2009	USAID	AZT/3TC/EFV	
	Active		23-Jun-2009 Tue	06/23/2009	USAID	AZT/3TC/EFV	
	Active		21-Jul-2009 Tue	07/21/2009	USAID	AZT/3TC/EFV	

Update Patient Information

Encounter Summary

Dispensing

Edit Encounter

Non-ARV/Non-antimalarial Dispensing

Current Encounter Report

Reverse Number of days until next visit: **62** Date of next visit: **09/21/2009** 21-Sep-2009 Mon

Date	Product	Unit	Dosage	Duration	Quantity	Remarks	Regimen
07/21/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	60	120		AZT/3TC/EFV
07/21/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	60	60		AZT/3TC/EFV
06/23/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	30	30		AZT/3TC/EFV
06/23/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	30	60		AZT/3TC/EFV
05/22/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	32	32		AZT/3TC/EFV
05/22/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	32	64		AZT/3TC/EFV
04/22/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	30	30		AZT/3TC/EFV
04/22/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	30	60		AZT/3TC/EFV

Click the “Dispensing” button on the right side of the screen to enter information about the ART or TB medicines that were dispensed to the patient on the selected date. The following screen appears.

Note: The information in the yellow fields is filled in by the software and cannot be edited.

The program pulls in the data that were entered in the Patient Information section. Review the information that is presented to ensure it is correct, including—

- **Date.** The Date field will display the current date. The date can be changed either by highlighting the current date and entering another date or by double-clicking in the field to bring up a calendar that can be used to select the correct date.
- **Type of visit.** For each patient's initial visit, the Type of Visit field will display the value from the Reason for Visit submenu (in the Configuration menu) that has the Initial Visit box checked. This initial selection cannot be altered. All subsequent visits for each patient will initially display the value from the Reason for Visit submenu that has the Refill box checked. Different values can be selected from the Type of Visit box during the subsequent visits.
- **Regimen ART.** The Regimen ART field displays which (if any) regimen the patient is on. The Reason for regimen change field will become active if a change is made in the regimen. In that case, the field must be filled in before clicking the "ART Dispensing" button.

- Regimen TB. The Regimen TB field displays which (if any) regimen the patient is on. The Reason for regimen change field will become active if a change is made in the regimen. In that case, it must be filled in before clicking the “TB Dispensing” button.
- Patient’s CD4 count (and its date).
- WHO Stage and Performance. These fields will appear if the Performance option has been checked in the System Configuration screen.
- Patient’s weight (in kilograms). This information needs to be entered before access to the dispensing screen is allowed.
- Patient’s height (in centimeters). This field will be displayed only if the patient is a child. The data must be entered in conjunction with the Weight field.
- Comments.
- Number of days until the next visit. Choose a value from the drop-down list or enter another value. This field can be filled in either before or after dispensing has occurred. The software automatically calculates the date of the next visit.

When you are finished reviewing and entering the necessary information, click the “ART Dispensing” or “TB Dispensing” button on the right-hand side of the screen. The following screen appears. (Although the screen capture used is for ART Dispensing, the screen is identical for both disease regimens, except for the change in title bar name and products available for dispensing.)

Product: From the drop-down list, select the product dispensed. The list will display the products that were defined in the Configuration menu for the regimen displayed.

Dose and Duration: If the dosage information was defined in the Configuration menu, then that information will automatically be entered on this screen. It can be edited if necessary. If the information is not automatically entered, you need to enter the dosage and number of days the medicine should be taken.

Quantity: The software will automatically calculate the quantity required based on the dosage information entered. If a product has been set to be issued by the pack/bottle, click on the “1 Pack/Bottle” button, and the duration and quantity will adjust automatically to the amount that is equivalent to one pack/bottle of the product.

If you want the software to choose the first-to-expire lot automatically (recommended), then click the “Product Assignment” button. The software will allocate the required quantity. If you want to choose the lot to issue manually, you may do so by selecting the desired lot from the drop-down list.

Repeat this process for each medicine being dispensed to the patient at this visit.

Comments and Dispensing Instructions: Enter text in each of these fields as it pertains to either the visit and the patient or the method in which the medicine should be consumed. The text entered in the Dispensing Instructions field will display on the Dispensing Label (the information to the right of the Dispensing Instructions field). If a label printer has been set up and configured for the EDT, then pressing the “Label Print” button will print the information directly above on a label. More information about the label printers that can be used with the EDT is found on page 3.

Updating Patient Information

There will be times when you wish to make changes to the information in the database, perhaps to correct errors or simply to update information.

To update patient *information*, proceed as follows—

- Find the patient file in which you wish to make changes.
- Click the “Update Patient Information” button at the right of the screen (see red arrow). The patient information fields that were yellow will change to white and can now be edited. Additionally, the “Update Patient Information” button will change text to say “Save.”
- Make the necessary updates and click “Save.”

Patient and Product Management

IFZMJQF, Gmhlt Status: **Active**

Clinic ID: **ST00586** Source of Patient: [] Link Patient: []

Family Name: **IFZMJQF** First Name: **GMHLT** Language: []

Start date: **01/18/2006** 18-Jan-2006 Wed Age (years): **38** Month: **0**

Gender: **Male** Pregnant? Weeks: [] Height: **0**

Address: **CARREFOUR MON REPOS#44,RUE LOUVEF** City: [] State/Province: [] District: []

Contact Person: [] Tel: [] Patient ID: []

Status	Remarks	Date	Date	Supported by	Regimen	Regimen TB
Active		09-Mar-2009 Mon	03/09/2009	USAID	AZT/3TC/EFV	
Active		22-Apr-2009 Wed	04/22/2009	USAID	AZT/3TC/EFV	
Active		22-May-2009 Fri	05/22/2009	USAID	AZT/3TC/EFV	
Active		23-Jun-2009 Tue	06/23/2009	USAID	AZT/3TC/EFV	
Active		21-Jul-2009 Tue	07/21/2009	USAID	AZT/3TC/EFV	

Reverse Number of days until next visit: **62** Date of next visit: **09/21/2009** 21-Sep-2009 Mon

Date	Product	Unit	Dosage	Duration	Quantity	Remarks	Regimen
07/21/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	60	120		AZT/3TC/EFV
07/21/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	60	60		AZT/3TC/EFV
06/23/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	30	30		AZT/3TC/EFV
06/23/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	30	60		AZT/3TC/EFV
05/22/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	32	32		AZT/3TC/EFV
05/22/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	32	64		AZT/3TC/EFV
04/22/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	30	30		AZT/3TC/EFV
04/22/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	30	60		AZT/3TC/EFV

Buttons: Update Patient Information, Encounter Summary, Dispensing, Edit Encounter, Non-ARV/Non-antimalarial Dispensing, Current Encounter Report

Once entered, the information on a patient cannot be erased. If you wish to prevent any future information capture for specific patients, you can change their status in the Dispensing Encounter window to *Deceased* or *Archived*. This will render the patient's file inactive and unavailable for any further changes or additions. Please note that this is a permanent change. This patient information can later be transferred to a backup database where it can be located again if necessary.

Note that the removed patient's identification number cannot be given to another patient. The system will check both databases—*active* and *backup*—for duplicates.

Summary of the Visit

Clicking the "Encounter Summary" button on the right-hand side of the Patient and Product Management screen opens a window that displays information about the patient's visit history (see next page).

Patient Encounter Information

TNNKVYZH, QWRHHVG

Patient Number: 00095

Date of New Encounter: 03/19/2009 (19-Mar-2009 Thu)

Total Number of Encounters: 19

Next Scheduled Appointment: 05/18/2009 (18-May-2009 Mon)

Date Missed Appointment: 05/18/2009 (18-May-2009 Mon)

Number Appointments Missed 1-3 Days: 2

Number Appointments Missed 3-30 days: 4

Number Appointments Missed >30 days: 3

Days Late to Last Appointment: 0

Total Days Late to Appointments: 186

Dispensing Non-ARV/Non-antimalarial Medicines

If you are dispensing medicines to the patient that do not treat either HIV/AIDS or malaria, click the “Non-ARV/Non-antimalarial Dispensing” button in the Patient and Product Management screen to enter that information. The Non-ARV/Non-antimalarial Dispensing screen will appear.

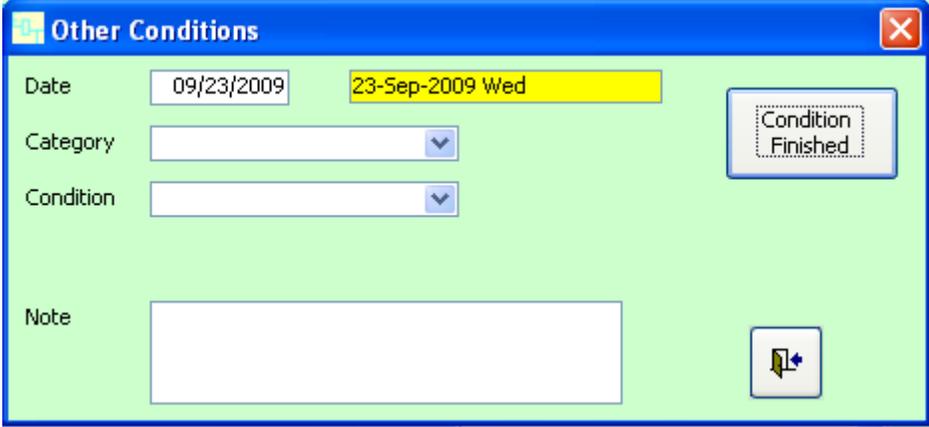
Non-ARV/Non-antimalarial Dispensing

NODLKN, rgxunkvg

Date	Category	Condition	Date Finished	Remarks
09/23/2009	Respiratoire	Pneumonie bacte		
09/23/2009				

Dispensing

Click the “plus” button  to add a diagnosis or condition for which medicine was dispensed. The following screen will appear.



If you need to modify the information after exiting this screen, you can click the “open form” button  on the Non-ARV/Non-antimalarial Dispensing screen to reopen this screen.

When a condition has cleared up, click the “Condition Finished” button. This will cause a date field to appear; enter the date that the condition was noted as cleared up.

To enter information on the medicines dispensed, click the “Dispensing” button on the Non-ARV/Non-antimalarial Dispensing screen. The following screen will appear.

The screenshot shows a software interface for dispensing non-ARV/Non-antimalarial medicines. The window title is "Non-ARV/Non-antimalarial Dispensing". The interface includes several sections:

- Date:** 05/27/2009, 27-May-2009 Wed
- Other Condition:** Respiratory Bronchitis
- Product:** (empty dropdown)
- Dose:** (empty dropdown)
- Duration:** (empty input) days
- Quantity:** (empty input) 1 Pack/Bottle
- Batch:** (empty dropdown)
- Supported by:** (empty input)
- Brand Name:** (empty input)
- Expiry Date:** (empty input)
- WAC:** (empty input)
- Language:** (empty dropdown)
- Unit:** (empty input)
- Form:** (empty input)
- Qty / Pack:** (empty input)
- Issue by Container:**
- Balance:** (empty input)
- Comments:** (empty text area)
- Dispensing Instructions:** (empty text area)
- Other Conditions:** Other Conditions
- Product Assignment:** (button)
- Label Print:** (button)

At the bottom, there is a table with the following columns: Product, Unit, Quantity, Batch, Expiration I, Dosage, Dura. The table content is mostly obscured by a gray box.

This screen is completed in the same way as the Dispense ART Medicines screen previously described.

Reverse/Cancel Medicine Dispensing

If you need to cancel, or “reverse,” the dispensing of medicine to a patient using the EDT, follow the steps below—

1. On the Patient and Product Management screen, click on the gray box at the beginning of the row (in the dispensed products section at the bottom of the screen) of the dispensed medicine that you want to reverse. The row will turn black to show that it is highlighted. See the example below.

Patient and Product Management

IFZMJQF, Gmhlt Status: **Active**

Clinic ID: **ST00586** Source of Patient: [] Link Patient: []

Family Name: **IFZMJQF** First Name: **GMHLT** Language: []

Start date: **01/18/2006** 18-Jan-2006 Wed Age (years): **38** Month: **0**

Gender: **Male** Pregnant? Weeks: [] Height: **0**

Address: **CARREFOUR MON REPOS#44,RUE LOUVEF** City: [] State/Province: [] District: []

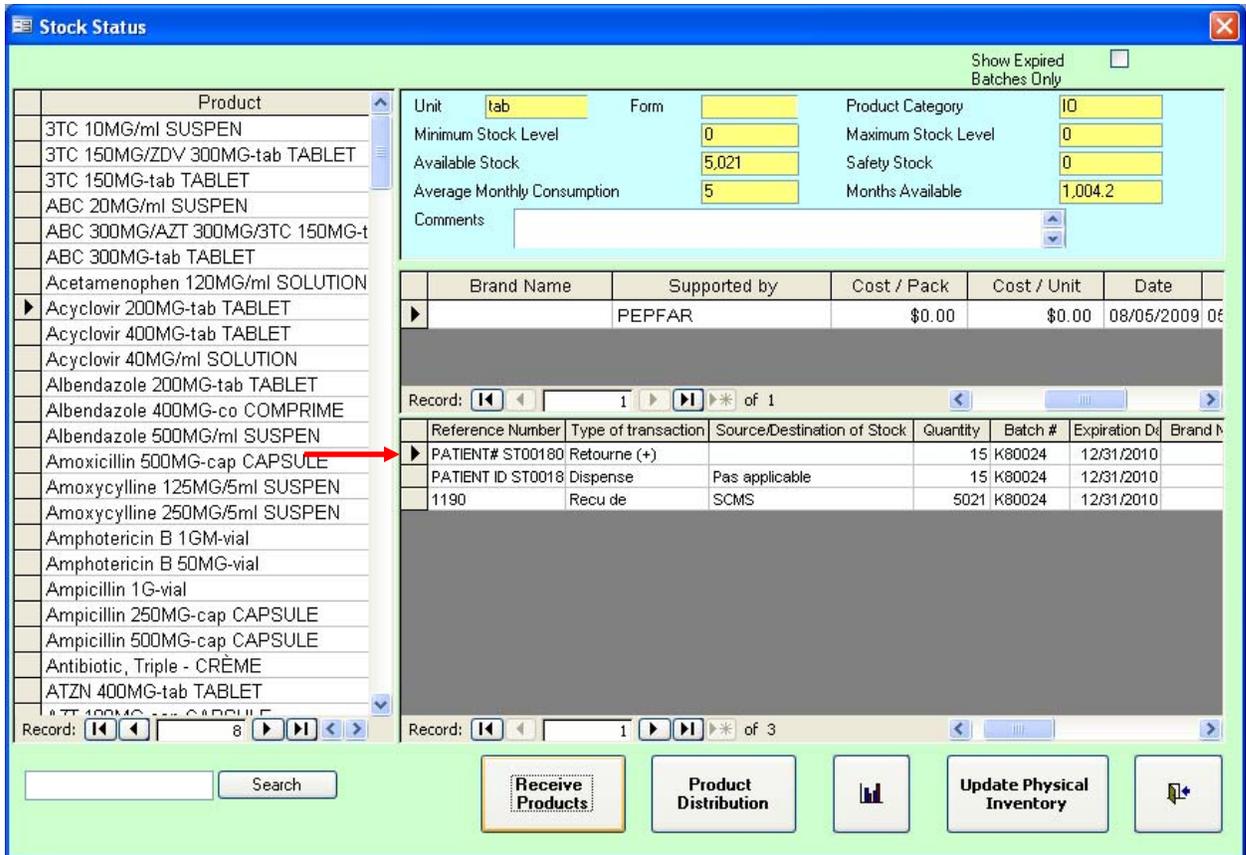
Contact Person: [] Tel: [] Patient ID: []

Status	Remarks	Date	Date	Supported by	Regimen	Regimen TB
Active		09-Mar-2009 Mon	13/09/2009	USAID	AZT/3TC/EFV	
Active		22-Apr-2009 Wed	14/22/2009	USAID	AZT/3TC/EFV	
Active		22-May-2009 Fri	15/22/2009	USAID	AZT/3TC/EFV	
Active		23-Jun-2009 Tue	16/23/2009	USAID	AZT/3TC/EFV	
Active		21-Jul-2009 Tue	17/21/2009	USAID	AZT/3TC/EFV	

Reverse Number of days until next visit: **62** Date of next visit: **09/21/2009** 21-Sep-2009 Mon

Date	Product	Unit	Dosage	Duration	Quantity	Remarks	Regimen
07/21/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	60	120		AZT/3TC/EFV
07/21/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	60	60		AZT/3TC/EFV
06/23/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	30	30		AZT/3TC/EFV
06/23/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	30	60		AZT/3TC/EFV
05/22/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	32	32		AZT/3TC/EFV
05/22/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	32	64		AZT/3TC/EFV
04/22/2009	EFV 600MG-tab TABLET	Tablet	1 tab/four	30	30		AZT/3TC/EFV
04/22/2009	AZT 300MG/3TC 150MG-tab T	Tablet	1 tab/bid	30	60		AZT/3TC/EFV

2. Click on the “Reverse” button (found just above the list of dispensed items) to have the quantity and item returned to stock.
3. When the software puts the item back in stock, it will use the same batch number and expiration date that were used at the time of dispensing.
4. A record of the reversal will automatically be created in the Stock Status screen for the item so that there is an audit trail. See the following example.



Encounter Report

Clicking the “Current Encounter Report” button near the bottom right corner of the Patient and Product Management screen produces a summary report of the medicines dispensed during the visit. This report includes any specified instructions for taking each medicine, as well as the respective lot numbers and expiry dates. The report also lists the date of the patient’s next visit. This report can be printed and given to the patient. An example is shown below.

Encounter Report							
Date	04/14/2009						
Name	Moise, Alex			Patient ID	WC1		
Type of Treatment				Gender	Male	Age	41 yrs
Current Status	Active			Weight (kg)	188	kg	
Régime:	AZT/3TC/EFV						
Support	Clinton Foundation						
Visit	Refill						
Product	Unit	Form	Dosage	Duration	Quantity	Batch	Expiry Date
Dispensing Instruction							
AZT 300MG/3TC 150	Tablet	TABLET	1 tab/ou	30	30	WLOT2	09/01/2009
EFV 300MG-Capsule	Capsule	CAPSULE	1 tab/ou	30	30	WLOT6	08/01/2010
Date of next visit	05/13/2009						

Dispensing Malaria Medicines

By definition, HIV/AIDS and TB are chronic conditions and require maintenance of records well into the future. Malaria, however, is an acute disease—one that people can contract multiple times per year and less demanding in terms of tracking adherence. The EDT allows users to easily and quickly dispense medicines for these cases.

To dispense malaria medicines, the Malaria Module box must be checked on the System Config screen. (More information about this screen is provided in Chapter 5.) In the Main Menu, click the “Patient Management” button under Patient and Product Management to bring up the Find Patient screen (see next page).

The screenshot shows a software window titled "Find Patient" with a search interface and a data table. The search interface includes input fields for "Clinic ID", "Family Name", and "First Name", along with "Lookup" and "Clear" buttons. Below the search fields are radio buttons for "All Patients", "Active Only", "ART Active", and "Inactive". The "Active Only" option is selected. The table below displays patient records with columns for Clinic ID, Family Name, First Name, Current Status, Gender, Age (years), and Start date. The table shows 15 records, all with a status of "Active". At the bottom of the window, there are three buttons: "New Patient Registration", "Product Dispensing", and "Malaria Encounter".

	Clinic ID	Family Name	First Name	Current Status	Gender	Age (years)	Start date	Start date
▶	st00513	ZMCWI	REXOQ	Active	Male	51.12	08/12/2005	12-Aug-2005
	st00552	TJUZZ	LFTUSWEF	Active	Female	60.76	12/19/2005	19-Dec-2005
	st00374	bswrlpg	NETOF LWK	Active	Female	39.76	12/20/2005	20-Dec-2005
	ST00566	MJCQ ULLPKTS	SDTLPVKI	Active	Female	34.73	12/29/2005	29-Dec-2005
	ST00570	KFFQ CBRUNW	Otzlsj	Active	Male	38.73	12/29/2005	29-Dec-2005
	ST00537	EESHHU	WPWFQHG	Active	Male	45.73	12/29/2005	29-Dec-2005
	st00571	ogwjwj	oggsntk	Active	Female	38.68	01/18/2006	18-Jan-2006
	st00586	ifzmjqf	Gmhlt	Active	Male	41.68	01/18/2006	18-Jan-2006
	st00509	wkpij	otwlfvh	Active	Female	33.68	01/18/2006	18-Jan-2006
	st00180	nodlkn	rgxunkvg	Active	Female	51.68	01/19/2006	19-Jan-2006
	st00190	hjnjbtk	pysjg	Active	Female	53.67	01/20/2006	20-Jan-2006
	st00536	ffowjt	ecqmgn	Active	Male	45.66	01/26/2006	26-Jan-2006

Record: 1 of 757

Buttons: New Patient Registration, Product Dispensing, Malaria Encounter

Click the “Malaria Encounter” button on the bottom right of the screen to bring up the Malaria Encounter screen. In contrast to the Patient and Product Management screen, only a few fields need to be filled out in the Malaria Encounter screen, as shown below.

After filling in the required fields (and the optional fields, if so desired) at the top of the screen, you will need to get some basic information from the patient regarding his or her current state. Based on the options that have been selected in System Config for the Malaria Encounter screen, you may be required to provide follow-up answers for the questions on testing at the bottom of the screen, as shown below.

- All pregnant patients will be required to provide an answer regarding the number of sulfadoxine-pyrimethamine (S-P) doses received.
- If the Require Malaria Testing Response box has been checked in System Config, then a positive answer for either Microscopic Test or Rapid Diagnostic Test will require the user to indicate a positive or negative result.
- If the Require HIV and TB Response box has been checked in System Config, then a positive answer for each question will require the user to indicate whether the patient is receiving treatment for the condition.

Malaria Encounter

Date: 09/23/2009

Family Name: [] First Name: []

Contact Person: []

Gender: Male [v] * = Required

Age (years): 28 [v] Weight: 82 [v]

Pregnant? Yes No

Microscopic Test Yes No

Rapid Diagnostic Test Yes No

HIV Positive Yes No

TB Positive Yes No

None
 S-P First Dose
 S-P Second Dose

Positive Negative *

Positive Negative *

Receiving Treatment for HIV?

Receiving Treatment for TB?

Malaria Dispensing

After all the required information has been filled in, the “Malaria Dispensing” button will be available to click. Click it to bring up the following dispensing screen:

The Dispense Malaria Medicines screen is completed in the same way as the Dispense ART Medicines, Dispense TB Medicines, and Non-ARV/Non-antimalarial Dispensing screens previously described.

Recording Stock Movement

The EDT manages levels of supplies that may be located at the dispensing point if it is independent from the institution's pharmacy or the entire stock in the institution's warehouse if the dispensing point is in the pharmacy itself. Medicines are dispensed, and the quantities dispensed are deducted automatically from the total stock. Reports on available supplies can be printed at any time.

Click the "Product Management" button under Patient and Product Management on the Main Menu to bring up the Stock Status screen. Select the medicine using the Product column on the left side of the screen.

Product

- 3TC 10MG/ml SUSPEN
- 3TC 150MG/ZDV 300MG-tab TABLET
- 3TC 150MG-tab TABLET
- ABC 20MG/ml SUSPEN
- ABC 300MG/AZT 300MG/3TC 150MG-t
- ABC 300MG-tab TABLET
- Acetamenophen 120MG/ml SOLUTION
- Acyclovir 200MG-tab TABLET
- Acyclovir 400MG-tab TABLET
- Acyclovir 40MG/ml SOLUTION
- Albendazole 200MG-tab TABLET
- Albendazole 400MG-co COMPRIME
- Albendazole 500MG/ml SUSPEN
- Amoxicillin 500MG-cap CAPSULE
- Amoxycylline 125MG/5ml SUSPEN
- Amoxycylline 250MG/5ml SUSPEN
- Amphotericin B 1GM-vial
- Amphotericin B 50MG-vial
- Ampicillin 1G-vial
- Ampicillin 250MG-cap CAPSULE
- Ampicillin 500MG-cap CAPSULE
- Antibiotic, Triple - CRÈME
- ATZN 400MG-tab TABLET

Unit: 240ml bottle Form: Product Category: TAR

Minimum Stock Level: 30 Maximum Stock Level: 0

Available Stock: 704 Safety Stock: 0

Average Monthly Consumption: 6 Months Available: 117.3

Comments:

Batch	Batch #	Expiration Date	Received	Balance	Brand Name	Support
▶ 1684	LT1008007	08/31/2009	200	181		PEPFAR
1686	LT1008011	09/30/2009	704	704		PEPFAR
1663	OldSys	08/04/2010	0	0		Fonds Mond

Record: 1 of 3

Date	Reference Number	Type of transaction	Source/Destination of Stock	Quantity	Batch #	Expir
▶ 08/07/2009	PATIENT ID ST0068	Dispense	Pas applicable		1 LT1008007	08/3
08/07/2009	PATIENT ID ST0317	Dispense	Pas applicable		2 LT1008007	08/3
08/06/2009	PATIENT ID ST0239	Dispense	Pas applicable		2 LT1008007	08/3
08/06/2009	PATIENT ID ST0322	Dispense	Pas applicable		3 LT1008007	08/3
08/05/2009	PATIENT ID ST0275	Dispense	Pas applicable		3 LT1008007	08/3
08/05/2009	PATIENT ID ST0293	Dispense	Pas applicable		2 LT1008007	08/3
08/04/2009	PATIENT ID ST0188	Dispense	Pas applicable		2 LT1008007	08/3
08/04/2009	PHYSICALCOUNT	Ajustement (-)		-4	LT1008007	08/3
08/04/2009	230	Recu de	SCMS	704	LT1008011	09/3
08/04/2009	230	Recu de	SCMS	200	LT1008007	08/3
08/04/2009	ADJ 001	Ajustement (-)	Pas applicable	900	OldSys	08/0
08/04/2009	NA	Dispense	Patients		2 Oldsys	08/0

Record: 1 of 1193

Buttons: Search, Receive Products, Product Distribution, Update Physical Inventory

To find a medicine in the database, enter a portion of the medicine’s generic name in the field under the Product column and click the “Search” button. The Product column will display all matching results. To display the original list of products, click the “Clear” button (the “Search” button changes to the “Clear” button after something has been searched).

Summary Stock Information

After you select a medicine in the Product column, the stock information for that medicine will display in the right half of the Stock Status screen. The fields in yellow are for information only and cannot be edited here.

Unit: This field shows the minimum quantity of medicine that can be recorded in the transaction. The unit is set when the medicine is entered and cannot be changed here. For example, if the unit is “Bottle,” the minimum quantity that can be dispensed is one bottle.

Form: This is the form of the product.

Product Category: This field shows the product category that was defined for the product.

Minimum Stock Level: This field displays the minimum amount of stock that should be available in the system. The minimum stock level is set by the user when the medicine is entered and cannot be changed here.

Maximum Stock Level: This is the maximum stock level that the user defined for the product. The maximum stock level is set when the medicine is entered and cannot be changed here.

Available Stock: This field shows the stock of the medicine currently available. It is updated each time a transaction is completed. This field cannot be changed on the screen.

Safety Stock: This field displays the safety stock figure that was defined for the product. The safety stock level is set when the medicine is entered and cannot be changed here.

Average Monthly Consumption: The EDT will automatically calculate and display the average monthly consumption for each product using the following formula—

$$\text{Total consumption for } X \text{ months} \div X \text{ months}$$

In this formula, “total consumption” means the number of units dispensed and “X months” means the number of months selected by the user.

Months Available: This field displays the number of months remaining with the available stock. The EDT calculates and displays this figure automatically using the following formula:

$$\text{Available stock} \div \text{Average monthly consumption}$$

In this formula, “available stock” refers to the figure in the Available Stock field for the medicine. The Average Monthly Consumption figure is used for the second half of the equation.

Show Expired Batches Only: Check this box to display only the expired batches for each product.

The middle window of the right-hand side of the screen displays the batches currently available for the product. The bottom-most window displays all of the transactions recorded for that product, listed from most recent to oldest and including a variety of related information such as quantity dispensed, batch number, expiration date, and comments.

	Supported by	Balance	Location Code	WAC Cost	Extended	Date
▶	ALL DONERES	5000	Eastern District Cer	\$0.03	\$125.00	11-Jun-2009 1

Also of note is the WAC Cost field that is included for each transaction. This field displays the weighted average cost (WAC) of one dispensing unit for the product dispensed. The WAC is derived in the EDT using the following formula:

$$\text{WAC} = [(\text{Stock} * \text{Cost}) + (\text{New Stock} * \text{New Cost})]/(\text{Stock} + \text{New Stock})$$

In this formula, “Stock” refers to the current stock balance, “Cost” refers to the WAC of the current stock balance, “New Stock” refers to the last stock received into inventory for that item, and “New Cost” refers to the cost of the new stock.

The Extended field displays the total cost for the transaction (Total units dispensed * WAC).

Receiving Stock

To receive stock, for example, a shipment from the central store, into your inventory, either click the “Receive Products” button at the bottom of the Stock Status screen or click the “Receive Products” button on the Main Menu. The following screen will appear.

Product	Brand Name	Batch	Expiry Date	PackSize	Units	Quantity	Cost
▼	▼			1	1	1	\$0.00

The EDT receives stock in a “GRN” format—that is, information common to all of the products is entered at the top in “the header,” and the actual products received in a shipment are entered below. In the “header” portion at the top of the screen, enter the required information about the product(s) you are receiving—

Date: This is the transaction date.

Source: A list of sources, for example, the central depot, is shown in the drop-down list accessed by clicking the arrow at the right of the box.

Reference Number: Any reference number from a document may be entered here, for example, the delivery notice number. This field is optional.

Supported by: Choose the supporter (funder) of this shipment from the drop-down list.

Comments: You can enter comments in this field. This field is optional.

After entering the header information, you will need to enter the information on the specific products received—

Product: Use the Product drop-down box to select the product that is being received.

Brand Name: Choose the brand name from the drop-down list accessed by clicking the arrow at the right of the box. This field is optional.

Batch: Enter the batch number of the stock. If there is more than one batch, create more than one reception transaction.

Expiry Date: Enter the expiration date of the stock. If more than one expiration date applies, create more than one reception transaction.

Pack Size: Enter the number (in dispensing units) of each pack for the medicines received. For example, if you received five bottles of 1,000 tablets of co-trimoxazole, and you dispense by tablet, the pack size would be 1,000. However, if you received 100 50-milliliter bottles of amoxicillin and you dispense by the bottle, the pack size would be 1.

Units: The dispensing unit for the product is automatically displayed here.

Quantity: Enter the quantity of packs received. In the two previous examples, these would be 5 and 100, respectively.

Cost: Enter the cost on the GRN or receiving slip of *one pack* in this field.

When you have entered all the information for one product, a new product line will appear for you to use to enter information about the next product. Continue entering information until all the products received have been entered. Then click the “Process” button and confirm the receipt. The program will automatically update the stock level of the product. If you do not wish

to save the transaction, simply click the exit button  to close the window.

Distributing Stock

To distribute (for example, a transfer to another clinic) or adjust (for example, if damaged stock is found) stock in your inventory, click the “Product Distribution” button at the bottom of the Stock Status screen. The following screen will appear.

Product Distribution

Product: **NEW 1 100MG-tab TABLET 60 tab**

Batch	Expiry Date	Balance	Brand Name	Supported by	Date Re
▶ NEW BATCH 1	02/24/2013	980	PEPFAR		02/24/

Record: 1 of 1

Batch: NEW BATCH 1

Date: 04/15/2009 15-Apr-2009 Wed

Reference Number: Comments:

Type of transaction:

Source/Destination:

Quantity: Balance: 980

Assign Batch/Lot

After confirming that the transaction is for the correct product, enter the required information about the product you are distributing or adjusting in the bottom half of the screen—

Product: The software shows the name of the medicine on this screen to ensure that the transaction is for the correct product. A list of the batches for the product appears below the name, including the expiration date, balance, brand name, and supporter for that lot.

Batch: This field displays which batch from the list is selected.

Date: This is the transaction date.

Reference Number: Any reference number from a document may be entered here, for example, the delivery notice number. This field is optional.

Type of transaction: The possible types of transaction are in a drop-down list accessed by clicking the arrow at the right of the box. These types are defined by the user in setting up the Configuration tables, although we recommend that the types distributed with the EDT software be used.

- **Receipt:** This transaction is used to record the receipt of medicines from different sources. Choose *Receipt* from the drop-down list. Select the appropriate option for the source or the destination from the drop-down list in the Source/Destination field. For

example, if the medicine is received from the depot, choose *Depot* from the drop-down list of options.

- *Return (+)/Return (-)*: These types of transactions are used to record returned medicines. If these are returned medicines that increase the pharmacy's stock, use the (+) option; otherwise, use the (-) option if the stock is diminished by the return. For example, if the medicines are returned by another ward in the clinic, use the *Returned (+)* option because this return will increase the stock. In contrast, if the medicine is returned to a regional or central warehouse, for example, use the *Returned (-)* option because this transaction decreases stock. Choose the suitable source or destination from the drop-down list in the Source/Destination field.
- *Adjustment (+)/Adjustment (-)*: These types of transactions are used to adjust stock. Use the (+) or (-) option depending on the case. Be certain that you write the reasons justifying this adjustment in the Comments field.
- *Dispensed*: This type of transaction is used if a medicine is dispensed without pulling a patient file.
- *Donated*: This type of transaction can be used to record stock given to, for example, other departments.
- *Damaged*: This type of transaction is used to record damaged stock so that it will be subtracted from available stock.
- *Expired*: This transaction is used to record expired stock so that it will be subtracted from available stock.

Source/Destination: A list of sources or destinations is shown in a drop-down list accessed by clicking the arrow at the right of the box. The choice depends on the type of transaction made. For example, if the *Received from* transaction is chosen, then it would be appropriate to choose the central or regional warehouse.

Quantity: This field records the quantity of medicines (in dispensing units) affected in the transaction.

Balance: The balance is automatically calculated based on the previous balance and the quantity entered for this transaction.

Comments: This field can be used to record any useful information related to transaction.

After you have entered all the information, click the "Assign Batch/Lot" button. The program will automatically update the stock level of the product. It will choose the first batch/lot to expire.

If you do not wish to save the transaction, simply close the window or click the exit button



Stock Graph



Clicking this button at the bottom of the Stock Status screen will display a graph of the stock transactions for the product over the past calendar year by month.

Updating Stock Levels

From time to time, it is necessary to conduct a physical inventory to reconcile the stock figures on the shelves with those figures captured in the EDT.

To begin the process, you need to go to the EDT Main Menu, click the “Product Reports” button, and then click the “Physical Inventory” button. This will bring up a report that lists all products that have been checked as Active in the EDT along with any batches for each product, the expiry date for each batch, the current balance for each batch, and a column where the physical count can be entered.

Sample Clinic				
44. Physical Inventory				
04/15/2009				
15-Apr-2009 Wed				
Products	Batch	Expiry	Balance	Count
3TC 150MG-Tablet	WLOT1	08/01/2010	3,000	_____
AZT 300MG/3TC 150MG-Tablet	WLOT2	09/01/2009	5,400	_____
Cotrimoxazole 480MG-Tablet	Sample Batch 2	03/05/2010	10,000	_____
	WLOT3	02/01/2010	1,105	_____
D-4T 40MG-Capsule	WLOT4	04/01/2010	210	_____
DDI 250MG-Tablet enteric coated				_____

After completing the physical count, return to the Stock Status screen and click the “Update Physical Inventory” button. A gridlike representation of the Physical Inventory report will be called up—

Product	Batch	Expiration Date	Computer Count	Physical Count	Variance
3TC 10MG/mml SUSPEN 240 mL	LT1008007	08/31/2009	181	196	15
3TC 10MG/mml SUSPEN 240 mL	LT1008011	09/30/2009	704		
3TC 150MG/ZDV 300MG-tab TABL	LZ1508020	01/31/2010	919	3960	3041
3TC 150MG/ZDV 300MG-tab TABL	LZ1508085	06/30/2010	10080		
3TC 150MG/ZDV 300MG-tab TABL	LZ1508087	06/30/2010	7380		
3TC 150MG/ZDV 300MG-tab TABL	LZ1508088	06/30/2010	17460		
3TC 150MG/ZDV 300MG-tab TABL	LZ1508089	06/30/2010	151200		
3TC 150MG-tab TABLET	1825704	09/30/2009	673	673	0
3TC 150MG-tab TABLET	LV1507060	09/30/2009	16970		
3TC 150MG-tab TABLET	LV1508013	04/30/2010	36512		
ABC 20MG/mml SUSPEN 240 mL	AA2008004	02/28/2010	29		
ABC 300MG-tab TABLET	10030070	12/31/2009	262		
Acyclovir 200MG-tab TABLET	K80024	12/31/2010	5021	4991	-30
Albendazole 400MG-co COMPRIMI	26309	07/31/2010	2725		
Albendazole 400MG-co COMPRIMI	AFIH0060	04/30/2011	5000		
Amoxicillin 500MG-cap CAPSULE	AXFB0225	01/31/2011	2216	2105	-111
Amoxycylline 250MG/5ml SUSPEN	GA8002	02/28/2011	30		
Amphotericin B 1GM-vial	a812	09/30/2010	1		
Ampicillin 1G-vial	0300308	05/31/2011	700		
Antibiotic, Triple - CRÈME	W697	08/31/2009	18		
AZT 100MG-cap CAPSULE	zc1009002	01/31/2011	300		

Using the “Count” figures collected on the Physical Inventory report, fill in the Physical Count column on the Physical Update screen. The software will automatically calculate the appropriate figure for the Variance column. After you fill in all of the amounts, click the “Process” button to apply the changes to the stock levels in the EDT.

If a record is required of the entries, clicking the “Variance Report” button will call up a printable report of the Physical Update screen. Clicking the “Reset Quantity” button will reset all of the values in the Physical Count column to those found in the Computer Count column.

If you do not wish to save the transaction, simply close the window or click the exit button



NOTE: If the physical inventory process turns up batches for an item that does not have any batches listed in the EDT, those batches will need to be entered into the EDT using the Receiving Products process.

CHAPTER 4. REPORTS

EDT can produce different types of reports. Each report is described in the following section. Please note that this is not an exhaustive list of reports. More reports can be produced if necessary.

Standard Reports

Various reports are considered essential for monitoring registered patients according to different criteria, such as age, gender, and type of ART case. Click the “Standard Reports” button from the Main Menu under Reports. The following screen appears.

Standard Reports

Start date: 07/01/2007 End Date: 12/31/2007

Date: 1999 Paona 24 2001 Ginbot 22

All Donors Select Donor Organization: [Dropdown]

All Donors | [Search Bar]

1. New Patients by Treatment Type, Age and Weight

2. Chart showing patient trend per month in a given year

3. Number of new patients during period defined per regimen and product

4. Cumulative Number of ART Patients per Current Status

5. Active Patients per Regimen

6. Adult Patient Visits by Weight

7. Number of visits during period defined per regimen

8. OI summary

11. Number of active patients under treatment

12. Number of patients initiating treatment (and still active)

13. Number of active patients per regimen

14. Number of patients lost

15. Number of patients dropped

16. Morbidity Requirements by Regimen

3.0.003

Date (Start Date and End Date): These are the reference dates for different reports. Click in each box to enter the desired date. Double-clicking in the box will display a calendar from which to choose the date. Depending on what calendar option has been selected in the Configuration menu, the appropriate value will display in the yellow field under each date.

All Donors: This box has a check mark in its default state. When it is checked, the reports produced include all patients supported by all donors.

Select Donor Organization: If you wish to produce reports that include patients supported by only a particular donor, uncheck the All Donors box and select the donor from the drop-down list by clicking the arrow at the right of the box.

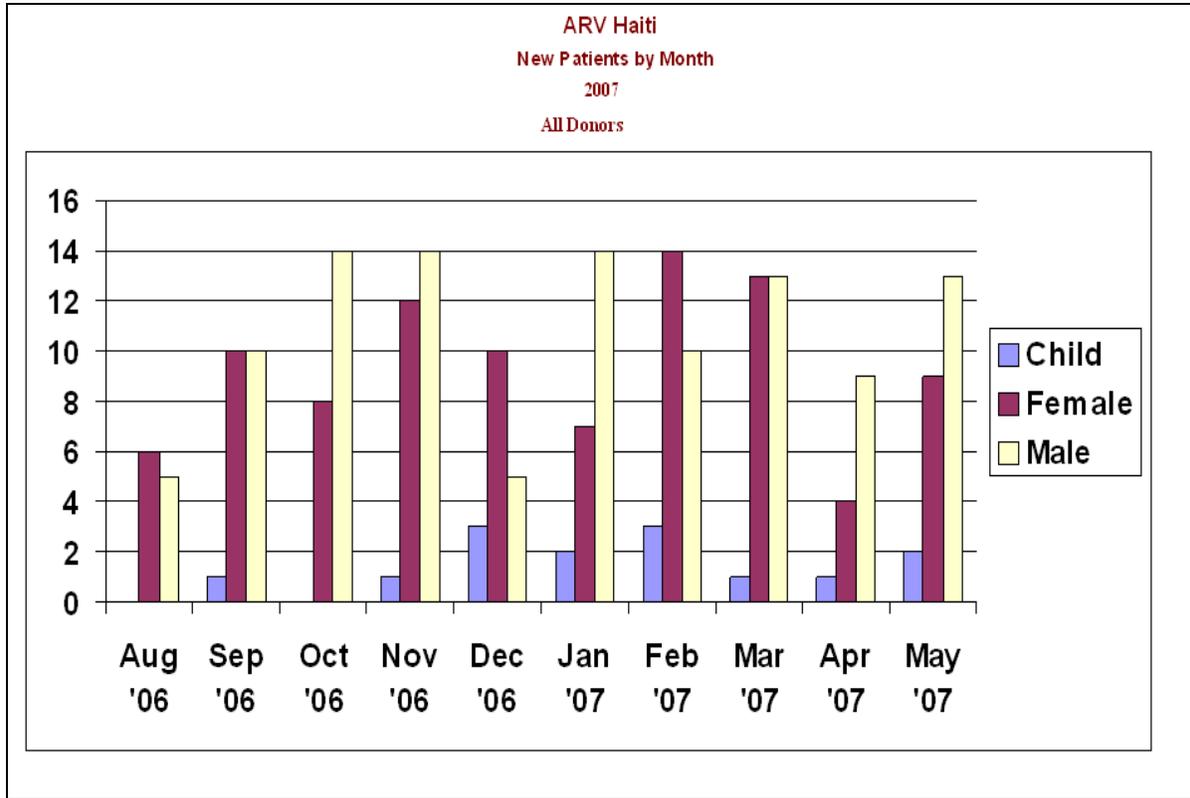
“New Patients by Treatment Type, Age and Weight”

This report shows a list of patients who came to the institution for the first time (up to the date selected). An example of the report generated follows.

EASTERN SITE								
New Patients by Treatment Type, Age and Weight								
07/01/2007 ==> 12/31/2007								
All Donors								
	<i>Totals</i>	<u>Adult</u>				<u>Child</u>		
			<u>Male</u>	<u>Female</u>				
	Total Number	% of Total Patients	Number	% of Total Patients	Number	% of Total Patients	Number	% of Total Patients
ART	4	80.0%	3	60.0%	1	20.0%	0	0.0%
PMTCT & ART	1	20.0%	0	0.0%	0	0.0%	1	20.0%
Totals	5		3	60.0%	1	20.0%	1	20.0%
 Weight > 60 Kg								
ART	1	20.0%	1	20.0%	0	0.0%	0	0.0%
Total Weight	1	20.0%	1	20.0%	0	0.0%	0	0.0%
 Weight <= 60 Kg								
ART	3	60.0%	2	40.0%	1	20.0%	0	0.0%
PMTCT & ART	1	20.0%	0	0.0%	0	0.0%	1	20.0%
Total Weight	4	80.0%	2	40.0%	1	20.0%	1	20.0%
 Average weight of new patients								
ART			62.3		38.0			
PMTCT & ART							11.0	
 Average age of new patients								
ART			45.0		25.7			
PMTCT & ART							3.5	

“Chart showing patient trend per month in a given year”

This option will produce a graphic showing the changes in patient registration by month.



The chart shows the monthly trend for new patients in 2006 and 2007 according to different cases. It is clear that the case management of adults was the most active program.

“Number of new patients during period defined per regimen and product”

This option generates a report on the number of new patients for a given month by regimen and product.

The second half of the report shows the number of patients by medicine. Please note that there is no correspondence between the number of new patients by regimen and the number of products. This is because the dispensing data were entered after the program began. There were no files showing which medicines patients had started taking at the beginning. Even if all the data were entered correctly, there would be no correspondence between the number of patients on the first part of the report and the second part of the report because there are combined products, simple products, or doubled medicines.

The problem encountered most often in entering data is the noncorrespondence between beginning regimens and products. For example, a patient may have started with

D4T30/3TC150/NVP200. The medicines could be dispensed separately or as a fixed-dose combination. At that moment, the beginning regimen is known, but the products dispensed for the first time can rarely be recorded. The patient may even have changed regimens or may take different products that in reality do not correspond to the beginning regimen. These problems will create inconsistencies between the first and second parts of the report. If the EDT is used from the beginning of the program and if the data are entered correctly, this problem will not occur.

New Patients per Regimen and Medication								
Jan 2006								
All Donors								
1. New Patients by Regimen								
Regimen	Total		Adult				Child	
	Total Number	% of Total Patients	Male		Female		Number	% of Total Patients
			Number	% of Total Patients	Number	% of Total Patients		
3TC + D4T(40) + NVP	1	0.05	0	0.0%	1	5.3%	0	0.0%
AZT/3TC + EFV	3	0.16	0	0.0%	3	15.8%	0	0.0%
AZT/3TC + NVP	2	0.11	1	5.3%	1	5.3%	0	0.0%
LSN30	7	0.37	2	10.5%	5	26.3%	0	0.0%
LSN40	5	0.26	2	10.5%	3	15.8%	0	0.0%
TDF/FTC+EFV	1	0.05	0	0.0%	1	5.3%	0	0.0%
Total	19		5	26.3%	14	73.7%	0	0.0%
2. New Patients by Medicines								
Products	Total		Adult				Child	
	Total Number	% of Total Patients	Male		Female		Number	% of Total Patients
			Number	% of Total Patients	Number	% of Total Patients		
ART								
	18	78.26%	5	21.74%	13	56.52%	0	0.00%
EFV 600MG-Tablet	4	17.39%	0	0.00%	4	17.39%	0	0.00%
Total	22	95.65%	5	21.74%	17	73.91%	0	0.00%
PMTCT								
	1	4.35%	0	0.00%	1	4.35%	0	0.00%
Total	1	4.35%	0	0.00%	1	4.35%	0	0.00%
Total	23		5	21.74%	18	78.26%	0	0.00%

“Cumulative Number of ART Patients per Current Status”

This report shows the total number of patients currently in the program based on their status, grouped by type of treatment.

“Active Patients per Regimen”

This report shows the total number of currently active patients by regimen, grouped by type of treatment.

EASTERN SITE									
Active Patients per Regimen									
All Donor s									
		Started prior to 12/31/2007							
Regimen	Service	Totals		Adult					
				Male		Female		Child	
		Total Number	% of Total Patients	Number	% of Total Patients	Number	% of Total Patients	Number	% of Total Patients
AZT/3TC/NVP									
	ART	1	20.0%	0	0.0%	1	20.0%	0	0.0%
	Totals	1	20.0%	0	0.0%	1	20.0%	0	0.0%
AZT/3TC/EFZ									
	ART	1	20.0%	1	20.0%	0	0.0%	0	0.0%
	Totals	1	20.0%	1	20.0%	0	0.0%	0	0.0%
D4T/3TC/IDV/RTV									
	PMTCT & ART	1	20.0%	0	0.0%	0	0.0%	1	20.0%
	Totals	1	20.0%	0	0.0%	0	0.0%	1	20.0%
AZT/3TC/RTV									
	ART	1	20.0%	1	20.0%	0	0.0%	0	0.0%
	Totals	1	20.0%	1	20.0%	0	0.0%	0	0.0%
D4T/ddI/NFV									
	ART	1	20.0%	1	20.0%	0	0.0%	0	0.0%
	Totals	1	20.0%	1	20.0%	0	0.0%	0	0.0%
	Totals	5		3	60.0%	1	20.0%	1	20.0%

“Adult Patient Visits by Weight”

This report shows the distribution of adult patients in two weight categories (> 60 kg and ≤ 60 kg) by each case type. Regular preparation of this report gives an indication of changes in the weight of patients. This information is useful for quantifying ARV needs.

EASTERN SITE							
Adult Patient Visits by Weight							
07/01/2007 ==> 12/31/2007							
All Donor s							
Adult							
		Male		Female			
		Total	% of Total	Number	% of Total	Number	% of Total
		Number	Patients	Number	Patients	Number	Patients
ART							
Weight <= 60 Kg		9	64.3%	5	35.7%	4	28.6%
Weight > 60 Kg		5	35.7%	5	35.7%	0	0.0%
Total ART		14	100.0%	10	71.4%	4	28.6%
Total		14		10	71.4%	4	28.6%

“Number of visits during period defined per regimen”

This report shows the total number of active patients who visited the pharmacy during the period entered.

EASTERN SITE							
Number of Visits per Regimen							
07/01/2007 ==> 12/31/2007							
All Donor s							
Adult							
		Male		Female		Child	
		Total	% of Total	Number	% of Total	Number	% of Total
		Number	Visits	Number	Visits	Number	Total
ART							
AZT/3TC/EFZ		3	18.75%	3	18.75%	0	0.00%
AZT/3TC/NVP		4	25.00%	0	0.00%	4	25.00%
AZT/3TC/RTV		3	18.75%	3	18.75%	0	0.00%
D4T/ddI/NFV		4	25.00%	4	25.00%	0	0.00%
PMTCT & ART							
D4T/3TC/IDV/RTV		2	12.50%	0	0.00%	0	0.00%
Regimen Totals		16		10	62.50%	4	25.00%

“OI summary”

This report shows a summary of the number of patients seen for each category and condition of opportunistic infection defined in the program. The report shows the totals according to men, women, and children.

EASTERN SITE				
Patients Active OI Regimens				
04/01/2007 ==> 06/30/2007				
All Donors				
	Adult		Child	
	Male	Female		
STI		1	0	0
	Condition Total	1	0	0
	Category Total	1	0	0
	Herpes	1	0	0
	Condition Total	1	0	0
	Category Total	1	0	0
Totals		2	0	0

“Number of active patients under treatment”

This report shows a summary of the patients who were dispensed medicines during the date range and who are still currently “Active.” They are arranged by the age groups established in the EDT. The report shows the totals according to men, women, and children (see next page).

11. Number of active patients under treatment									
Effective Date		02/28/2009		2001 Megabit 20					
All Donors									
<i>Type of Service</i>		ART							
<i>Description</i>	<i>Age --> Age</i>				<i>Male</i>		<i>Female</i>		
			Total Number	% of Total Patients	Number	% of Total Patients	Number	% of Total Patients	
child 0-3	0	3	0	0.0%	0	0.0%	0	0.0%	
child 4-15	4	15	1	50.0%	1	50.0%	0	0.0%	
	<i>Sub Totals</i>		1	50.0%	1	50.0%	0	0.0%	
adult	16	30	1	50.0%	1	50.0%	0	0.0%	
adult 31+	31	99	0	0.0%	0	0.0%	0	0.0%	
	<i>Sub Totals</i>		1	50.0%	1	50.0%	0	0.0%	
	<i>Totals</i>		2	100.0%	2	100.0%	0	0.0%	
<i>Overall Total</i>			2		2	100.0%	0	0.0%	

“Number of patients initiating treatment (and still active)”

This report shows a summary of the patients who initiated treatment during the date range and who are still currently “Active.” They are arranged by the age groups established in the EDT. The report shows the totals according to men, women, and children.

12. Number of patients initiating treatment (and still active)									
		04/25/2009 ==>		05/01/2009					
		25-Apr-2009 Sat==>		01-May-2009 Fri					
All Donors									
<i>Type of Service</i>		UNKNOWN							
<i>Description</i>	<i>Age --> Age</i>				<i>Male</i>		<i>Female</i>		
			Total Number	% of Total Patients	Number	% of Total Patients	Number	% of Total Patients	
child 0-3	0	3	18	0.7%	9	0.4%	9	0.4%	
child 4-15	4	15	175	7.2%	86	3.5%	89	3.7%	
	<i>Sub Totals</i>		193	7.9%	95	3.9%	98	4.0%	
adult	16	30	420	17.2%	68	2.8%	352	14.4%	
adult 31+	31	99	1821	74.7%	831	34.1%	990	40.6%	
	<i>Sub Totals</i>		2241	92.0%	899	36.9%	1342	55.1%	
	<i>Totals</i>		2434	99.9%	994	40.8%	1440	59.1%	
<i>Overall Total</i>			2437		996	40.9%	1441	59.1%	

“Number of active patients per regimen”

This report shows a summary of the number of active patients for each regimen defined in the program arranged by the age groups established in the EDT. The report shows the totals according to men, women, and children.

13. Number of active patients per regimen									
Effective Date		02/28/2009		2001 Megabit 20					
All Donors									
<i>Line</i>	<i>Regimen</i>								
<i>Description</i>	<i>Age --> Age</i>		<i>Totals</i>		<i>Male</i>		<i>Female</i>		
			Total Number	% of Total Patients	% of Total Patients		% of Total Patients		
0									
AZT/3TC/EFV									
1 child 0-3	0	3	0	0.0%	0	0.0%	0	0.0%	
2 child 4-15	4	15	1	50.0%	1	50.0%	0	0.0%	
3 adult	16	30	1	50.0%	1	50.0%	0	0.0%	
4 adult 31+	31	99	0	0.0%	0	0.0%	0	0.0%	
	<i>Regimen Total</i>		2	100.0%	2	100.0%	0	0.0%	
	<i>Overall Total</i>		2		2	100.0%	0	0.0%	

“Number of patients lost”

This report shows a summary of the number of patients that are current labeled as “Lost.” The report shows the totals according to men, women, and children.

14. Number of patients lost

01/01/2008 ==> 05/28/2009
2000 Tahsas 22 ==> 2001 Senie 20

All Donors

<i>Type of Service</i>		ART							
<i>Description</i>	<i>Age -> Age</i>		<i>Totals</i>		<i>Male</i>		<i>Female</i>		
			Total Number	% of Total Patients	Number	% of Total Patients	Number	% of Total Patients	
child 0-3	0	3	0	0.0%	0	0.0%	0	0.0%	
child 4-15	4	15	1	50.0%	1	50.0%	0	0.0%	
	<i>Sub Totals</i>		1	50.0%	1	50.0%	0	0.0%	
adult	16	30	1	50.0%	1	50.0%	0	0.0%	
adult 31+	31	99	0	0.0%	0	0.0%	0	0.0%	
	<i>Sub Totals</i>		1	50.0%	1	50.0%	0	0.0%	
	<i>Totals</i>		2	100.0%	2	100.0%	0	0.0%	
	<i>Overall Total</i>		2		2	100.0%	0	0.0%	

“Number of patients dropped”

This report shows a summary of the number of patients that are current labeled as “Dropped.” The report shows the totals according to men, women, and children.

15. Number of patients dropped

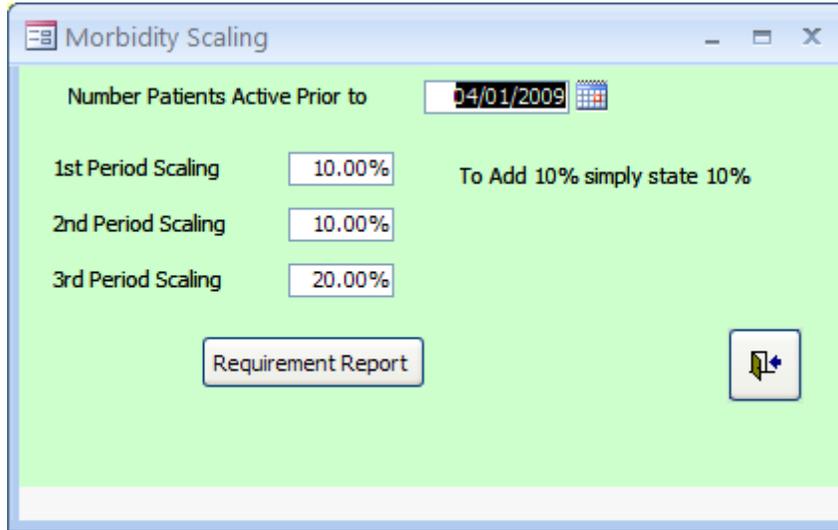
01/25/2009 ==> 04/02/2009
25-Jan-2009 Sun ==> 02-Apr-2009 Thu

All Donors

<i>Type of Service</i>		UNKNOWN							
<i>Description</i>	<i>Age -> Age</i>		<i>Totals</i>		<i>Male</i>		<i>Female</i>		
			Total Number	% of Total Patients	Number	% of Total Patients	Number	% of Total Patients	
child 0-3	0	3	0	0.0%	0	0.0%	0	0.0%	
child 4-15	4	15	0	0.0%	0	0.0%	0	0.0%	
	<i>Sub Totals</i>		0	0.0%	0	0.0%	0	0.0%	
adult	16	30	0	0.0%	0	0.0%	0	0.0%	
adult 31+	31	99	0	0.0%	0	0.0%	0	0.0%	
	<i>Sub Totals</i>		0	0.0%	0	0.0%	0	0.0%	
	<i>Totals</i>		0	0.0%	0	0.0%	0	0.0%	
	<i>Overall Total</i>		164		74	45.1%	90	54.9%	

“Morbidity Requirements by Regimen”

This report allows users to project morbidity requirements for the clinic up to three months in the future, including scaling up. Users enter percentages into each of the month blanks and click the “Requirement Report” button.



The formula used in calculating the figures is as follows—

Number of patients * defined daily dose (ddd) * number of days * scaling up percent

The defined daily dose is established for each product when the user sets up the regimens to be used (under the “Regimen” button in the Configuration screen).

After the user clicks the “Requirement Report” button, the report screen appears and displays the suggested amounts to order for each of the three months listed and the total amount to order for all three months (see next page).

16. Morbidity Requirements by Regimen

<i>Regimen</i>		<i>days</i>	30	31	30		
		<i>Scaling</i>	10.00%	10.00%	20.00%		
<i>Product</i>	<i>Unit</i>	<i>Patients</i>	<i>ddd</i>	<i>Months</i>			<i>Total</i>
				Apr-2009	May-2009	Jun-2009	
<i>D4T(30)/3TC/EFV</i>							
		42	1	1,386	1,525	1,830	4,740
		42	1	1,386	1,525	1,830	4,740
		42	1	1,386	1,525	1,830	4,740
<i>D4T(30)/3TC/NVP</i>							
		70	1	2,310	2,541	3,049	7,900
		70	1	2,310	2,541	3,049	7,900

Patient Reports

In addition to the standard reports, the EDT comes preloaded with reports that focus on the patient side. Click the “Patient Reports” button from the Main Menu under Reports. The following screen appears.

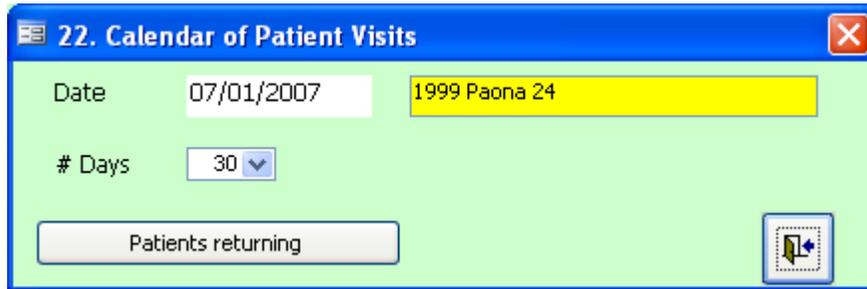
“Daily Appointments”

This report shows a list of all the appointments at a clinic within the date parameters set.

<i>21. Daily Appointments</i>		
All Donors		
<i>Date</i>		<i>Number Appointed</i>
04/21/2009	21-Apr-2009 Tue	89
04/22/2009	22-Apr-2009 Wed	87
04/23/2009	23-Apr-2009 Thu	75
04/24/2009	24-Apr-2009 Fri	18

“Calendar of Patient Visits”

When you click this option in the Patient Reports menu, the following screen appears. Enter the date for which you wish to see the expected appointments and the number of days after that date, and click the “Patients returning” button.



A list appears as shown below. It can be printed if necessary. In this example, nine patients are expected in the first week of January 2007. This report can be useful for preparing products to be delivered.

22. Calendar of Patient Visits			
09/23/2009		==> 06/05/2010	
23-Sep-2009 Wed		==> 05-Jun-2010 Sat	
ID	First Name	Name	Gender
24-Sep-2009 Thu		09/24/2009	
ST02272	QQQGOK	CEVLPH	Female
ST02290	PDSICVKXM	QIWGROJXT	Female
25-Sep-2009 Fri		09/25/2009	
ST00228	IKJOPVVZK	MQ TILMORQJ	Male
ST02205	LO NBXG	NP QQYOX	Male
ST02438	QCUMWYG	QGWIJOMZW	Female

“Missed Appointments”

This report shows a list of patients who missed their appointments. In the following example, eight patients missed their appointments. The institution must have a policy to manage the problem of patients who miss their scheduled appointments.

Chapter 4. Reports

23. Missed Appointments								
09/23/2009				23-Sep-2009 Wed				
All Donors								
Number	Name	First Name	Gender	Address	City	State/Provi	Date of next visit	Days Late
Location Code								
ST02110	ORZNUWGMTU	TUOKYXI	Female	DELMAS 41 RUE DAD			25-Jun-2009 Thu	90
ST02407	QQYNX	XEWLCOB	Female	CROIX-DES -BOUQUE			25-Jun-2009 Thu	90
ST02326	BOJIMY	JNPBRYHQ	Male	GRESSIER, LA COLLIN			26-Jun-2009 Fri	89
ST01705	IFOOS	VZWRVG	Female	PERNIER 50 #12			26-Jun-2009 Fri	89
ST02916	ZMXEQ	NUTGVL TPV	Male	NAZON,RUE PRICE M			26-Jun-2009 Fri	89
ST00011	MUVJQJ	RFTDKGNIO	Male	BLVD JN JACQUES DE			29-Jun-2009 Mon	86
ST01795	UJGTXF -QUVJT	GKHYKV VZF	Male	DELMAS 24 ,RUE ST-L			29-Jun-2009 Mon	86
ST00566	MJCQ ULLPKTSJ	SDTLPVKI	Female	LILAVOIS 34,#99 A L'IN			02-Jul-2009 Thu	83
ST01146	MWHJR	OCWKG GEXR	Female	DELMAS 0 PROLONGÉ			02-Jul-2009 Thu	83

“Inactive Patients”

The below report shows a list of patients who registered but who are no longer coming back to the institution for various reasons.

24. Inactive Patients				
All Donors				
Institution Name				
Supported by				
Case Type	UNKNOWN		Number of Patient	26
Patient ID	First Name	Name	Gender	Actual Status
ST00010	DDOFME	BNGYBQHVJ	Female	Deceased
ST00104	TVKPKQZV	DPHWG	Male	Deceased
ST00503	SDWMI FOCV	EFEZHXVQ	Female	Deceased
ST00730	QCLDME	FJKXNMYT	Female	Deceased
ST01729	MIGR JXJFN	FKJSHTH	Male	Deceased
ST00107	VQTJP	HFEJMW	Male	Deceased
ST01395	FUSUREK	HJXDW	Female	Deceased
ST00590	EXYPGKUH	HYKJPOBTE	Male	Deceased

“Active Patients”

This report shows a list of all active patients at the institution by type of treatment.

List of Active Patients							
Type of Treatment							
TAR							
Supported by				Number of Patients			
				710			
ID	Name	First Name	Gender	Actual Age	Start date	Regimen	Current Status
ST03326	BPVLSJ	KVFLPVT	Male	28.2	28-Jul-2009 Tue	Regimen Not Specifie	Active
ST03470	OFUUIOQMJ	QFWQOLG EO	Female	48.2	30-Jul-2009 Thu	Regimen Not Specifie	Active
Supported by CDC				Number of Patients			
				2			
ID	Name	First Name	Gender	Actual Age	Start date	Regimen	Current Status
ST02919	OPYKW	NUICSPJ	Female	29.2	07-Jul-2009 Tue	AZT/3TC/NVP	Active
ST02880	RSWZHMND	TJOMMNQ	Female	47.9	13-Oct-2008 Mon	AZT/3TC/NVP	Active
d by PEPFAR				Number of Patients			
				3			
ID	Name	First Name	Gender	Actual Age	Start date	Regimen	Current Status
ST03327	EGFWTZJW	UZOGMUH	Female	30.1	06-Aug-2009 Thu	D4T/3TC/EFV	Active
ST03463	NHDQ	XPPKSC	Male	44.1	06-Aug-2009 Thu	AZT/3TC/EFV	Active
ST03510	TKPOZJF	QUXUSS	Male	34.1	05-Aug-2009 Wed	D4T/3TC/EFV	Active

“Patients Transferred In”

This report shows a list of all registered patients at the institution who transferred in from another location.

List of Patients Transferred In							
01/12/2009 ==> 05/16/2009							
2001 Thir 04 ==> 2001 Senie 08							
All Donor s							
	Date	From	ID	First Name	Surname	Sex	Age
1	03/15/2009	2001 Miyazia 06 Old Clinic	WC9	Esteban	QQQQQ	Male	44.00

“Patients Transferred Out”

This report shows a list of all registered patients at the institution who have transferred out to another location.

List of Patients Referred Out

01/12/2009 ==> 05/16/2009

2001 Thir 04==> 2001 Senie 08

All Donors

<i>Date</i>	<i>To</i>	<i>ID</i>	<i>First Name</i>	<i>Surname</i>	<i>Gender</i>	<i>Age</i>
1 2001 Miyazia 06	ALT Clinic	WC9	Esteban	QQQQQ	Male	44

“Patients by Type of Product”

This report lists all patients at the institution who have been dispensed product by the category of product that is dispensed, along with the number of patients for each product category (see next page).

33. Patients by Type of Product

04/28/2003 ==> 07/30/2008

28-Apr-2003 Mon==> 30-Jul-2008 Wed

All Donors

<i>ID</i>	<i>First Name</i>	<i>Name</i>
<i>Products</i> TAR		<i>Number of Patients</i> 453
ST01798	RIGEMGK	EIVFOTVWX
ST01009	XDQB	BIHNRKGP
ST01157	KGVQJV	BJRNSKF
ST01223	LGGO MROLY	BRUSKPG
ST00374	NETOF LWC	BSWRLPG
ST01356	XTQZ	CFRPGPMK
ST01201	JWBP XT	CJSTDFJO
ST00687	HNXJUJZKGQI	CKSPDUH

“Patients by Type of Service”

This report lists all patients who have been dispensed product at the institution by the type of service along with the number of patients for each type of service.

34. Patients by Type of Service			
04/28/2003 ==> 07/30/2008			
28-Apr-2003 Mon ==> 30-Jul-2008 Wed			
All Donors			
<i>ID</i>	<i>First Name</i>	<i>Name</i>	
<i>Service</i>		<i>Number of Patients</i>	139
ST00359	EKSGWNN	CGGZWMGS	
ST00687	HNX.II7KGQI	CKSPDIH	
ST00510	WKIHLI	CSSXN	
ST00891	IISVH	DCLMVK17H	
ST01906	DOPT	DFM.IYYK	
ST00297	TPIHRLISF	DKOQNV	
ST01450	RMIIRFOGC	DNRXQFV	
ST02070	QQ7KQHY	FDGF7	
ST00022	TRVHNKOF	FÉII V	
ST00432	7KFSHTIF	FFII ONH	
ST00028	NPHGMWT	FHOHTVX	
ST00948	OISQÉS.I	FHPQI7VG	
ST00572	UEWNLRH	EJVVNNXW	
ST01300	NIYZPC	EMFRH	
ST00224	OOE	EOUDMOHQ	

“Adherence”

The EDT includes a reporting section on ART patient adherence as a way of monitoring both patients and clinics. Adherence in the EDT is expressed using eight indicators that look at three categories of data.

Patient Attendance and Defaulting (in Month of Index Visit) Indicators

1. Percentage of patients attending on or before day of appointment
2. Percentage of patients attending within three days of appointment

Month of index visit refers to the specific month that is used as the baseline for tracking patients. This variable is used in calculating all the indicators, but each indicator cohort has its own month of index. In the following sample Adherence Report screen, the month of index visit for the attendance cohort is *Nov 2008*. Thus, any patient who came in for a visit in November 2008 will be tracked from November 2008 to the present time and reported on as part of the percentage reported for that indicator.

Dispensing-Based Adherence (during Look-Back Period) Indicators

3. Percentage of patients with 100% of days covered by ARVs dispensed
4. Percentage of days covered by ARVs dispensed
5. Percentage of patients with gap in ARV availability of 30 days or more

6. Percentage of visits made during look-back period before days of medicines in previous dispensing were consumed

Look-back period defines the range of time that an indicator will cover for its analysis. It works in conjunction with the month of index visit, where the month of index visit defines the starting month and the look-back period defines how far out from that starting point the data will be analyzed. Continuing with the preceding example, if the month of index visit is November 2008 and the look-back period is three months, the indicator will track those patients who recorded a visit in November 2008 for the three following months (December, January, February) and then calculate the appropriate percentage for that indicator.

Retention Indicators

7. Percentage of patients who were treated during the month of *X* and are still on treatment 12 months later

The *X* placeholder in the indicator will display the name of the month that is selected as the Month of index visit on the Variables page under the heading Definitions for retention (Indicator 7).

8. Percentage of patients who initiated treatment starting in *DATE* for *X* months and still on treatment *Y* months after starting

The *DATE*, *X*, and *Y* placeholders will display, respectively, the name of the beginning month of the index period, the number of months in the index period, and the number of months after each patient's initial visit during the index period that the program will track that patient. These are selected on the Variables page under the heading Definitions for retention (Indicator 8).

Click the "Adherence" button to bring up the Adherence Report screen.

The screenshot shows the 'Adherence Report' window with the 'Variables' tab selected. The interface includes the following sections and controls:

- Facility:** Eastern District Central
- Report Date:** 08-Mar-2009 to 08-Mar-2009 Sun
- Buttons:** Process, Reset variables to system defaults
- Patient Selection:** Patient Age Range (0 -> 99), Gender (Both)
- Global Parameters:**
 - Minimum days on treatment to define experienced patients: 90
 - Number of days past appointment to define defaulting: 60
- Definitions for attendance cohort (Indicators 1-2):** Month of index visit (Nov 2008)
- Definitions for dispensing-based cohort (Indicators 3-6):** Month of index visit (Aug 2008), Number of months of retrospective look-back period (6)
- Definitions for retention (Indicator 7):** Month of index visit (Mar 2008), Number of months of retrospective look-back period (12), Patients defined as 'still in treatment' when the current gap in dispensed product is less than 30 days at this facility
- Definitions for retention (Indicator 8):** Starting month of index period (Jun 2008), Number of months in index period (3), Number of months after initiation to observe if still on treatment (6)
- VARIABLES:** A central column of dropdown menus for each parameter.
- System defaults:** A panel on the right with buttons for default values: 90 Days, 60 Days, 4 Months, 7 Months, 6 Months, 13 Months, 12 Months, 30 Days, 10 Months, 3 Months, 6 Months.

The Adherence Report consists of two tabs: Variables and Results. The EDT opens initially to the Variables tab, which consists of the variables that the user manipulates. The Results tab displays the resulting percentages for the eight indicators.

The EDT has internal system defaults for each of the variables, and the program resets to these system defaults each time the program is exited. These variables and their explanations are summarized in the following table.

Chapter 4. Reports

Variable	Explanation
<u>Patient Age Range</u>	Enter the beginning and ending ages for the patients who will be covered in the adherence report. (The system default is all ages 0–99.)
<u>Gender</u>	Specify which gender—or both—will be covered in the report. (The system default is both.)
<u>Minimum days on treatment to define experienced patients (prior to index visit)</u>	Enter the minimum number of days that a patient must be on treatment to be considered “experienced.” A value can be selected from the drop-down box or entered directly into the field. (The system default is 90 days [3 months].)
Attendance Indicators	
<u>Number of days past appointment to define defaulting</u>	Enter the number of days that a patient must be late for an appointment to be noted as “defaulted” in the report. A value can be selected from the drop-down box or entered directly into the field. (This number varies from program to program, but the system default is 60 days [2 months].)
<u>Month of index visit for attendance</u>	Select the month and year that will serve as the index (baseline) month for looking at the attendance indicator. The program looks at the attendance of the next appointment after that. (The default index month is four months before the current month.)
Dispensing Indicators	
<u>Month of index visit for dispensing</u>	Select the month and year that will serve as the index (baseline) month for looking at the dispensing indicators. (The default index month is seven months before the current month.)
<u>Number of months of retrospective look-back period</u>	Select the number of months following the index month for which the report should analyze the dispensing indicator. A value can be selected from the drop-down box or entered directly into the field. (The default is six months from the index visit, but you may want to look at a different number of months such as a full 12 months.)
Retention Indicators	
<u>Month of index visit for retention</u>	Select the month and year that will serve as the index (baseline) month for beginning the period for looking at the retention indicators. (The default index month is 13 months for patients in treatment looking over the subsequent 12 months. For patients initiating treatment, the default is 9 months before the index month and then looking at all those who initiated treatment over that month and the following 2 months, providing retention over the next 6 months from initiation of treatment.)
<u>Patients defined as ‘still in treatment’ when the current gap in dispensed product is less than X days at this facility</u>	Enter the number of days that a patient is considered still in treatment. When a patient’s gap in dispensed product is less than the number of consecutive days selected, that patient is considered to be still in treatment. A value can be selected from the drop-down box or entered directly into the field.
<u>Number of months in index period</u>	Enter the number of months that compose the index period. This variable applies only to the eighth indicator. (The default is a three-month period including the index month, but it can be changed as needed.)
<u>Number of months after initiation to observe if still on treatment</u>	Enter the number of months from the index month that the report should follow the patients to check whether the patients are still in treatment. (The default is six months.)

When the variables have been adjusted to the user's specifications, click either the "Process" button or the Results tab at the top of the screen to bring up the screen with the indicators and the resulting percentages. Clicking the "Reset variables to system defaults" button will reset any changes made by the user to the information in the Variables column back to the System defaults figures.

	All Patients	New Patients	Experienced Patients
Patient Attendance and Defaulting (in month of index visit) n=patients counted	n = 186	n = 37	n = 149
1 % of patients attending on or before day of appointment	23.7%	43.2%	18.8%
2 % of patients attending within 3 days of appointment	34.9%	54.1%	30.2%
Dispensing-based Adherence (during look-back period) n=patients counted	n = 192	n = 38	n = 154
3 % patients with 100% of days covered by ARVs dispensed	53.1%	34.2%	57.8%
4 % of days covered by ARVs dispensed	86.5%	84.8%	86.9%
5 % of patients with gap in ARV availability of 30 days or more	5.2%	5.3%	5.2%
6 % of visits made during look-back period before days of medicines in previous dispensing were consumed	18.9%	33.8%	13.4%
Retention indicator n=patients counted	n = 192	n = 38	n = 154
7 % of patients who were treated during the month of Jan 2008 and are still on treatment 12 months later.	79.7%	68.4%	82.5%
Retention indicator n=patients counted		n = 45	
8 % of patients who initiated treatment starting Jan 2008 for 3 months and still on treatment 6 months after starting.		60.0%	

All indicators will be based on all patients who attended during their respective index month.
Indicators 7 and 8 are based on the specific values entered on the variables tab.

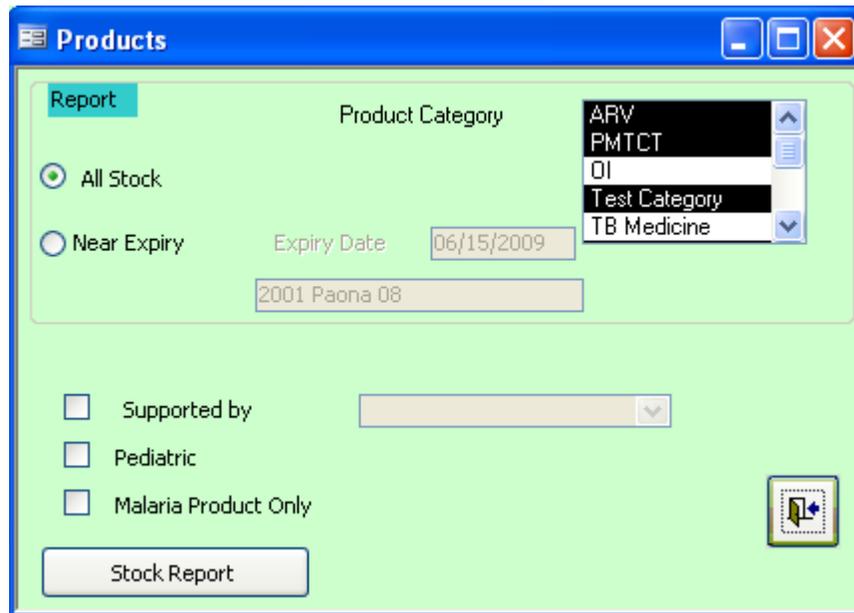
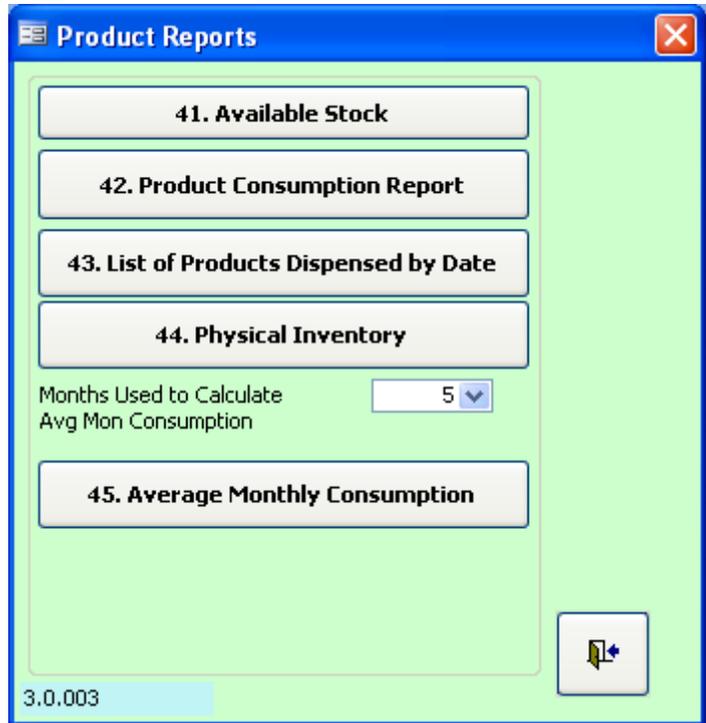
NOTE: The Adherence Report looks at those patients who are assigned a regimen and then are dispensed ARV products. Therefore, patients coming to the clinic for non-ARV treatment should not be assigned a regimen when being registered for the first time because this will distort the adherence figures. Instead, the "Non-ARV/Non-antimalarial Dispensing" and "Malaria Encounter" buttons should be used when dispensing these products.

Product Reports

In addition to the standard reports, the EDT comes with preloaded with reports that focus on the product side. Click the “Product Reports” button from the Main Menu under Reports. The Product Reports (at right) screen appears.

“Available Stock”

This report shows the quantities of products available at the time the report is prepared. The stock status will display an “Alert Message” if the stock quantity is less than the minimum stock level. You can select the range of products shown on the report by choosing options on the screen shown below.



Available Stock

09/23/2009

23-Sep-2009 Wed

Products	Unit	Qty in Stock	Expiry	Batch #	Expired Stock	Alert Message
<i>Institution Name</i>						
<i>Supported by</i>		UNICEF				
Miconazole 2%- CRÈME 30 g	30g tube	2,357	09/30/2009	G0362	0	
Nystatin 100000IU/ml SUSPEN	mL	4,586	07/31/2010	H0154	0	
<i>Supported by</i>		PEPFAR				
3TC 10MG/ml SUSPEN 240 mL	240ml bottle	181	08/31/2009	LT10080	181	
3TC 10MG/ml SUSPEN 240 mL	240ml bottle	704	09/30/2009	LT10080	0	
3TC 150MG/ZDV 300MG-tab TABLET	tab	151,200	06/30/2010	LZ15080	0	
3TC 150MG/ZDV 300MG-tab TABLET	tab	7,380	06/30/2010	LZ15080	0	
3TC 150MG/ZDV 300MG-tab TABLET	tab	10,080	06/30/2010	LZ15080	0	
3TC 150MG/ZDV 300MG-tab TABLET	tab	17,460	06/30/2010	LZ15080	0	
3TC 150MG/ZDV 300MG-tab TABLET	tab	919	01/31/2010	LZ15080	0	
3TC 150MG-tab TABLET	tab	16,970	09/30/2009	LV15070	0	
3TC 150MG-tab TABLET	tab	673	09/30/2009	1825704	0	<i>PLACE ORDER</i>
3TC 150MG-tab TABLET	tab	36,512	04/30/2010	LV15080	0	

“Product Consumption Report”

This report shows the quantity of medicines dispensed each month of the year.

The screenshot shows a software window titled "Product Consumption Report". On the left, there are three radio buttons: "Year" (selected), "Month", and "ABC Analysis". Below these are two checked checkboxes: "All Product Categories" and "All Products". The "Starting Month" is set to "Jan 2007" in a dropdown menu. Below this, there are two date input boxes: "01/01/2007" and "12/31/2007". Underneath these are two yellow highlighted boxes: "01-Jan-2007 Mon" and "31-Dec-2007 Mon". There are two dropdown menus labeled "Select Product Category" and "Select Product ->". At the bottom, there is a "Consumption Report" button, a green checkmark icon, and a printer icon.

The Product Consumption Report screen gives the user the flexibility to display consumption information by year or by month. Depending on the option chosen, the EDT gives the user further flexibility. If the Year option is chosen, then the user can either select the Starting Month for the analysis from the drop-down box or specify a year range using the two boxes underneath for starting and end dates. Similarly, when the Month option is chosen, the user can either select the Starting Month for reporting in the drop-down box or specify a range using the two boxes below.

If you wish to know the consumption of one medicine or one product category, choose the product or category in the Select Product or Select Product Category field after unchecking the the All Products and All Product Categories boxes. Using these options, you can choose to report on a specific category, such as malaria products only. You can also choose to report on all product categories or see an ABC analysis of the stock consumed by checking the appropriate box.

The ARV products dispensed during 2007 are shown in the example below.

Annual Consumption
 01/01/2007 ↔ 12/31/2007
 01-Jan-2007 Mon ↔ 31-Dec-2007 Mon

Location **#Error**

Product	Unit	2007	2007	2007	Apr 2007	May 2007	Jun 2007	Jul 2007	Aug 2007	Sep 2007	Oct 2007	Nov 2007	Dec 2007	Total
Program Supported By														
	<i>Product Use</i>	TAR												
3TC 10MG/ml SUSPEN	240ml bot	5	5	6	4	5	8	4	3	4	5	5	4	58
3TC 150MG-tab TABLET	tab	180	180	175	180	180	180	154	240	240	240	189	245	2,383
AZT 10MG/ml SOLUTION	mL	9	6	13	10	9	10	5	5	5	6	7	6	91
AZT 300MG/3TC 150MG-t	tab	1,514	1,560	1,740	1,564	1,750	1,939	1,509	1,621	1,648	1,589	1,687	1,726	19,847
AZT 300MG-tab TABLET	tab	0	0	0	0	0	0	45	60	30	30	30	30	225
D4T 30MG-cap CAPSULE	cap	0	0	0	0	0	0	0	0	0	182	129	185	496
D4T 40MG-tab TABLET	tab	180	180	175	180	180	180	115	180	180	0	0	0	1,550
EFV 200MG-tab TABLET	tab	90	90	0	90	60	120	0	90	60	0	0	0	600

“List of Products Dispensed by Date”

This report shows the medicines dispensed on any given date. A paper version of the report can be printed using the report button on the upper right-hand side of the screen.

View Daily Dispensing

List of Products Dispensed by Date

Date: 11/22/2008 2001 Hidar 13

Dispensing Date	Dispensing Date	Product	Total Qty Dis
11/22/2008	2001 Hidar 13	EFV 300MG-Capsule	30
11/22/2008	2001 Hidar 13	RTV 10MG/ml LIQUID 100 mL	2
11/22/2008	2001 Hidar 13	AZT 300MG/3TC 150MG-Tablet	150

“Average Monthly Consumption”

This report lists the active medicines currently in the EDT along with the average monthly consumption (in dispensing units), available stock, and months available for each.

NOTE: On the Product Reports menu, the user can select the number of months to use in calculating the average monthly consumption (the formula used for this calculation is discussed in Chapter 3). The drop-down list contains values from 1 to 12, but any value can be entered into the field manually.

Sample Clinic				
Average Monthly Consumption				
04/16/2009 2001 Ginbot 08				
<i>Drug Description</i>	<i>Unit</i>	<i>Average Monthly Consumption</i>	<i>Stock</i>	<i>Months Available</i>
EFV 300MG-Capsule	Capsule	24	1,650	68.8
EFV 600MG-Tablet	Tablet	8	3,000	375.
NFV 250MG-Tablet	Tablet	24	28,620	1192.5

CHAPTER 5. SYSTEM CONFIGURATION AND MAINTENANCE

This chapter discusses the options under the Configuration column in the Main Menu of the EDT tool. Although the first button in this column, “Configuration,” was explained in Chapter 2 of this manual so that initial choices could be made for setting up the tool, it is now time to delve into more detail.

“System Config”

After you have clicked the “Configuration” button in the Main Menu, click the “System Config” button. This screen gives access to several functions and program settings, as shown below.

The screenshot shows the "System Configuration" window with the following settings:

- Administrator Code:** ****
- Default Printer:** \\A1PRINTSERVER\VA Canon 1
- Clinic Facility:**
- Minimum Age for Adults:** 15
- Delete Users:** Button
- Add Encounters for Patients NOT Active, Lost, or Dropped:**
 - Administrators Only
 - All Users
- Expiry Date Buffer:** 60
- Search on Patient ID:**
- Enter Patient Names:**
- Hide Patient Names:**
- Costing:**
- Performance:**
- Show stock balance:**
- Patient Language:**
- Data Transfer Password:** *****
- Malaria Module:**
- Require Malaria Testing Response:**
- Require HIV and TB Response:**
- Central Email:** [Text Field]
- Clinic Email:** [Text Field]
- SMTP Server:** [Text Field]
- SMTP Port:** [Text Field]
- SMTP User Name:** [Text Field]
- SMTP Password:** [Text Field]

This function can be activated only with a code that is known by administrators (the “administrator code”). This code is used separately at each installation in a site and is not the

same thing as the administrator password. When this code is entered, the grayed-out fields and buttons are activated. The fields to complete on this screen are the following—

Field	Explanation
<u>Default Printer</u>	Enter the location of the default printer you wish to use with the EDT. The software automatically detects and inserts the name of the printer marked as <i>Default</i> in Windows, but this printer can be changed manually.
<u>Clinic Facility</u>	Specify whether this installation is at a clinic facility, as opposed to a central facility that may aggregate data.
<u>Minimum Age for Adults</u>	Enter the minimum age at which a patient will be considered as an adult.
<u>Add Encounters for Patients NOT Active, Lost, or Dropped</u>	Select whether only administrators or all users will be able to add new encounters for those patients with status labels other than <i>Active, Dropped, or Lost</i> .
“Delete Users”	Click this button to bring up a list of all users currently in the EDT. Select one and click the “Delete” button to remove the user from the EDT.
<u>Expiry Date Buffer</u>	Enter the minimum number of days before a medicine's expiration date after which a particular lot will not be issued to a patient.
<u>Search on Patient ID</u>	Select whether to allow searching by Patient ID field to find a patient in the patient list.
<u>Enter Patient Names</u>	Select this option to hide the <u>Family Name</u> and <u>First Name</u> fields in the New Patient Information screen. This option is useful if ART patients are maintained by unique IDs only, because it removes the possibility of accidentally capturing their name.
<u>Hide Patient Names</u>	Place a check mark in this box to hide the display of patient names. This option is useful if patient names are captured in the system, but patient confidentiality reasons require that they are not displayed.
<u>Costing</u>	Select to allow display of the WAC and extended prices of received and dispensed products.
<u>Performance</u>	Select to allow display of WHO performance indicators.
<u>Show stock balance</u>	Check the box to be able to print the stock balance for each product on the Physical Inventory sheet.
<u>Patient Language</u>	Check the box to allow the use of patient languages when printing labels.
<u>Malaria Module</u>	Check this box to render the malaria functionality visible and operational.
<u>Require Malaria Testing Response</u>	Check this box if your clinic requires that patients indicate whether they have been tested for malaria.
<u>Require HIV and TB Response</u>	Check this box if your clinic requires that patients indicate whether they have been tested for HIV and TB.
<u>Data Transfer Password</u>	Enter the password that will be used in the zip file created when exporting data from this installation.
<u>Central Email</u>	Enter the email address of the location where your clinic's data is aggregated.
<u>Clinic Email</u>	Enter the email address for your clinic.
<u>SMTP Server</u>	Enter the SMTP server name.
<u>SMTP Port</u>	Enter the port used by the SMTP server.
<u>SMTP User Name</u>	Enter the user name for the SMTP server.
<u>SMTP Password</u>	Enter the password for the SMTP server.

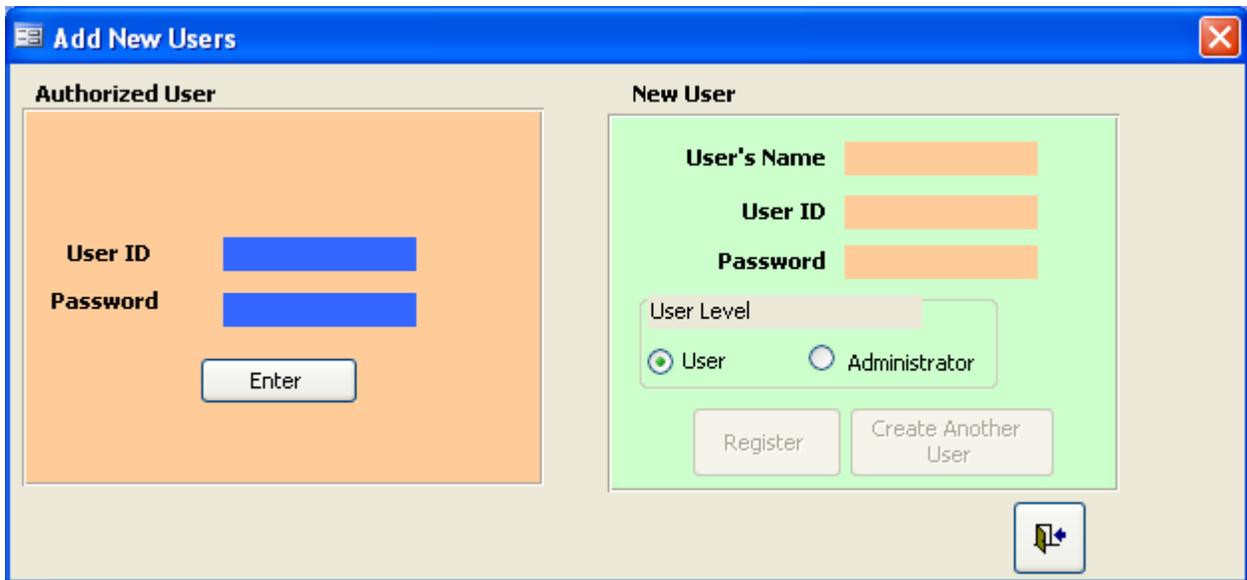
Login New User

Click this button in the Main Menu under the Configuration column when you want to log one user out of the program and log a different user into the program. For tracking purposes, it is important that the user entering data is the user who is logged into the software. This option allows changing the user without exiting the program.

Add New Users

More than one user can use the software. Users belong to two different categories: administrators and regular operators. Administrators have more authority over the software. For example, only administrators can define codes and other parameters. Only administrators can create other users. An administrator (with user ID and password) is defined when the software is installed. This password can be modified at a later time.

To create new users, you click the “Add New Users” button from the Main Menu under Configuration. The following window appears. Please note that this window has two sections. The first section (on the left-hand side) requires an administrator to authorize the creation of other users. The second section (on the right-hand side) is where the details of the new user are entered. To create a new user, perform the following steps—



- Enter your administrator user ID and password, and click on the “Enter” button in the Authorized User box. The New User box is activated.
- Enter the name of the new user, his or her User ID and Password, and the User Level, then click the “Register” button. To create another user, click the “Create Another

User” button. Please note that the default software user level is User. If this user will be an administrator, change the User Level to Administrator.

Change Password

A user can change his or her password at any time. The User ID, however, cannot be changed. It is recommended that passwords be changed every three months, or any time you think a password is no longer confidential.

If you forget your password, you will not be able to change it. In this case, you must ask the administrator to create you as a new user.

Data Preparation for Installation

Click the “Data Preparation for Installation” button under Configuration in the Main Menu. This screen gives access to several functions and program settings, as shown below.

Prepare Data for Installation

Administrator Code ***

Organization/Institution Name Sample Clinic

State/Province North

District Northwest

Erase patient information and dispensing data

Erase all stock transactions and set stock levels to zero

Erase all stock transactions AND product names

Upgrade from version 1.2 DataFiles

Archive Transactions

Before this date 10/18/2008

Regardless of any date

Send dispensing transactions to archives

Send stock transactions to archives

Send inactive patient files to archives

This function can be activated only with a code that is known by administrators (the “administrator code”). This code is used separately at each installation in a site and is not the same thing as the administrator password. When this code is entered, the grayed-out fields and buttons are activated. The fields to complete on this screen are the following—

Field	Explanation
<u>Organization/Institution Name</u>	Enter the name of the institution or any other organization that you wish to see appear on the screen or in the reports.
<u>State/Province</u>	Enter the province or region where the institution is located. The options in this list are based on the information entered in the State/Province list during configuration.
<u>District</u>	Enter the district where the institution is located. The options in this list are based on the information entered in the District list during configuration.

Erasing Data

The “Erase” buttons in the Prepare Data for Installation screen are used to erase existing data in the database. This is practical if you wish to erase the data before installation for normal use or after having used the software to practice. The action associated with each button is described below—

“Erase patient information and dispensing data”: This button erases all patient information and dispensing history.

“Erase all stock transactions and set stock levels to zero”: This button erases all stock transactions and sets available stock to zero, but it does not erase product names.

“Erase all stock transactions AND product names”: This button erases all stock information, including product names.

Importing Clinic Data

If you are using the EDT at the central level, you will need to import data from the clinics you manage. Importing this information on a regular basis will provide data to produce consolidated reports about the group of clinics that you manage. The “Import Data” button (in the Configuration menu) is available only if the “Clinic Facility” box does not have a checkmark in it. Please note that when the “Clinic Facility” box does not have a checkmark, the functionality of the software changes in both look and operation. The primary purpose shifts from data entry to viewing and reporting data. As such, the various reports and stock capture screens alter to display the data from all facilities captured in the EDT.

1. Click the “Import Data” button. The following screen will appear.

ClinicName	importdate	Date Imported
Sample Clinic		

Clinic Name: Sample Clinic Password: _____

Address: _____

Address: _____

State/Province: _____ Clinic ID: 14

District: _____

Phone: _____

Email: _____

Contact: _____

Clinic Directory: _____

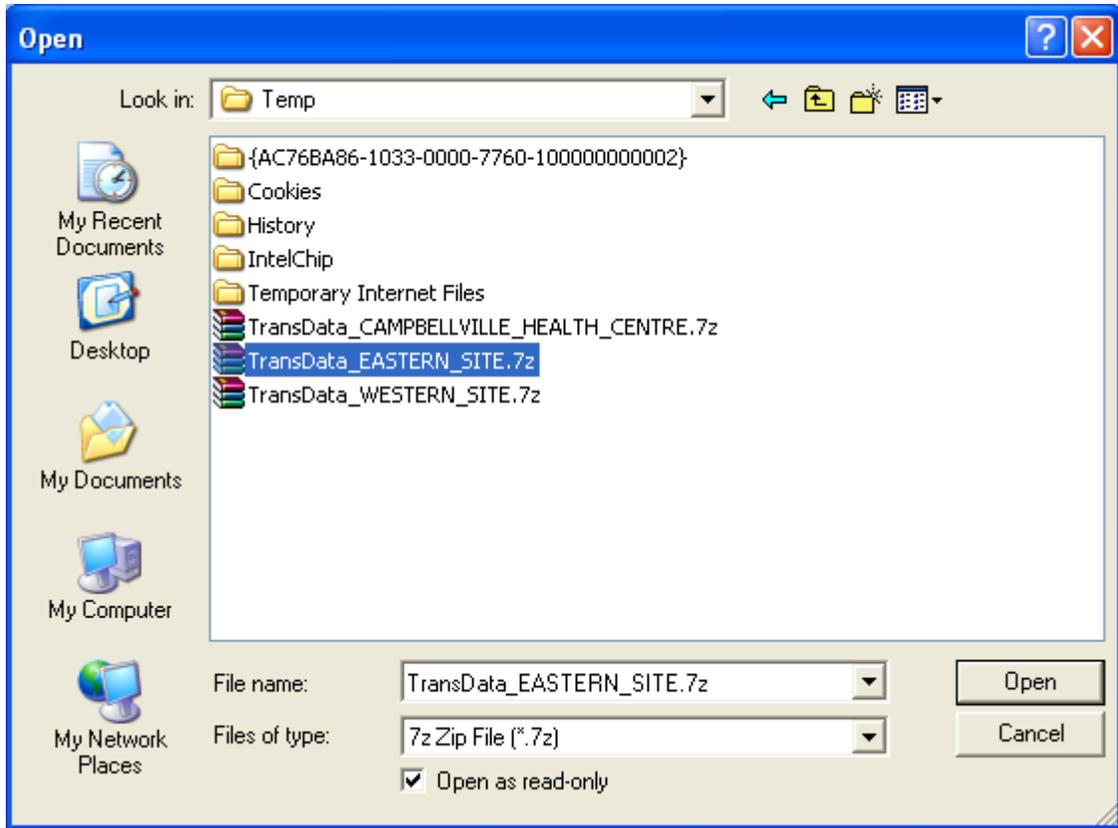
Clinic File: _____

Last Import: _____

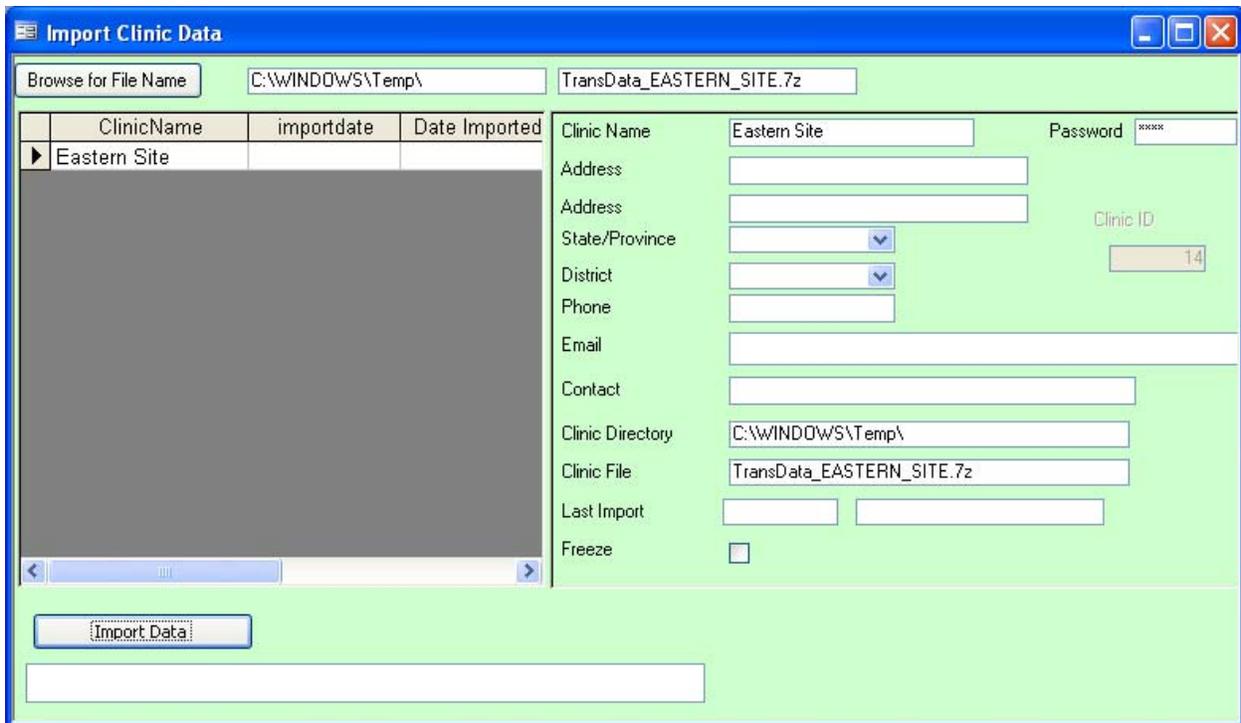
Freeze:

Import Data

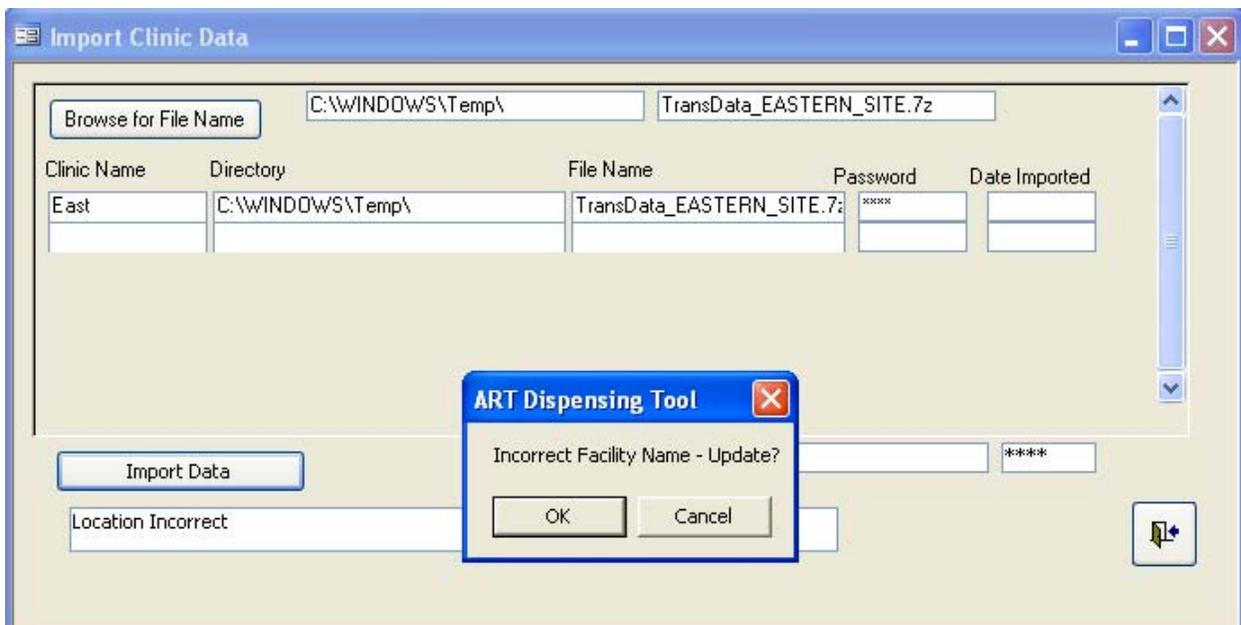
2. Enter the name of the clinic whose data file you are importing in the Clinic Name field.
3. Enter the other information about the clinic as required. Apart from the Clinic Directory, Clinic File, and Last Import fields, which are system generated, the remaining information fields (Address, State/Province, District, Phone, Email, and Contact) are optional.
4. Click the “Browse for File Name” button and select the correct clinic file. Please note that these files will have an extension of “.7z.”



5. After selecting the appropriate file, enter the correct password in the Password field. By default, the data password for each EDT is 1234. If a clinic changes a password, the change needs to be reported to the importing site or else the transaction will not complete.



6. If the name that has been entered into the Clinic Name field does not match with the clinic name contained in the file being imported, a prompt will appear. Click “OK” to update the name and continue with the process. If the “Cancel” button is clicked, the process will terminate.



7. After the data have been imported, a “Finished!” message will appear at the bottom of the screen. Repeat the process as necessary for data from other clinics.

Upgrading from Version 1.2 Data Files

1. Make a copy of the existing folder where the Electronic Dispensing Tool or the ART Dispensing Tool (if you are upgrading for the first time) is stored and save this copy in a different location on the server or C: drive.
2. Install the new version of the Electronic Dispensing Tool by following the instructions in Chapter 1.
3. Click on the “Data Preparation for Installation” button in the Main Menu under the Configuration column.
4. Enter the appropriate Administrator Code.
5. **IMPORTANT:** Enter the correct name of the facility in the Organization/Institution Name field when setting up the first time. Changing the name after the data have been imported will cause duplication errors.

Prepare Data for Installation

Administrator Code ***

Organization/Institution Name Sample Clinic

State/Province North

District Northwest

Erase patient information and dispensing data

Erase all stock transactions and set stock levels to zero

Erase all stock transactions AND product names

Upgrade from version 1.2 DataFiles

Archive Transactions

Before this date 10/18/2008

Regardless of any date

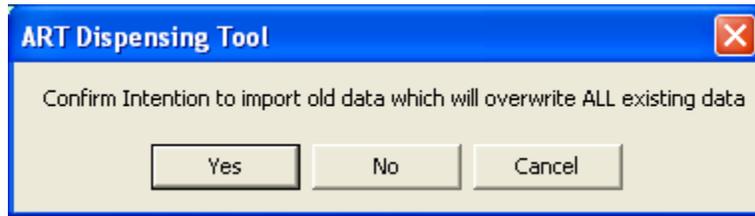
Send dispensing transactions to archives

Send stock transactions to archives

Send inactive patient files to archives

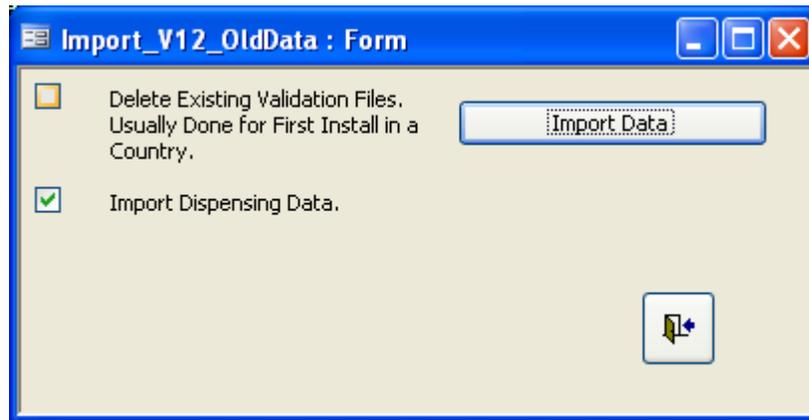
6. Click the “Upgrade from version 1.2 DataFiles” button.

7. After clicking the button, the following message box appears.



By clicking “Yes,” all data currently in the Version 1.3 database will be rewritten with the imported data from Version 1.2. Because you are upgrading, this should not be a problem.

8. The following screen should appear.



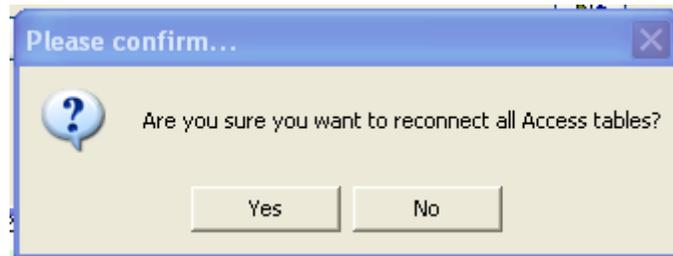
- Place a check mark in the box “Delete Existing Validation Files. Usually Done for First Install in a Country.” if you want the validation files from Version **1.2** to *replace* the validation files in Version **3.0.031**.
- Leave the “Import Dispensing Data” box **checked** to *import* the dispensing data for each patient from Version 1.2. **Uncheck** the box if you *do not* want the dispensing data from Version 1.2 to be imported.

Click the “Import Data” button to begin the process.

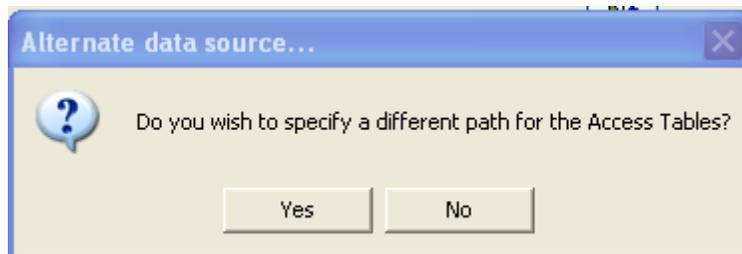
9. A message prompt will then appear, asking if you want to “Link to Old 1.2version data files.” Click “Yes.”



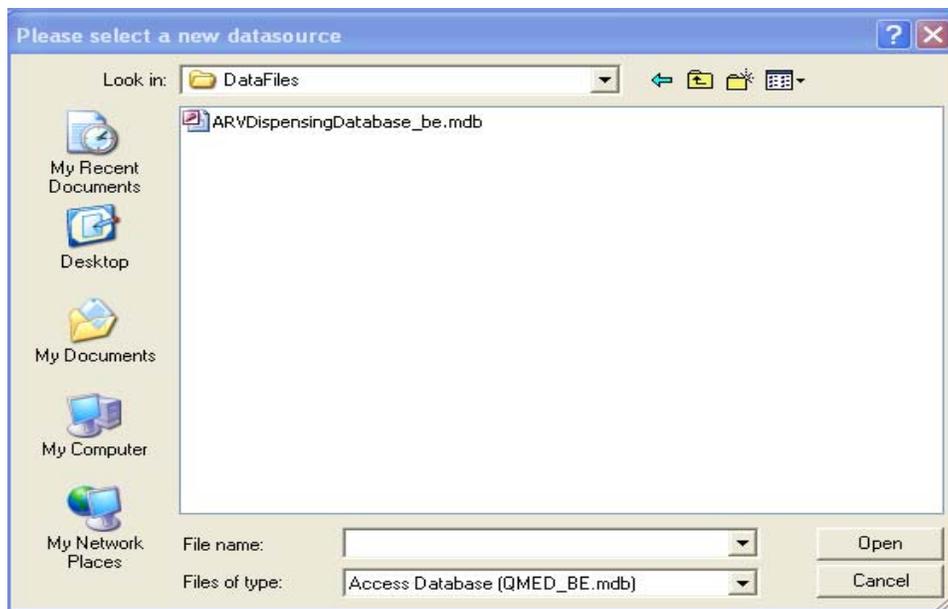
10. Another prompt will appear that says, “Are you sure you want to reconnect all Access tables?” Click “Yes.”



11. A final message box will appear asking, “Do you wish to specify a different path for the Access Tables?” Click “Yes.”



12. A Windows Explorer screen will appear and ask you to identify the location of the database file from Version 1.2. Navigate to the folder for Version 1.2 (*not* the backup you made earlier) and select the appropriate file. **NOTE: GENERALLY, THIS FILE IS FOUND BY GOING TO C:\ARVDATABASE\DATAFILES.** The file should be titled “ARVDispensingDatabase_be.mdb.” Click on the file name, then click the “Open” button.



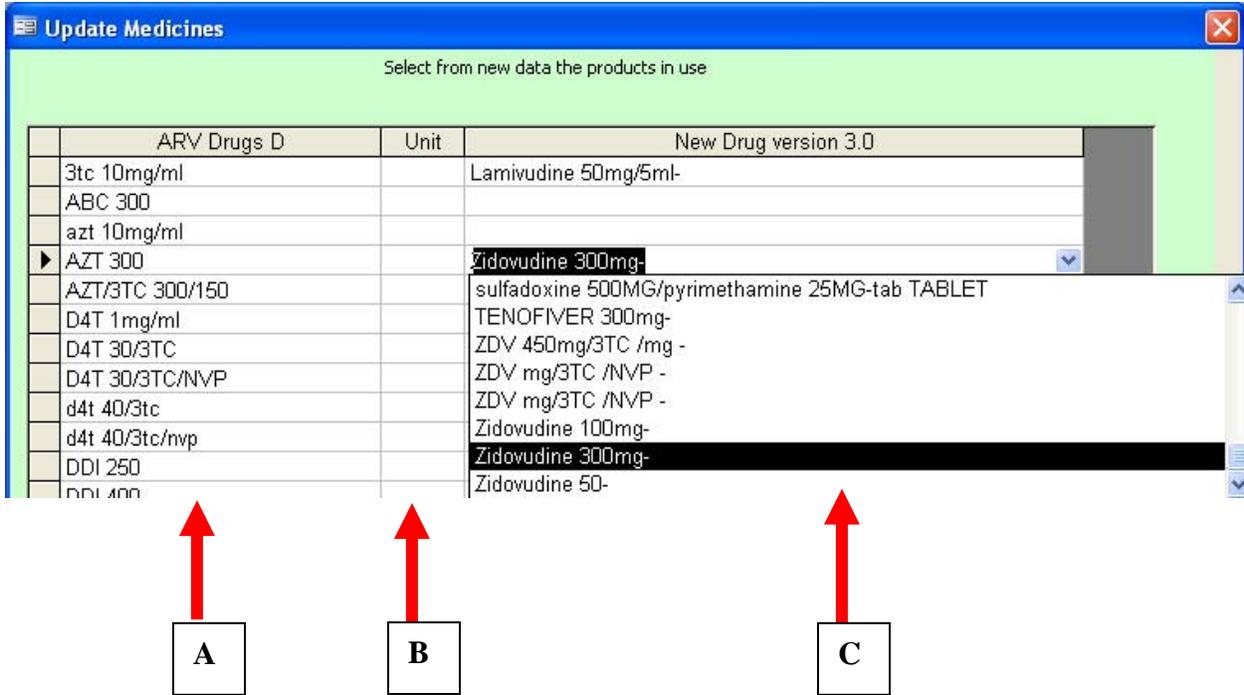
13. A message box should appear indicating success.



14. The next screens that appear are to establish equivalencies for the following validation files—

- Dose conversion
- Client support
- Regimen
- Type of visit
- Type of service
- Source of client
- Medicines
- Stock levels

This is how the old information from the previous version is connected to the new version. An example of the medicines screen is shown below.



A. This column displays the medicine names from **Version 1.2**.

B. DO NOT CHANGE THIS COLUMN.

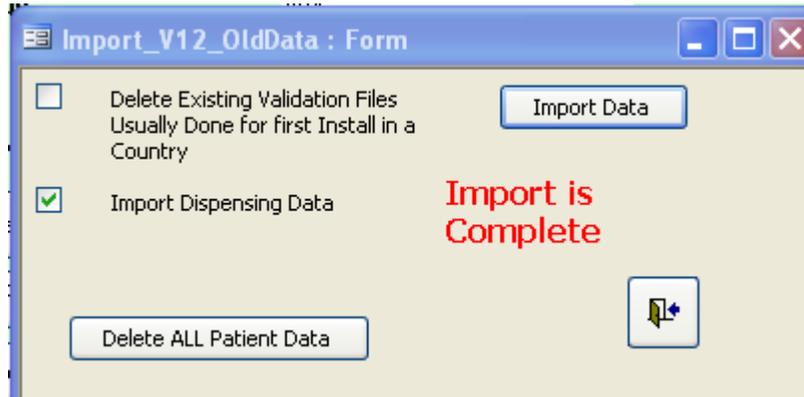
C. Each line in this column contains a drop-down list with all of the **ACTIVE** medicines in Version 3.0.031. Using this list, select the appropriate counterpart to the medicine name from Version 1.2. For example, in this screenshot, the medicine name from Version 1.2 is “AZT 300mg.” Based on the list of medicines currently in Version 3.0.031, “Zidovudine 300MG-” is the correct match.

IMPORTANT NOTES:

- If some of the medicine names are missing in the drop-down list, you can make a list of those names and add them in the Product Creation screen. You can then go through the import process a second time and, *provided that no data entry has taken place and the same file is being used each time*, the previous “pairings” will still be in place. This means that you will not have to rematch each medicine.
- If you wish to capture the dispensing data for each patient in Version 1.2, then you are strongly encouraged to identify a correct medicine name for each medicine in Column A. If any are left blank, then the associated “Drug Dispensed” record in the Dispensing module will be blank as well.
- If you wish to capture the medicines dispensed in Version 1.2 but do not want some of them to be used in Version 3.0.009, then you can create the appropriate medicine name in the

Product Creation screen and, after importing, uncheck the Active box for that product in the Product Creation screen.

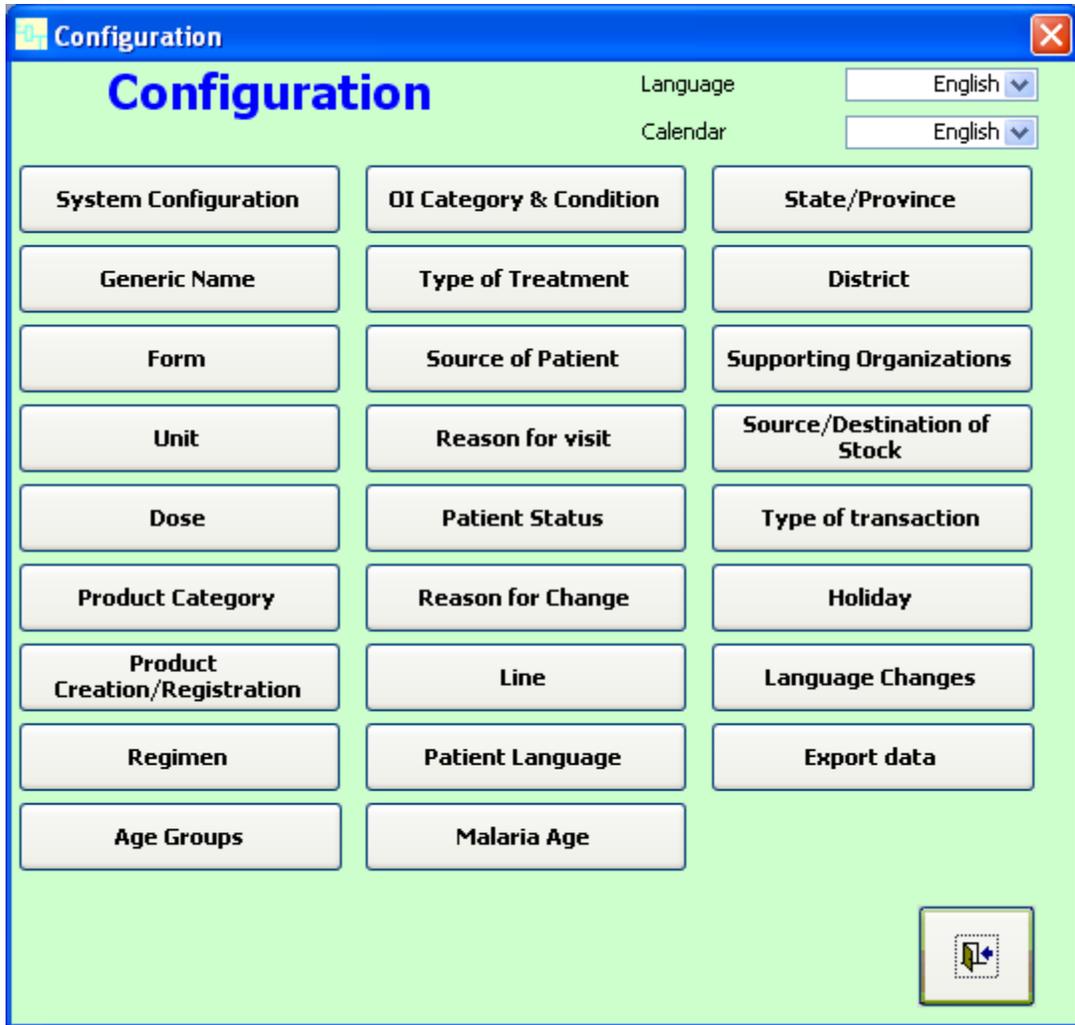
15. After matching the medicines, click the exit icon at the bottom right of the screen and a confirmation message stating the “Import is Complete” should appear. You are now done.



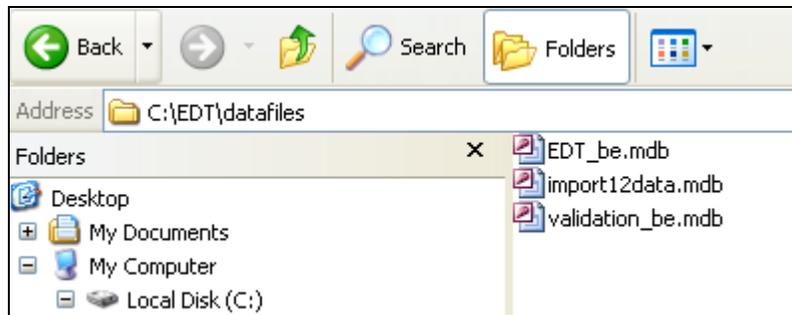
Distributing Validation Tables from a Central Location to Other Clinics Using the EDT

To get the most effective use out of the EDT in tiered settings (i.e., where there is one central site and multiple “client” sites that send information to the central location), the central location needs to regulate the validation tables in the Electronic Dispensing Tool and distribute them to the client sites. This section gives instructions on how to accomplish this.

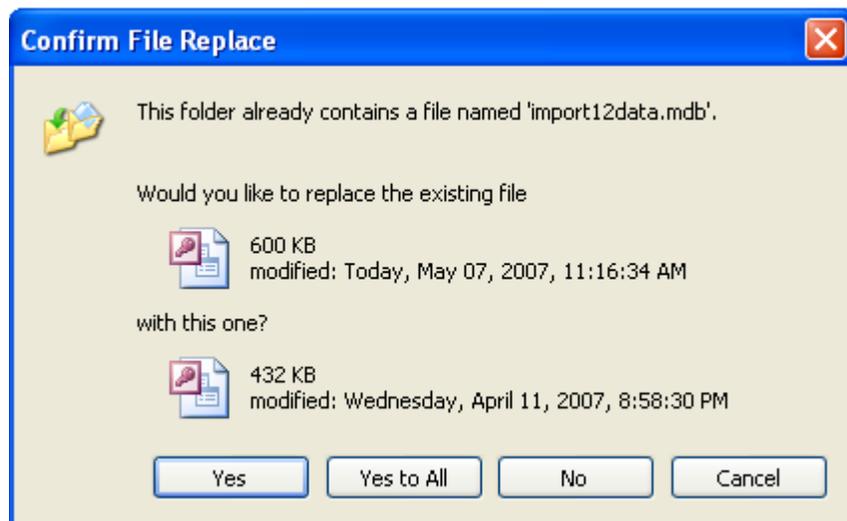
1. At the **Central** location, install the program and then edit each of the tables under the Configuration tab to include the values appropriate for your program.



2. When all of the Configuration tables have been modified, go to the folder where the EDT program is located. (During the installation process, the default location is *C:\EDT*. However, if the location was changed during the installation process, you will need to go to the new folder.)
3. In the EDT folder, open the subfolder called "datafiles."



4. As indicated in the picture above, find the two files called “import12data.mdb” and “validation_be.mdb.” Highlight both of these files and copy them. (This can be done by either by simultaneously pressing *Ctrl* and *C* on the keyboard or by right-clicking on the two highlighted files and clicking “Copy” from the menu.)
5. Put these files into a separate folder called “EDT-Central Validation Files.”
IMPORTANT: This folder should NOT be in the EDT folder—it should be completely separate.
6. When you travel to the client sites, make sure that you take (a) the EDT install file and (b) both of these validation files.
7. At the client site, install the EDT.
8. After installation, copy the two validation files from the Central location (“import12data.mdb” and “validation_be.mdb”) that you should have brought with you.
9. Go to the EDT folder on the client’s computer. Open the “datafiles” folder and paste the two files. (This can be done either by simultaneously pressing *Ctrl* and *V* on the keyboard or by right-clicking in the folder and clicking “Paste” from the menu.) **IMPORTANT: A message should appear asking if you want to replace files. Click “Yes to All.”**

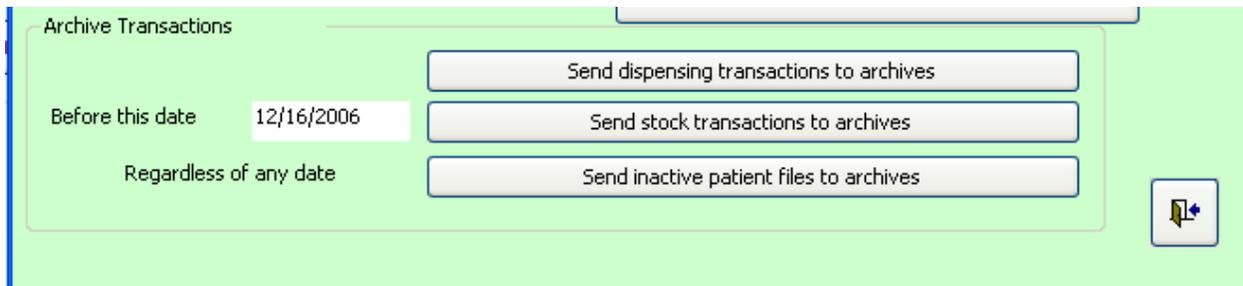


10. After the files have copied, run the EDT and, if necessary, begin the upgrade process discussed in the previous section. **IMPORTANT: When upgrading—if it is required—do NOT put a check mark in the box that says “Delete Existing Validation Files”!**

Archiving Transactions

Over time, as the number of patients in the database increases, the size of the database also increases. Theoretically, the Access program can support an unlimited number of files. However, when the number of files is too great, the program becomes slower. Because the EDT was conceived to be simple, it would not be practical to make it sophisticated by requiring too many functions. It is better to move old transactions and inactive patients to a different database and keep the active database at a level where it will have a comfortable operational status.

You can archive transactions with buttons on the Prepare Data for Installation screen. Remember, though, that archived data will not be included in reports. In the Before this date box, specify the date before which the data should be archived. Then choose one of the following buttons—



“Send dispensing transactions to archives”: This function will remove all dispensing transactions from the active database before the date entered. In this example, all dispensing done before December 16, 2006, will be removed from the active database and transferred to another database located at: *C:\EDT\Tranback\TransactionBackup.mdb*.

“Send stock transactions to archives”: This function will remove all stock transactions from the active database before the date entered. In this example, all stock transactions before December 16, 2006, will be removed and transferred to another database located at: *C:\EDT\Tranback\TransactionBackup.mdb*.

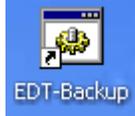
“Send inactive patient files to archives”: All inactive patient files will be transferred to another database located at: *C:\EDT\Tranback\TransactionBackup.mdb*.

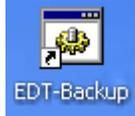
Export Data

The “Export data” button under Configuration on the Main Menu brings up the same screen that can be accessed via the “Export data” button in the Configuration screen. The button has been placed on the Main Menu for use by those users who do not have Administrator access.

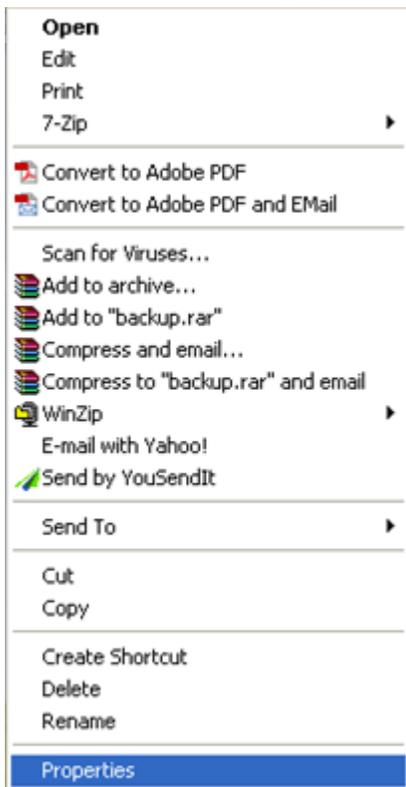
Backing Up Data

It is very important to back up your data. It is recommended that the entire file *C:\EDT* be copied to a removable disk (for example, USB drive, CD, or floppy disk). To help in this practice, the EDT comes equipped with a backup routine that is installed on the computer during installation.

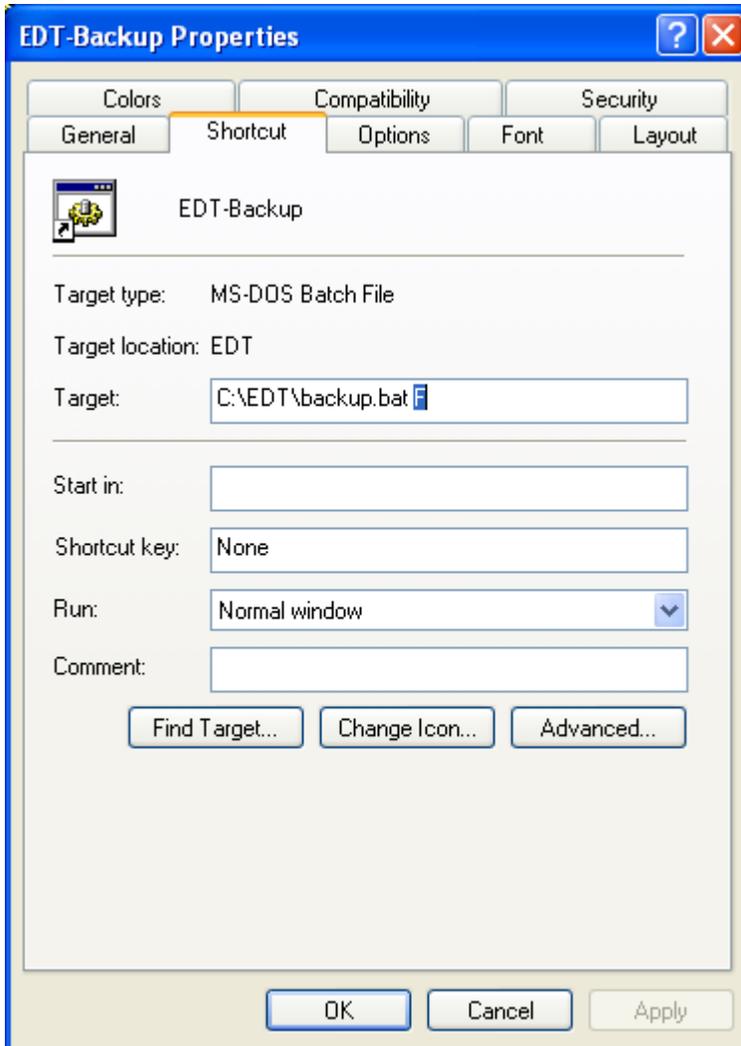


The icon  is placed on the user's desktop. To use the backup procedure, you first need to set it up.

1. Right-click on the EDT-Backup icon, and select the Properties option.



2. The following screen will open. Select the Shortcut tab. In the Target field, select the capitalized character at the end of the file path and replace it with the letter of the drive where you will be saving the backup. In the example, the character "F" has been added because it is the letter of the flash drive where the backup will be saved.



NOTE: It is good practice to save the backup to a drive that is not on the same computer as the EDT—thus, the use of a flash drive. If the backup is saved on the same computer and the computer crashes, then everything is lost and the backup is worthless.

NOTE: If different flash drives are used, or if the flash drive gets put into a different USB slot, the computer can potentially assign a new drive letter. The user therefore needs to ensure that the “EDT-Backup” icon has the correct character for the drive so that the backup is saved correctly.

3. After confirming the drive letter is correct, double-click the EDT-Backup icon. A DOS screen will appear briefly.

```

C:\Documents and Settings\aspeed\Desktop>ren F:\edt\edtdata4.7z edtdata5.7z
The system cannot find the file specified.

C:\Documents and Settings\aspeed\Desktop>ren F:\edt\edtdata3.7z edtdata4.7z
The system cannot find the file specified.

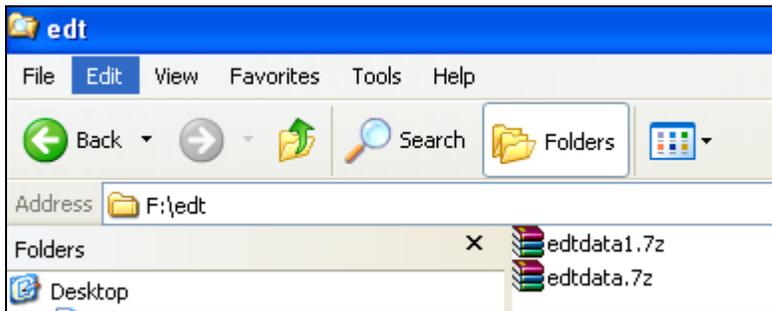
C:\Documents and Settings\aspeed\Desktop>ren F:\edt\edtdata2.7z edtdata3.7z
The system cannot find the file specified.

C:\Documents and Settings\aspeed\Desktop>ren F:\edt\edtdata1.7z edtdata2.7z
The system cannot find the file specified.

C:\Documents and Settings\aspeed\Desktop>ren F:\edt\edtdata.7z edtdata1.7z
The system cannot find the file specified.

C:\Documents and Settings\aspeed\Desktop>7z a F:\edt\edtdata c:\edt\datafiles
7-Zip 4.57 Copyright (c) 1999-2007 Igor Pavlov 2007-12-06
Scanning
Creating archive F:\edt\edtdata.7z
Compressing datafiles\SCMSConsumption.xls
Compressing datafiles\EDT_be.mdb 77%
    
```

- When the screen disappears, the backup has run and been saved to the desired location.



- As a further precautionary measure, the backup routine creates an audit trail of sorts for the backups taken. As an example, if the user runs the backup routine each day for a week and then looks at the folder where the backups are saved, the user will see up to five versions of the `edtdata.7z` file that is created as part of the backup routine. The most current one will always be named `edtdata.7z`. The second-most current is named `edtdata1.7z`, the third-most current, `edtdata2.7z`, all the way to `edtdata5.7z`. When the user has reached `edtdata5.7z`, the backup routine will automatically delete this file (the oldest one), rename the existing files (`edtdata4.7z` will be renamed `edtdata5.7z`, `edtdata3.7z` will be renamed `edtdata4.7z`, and so on), and then create `edtadata.7z` with the newest backup.

NOTE: It is also good practice to save the backup files created on a secondary flash drive to ensure that a safeguard is in place in case something happens to both the computer and the primary flash drive.

Problems?

Even though this software tool was developed with MS Access and requires a minimum amount of maintenance, malfunctions may occur as with any computer software tool. If you encounter a problem and the software cannot be used, continue to dispense medicines and record the necessary information until the problem is resolved. Use the manual forms provided for this purpose.

The computer software management department must be capable of ensuring the maintenance of software before deciding to install the EDT.

Contact your local support team or the Management Sciences for Health staff who installed the software and did your training if you need more assistance.