Clinical Case Registries

User Manual

Version 1.5

February 2006

Department of Veterans Affairs

Health Systems Design and Development

Provider Systems

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Revision History

Date	Description	Author
June 2002	Initial release of CCR Version 1.0	
February 2006	Completely updated for CCR Version 1.5	Christine Long

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Preface

The Clinical Case Registries (CCR) application supports the maintenance of local and national registries for clinical and resource tracking of care for patients with certain clinical conditions. At this time, Hepatitis C (CCR:HEPC) and Human Immunodeficiency Virus (CCR:HIV) registries are available. This application contains important demographic and clinical data on all VHA patients with these conditions, and provides many capabilities to VA facilities that provide care and treatment to patients with these conditions, including clinical categorization of patients and automatic transmission of data to the VA's National Case Registry. It also provides clinical and administrative reports for local medical center use.

CCR accesses several other **Veterans Health Information Systems and Technology Architecture (VistA)** files that contain information regarding other diagnoses, prescriptions, surgical procedures, laboratory tests, radiology exams, patient demographics, hospital admissions, and clinical visits. This access allows identified clinical staff to take advantage of the wealth of data supported through VistA.

The ***Clinical Case Registries User Manual*** provides detailed instructions for using the CCR software and graphical user interface (GUI). Throughout this document, CCR always refers to the application and its features, not the individual registries. The HIV and Hepatitis C registries are referred to as CCR:HIV and CCR:HEPC respectively: see the Appendices for registry-specific information.

Recommended Users

The CCR software is designed for use by designated Registry Coordinators, Managers, and Clinicians who are responsible for and provide care to VA patients with registry-specific conditions.

Related Manuals

Clinical Case Registries 1.5 Installation Guide

Clinical Case Registries 1.5 Release Notes

Clinical Case Registries 1.5 Technical Manual

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Introduction

The Clinical Case Registries (CCR) application collects data on the population of veterans with certain clinical conditions, namely hepatitis C and Human Immunodeficiency Virus (HIV) infection. This version of the CCR software has been significantly redesigned to provide access to the HIV Registry (CCR:HIV) and Hepatitis C Registry (CCR:HEPC) from a single interface. CCR has also been enhanced by automation of the data collection system and transformed from an administrative database into a clinically relevant tool for patient management.

Data from the registries is used for both clinical and administrative reporting on both a local and national level. Each facility can produce local reports (information related to patients seen in their system). Reports from the national database are used to monitor clinical and administrative trends, including issues related to patient safety, quality of care, and disease evolution across the national population of patients.

The registries at each facility will store selected HIV and Hepatitis C data from 1985 to the present

CCR provides these key features:

- Automates the development of a local list of patients with evidence of HIV or Hepatitis C infection.
- Automatically transmits patient data from the local registry lists to a national database.
- Provides robust reporting capabilities.

CCR also provides the following functions:

- Facilitates the tracking of patient outcomes relating to treatment.
- Identifies and tracks important trends in treatment response, adverse events, and time on therapy.
- Monitors quality of care using both process and patient outcome measures.

What's new in CCR v1.5

This version of CCR introduces a single software package to support both the Hepatitis C Case Registry and the Human Immunodeficiency Virus (HIV) Registry (also called the Immunology Case Registry (ICR)). Previously, these two registries were created and maintained through two separate software packages. The functional requirements for these registries were substantially the same, so they have been combined.

Decommissioning of Immunology Case Registry v 2.1

Patients from ICR version 2.1 were migrated to CCR:HIV during the installation of patch ROR*1*5 (March 2004). After the transitional period when the two packages were used concurrently, ICR v2.1 was removed from service by patch IMR*2.1*21 (October 2005).

Decommissioning of Hepatitis C Case Registry v 1.0

HCCR version 1.0 will be removed from service with the release of CCR v1.5. Historical patient data from the previous Hepatitis C Registry has been migrated to CCR:HepC.

Automatic Pending Case Identification

Patients with laboratory evidence or registry-related ICD-9 codes will be identified by the system and their records will be added to the registry with a status of Pending. The registry coordinator or designee will need to periodically review the list of pending patients and confirm any patients that have been verified to have a registry-related condition such as HIV or Hepatitis C.

Users will not be permitted to manually enter patients.

Patients confirmed into the registry can be completely deleted from the registry. For example, if a pending patient is determined to not actually have the condition (due to a false positive screening test result, etc), the registry coordinator will delete that patient.

The official patient registry status codes are now ‘pending’ or ‘confirmed.’ ‘Inactive’ is no longer an option.

‘Local Fields’ for customizing local registry specific data

In the CCR GUI for both the HIV and Hepatitis C registries, users with administrator keys will be able to define data collection attributes and assign names to them. These local fields will serve as manual toggles in the Patient Data Editor and as filters that can be used in the report selection panels. Titles and descriptions of local fields can be edited as free text fields without deleting all associated information.

New Report for CCR: Procedures

A new Procedures report allows users to select multiple CPT codes to produce a report that will list all patients who had the selected CPT codes in a selected date range.

Required Entry of Risk Behavior Information

(CCR:HIV only) In order to confirm “Pending” patients into the registry in CCR:HIV v1.5, you must complete the Patient History tab questions in the Patient Data Editor. If you do not know a patient’s HIV risk behaviors, you can answer “unknown” and update the answers once you obtain more information.

Obtaining Software and Documentation

The CCR software (ROR 1_5) and documentation files are available for downloading from the following Office of Information Field Offices' (OIFOs) ANONYMOUS SOFTWARE directories.

OIFO	FTP Address	Directory
Albany	ftp.fo-albany.med.va.gov	ANONYMOUS.SOFTWARE
Hines	ftp.fo-hines.med.va.gov	ANONYMOUS.SOFTWARE
Salt Lake City	ftp.fo-slc.med.va.gov	ANONYMOUS.SOFTWARE

The CCR software and accompanying guides and manuals are distributed as the following set of files:

File Name	Contents	Retrieval Format	File Size
ROR1_5.KID	KIDS build	ASCII	3,140 KB
ROR1_5GUI.ZIP	Zipped GUI distributive	BINARY	7,171 KB
ROR1_5DOC.ZIP	Zipped DOC distributive, includes both PDF and DOC formats: ► Installation Guide (ROR1_5IG) ► Release Notes (ROR1_5RN) ► Technical Manual (ROR1_5TM) ► User Manual (ROR1_5UM)	BINARY	4,280 KB

VistA Documentation on the Intranet

Documentation for this product, including all of the clinical software manuals, is available in the VistA Document Library (VDL). Access the VDL at http://www.va.gov/vdl/, then click the **Clinical Case Registries** link to locate and download the documentation.

For additional information about the CCR, access the CCR Home Page at the following address: http://vista.med.va.gov/ClinicalSpecialties/CCR/. Training links and information are also available at http://vaww.vistau.med.va.gov/vistau/ccr/ .

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About the CCR Interface

GUI Conventions

CCR uses a graphical user interface (GUI) similar to those used on Microsoft Windows® or Apple Macintosh® platforms. If you have already used programs with these screens, the CCR GUI will seem familiar to you. CCR is only implemented on the Microsoft Windows platform at this time.

If you have little or no familiarity with the Microsoft Windows GUI environment, information can be found by accessing the Microsoft Windows Help file. Additionally, brief descriptions of the GUI features used in the CCR application are provided in the following sections.

Windows

An "application window" is the area on your computer screen used by a program. If you have more than one program running at the same time, you can go from one program to another by clicking in each application window. You can also move, close, or minimize the application window to make room for another window. (See Help in Windows for further instructions on these functions.)

The CCR uses Multiple Document Interface (MDI). Several child windows can be open inside the main "parent" application window at the same time. A child window either provides access to a registry (such as CCR:HIV or CCR:HEPC) or contains a document (such as a report). You can switch between these windows using the Windows menu or keyboard shortcuts.

Pop-up Windows

These are "mini" windows that pop up within a window to provide or request information. Usually they require some action before they will disappear. Clicking on buttons with the words OK, Cancel, Exit, or something similar closes these windows.

Windows GUI Elements

The following sections describe typical Windows GUI elements.

Checkbox

A Checkbox toggles between a YES/NO, ON/OFF setting. It is usually a square box containing a check mark or **X**. Clicking the box or pressing the spacebar toggles the check box setting.

Command button

The Command button initiates an action. It is a rectangular box with a label that specifies what action will be performed when the button is clicked. Command buttons that end with three dots indicate that selecting the command may evoke a subsidiary window.

Date field

The date field is identified by "__/__/__" or a date "mm/dd/yyyy" and will usually have an associated popup calendar. The month and day components of the date must consist of two digits and the year must consist of four digits (i.e., 02/02/1996). The selected entry will not be effective until you tab off or exit from the date field.

Drop Down List

A drop-down list is displayed as a box with an arrow button on the right side. Such boxes usually display one entry at a time. Choose from a vertical list of choices that display when you click the downward arrow. Select the entry you want by clicking the list entry.

If **None** is the last entry, selecting it will clear the list entry. If **More**… is the last entry, selecting it will display additional options. The selected entry will not be effective until you tab off or exit from the drop down list.

Faded Background

Fields that appear with a faded background ("grayed out") are currently unavailable, meaning they cannot be selected.

Keyboard Commands

Keyboard commands can be used throughout the CCR application by pressing and holding the **<Alt>** key and then pressing the appropriate key to perform the command. The key to press in order to perform the command is identified by an underlined character on the screen. For example, the **Task Manager** tab can be displayed by pressing and holding the **<Alt>** key and then pressing the **<T>** key.

Keyboard keys are shown in brackets throughout this manual to differentiate them from on-screen buttons or menu options: **<Ctrl>** and **<Enter>** are on the keyboard, **Enter** is a button on screen.

List Box or Drop-Down List

The list box shows a list of items. If more items exist than can be seen in the box, a scroll bar appears on the side of the box. Click the desired entry to select it from the list.

Non-White Background

Items in fields that appear with a non-white background can be selected but cannot be modified directly in that field.

Radio button

Radio buttons, also known as Option buttons, appear in sets. Each button represents a single choice and normally only one button may be selected at any one time. For example, MALE or FEMALE may be offered as choices through two radio buttons. Click inside the button to select it.

Tab Key

Use only the **<Tab>** key or the mouse to move between fields. Do not use the **<Enter>** or **<Return>** key. The **<Enter>** or **<Return>** key is usually reserved for the default command button or action.

Text Box

Type the desired characters into the edit box. The selected entry will not be effective until you tab off or exit from the text box.

Changing (Resizing) a Window

Most windows and columns displayed in the CCR application can be resized. To change the size of a window, position the mouse pointer over the right edge of the column or the outside edge of the window, click and while holding the mouse button down, move the mouse and "drag" to change the size of the window or column. Position the mouse pointer over one corner and drag diagonally to increase the size of the entire window.

Please note that in CCR, changes to the window and column sizes are maintained in subsequent sessions.

Cancel

When used in a prompt, Cancel allows you to cancel the action about to be taken. For example, when closing an application, you may be prompted to validate the action to close. If you click the Cancel button, the application will not close and you will resume from the point at which the close action was initiated.

Close

This command closes the active window. CCR uses a window-within-a-window display. The main application window is the Clinical Case Registries (CCR) window, and the CCR:HEPC or CCR:HIV window is displayed in the child window.

Close the active registry window by selecting **Close** from the **File** menu, by pressing and holding the **<Ctrl>** key and then pressing **<F4>**, or by clicking on the **X** in upper right corner of the child window.

Close and exit the CCR application by selecting **Exit** from the **File** menu, by pressing and holding the **<Alt>** key and then pressing the **<F4>** key, or by clicking on the **X** in the upper right corner of the main application window.

Edit

This command is used to edit information.

Find

This command is used to find an entry. Enter the search string and click **OK.**

Help

Provides help for the area in which you are currently working.

OK

Confirms the input and initiates the action defined by the window.

Save

Saves all changes made since the last save action. If you attempt to save and all required fields have not yet been completed, you will receive notification that the required fields must be completed before saving.

Save As

This command is used to export to a file a report produced in CCR. With the report open, clicking on the **Save As…** menu option will produce a window labeled "Save the report as" in which you will indicate the file location where you wish to store the report. You will need to name the file and choose the format in which it will be saved.

Search

After at least one character is typed in a lookup dialog box, clicking the **Search** button will bring up matching entries.

Selecting Multiple Items from a List

A variety of lists are displayed throughout the CCR application from which you can select one or more items.

To select all items in a range between two separate entries, hold the **<Shift>** key and click on the first item in the range, then click the last item in the range. All of the items between the first and last will be highlighted.

To select multiple separate entries from a list, hold the **<Ctrl>** key and click each of the items you want to select.

Undo

Undoes all changes made since the last save action and redisplays the original data.

Right-Click Menus

Most Windows-based applications provide some sort of menu when you click the right mouse button over a GUI element. Depending upon which CCR window is open, the following right-click menu options will be available:

Window	Right-Click Menu Options
Task Manager tab	New Report
	Open Report
	View Report
	Delete
	Refresh
Registry tab	CDC… *(in CCR:HIV only)*
	Confirm/Edit…
	Delete
Reports window	Back
	Forward
	Cancel
	Copy
	Select All
	Text Size
	Find…

Pop-up Calendars

Pop-up calendars are used throughout the CCR application. The default date display is usually the current date. The default date is highlighted with a red circle at the bottom of the calendar. You can select or change the date displayed on the calendar using the methods described in the following table:

Change the…	Description
Day	Click the actual day of the week in the calendar.
Month	Click on the month at the top of the calendar to display a list of all months and select one. You can decrease or increase one month at a time by clicking the left and right arrow buttons.
Year	Click on the year and an up and down arrow button displays for you to increase or decrease the year.

System Time Out

After you connect to the database, the application extracts the timeout value assigned to you and applies it as the application timeout value. If no value is assigned, the default value of 60 minutes will be used.

If there is no keyboard or mouse activity during the timeout period, the Last Chance message window displays for 15 seconds. If there is still no activity within 15 seconds, the application automatically closes.

Security Keys

To access CCR, you must be assigned at least one of the following security keys:

- ROR VA HIV USER or ROR VA HIV ADMIN
- ROR VA HEPC USER or ROR VA HEPC ADMIN
- ROR VA IRM

Users with the ROR VA HIV/HEPC USER key will be displayed on the **Show Registry Users** window as "User." Users with this security key will be able to run reports.

Users with the ROR VA HIV/HEPC ADMIN key will be displayed on the **Show Registry Users** window as "Administrator." Users with this security key will have full GUI access that will enable them to run reports, create local fields, and edit, confirm and delete patient records.

Users with the ROR VA IRM key will be displayed on the **Show Registry Users** window as "IRM." Users with this security key will have access to all CCR files in VistA but no access to the GUI. This key should be assigned to the IRM personnel authorized to maintain and troubleshoot the CCR package.

If any unauthorized users access this system, a VA alert will be sent to persons identified to receive registry notifications stating the date and time of the violation, the name of the user who attempted to access the system, and a record of the access violation will be written to the Access Violations folder of the Technical Log.

Local Registry Population and Update

Initial Data Load

Initial creation of the CCR patient lists are based on the patient lists in the CCR:ICR and in the Hepatitis C Case Registry.

Population of the Local Registry

This method of populating the local registry will occur during each of the automatic nightly updates.

The CCR application searches inpatient files, outpatient files, and the problem list to identify patients with registry-specific ICD-9 codes, and searches the laboratory files for positive registry-specific antibody test results. These ICD-9 codes and antibody tests are defined for each registry. As CCR recognizes the earliest instance of data that indicates a positive result, it adds the patient to the registry with a status of **Pending**. These pending patients must be reviewed locally, and either confirmed as having the registry-specific condition, or deleted from the registry.

If review of a pending patient indicates that the patient is not truly infected – for example, the coding was done in error – the patient should be deleted from the registry. After this action is taken for a patient, the software will not again select the same patient based on the same data. If there are multiple instances of erroneous coding for the same patient, the system will recognize the subsequent instance of such coding and again add the patient to the registry as a pending patient. Local facilities should take appropriate action to correct any miscoding identified in the record.

In the event that a patient is confirmed in the registry and later information reveals that the patient is not positive for the monitored condition, that patient should be deleted from the registry.

Deceased Check

A check of the Patient file will be performed for each patient in the local registry to validate whether or not the patient is deceased. If a registry coordinator becomes aware of a patient death that is not reflected in the record, he or she should contact the appropriate MAS or Decedent Affairs staff to have the death recorded in the system.

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Working with a Clinical Case Registry

Access to the HIV and HepC registries is obtained through the Clinical Case Registries package. You must first sign on to the CCR to open either of these registries.

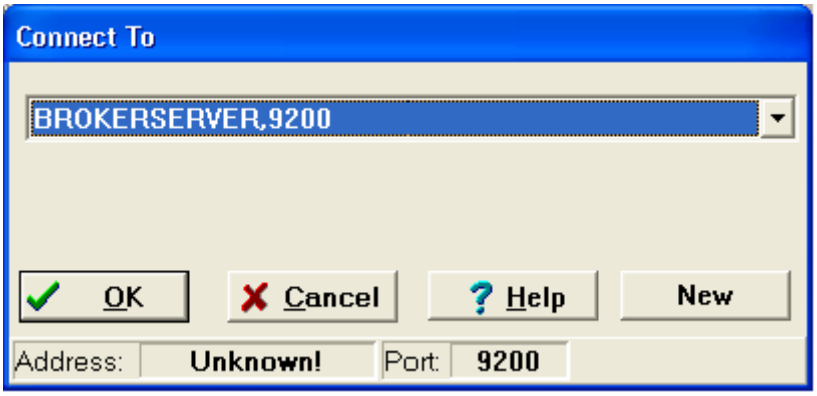
Signing on to the CCR application

You can sign onto CCR after the application has been added to your CPRS Tools menu or installed on your workstation and you have been assigned a security key by your local Automated Data Processing Application Coordinator (ADPAC) or Information Security Officer (ISO).

To start the CCR application, follow these steps:

1. Select **CCR** from your Tools menu within CPRS, or double-click the **CCR** icon on your desktop.

   The **Connect To** window displays:



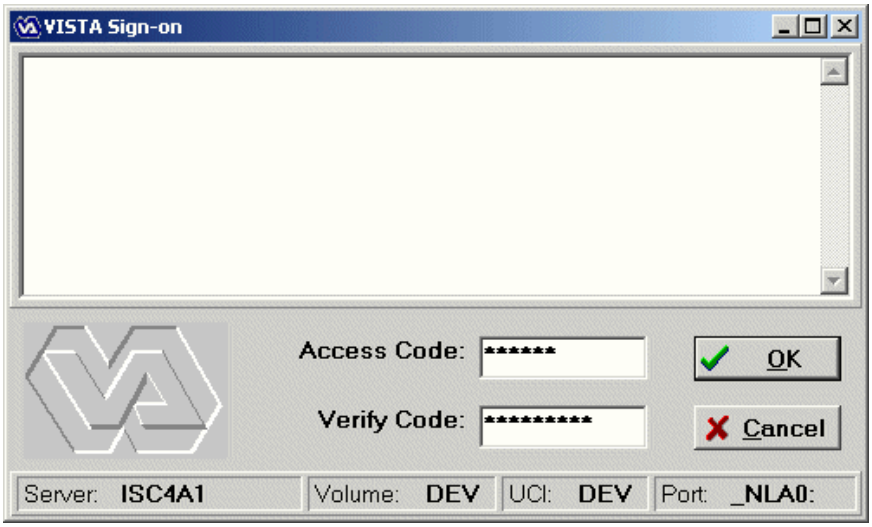
   If you are launching CCR from CPRS Tools, the correct account information will automatically appear. If you are launching CCR from a desktop icon, you may need to ask your IRM support person for the account information to enter.

   Note: The **Connect To** window appears only if the site has multiple servers; otherwise the VistA **Sign-on** window automatically displays as shown in step 2.

2. Click **OK**.

   After connecting to the appropriate account, the **VistA Sign-on** window open.

   Note: If are launching CCR from CPRS Tools and your workstation is configured for CCOW and Single Sign-On, the VistA Sign-on window will not open at this point. You will be automatically signed in to CCR using your CPRS access code and verify code.

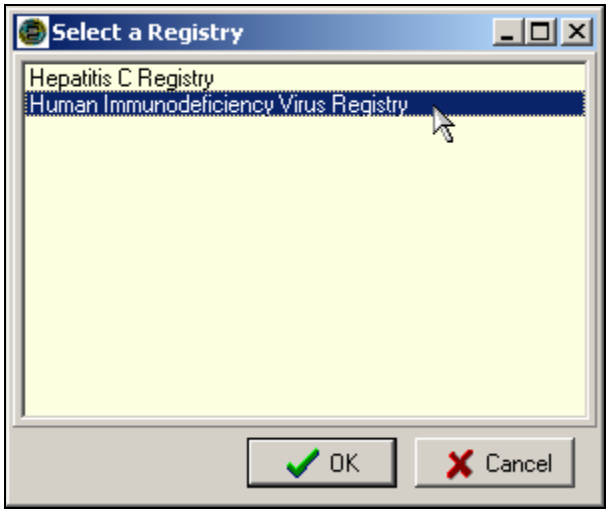


3. Type your CPRS access code into the **Access Code** field and press **<Tab>**.

4. Type your CPRS verify code into the **Verify Code** field and press **<Enter>** or click **OK**. The **Select a Registry** window opens.

   Note: You can also type the access code followed by a semicolon <;>and then the verify code in the **Access Code** box. After you have done this, press **<Enter>** or click **OK**.

5. Click a registry name to select it, then click **OK**.



The selected registry opens in the main CCR window. If you have access to only one registry, it will open automatically.

Registry Window Menus

The Registry Window Menus are displayed in the gray bar near the top of the window. The menus are **File**, **Registry**, **Reports**, **Window**, and **Help**. When you click one of these, a list of menu options is displayed.

File Menu

The **File** Menu displays the following menu options:

- **Open Registry**
- **Save As…**
- **Close**
- **Close All**
- **Page Setup**
- **Print Preview…**
- **Print…**
- **Preferences**
- **Rejoin Clinical Context**
- **Break the Clinical Link**
- **Exit**

Open Registry menu option

The **Open Registry** menu option is used to open a CCR session.

More than one CCR session can be opened at the same time. The registry displayed is named in the blue bar located at the top of the window. To view the number and type of all open sessions, or to select another open session to view, go to the Window menu.

Save As menu option

The **Save As** menu option on an active report window opens a window used to export reports produced in CCR. This menu option will be unavailable ("grayed out") when the active window is not a report.

Close and Close All menu options

The **Close** menu option closes only the active window that is displayed. The **Close All** menu option closes all child windows listed in the Window menu.

Page Setup, Print Preview, and Print menu options

These options are available only when a report is selected as the active window.

The **Page Setup** menu option launches the Page Setup window from which you can set margins, paper source, paper size, page orientation, and other layout options.

The **Print Preview** menu option will show how the file will appear when you print it.

The **Print** menu option opens the Print window from which you can print the active document and select printing options.

These three menu options are normally used to format and print reports from the registry data. They will be unavailable ("grayed out") when the active window is not a report.

Preferences menu option

The **Preferences** menu option allows you to customize general and appearance-related settings that affect the CCR window and its behavior.

Rejoin Clinical Context menu option

This menu option enables you to participate in a CCOW Clinical Context and synchronize your CCR clinical data with other CCOW-compliant applications. For example, when CCR and CPRS are both open and are sharing a context, if you change to a different patient in one application, the other application will change to that patient as well.

By default, the CCOW link is automatically active.

Break the Clinical Link menu option

This menu option enables you to discontinue a CCOW Clinical Context link, allowing you to work on two different patients when multiple CCOW-compliant applications are open. For example, if CCR and CPRS are both open and you would like to open a different patient file in each application, select **Break the Clinical Link** to un-synchronize the clinical data.

Exit menu option

The **Exit** menu option is used to close the CCR application and all open sessions. You will be prompted to confirm this selection.

Registry Menu

Clicking on **Registry** automatically takes you to the Registry tab and displays the following menu options:

- **Confirm/Edit…**
- **CDC** (CCR:HIV only)
- **Show Registry Users…**
- **Edit Site Parameters…**

Confirm/Edit menu option

This menu option will appear as **Confirm** or **Edit** depending on which patient is selected. If you select a patient with a status of Pending, the **Confirm** menu option will allow you to open the patient record and verify that the patient does or does not belong in the registry. If you select a patient who has already been confirmed in the registry, the **Edit** menu option allows you to update the patient's record.

CDC menu option (CCR:HIV only)

Clicking this option opens a window designed according to the CDC case report form. Select information already in the system (demographic data, lab tests) is automatically inserted into the form. For information on the CDC form, see page 48.

Show Registry Users menu option

This menu option displays the **Users of the Registry** window. From this window, you can view the names of CCR users, their Internal Entry Number (IEN), and the type(s) of user access granted to each user.

CCR users can be granted one or more of the following types of access:

- **User** – can generate reports but not enter/ edit patient data
- **Admin** – can enter/edit patient data or registry parameters and generate reports
- **IRM** – can install, remove or change programming

The type of access that is granted to a user is controlled by the assignment of Security Keys. For more information about security keys, see page 12.

Edit Site Parameters menu option

This menu option displays the **Site Parameters** window. From this window, you can add or remove values that define the system profile for each registry at the local facility. You will not be able to edit any of the national CCR values.

Use the following four tabs to set your local Site Parameters:

- Lab Tests
- Registry Meds
- Notifications
- Local Fields

Lab Tests tab

From this tab, you can indicate which local lab tests (orderable items), from the Lab Test file (60), are used for reporting registry-specific results. These values are used for reports throughout the CCR.

If a facility has used numerous local names to refer to these tests over the years, then all of these test names should be selected, including those that have been "Z'd out" (a lab test that is no longer in use and has one or more "Z" characters appended to the beginning of the test name). **This is especially important at merged facilities**. Registry coordinators should confer with their clinical staff and Lab ADPAC to assure that all variations of test names are entered.

Registry Meds tab

From this tab, you can view two lists of medications used in the active registry: Local Registry Medications, and Generic Registry Medications.

- The Local Registry Medications list identifies registry-related drugs and dosages used at the facility but not already included in the National Registry Medication list. This list appears in the upper right pane and can be modified by local registry coordinators. In general there will be no or very few medications that are not already included in the National Registry Medication list.

- The Generic Registry Medications list contains all generic medications relevant to the registry that have been approved by the FDA as of November 30, 2005. The VA generic name is used because it includes all formulations and strengths of the drug. Local names for these medications are not displayed in this list. The Generic Registry Medications list appears in the lower right pane, and cannot be modified locally. As new medications receive FDA approval and are placed on the VA formulary, the National Registry Medications list in file #798.1 will be updated.

In most cases, the local coordinator will not need to add to this list. An exception might be when a new medication (not just a different dosage form, but a new medication altogether) to treat the registry specific condition is FDA approved. It can take some time for the VA Generic name to be set up in the local system, and patients may receive the new medication prior to the VA Generic name being set up. In this situation the local dispensing pharmacy creates a local drug name for the new drug, which the coordinator can add to the Local Registry Medications list. When the VA Generic name is installed in the system, the local Pharmacy ADPAC links any previously created local drug names to the new VA Generic name.

Notifications tab

From this tab, you can add to or remove from the list of people who have been identified as registry coordinators or who have been selected to receive notifications. These users will receive alerts generated

by the CCR system when a registry error occurs, such as a problem in the transmission of data or attempted access by an unauthorized user. Notifications are typically sent to the IRM support person and the registry coordinator.

Local Fields tab

From this tab, you can create and define fields to track pertinent aspects of care for your local environment. For example, you can set up fields in the Hepatitis C registry to document sustained viral response and another to note that a patient refused a liver biopsy. These fields can be applied to a patient through the Patient Data Editor screen. Local fields are available to all users of the registry and are registry specific – if you create a field in CCR: HepC, it will not appear in CCR: HIV.

Reports Menu

The **Reports** menu displays the list of reports that are available to you, and a **Report List** option. When you select a report from the list, a secondary **Registry Reports** window displays the specific parameters and criteria that you can select to generate the report.

Report List menu option

The **Report List** option provides you with an alternate method of generating reports.

When you select this option, a secondary **Registry Reports** window displays two panes. The left pane, under the heading **Report List**, displays an alphabetical list of the reports that are available to you. From this **Report List**, you can select the report to generate. The selected report is identified with an arrow. The right pane displays the specific parameters and criteria that you can select to generate the report.

Window Menu

Each session of the registry and each report selected for display will appear in its own window within the larger CCR window. You can choose to display these windows in several ways using the **Window** menu to select the following menu options:

- The **Cascade** menu option allows you to cascade the view of all open windows.
- The **Tile** menu options – **Tile Horizontally** and **Tile Vertically** – allow you to view the windows in these display modes.
- The **Minimize All** menu option places the open windows in the minimized mode, meaning that the window is not open and cannot be viewed, but the title of the window is displayed in the bottom part of the CCR window.
- The **Arrange All** menu option arranges the icons of minimized child windows in the bottom part of the CCR main window.

In the area below the **Arrange All** menu option, you can view the number of open windows, including registry windows and any reports that are being viewed. The open windows are listed numerically in the order in which they were opened. The current active window is identified with a checkmark. To activate another window, click the desired window on the menu.

Help Menu

The **Help** menu displays the following three menu options:

- **Help Topics**
- **Registry Info**
- **CCOW Status**
- **About…**

Help Topics menu option

The **CCR Online Help** file is launched from the **Help Topics** menu option, or by pressing **<F1>**. It includes instructions, procedures, and other information to help you use the CCR application.

Registry Info menu option

The **Registry Information** window is launched from the **Registry Info** menu option. It displays basic information about the active registry including the following items:

- Date of the last registry update (the date any changes were made to your local registry list)
- Date of the last data extraction
- Number of active and pending patients in the registry during the last update
- Server version, latest patch number, and the patch installation date

CCOW menu option

CCOW, or Clinical Context Management, allows VistA applications to synchronize their clinical context based on the HL 7 CCOW standard. In simple terms, this means that if CCOW-compliant applications are sharing context and one of the applications changes to a different patient, the other applications will change to that patient as well.

The **CCOW Status** window is launched from the **CCOW** menu option. It displays information about whether or not the Contextor software has been installed, and whether the application is participating in a clinical context.

For more information about the CCOW standards for VistA applications, see the Workgroup web site at: http://vaww.vista.med.va.gov/ccow/ .

About menu option

This menu option launches the **About Clinical Case Registries** window. It displays basic information about the current file version including the release date, patch number, and where the Clinical Case Registries software was developed.

Setting Up Site-Specific Parameters

Each medical center or site that uses CCR can set the following parameters:

- **Lab Tests**
- **Registry Medications**
- **Notifications**
- **Local Fields**
- **Preferences (Default Settings)**

Adding Lab Tests

Use the **Lab Tests** tab on the **Site Parameters** window to indicate which local lab tests (local test names) should be used to report HIV or HepC-specific results. Note: these parameters must be set up in order for the Registry Lab Tests By Range report to work properly.

1. From the **Registry** menu, select **Edit Site Parameters**, then click the **Lab Tests** tab.

2. On the right pane, select a lab test category by clicking its tab.

   CCR:HIV tabs include CD4 count, CD4 %, HIV Viral Load, HIV Ab and HIV Western blot.

   CCR:HEPC tabs include HepC Ab, HepC RIBA, HepC Qual, HepC Quant, and HepC Genotype.

3. On the left pane, type a partial or full name of the test you want to add in the **Target** field, then press <**Enter**> or click the **Start Search** button (magnifying glass icon).

   The left-side pane displays the test(s) that match the criteria in the **Target** field.

4. Select the test(s) from the left-side pane that you want to add to the tab you have selected in the right-side pane, then click the right arrow to transfer the selected test(s) to the right-side pane. You can add all tests on the left-side pane by clicking the double right arrow.

   Note: If a facility has used numerous local names to refer to these tests over the years, then all of these test names should be selected, including those that have been "Z'd out" (a lab test that is no longer in use and has one or more "Z" characters appended to the beginning of the test name). **This is especially important at merged facilities**. Registry coordinators should confer with their clinical staff and Lab ADPAC to assure that all variations of test names are entered.

5. Click the **Save** button to save any changes, or click **Cancel** to close without saving.

   Note: You will be prompted to save or cancel your changes if you attempt to close the window without first clicking the **Save** button.

Removing Laboratory Tests

Use the **Lab Tests** tab on the **Site Parameters** window to remove local lab tests (local test names) from the report categories used to report HIV and HepC-specific information .

1. From the **Registry** menu, select **Edit Site Parameters** then click the **Lab Tests** tab. The right-side pane displays a list of the laboratory tests that have been added to each report category type.

2. On the right pane, select a lab test category by clicking its tab. A list of the tests associated with the selected category displays in the right side pane.

3. Select the test(s) from the right side pane that you want to remove, then click the left arrow to delete the selected test(s) from the right side pane.

4. Click the **Save** button to save any changes, or click **Cancel** to close without saving. **Note:** You will be prompted to save or cancel your changes if you attempt to close the window without first clicking the **Save** button.

Adding Registry Medications

Use the **Registry Meds** tab on the **Site Parameters** window to identify medications and dosages used at the facility that are not included in the Generic Registry Medications list. The medications included in the Generic Registry Medications are listed in the lower right pane.

Registry medications are used to treat the condition being tracked and not complications of the disease or its treatment. For example, the HIV registry tracks antiretrovirals but not PCP prophylaxis drugs; in HepC, Peginterferon and ribavirin are tracked but not epoetin.

In most cases, the local coordinator will not need to add to this list. An exception might be when a new medication (not just a different dosage form, but a new medication altogether) to treat the registry specific condition is FDA approved. It can take some time for the VA Generic name to be set up in the local system, and patients may receive the new medication prior to the VA Generic name being set up. In this situation the local dispensing pharmacy creates a local drug name for the new drug, which the coordinator can add to the Local Registry Medications list. When the VA Generic name is installed in the system, the local Pharmacy ADPAC links any previously created local drug names to the new VA Generic name.

1. From the **Registry** menu, select **Edit Site Parameters**, then click the **Registry Meds** tab.

2. At the top of the left-side pane, type a partial or full name of the drug you want to add in the **Target** field, then press <**Enter**> or click the **Start Search** button (magnifying glass icon).

   The left-side pane displays the drugs that match the criteria in the **Target** field. **Note:** The system will search for drugs whose names *begins* with the letters typed in the target field, not based upon whether the string of characters is contained within a word.

3. Select the drug(s) you want to add from the left-side pane, then click the right arrow or double-click the name to transfer the selected drug(s) to the upper right-side pane. Add all drugs on the left-side pane by clicking the double right arrows.

4. Click the **Save** button to save any changes, or click **Cancel** to close without saving.

Note: You will be prompted to save or cancel your changes if you attempt to close the window without first clicking the **Save** button.

Removing Registry Medications

It is generally **not necessary** to remove a mediation form this list unless it was somehow entered in error. Even if a medication used historically becomes outdated and no longer used, it should remain on the list, because removing it would mean the software would omit past instances in which it was used to treat the registry condition. You can remove local names for registry medications from the **Registry Meds** tab on the **Site Parameters** window.

1. From the **Registry** menu, select **Edit Site Parameters**, then click the **Registry Meds** tab.

   The upper right-side pane displays a list of the medications identified as being used locally at the facility, in addition to the generic medications listed in the lower right-side pane.

2. From the upper right-side pane, select the drug(s) to remove, then click the left arrow to delete the drug(s) from the list.

3. Click the **Save** button to save any changes, or click **Cancel** to close without saving.

   Note: You will be prompted to save or cancel your changes if you attempt to close the window without first clicking the **Save** button.

Adding Notifications

Certain users such as IRM staff and Registry Coordinators can receive system-generated notifications and alerts when problems occur with the registry, such as a problem in the transmission of data or attempted access by an unauthorized user. Use this procedure to assign these alerts through the **Registry** menu.

1. From the **Registry** menu, select **Edit Site Parameters**, then click the **Notifications** tab.

2. Enter a partial or full surname of the user you want to add in the **Target** field at the top of the left hand pane, then press <**Enter**> or click the **Start Search** button (magnifying glass icon).

   The left-side pane displays a list of users matching the criteria in the **Target** field.

   Note: Clicking the **Start Search** button when the **Target** field is empty will return all selectable user names in the left-side pane. This is the entire list of all people with VistA access and would likely take several minutes to process, often exceeding the system timeout parameter. There are few if any times when this option would be used.

3. From the left-side pane, select the name of the user(s) to add, then click the right arrow or double-click the name to transfer it to the right-side pane. Add all users on the left-side pane by clicking the double right arrow.

4. Click the **Save** button to save any changes, or click **Cancel** to close without saving.

   Note: You will be prompted to save or cancel your changes if you attempt to close the window without first clicking the **Save** button.

Removing Notifications

Users who are removed from the Notifications list will no longer receive system-generated alerts when problems occur. However, removing a name from the Notifications list does NOT remove that person's access to the registry.

Notifications are managed through the **Notifications** tab on the **Site Parameters** window.

1. From the **Registry** menu, select **Edit Site Parameters**, then click the **Notifications** tab.

   The right-side pane displays a list of users who are currently set to receive notifications.

2. From the right-side pane, select the name of the user(s) to remove, then click the left arrow to delete the name of the user from the list.

3. Click the **Save** button to save any changes, or click **Cancel** to close without saving.

   Note: You will be prompted to save or cancel your changes if you attempt to close the window without first clicking the **Save** button.

Adding Local Fields

Local Fields can be used to track pertinent aspects of care in your local environment. For example, you can add fields to track which patients attended an educational group session, or track a particular test result. These will be available to all users of the registry and are registry specific – if you create a field in CCR:HepC, it will not appear in CCR:HIV.

1. From the **Registry** menu, select **Edit Site Parameters**, then click the **Local Fields** tab.

   The Local Fields window contains the list of pre-defined local fields. If no local fields have been defined, the window will be empty.

2. Click the **Add** button. A blank entry row appears in the list.

3. Click the **Name** field and enter a brief label that reflects what the field means. This label will appear in the Patient Data Editor window, so it needs to be clear what the field indicates.

4. Click the **Description** field and enter a concise description for the new field.

5. Click **Apply** to save the new field and continue to work with local fields, or click **Save** to save the new field and close the window. Click **Cancel** to close without saving.

To verify that your newly created field is operational, open a patient record in the Patient Data Editor (see instructions for confirming registry patients) and click on the **Local Fields** tab. The newly-created field will be available there.

Inactivating or Deleting Local Fields

If a Local Field is no longer needed, you can inactivate it or delete it. **In most cases it is preferable to inactivate rather than delete a local field.** Inactivated local fields remain on this list but no longer

appear elsewhere in the registry, such as in the Patient Data Editor window or as choices when running reports. Inactivated fields can be reactivated for use at a later date. Deleted local fields are removed from the system entirely and **cannot** be restored.

1. From the **Registry** menu, select **Edit Site Parameters**, then click the **Local Fields** tab.

   The Local Fields window opens, containing the list of existing local fields.

2. Click a field to select it, then click the **Delete** button. A confirmation dialog box opens:

   - Click **Yes** to delete the field and remove all of its related values from patient records
   - Click **No** to inactivate the field and leave the related values in patient records. "Inactivated" fields will not appear in the Patient Data Editor window or in reports.
   - Click **Cancel** to leave the selected field as it is.

Reactivating Local Fields

If a Local Field has been inactivated, you can reactivate or "restore" it. (Deleted fields cannot be restored.)

1. From the **Registry** menu, select **Edit Site Parameters**, then click the **Local Fields** tab.

   The Local Fields window opens, containing a list of existing local fields. An inactivated local field has a date in the **Inactivated** column.

2. Click an inactivated local field to select it, then click the **Restore** button.

   The date is removed from the **Inactivated** column, and the local field is available to use again.

3. Click **Apply** to save the restored field and continue to work with local fields, or click **Save** to save the restored field and close the window. Click **Cancel** to close without saving.

Changing System Default Settings

The following settings allow you to customize the way your system performs and how the GUI looks.

Changing the Maximum Number of Patients to Retrieve

You can speed up your searches by limiting the number of patients to be retrieved in each search. Be aware, however, that setting a lower value in registries with large numbers of patients may result in incomplete reports.

1. Select **Preferences** from the **File** menu.

   The **Preferences** window displays.

2. In the **General** section of the **Preferences** window, type the maximum number of patients to retrieve in the applicable field.

   Note: The default number of maximum patients to retrieve is 300. In registries with larger volumes of patients it will be helpful to set this value fairly high.

3. Click the **Save** button, or click **Cancel** to close without saving.

   The **Preferences** window automatically closes.

Changing the RPC Broker Timeout Parameter

1. Select **Preferences** from the **File** menu.

   The **Preferences** window displays.

2. In the **General** section of the **Preferences** window, select the number of seconds from the **Broker Timeout (sec)** dropdown list.

   Note: The default number of seconds before timeout is 60.

3. Click the **Save** button, or click **Cancel** to close without saving.

   The **Preferences** window automatically closes.

Changing the Screen Colors and Options

1. Select **Preferences** from the **File** menu.

   The **Preferences** window displays.

2. Click the **Appearance** tab.

3. Click the **Display Hints** checkbox to enable tool tips throughout the application.

4. Click a GUI Element name (for example, *Read-only Controls*) to select it.

5. Select a **Foreground Color** from the drop-down list to set the text color for the selected element.

6. Select a **Background Color** from the drop-down list to set the background color for the selected element.

   The selected colors are shown in the Text Sample box at the bottom of the Options window.

7. Click **Save**, or click **Cancel** to close without saving.

   The **Preferences** window closes and selected colors and options are displayed throughout the GUI.

Restoring Default GUI Settings

1. Select **Preferences** from the **File** menu.

   The **Preferences** window displays.

2. Click the **Restore Defaults** button.

   The system defaults are displayed in the **Preferences** window.

3. Click **Save**, or click **Cancel** to close without saving.

   The system defaults are restored for all options and the **Preferences** window closes.

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Registry Window Tabs

When you open a registry, a "child" window is displayed inside the main application window. This window contains registry-specific interface elements. When the registry window is activated, the main menu of the application is updated with the registry-specific menus and options.

The main registry window is divided into sections that are accessible through the Task Manager, Technical Log, and Registry tabs.

Task Manager tab

The **Task Manager** tab displays a list of the reports that a user has generated. Each report is associated with a task number. Adjacent to the task number is the name of the report, the date and time that the report is scheduled to run, the status of the report, its progress, the date and time the report was completed and any comments that were entered when the report was selected.

Completed reports appear on the **Task Manager** tab for 14 days after they finish running, at which point they are automatically deleted from the list. To save a report for use beyond that 14 day period, see the instructions on page 37.

You can sort the information displayed on the **Task Manager** tab in ascending or descending order by clicking the column headings.

From the **Task Manager** tab, you can view completed reports, generate new reports, delete generated reports from the list, and check the status of reports that are in progress.

Task column

The **Task** column displays the unique system generated task number associated with the report. The task number is used for tracking purposes.

Type column

The **Type** column displays the type of task performed by the user. For this release of the CCR, the task type will always be **Report**.

Description column

The **Description** column displays the name of the report.

Scheduled column

The **Scheduled** column displays the date and time at which the report is scheduled to run.

Status column

The **Status** column displays the status of the report in progress. The following table lists the status values and their meanings.

Status	Description
Active: Pending	The report is scheduled, but not yet running
Active: Running	The scheduled report is running
Active: Suspended	The report is suspended
Inactive: Crashed	The report crashed due to runtime errors or system shutdown
Inactive: Errors	The report was completed with errors (the results can be incomplete)
Inactive: Finished	The scheduled report was completed successfully
Inactive: Interrupted	The report was stopped by the user (using the VistA Menu option)
Stopping	An attempt to delete the report task has been made by the user, but the report has not yet been deleted from the system.

Progress column

The **Progress** column displays the progress of the report as a percentage of completion.

Completed column

The **Completed** column displays the date and time the report completed running.

Comment column

The **Comment** column displays the text from the Comment field on the Report setup window, if any. This column displays up to 60 characters.

Refresh button

The **Refresh** button updates the **Task Manager** tab by displaying any new data on the status of reports that has been added since the window was accessed.

> **Note:** Clicking the **Refresh** button does NOT update the data contained in a report that has already completed.

New Report button

The **New Report** button displays the **Registry Reports** window from which you can select and generate new reports.

Open Report button

The **Open Report** button allows you to view a selected report. If no report is selected in the **Task Manager** tab, this button will be deactivated.

View Log button

The **View Log** button switches the main window display from the **Task Manager** tab to the **Technical Log** tab and displays detail for the selected report. See the Technical Log Tab section (page 40) for more information. If no report is selected in the **Task Manager** tab, this button will be unavailable.

Delete button

The **Delete** button allows you to delete a selected report from the **Task Manager** tab display. You will be prompted to confirm that the selected report should be deleted. If no report is selected, the **Delete** button will be unavailable.

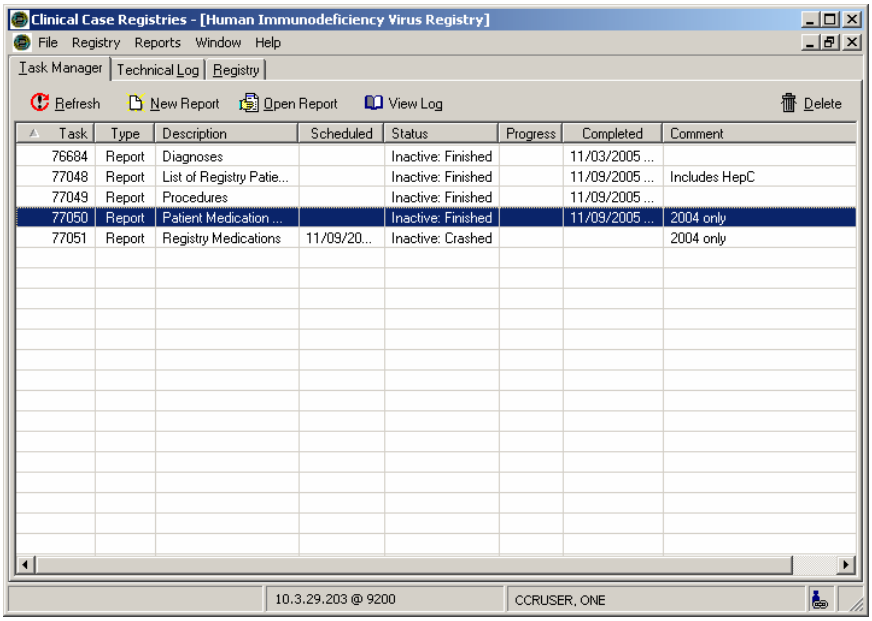
Right-Click Menu options

The following menu options are available from the **Task Manager** tab display when you click the right-side mouse button:

- **New Report…**
- **Open Report**
- **View Task Log**
- **Delete**
- **Refresh**

The **Open Report, View Task Log,** and **Delete** menu options are only activated and selectable when you click the right-side mouse button on a task.

The following screen capture shows the **Task Manager** tab view:



Managing Reports from the Task Manager view

Viewing a Report

Use the **Open Report** button from the **Task Manager** tab to view a selected report:

1. From the task list in the Task Manager window, select the report you want to view.

   Note: See the Status column to be sure that the report has finished running (Inactive:Finished).

2. Click the **Open Report** button, or double-click the selected report.

The selected report displays.

Note: If the report is large, it may take several minutes for the report to display. The screen will temporarily appear blank and the words "Loading and Transforming the report" will appear in the bottom left hand corner while the report is loading for display. Please be patient.

To open **multiple reports** for viewing, minimize the open report or select the registry name from the **Window** menu, then repeat steps 1 and 2. Alternately, press **<Ctrl>** and **<F6>** to switch back to the Task Manager view, then repeat steps 1 and 2.

Copying Text from a Report

When viewing a report, you can copy and paste the report text.

1. While viewing the report output, right-click anywhere on the report display.

   The right-click pop-up menu displays.

2. From the right-click menu, select **Select All**.

   The text of the report is highlighted.

3. From the right-click menu, select **Copy**.

4. Place the cursor in the document where you want to paste the report output, then press **<Ctrl>** and <**V**>, or select **Paste** from the right-click menu.

   The report text will be pasted to the selected location.

Note: The above procedure will copy the report data as text. To be able to sort and otherwise manipulate the data in a report, use the **Save as** command on the File menu to export to a file which you can then open in another program (e.g., Excel or Access) instead of this copy-and-paste function.

Changing the Text Size of a Report

You can change the size of the text in the report output.

1. While viewing the report output, right-click anywhere on the report display.

   The right-click pop-up menu displays.

2. Select **Text Size**, then select the desired text size from the options displayed.

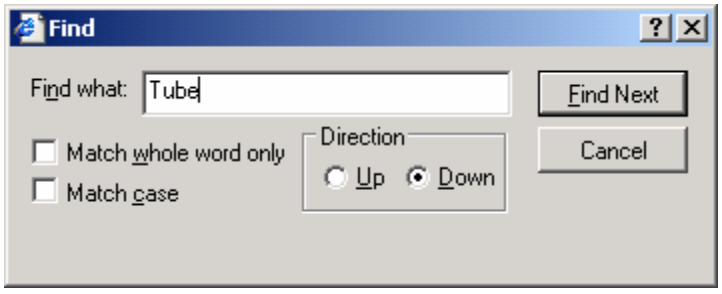
Finding Text on a Report

Use the **Find** option on the right-click menu while viewing a report to search for a word or term in the report.

1. While viewing the report output, right-click anywhere on the report display.

   The right-click pop-up menu displays.

2. Click **Find**. The Find window displays:



3. Type the word or term you want to find in the **Find what:** field.

   You can search for a match to the whole word only or match by case. You can also search up or down the report by selecting a radio button

4. Click the **Find Next** button to find the next instance of the selected word or term.

Sorting/Ordering the Information on a Report

When viewing a report, you can change the order in which the information is presented by clicking the heading of a column. All tables of the same type are sorted in the same way. For example, if you sort an Outpatient Drugs table by Number of Fills in the Pharmacy Prescription Utilization, then this kind of table will be sorted in the same way in all other sections of the report.

> **Note:** Some columns cannot be sorted. Column headings that can be used for sorting are indicated with **Bold, Blue, Underlined** text.

The information in the selected column will be displayed in either ascending or descending order and the items in the associated columns will be reordered accordingly. The report columns only sort in either ascending or descending order.

Saving a Report

You can save report output to an alternate location from an active report window, for example, you can export it for use in another application.

IMPORTANT: Reports that contain patient information must be handled in accordance with established policies for confidential medical information.

1. While viewing the selected report, select **Save As** from the **File** menu.

   The **Save the Report As** window displays.

2. Select the location to which to save the report.

3. Enter a name for the report in the **File name** field. To facilitate later use, use a name that indicates what is in the report and the date it was run – e.g., "HIV Inpts 5Jan06.csv".

4. Select a format from the **Save as type** drop down list. Reports can be saved in the following formats:

   - Comma Delimited (*.csv)
   - HTML Document (*.htm; *.html)
   - XML Document (*.xml)

5. Click **Save**.

The **Save the Report As** window automatically closes and the report is saved to the selected location.

Exporting a Report to Excel or Access (CSV Format)

Saving a report in CSV format automatically exports (saves) the contents of the report to a file in a location determined by you during the saving procedure.

Reports that contain multiple tables based upon the selected report parameters will be saved in separate CSV files. The number of separate files for each saved report will depend on the report that is generated and the report parameters you selected. A sequential number will be appended to the names of the additional files.

The following list describes how the tables for each of the reports will be saved as separate files:

Report	Files
Clinical Follow Up	Single file (Summary not saved)
Combined Meds and Labs	Medications
	Lab Results
Current Inpatient List	Single File
Diagnoses	ICD-9 Codes
	Patients
General Utilization and Demographics	Patients
	All summary tables
Inpatient Utilization	Stays
	Distribution of Utilization Among Bed Sections
	Occurrences of Missing Bed Section ID
	Highest Number of Stays
	Highest Number of Days
Lab Utilization	Results
	Laboratory Tests
	Patients with Highest Utilization
List of Registry Patients	Single file
Outpatient Utilization	Stops
	Distribution of Utilization among clinics
	Highest Utilization of Stop Codes
Patient Medication History	Separate file for each patient
Pharmacy Prescription Utilization	Fills
	Outpatient Drugs
	Patients with Highest Utilization of Fills
	Doses
	Inpatient Drugs Patients with Highest Utilization of Doses
	Summary with Fills and Doses
Procedures	ICD-9 Codes
	Patients
Radiology Utilization	Procedures
	Patients with Highest Utilization
Registry Lab Tests by Range	Single file
Registry Medications	Single file
VERA Reimbursement (for CCR:HIV only)	Registry Medications
	Patients

Printing a Report

You can print the report from an active report window. The font size selected for the report window affects the corresponding printout; therefore, it is recommended to select smaller fonts before printing wide reports.

> **IMPORTANT:** Use only secure printers to produce reports that contain patient information. When you print a report that contains patient information, retrieve it from the printer as soon as possible.

1. While viewing the selected report, select **Print** from the **File** menu.

   The **Print** window displays.

2. From the **Print** window, if necessary, select the printer from which to print the report and select the printing options.

3. Click **Apply** if different printing options were selected from the **Print** window, then click **Print**.

   The selected report prints.

Note: You can also print a report after saving it in CSV, HTML, or XML format using the appropriate applications MS Word, MS Excel, MS Access, etc.

Deleting a Report

You can delete a report from the **Task Manager** tab display.

1. From the **Task Manager** tab, select the report you want to delete. To select more than one report, hold down the **<Ctrl>** key and click each report name to select it.

2. Click **Delete**.

   You will be prompted to confirm the delete command.

3. Click **OK** to delete the report.

Note: Reports are automatically deleted 2 weeks after the date on which they were generated.

Closing a Report

Close an active report window by selecting **Close** from the **File** menu. You can also close a report by clicking the **X** in the upper right corner of the report window.

> **Note:** Clicking the **X** on the **Clinical Case Registries** window will close the CCR application. A prompt will display asking you to confirm.

Technical Log Tab

> **Note:** Information on the Technical Log tab will not be used by most clinicians; the following is included for reference purposes.

The Technical Log tab displays information regarding processes that are scheduled and performed in the registry. The tasks and events associated with registry processes are logged and displayed in a folder tree view in the left pane of the Technical Log tab view. Each folder in the tree is displayed with its associated task type and the date/time when the task occurred. The folders in the tree view are displayed chronologically for the past 7 days in descending order, with the most recent tasks at the top of the list. You can use the date range parameters to view more than seven days.

You can expand the folders to view the message details of the logged tasks. When a task is selected from the tree view, the message details about the task are displayed in the right pane. The types of message details that can be displayed include Warning, Information, Database Error, Data Quality, and Error.

This table shows the icons that are displayed adjacent to the messages associated with the logged tasks:

Icon	Description
	**Informational Message**: These messages present general information.
	**Data Quality Message**: These messages present information about problems with data quality. You can inform the IRM group with the details regarding these messages, though this is not mandatory
	**Warning Message**: These messages are largely informational with the exception of the "*Registry VA is awaiting ACK*" warning. The IRM group should be notified if this warning is the most recent message in the log; you can assume that an acknowledgment for the last extract has not yet been received.
	**Database Error Message**: The IRM group should be informed of the details within these messages.
	**Error Message**: **The IRM group MUST be informed of the details of these messages.** All of these messages with the exception of the message "*Error(s) during processing of the patient data*" indicate that the running process had to stop due to the error. This message indicates that the processing of the patient stopped but the job itself continued processing.

From: and To: Date fields

The **From:** and **To:** date fields allow you to adjust the display of the Technical Log tab, by displaying those tasks and events that occurred within a selected date range. The default Technical Log view includes tasks that occurred within one week of the current date, and the date range can be expanded to include earlier activities.

Refresh button

The refresh button updates the Technical Log display with new activities that have taken place since the last time the window was refreshed.

Types of Logged Activities

The following types of activities are displayed in the **Technical Log**:

Activity Type	Description
Data Extraction	Indicates that data was extracted from the registry. The activity details include the start and end dates and times of each extraction, the number of patients processed, the number of patients processed with errors, the processing rate and the registries updated.
Report	Indicates that a user generated a report. The activity details include the start and end date and time the report was generated and the task number.
Registry Update	Indicates that an update was made to the active registry. The activity details include the start and end dates and times of each update, the number of patients processed, the number of patients processed with errors, the processing rate and the registries updated.
Access Violation	Indicates that an unauthorized user attempted to access CCR data. An alert will display on the unauthorized user's window stating that access is denied. Simultaneously and for each violation, those CCR users who receive notifications will receive an alert, and the name of the unauthorized user is recorded in the Technical Log along with the unauthorized action.

Managing Logged Activities from the Technical Log tab

Viewing the Technical Log

1. Click the **Technical Log** tab to display the **Technical Log** window.
2. Using the **From:** and **To:** date fields, select a date range from the drop-down calendars.
3. Click the **Refresh** button to display the activities that fall within the selected date range.

Viewing Activity Details

1. Click the plus-sign next to the activity in the left pane to expand the heading and view all the messages associated with the selected activity. Information regarding the selected activity will display in the right pane.
2. Click the message you want to view in the left pane. Information regarding the selected message will display in the right pane.
3. Repeat as necessary to view all the associated messages and details.

Registry tab

The **Registry** tab displays the primary interface for selecting patients and performing patient-related tasks. From the **Registry** tab, you can search for existing patients, confirm a pending patient, edit a patient's record, and generate, view, and print a CDC form for a patient (CCR:HIV only).

The Registry tab is automatically activated when the Registry menu is selected.

Search button

The **Search** button activates the search function based on the searchable information in the **Patient** field and/or on the additional search options.

The system will search for names that begin with the characters typed in the **Patient** field, not based upon whether the string of characters is contained within a word. For example, typing "car" in the target field would return Carter and Carmichael but not McCarthy.

If no search criteria are provided, CCR will attempt to return all patient records; this requires considerable time, possibly exceeding system timeout parameters, and should not generally be attempted.

Confirm/Edit button

This button is labeled **Confirm** or **Edit** depending on which patient is selected. If you select a patient with a status of Pending, the **Confirm** button will allow you to open the patient record and verify that the patient does or does not belong in the registry. If you select a patient who has already been confirmed in the registry, the **Edit** button allows you to update the patient's record.

CDC button

The **CDC** button is only available in CCR:HIV. It allows you to access the CDC window for a selected patient. You can enter information on a new CDC form, or edit, view, and print an existing form.

Delete button

The **Delete** button allows you to delete a record for a patient from the registry. You will be prompted to confirm before the patient record is deleted.

If a patient record is deleted because the patient was selected for the registry based on erroneous coding or a false positive test result, that patient will not be selected again based on the same instance of erroneous coding or false positive test result. However, if there are multiple instances of erroneous coding or additional false positive tests results, the patient will be selected and placed in Pending status sequentially based on each instance. If such situations are observed, it is advisable to address the local coding issue.

Patient field

You can enter searchable information in the **Patient** field to search for a patient or list of patients to view in the **Patient Display** list.

Searchable information includes the patient's full last name, the first one or more characters of the patient's last name, the patient's SSN, the last four digits of the patient's SSN, or a combination of the first letter of the patient's last name and the last four digits of the patient's SSN.

Pending Only checkbox

The **Pending only** checkbox allows you to search for patients in the registry who have a status of Pending. Patients with Pending status must be validated and then confirmed by the Coordinator before their records are added to the registry. Data for a patient with a Pending status will not be sent to the national registry and will not be included in the reports until the patient has been confirmed.

Only Confirmed After checkbox

The **Only confirmed after** checkbox allows you to search for patients in the registry who were added to the registry after a selected date. When you check this box, the adjacent date field is activated and you can enter a date.

Patient List Display

The **Patient List** displays the patients whose records match the search criteria in the Patient field. The patient records will be displayed alphabetically according to their last names.

The following columns are displayed in the Patient List:

- Name
- IEN
- Date Of Birth
- SSN
- Date Of Death
- Sex
- Confirmed
- Status
- Selection Site

You can resize these columns, and you can click any column heading to sort or reorder the Patient List display by that heading.

Name column

The **Name** column displays the full name of the patient. The names are listed alphabetically by last name.

IEN column

The **IEN** column displays the patient's Internal Entry Number.

Date Of Birth column

The **Date Of Birth** column displays the patient's date of birth.

SSN column

The **SSN** column displays the patient's Social Security Number.

Date Of Death column

If applicable, the **Date Of Death** column displays the date the patient died.

Sex column

The **Sex** column displays the sex of the patient. The column will display **M** for male, or **F** for female.

Confirmed column

The **Confirmed** column displays the date that the patient was confirmed in the registry.

For patients whose records existed in the Hepatitis C Case Registry, the Confirmed column displays the date of the patient's addition to the Hepatitis C Case Registry – either at the initial registry creation or subsequent selection by the nightly update. For patients whose records existed in the ICR v 2.1, this column displays the date of their earliest selection rule. For patients whose records existed in the ICR v 2.1 but who did not have a selection criteria, the Confirmed column displays the date the CCR:ICR was created. For patients subsequently added to CCR:ICR, the Confirmed column displays the date that the patient was confirmed in the registry. For all subsequent patient entries in either the CCR:HepC or CCR:HIV, the Confirmed column displays the date that the patient was confirmed in the registry.

Status column

The **Status** column displays the registry status of the patient:

- **Pending** patients have been identified by the system as having positive test results or registry-related ICD-9 codes, and must be reviewed and confirmed/deleted by the registry coordinator.

- **Confirmed** patients have been reviewed by the registry coordinator and found to have a registry-related condition such as HIV or Hepatitis C.

Selection Site column

For multidivisional facilities, the **Selection Site** column displays the clinical site where the initial triggering ICD-9 code or positive laboratory test was entered, if it can be determined. This column will be empty for older patients.

Using the Registry tab

Searching for Patients

You can search for patients in the registry by using the **Patient** field and setting additional search options.

1. Enter searchable information about the patient in the **Patient** field.

   Searchable information includes the patient's last name, the first one or more characters of the patient's last name, the patient's SSN, the last four digits of the patient's SSN, or a combination of the first letter of the patient's last name and the last four digits of the patient's SSN.

2. Select additional search criteria if necessary:

   Check the **Pending Only** checkbox to limit the search to patients with a status of Pending.

   Check the **Only confirmed after:** checkbox and select a date to limit the search to patients who were added to the registry after the selected date.

   Note: You cannot search using both the Pending only and the registry entry date criteria.

3. Click the **Search** button or press <**Enter**>**.**

   The search begins, and the **Patients Found** indicator automatically updates as patients are found to match the search criteria. The patient(s) matching the search criteria will be displayed in the **Patient List** display.

   Note: Under certain circumstances, the small magnifying glass icon will change to a red **X** during the search. You can click the red **X** to cancel a search that is taking too long.

If no patient records match the search criteria, a prompt will display stating "No records found…"

If the search criteria return too many patient records to display, you will be prompted to narrow your search criteria. After you press OK, the screen will display the initial part of the results of your search. You can then work with the partial results, or narrow your search criteria further.

Alternately, in order to display more patients, you can adjust the parameter that controls the maximum number of patients to retrieve. For more information, see Changing the Maximum Number of Patients to Retrieve, page 28.

Deleting a Patient

You can delete a patient with a status of Pending or Confirmed from the CCR by using the **Delete** button or the right-click menu from the **Patient List** display.

1. Select the confirmed or pending patient you want to delete from the **Patient List** display.

2. Click the **Delete** button or select **Delete** from the right-click menu. The confirmation dialog box displays.

3. Click **Yes** to complete the delete process or click **No** to cancel.

Using the Patient Data Editor Window

The **Patient Data Editor** window is accessed from the **Registry** tab, and is used to edit a patient's record. You can edit a patient's record using the fields, buttons, and checkbox options displayed on the following tabs:

1. **Clinical Status tab** – available in all registries.
2. **Risk Factors tab** – available in CCR:HIV only.
3. **Local Fields tab** – available in all registries and customized at the local level. Usage is optional.

Basic identifying information is included at the top of the window, showing the SSN, patient name, date of birth, and status.

Clinical Status tab

The **Clinical Status** tab on the **Patient Data Editor** window allows you to enter or view information regarding the patient's current clinical status.

Risk Factors tab

In CCR:HIV, the **Risk Factors** tab lists a series of questions from the CDC form regarding HIV risk behavior. Check **Yes**, **No**, or **Unk.** (unknown) for each question. These questions must be answered to confirm a patient into the CCR:HIV.

Local Fields tab

The **Local Fields** tabs allow you to enter registry-specific information regarding the patient's health history in locally configured fields (see page 26 for details).

Confirming a Pending patient record

When patient records are first selected by the CCR, their status is marked as **Pending**. These patient records are identified via the automatic nightly registry update process and must be validated before being confirmed in the registry. The local Registry Coordinator at each facility will be authorized to validate pending patients and change their status to **Confirmed**.

Confirmed Positive – A patient is considered Confirmed Positive if he or she has a positive antibody screening test result and a positive result on confirmatory testing. If confirmatory testing has been done, the results are displayed in the lower sections of the Patient Data Editor window.

No Confirmation Available – If the patient has a positive result on a screening test or was selected on the basis of a registry related ICD9 code but no confirmatory test has been done, the registry coordinator will need to look in CPRS (labs, progress notes, including remote data) to see if there is information that confirms the diagnosis. If such data is not found, the patient should not be confirmed and should retain their Pending status until confirmation is available. The

registry coordinator should report such cases to the provider (usually the one who ordered the screening antibody test) to order confirmatory testing. If the provider knows that the patient was confirmed positive at another facility, he or she should document that fact in a Progress note and enter the diagnosis on the Problem List. The registry coordinator can use that information to confirm the patient.

Negative Confirmatory Result – In some cases a patient may be selected because of a positive result on a **screening** test but then have a negative result on **confirmatory** testing. In such cases the coordinator should delete the patient from the registry, and the patient will not be selected again based on the same test result. If the screening test is repeated at a later date and the result is again positive, the patient would be selected again based on that new test result.

To review the list of pending patients:

1. On the **Registry** tab, leave the patient field blank and click the **Pending only** checkbox, then click the **Search** button. The system searches for Pending patients, then displays them in the **Patient List**.

2. Double-click the patient to be validated, or select the patient with a single click and then click the **Confirm** button. The **Patient Data Editor** window displays.

3. Review the patient information and decide whether this patient belongs in the registry. (If there is insufficient information in the Patient Data Editor you will need to look in CPRS to determine if the patient belongs in the registry.) If so, click the **Save** button in the bottom right corner of the window. If not, click the **Cancel** button.

   IMPORTANT: Opening a Pending patient record and clicking **Save** will automatically confirm the patient in the registry. If you are not sure whether to validate the patient, click **Cancel**. The patient will retain their Pending status.

   The confirmed patient's status is set to **Confirmed**, and today's date will be displayed in the **Confirmed** column in the **Patient List**.

Editing a Patient Record

Follow this procedure to edit or update a patient record. This procedure is typically used by CCR:HIV users to add or update information regarding AIDS-defining opportunistic infections (AIDS-OI) or HIV risk behavior information. This procedure is also used in both CCR:HIV and CCR:HepC to update information in Local Fields.

1. In the **Registry** tab view, search for the patient to be edited. The patient(s) matching the search criteria are displayed in the Patient List.

2. Double-click the patient name, or click the patient name and then click the **Edit** button. The **Patient Data Editor** window displays.

3. In the **Clinical Status** tab view, check the **Check if patient ever had an AIDS-OI** and enter the date of the diagnosis in the **Date of AIDS OI** box. (CCR:HIV only)

4. In the **Patient History** tab view, click the **Yes**, **No**, or **Unk** (Unknown) checkboxes to update the patient's HIV risk behavior information. (CCR:HIV only)

5. In the **Local Fields** tab view, click the checkboxes to add or update information as necessary. The **Local Fields** tab may not be visible if your site does not use local fields.

6. Click **Save** to save these changes to the registry, or click **Cancel** to close the **Patient Data Editor** window without saving the changes.

Deleting a Patient Record

Follow these steps to delete a patient record

1. In the **Registry** tab view, search for the patient to be deleted. The patient(s) matching the search criteria are displayed in the Patient List.

2. Click the name of patient to be deleted, then click **Delete**, or select **Delete** from the right-click menu. The confirmation dialog box displays.

3. Click **Yes** to complete the delete process, or click **No** to cancel.

CDC Window

Note: The CDC window is available only in CCR:HIV.

The **CDC** button on the **Registry** tab displays the CDC window. The CDC window allows you to enter the information necessary to complete the 10 sections of the **CDC Adult HIV/AIDS Confidential Case Report** for a patient, edit some fields, and view and print a patient's existing CDC report.

You can open the CDC window using the **CDC** button, by selecting **CDC** from the **Registry** menu, or by selecting **CDC** from the right-click menu in the Patient List.

The CDC window displays two panes. The right pane displays the form used to enter the patient's data. The left pane contains **CDC parameter groups**, a list of the ten sections of the CDC report. You can navigate to each of the 10 sections of the CDC report by using the scroll bar, or by clicking the Group Title of the desired section. You can hide or display this pane by clicking the **Group Titles** button.

The following tabs are displayed above the right pane of the CDC window:

- Form
- Preview
- Preview (page 2)

Form tab

The **Form** tab displays the GUI through which you can enter a patient's information. The information is displayed on the completed **Adult HIV/AIDS Confidential Case Report**.

Preview tab

The **Preview** tab display shows you how the CDC report will appear when printed. The Preview tab displays the first page of the 2-page **CDC Adult HIV/AIDS Confidential Case Report**, which contains sections I through VI.

Preview (page 2) tab

The **Preview (page 2)** tab display shows you how the CDC report will appear when printed. The Preview (page 2) tab displays the second page of the 2-page **CDC Adult HIV/AIDS Confidential Case Report**, which contains sections **VII** through **X**.

Print button

The **Print** button allows you to print the selected patient's CDC report.

Print Blank button

The **Print Blank** button allows you to print a blank CDC report.

Save button

The **Save** button saves the information entered from the **CDC Form** tab and automatically closes the CDC window.

Close button

The **Close** button allows you to close the CDC window without saving the information entered on the **CDC Form**.

Zoom In and Zoom Out buttons

The **Zoom In and Zoom Out** buttons allow you to incrementally enlarge or reduce the **Preview** and **Preview (page 2)** tab displays within the **CDC** window.

Fit Width

The **Fit Width** button automatically adjusts the size of the **Preview** and **Preview (page 2)** display to fit the width of the CDC window.

Zoom 1:1

The **Zoom 1:1** button automatically enlarges the **Preview** and **Preview (page 2)** tab display at a 1:1 ratio.

Auto Fit

The **Auto Fit** checkbox automatically adjusts the size of the form so that it fits the width of the window when the window is resized.

Viewing a Patient's CDC Report

1. From the **Registry** tab, select a patient from the **Patient List** display.

2. Click the **CDC** button.

   The CDC window displays the selected patient's CDC report. Use the **Preview** and **Preview (page 2)** tabs to view how the CDC report will appear when printed.

Printing a Patient's CDC Report

1. From the **Registry** tab, select a patient from the **Patient List** display.

2. Click the **CDC** button.

   The CDC window displays the selected patient's CDC report. Use the **Preview** and **Preview (page 2)** tabs to view how the CDC report will appear when printed.

3. Click the **Print** button

   The **Print** window displays.

4. Select any necessary printing options from the **Print** window, then click **OK**.

Entering Information on a Patient's CDC Report

The following procedure can be used to create a new CDC report for a patient, or edit the information on a patient's existing CDC report.

1. From the **Registry** tab, select the patient from the **Patient List** display.

2. Click the **CDC** button.

   The CDC window displays.

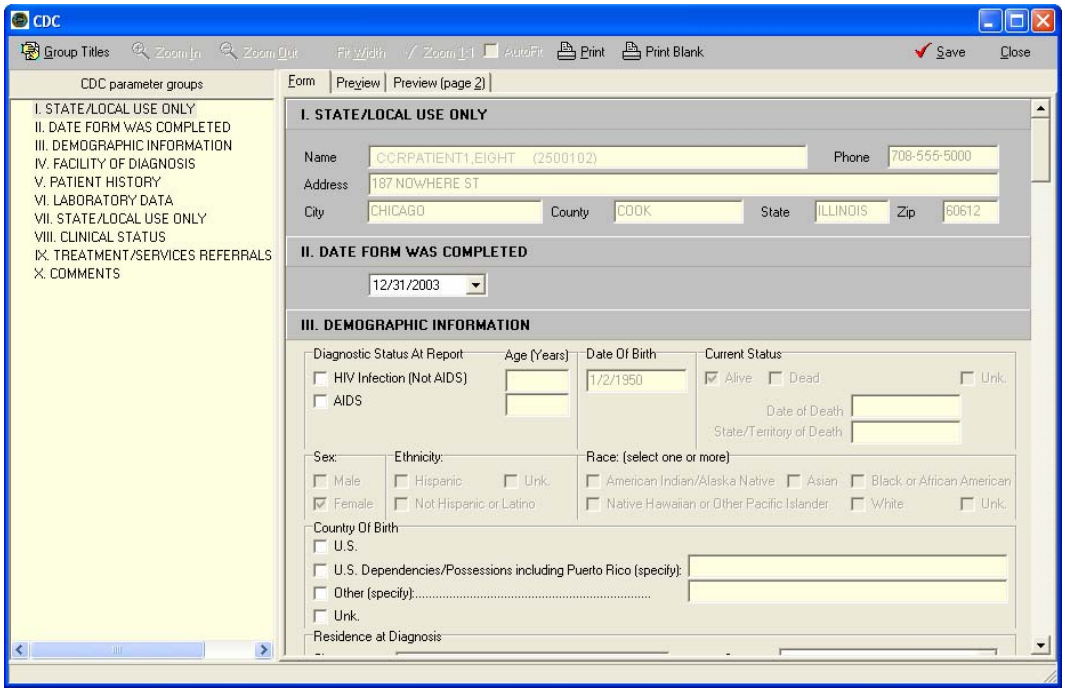
3. From the **Form** tab, use the **Group Titles** or the scroll bar to navigate to the field(s) you want to enter/edit.

4. After entering the patient's information or editing the existing information, click **Save**.

   The patient's CDC report is saved and the CDC window automatically closes.

Detailed information regarding each of the **Group Title** sections of the CDC report is provided in the following sections of this document:

Figure 1: Sections I, II, and III of the CDC Form.



SECTION I - STATE AND LOCAL USE ONLY

Information in this section is **read-only** and cannot be entered or edited from the **Form** tab. The address is obtained from Patient File #2. If there is an error in the address, contact Patient Registration to correct the Patient File which will then populate the CDC form with the corrected information.

SECTION II - DATE FORM WAS COMPLETED

The current date is the default date and will be displayed automatically. To change the date, enter or select from the drop-down calendar the date that the CDC report form was completed. The date must be the current date or earlier. A future date cannot be entered.

SECTION III – DEMOGRAPHIC INFORMATION

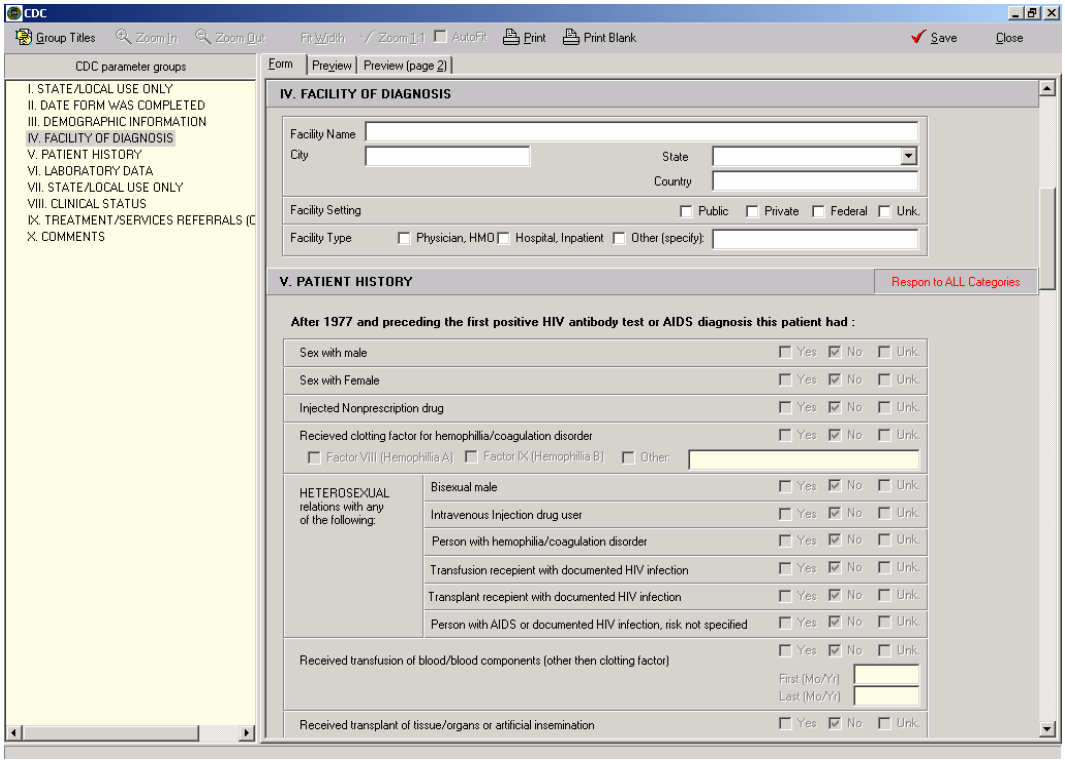
The following information can be entered or edited from this section:

- The patient's diagnostic status at the time of the report, and the age of the patient at the time of the diagnosis.

- The patient's country of birth, and the city, state, county, and country in which the patient resided at the time of the diagnosis.

The other fields in section III are **read-only** and cannot be entered or edited from the **Form** tab. The date of birth, current status, sex, ethnicity and race information is obtained from the Patient File #2. If there are errors in these fields, please contact Patient Registration to correct the Patient File which will then populate the CDC form with the corrected information.

Figure 2 – Sections IV and V of the CDC Form



SECTION IV – FACILITY OF DIAGNOSIS

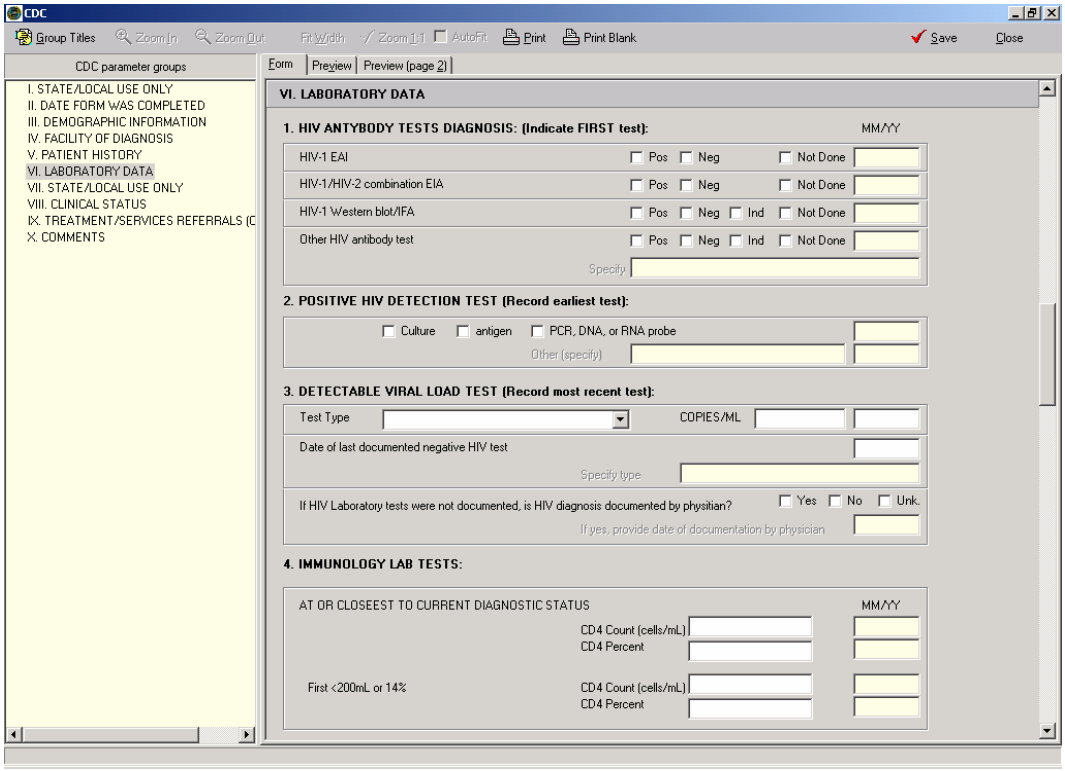
The following information can be entered/edited from this section:

- **Facility Name** – Enter the name of the facility where the patient was diagnosed.
- **City** – Enter the name of the city in which the facility is located.
- **State** – Select the name of the state in which the facility is located from the drop-down list.
- **Country** – Enter the name of the country in which the facility is located.
- **Facility Setting** – Select the appropriate facility setting by clicking a checkbox: **Public, Private, Federal,** or **Unk. (unknown).**
- **Facility Type** – Select the appropriate facility type by clicking a checkbox: **Physician, HMO; Hospital, Inpatient; or Other.** If **Other**, enter the type of facility in the field provided.

SECTION V – PATIENT HISTORY

The Patient History section is **read-only** and displays the information entered from the **Risk Factors** tab on the **Patient Data Editor** window.

Figure 3 – Section VI of the CDC Form



SECTION VI – LABORATORY DATA

This section is divided into four subsections:

1. HIV ANTIBODY TESTS AT DIAGNOSIS (Indicate first test):

If the tests listed in this section were performed, use the checkboxes and fields to indicate the month and year the test(s) were performed and one of the following results:

- **Pos** (positive)
- **Neg** (negative)
- **Ind** (indeterminate)

Use the **Not Done** checkbox to indicate that a test was not performed. If a test other than those listed was used, enter the name of the "Other HIV antibody test" in the field provided, and use the checkboxes to record the outcome of the test.

2. POSITIVE HIV DETECTION TEST (Record earliest test)

Use the checkboxes to select the type of test. Enter the month and date of the test in the field provided. If a test other than the ones listed was used, specify the type of test in the field provided.

3. DETECTABLE VIRAL LOAD TEST (record most recent test)

Select one of the following test types form the **Test Type** drop-down list:

- **NASBA (Organon)**
- **RT-PCR (Roche)**
- **bDNA (Chiron)**
- **Other**

Enter the **COPIES/ML** for the selected test type in the fields provided.

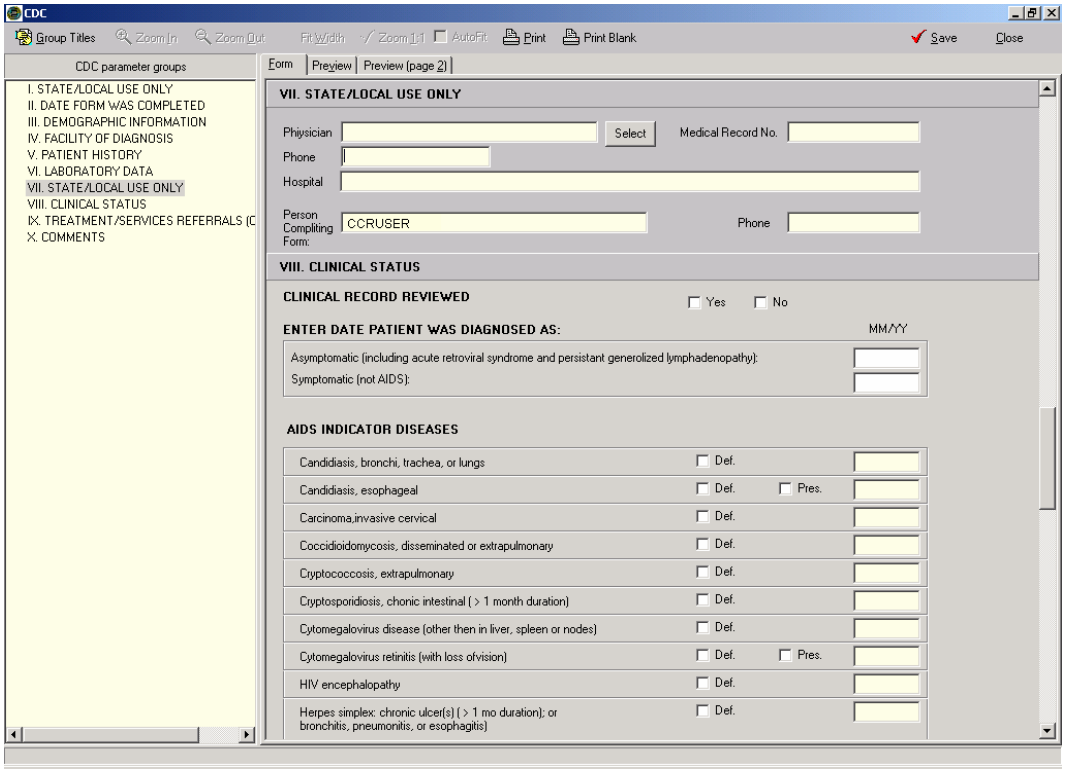
If applicable, enter the month, year and test type of the last documented negative HIV test in the fields provided. **Note:** Data must be entered manually, even if test was performed at the VA facility, and data entered here does not become part of the patient's record in CPRS or CCR.

Use the applicable checkbox to indicate whether the HIV diagnosis is documented by a physician. If the **Yes** checkbox is selected, type the date the physician documented the HIV diagnosis in the field provided.

4. IMMUNOLOGIC LAB TESTS

Type the applicable CD4 counts and percentages, and the date(s) of each of the tests in the fields provided. **Note:** Data must be entered manually, even if test was performed at the VA facility, and data entered here does not become part of the patient's record in CPRS or CCR:HIV.

Figure 4 – Sections VII and VIII of the CDC Form



SECTION VII – STATE AND LOCAL USE ONLY

Use the **Select** button to enter the name of the physician in the **Physician** field. You cannot type directly intro the **Physician** field.

1. Click the **Select** button.

   The **VistA User Selector** window displays. The **Medical Record No.** field is automatically populated with the selected patient's medical record number

2. Type the full or partial last name of the physician, then press **<Enter>** or click **Select**.

   The list will update to display those physician names that match the search criteria.

3. Select the name of the physician from the list, then click **OK.**

   The **VistA User Selector** window automatically closes and the selected name will be displayed in the **Physician** field of the **CDC** form.

   The selected physician's **Phone** number and **Hospital** information will be automatically populated in the fields provided. The current user's name and phone number automatically populate the **Person Completing Form** and **Phone** fields.

SECTION VIII – CLINICAL STATUS

Use the applicable checkboxes to indicate whether the patient's clinical record was reviewed.

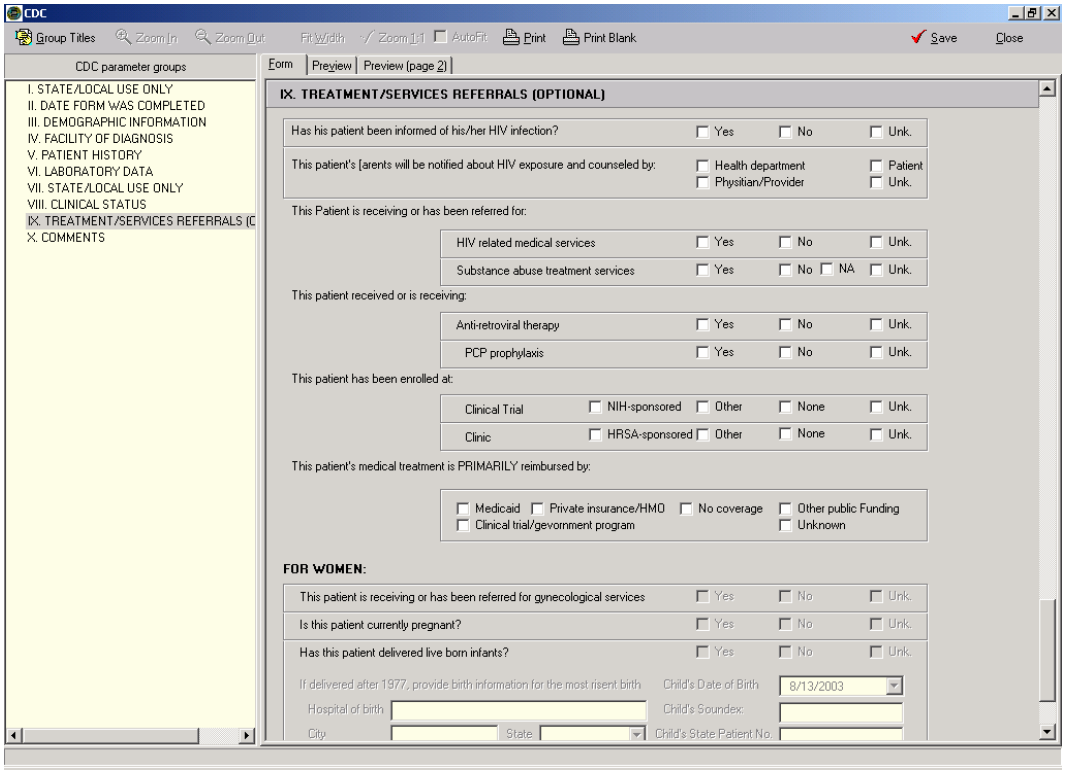
Enter the date the patient was diagnosed as asymptomatic or symptomatic in the fields provided.

Use the checkboxes to select the applicable AIDS indicator diseases. Use the **Def.** checkbox to indicate a definitive diagnosis and the **Pres.** checkbox (when provided) to indicate a presumptive diagnosis. Enter the month and year of the diagnosis for each selected disease in the field provided.

All reporting areas (i.e., the 50 states, the District of Columbia, Puerto Rico, and other U.S. jurisdictions in the Pacific and Caribbean) report tuberculosis (TB) cases to the CDC using a standard case report form. If the selected patient has been diagnosed with **M. tuberculosis, pulmonary** and/or **M. tuberculosis, disseminated or extrapulmonary**, type the applicable **Report of a Verified Case of Tuberculosis** case number in the **RVCT CASE NO.** field.

Use the applicable checkbox to indicate whether in the absence of positive HIV test results, the patient has an immunodeficiency that would disqualify him/her from the AIDS case definition. Select **Yes**, **No**, or **Unk**. (unknown).

Figure 5 – Section IX of the CDC Form



SECTION IX – TREATMENT/SERVICES REFERRALS (OPTIONAL)

This section of the CDC report is optional.

Use the applicable checkboxes to indicate:

- whether the patient has been informed of his/her HIV infection.
- whether the patient's partners will be notified about HIV exposure, and the resource that will be used to provide counseling
- the types of services to which the patient has been referred or is receiving.
- whether or not the patient is receiving or has received anti-retroviral therapy and/or PCP prophylaxis.
- whether or not the patient has been enrolled in a clinical trial, and whether the clinical trial is NIH sponsored.
- whether or not the patient has been enrolled in a clinic and whether the clinic is HRSA sponsored.
- the primary source of reimbursement for the patient's treatment.

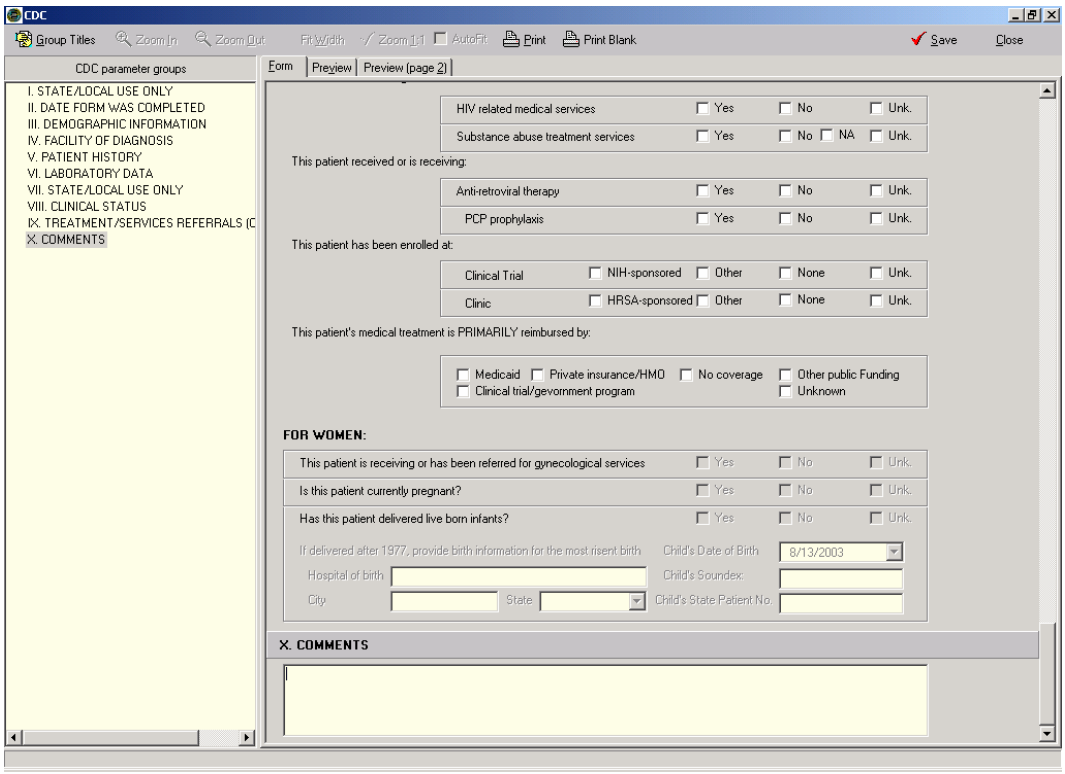
The **FOR WOMEN** subsection allows you to enter information specific to female patients. This subsection will be unavailable for male patients.

Use the applicable checkboxes to indicate:

- if the patient is receiving or has been referred to gynecological services,
- if the patient is currently pregnant,
- if the patient has delivered live born infants. If Yes is checked, complete these additional fields:

  Select the Child's Date of Birth, then enter the name of the hospital at which the child was born, the city and state in which the hospital is located, and the child's Soundex and Patient Numbers in the fields provided.

Figure 6 – Section X of the CDC Form



SECTION X – COMMENTS

Type your comments in the field provided. The **Comments** field can accommodate 300 characters.

Registry Reports

A key benefit of the CCR is its reporting capability. Fifteen standard reports are available in both Clinical Case Registries, and one additional report is available in CCR:HIV.

All of these reports are set up from the **Reports** window. You can set specific reporting options for each report, and schedule a date and time for the report to run. After the report is generated, you can view, save, and print the report from the **Task Manager** tab.

Improved reporting functionality allows clinicians and administrators to:

- Track important aspects of care through customizable report parameters, including "NOT" logic (for example, find patients on drug X who DID NOT have a particular lab test).
- Save report parameters for later re-use.
- Search the population of patients co-infected with both hepatitis C and HIV, and return results on a single integrated report.
- Create patient-based Divisional reporting.

See the **Local Reports** section, starting on page 65, for detailed information and examples of each report.

Registry Reports Window

The **Registry Reports** window is the window from which you can select the specific parameters and criteria used to generate the selected report. The **Registry Reports** window can be displayed in a single pane, or 2-pane mode. When the **Registry Reports** window is accessed from the **Report menu, Report List menu option**, or the **New Report button**, it is displayed in the 2-pane mode.

The left pane displays the **List of Reports** from which you can select a report to run. The right pane displays the reporting criteria that you can select for the report. You can hide or display the Report List by checking the **Show Report List** box.

Accessing the Registry Reports Window

You can access the **Registry Reports** window using the following methods:

- Select a report from the **Reports** menu
- Select **Reports List** from the **Reports** menu
- Click the **New Report** button in the **Task Manager** view
- Select **New Report** from the right-click menu in the **Task Manager** view

Reports Menu

The **Reports** menu displays the list of all available reports. When you select a report from the list, a secondary **Registry Reports** window displays the specific parameters and criteria that you can select to generate the report.

You can also select **Report List** from the **Reports** menu. When you select this option, the **Registry Reports** window displays a list of all available reports on the left side of the window. You can select a report to generate from this **List of Reports**, and the selected report is identified with an arrow. The right-side pane displays the specific parameters and criteria that you can select to generate the report.

New Report button and right-click menu option

From the **Task Manager** tab view, you can access the **Registry Reports** window by clicking the **New Report** button, or by selecting **New Report** from the right-click menu.

The **Registry Reports** window displays a list of all available reports on the left side of the window. You can select a report to generate from this **List of Reports**, and the selected report is identified with an arrow. The right pane displays the specific parameters and criteria you can select to generate the report.

Date Range parameters

Most registry reports allow you to set **Date Range** parameters to determine the window of time from which to capture the data for the report.

If date range parameters are incorrectly set, a warning will prompt you to check the Report Period parameters when you click the **Run** button. For example, if a **Quarter** is selected but no **Year**, you will be warned that the Year or Quarter value is not valid.

Year	Enter the four digit year in **YYYY** format. The **Year** date range parameter will include all relevant data within the selected calendar year (January 1 through December 31) on the report. Check the **Fiscal** box to include all data within the selected fiscal year (October 1 through September 30) on the report.
Quarter	Select a quarter (**I – IV**) from the drop-down list. Used with the **Year** date range parameter, the **Quarter** parameter allows you to include on the report only relevant data within the selected quarter of the selected year. The appropriate date range is automatically selected for calendar or fiscal quarters.
Custom	Use the **Custom** date range parameter to include on the report only relevant data within a selected date range inclusive of the selected start and end dates of the date range. Enter the start date of the date range in the left-side field, or click the left-arrow button **(<<)** next to the field to automatically set the date field to 12/30/1899 to include all data. Enter the end date in the right-side field, or click the right-arrow button **(>>)** next to the field to set the date field to the current date.
Cut Off	Define a time range to be included on the report using the **Cutoff** option. Enter a value for the amount of time, in days, to "go back" from the current date, using digits and the **<W>** and **<M>** keys to specify the number in weeks or months. For example, enter **20** in the **Cut Off** field to include data from the last 20 days through the current day on the report. **30W** will include data from the last 30 weeks through the current day, and **2M** will include data from the last two months through the current day.

Include Patients Confirmed in the Registry checkboxes

Many of the reports allow you to include patients who were added to the registry before, during, and/or after the selected date range by checking one or more of the checkboxes provided. An error message will display if no checkbox is selected.

Other Registries checkboxes

Many of the reports allow you to include only those patients who appear in the registry you are signed into and any other registry selected to which the user has keys. Currently there are only two registries – Hepatitis C and HIV. If you are signed in to the HIV Registry, the option to select another registry is set to Hepatitis C. The converse happens when you are signed in to the Hepatitis C registry. The report will then contain only patients who are in both the HIV and Hepatitis C registries.

In the future, when additional registries are created, this feature will allow you to find subset populations across a variety of registries.

Load / Save Parameters buttons

The **Load Parameters** and **Save Parameters** buttons allow you to save and later reuse a report set up. These buttons are located at the bottom of the Registry Reports window and are available for all reports.

When you click **Save Parameters,** all the selections you have made in each section of the Registry Reports window will be stored as a template. When you click **Load Parameters,** two lists of saved templates will be displayed – **Common Templates** are issued with the software package and are available to all users, and **Your Templates** are available only to you, not to all registry users – and you can select one to automatically "fill in" the fields of the report form.

When you load a template, it will overwrite what you have already entered on a screen. Once a template is opened, you can modify the parameters to meet your current needs. You can delete a template by selecting it and then clicking the **X** button at the top of the screen.

Generating a Report

This is a general procedure for selecting and setting up a report in CCR: not all of these options and settings are available in each report, but the process is substantially the same for all reports. If you want detailed information for a particular report, see the **Local Reports** section, starting on page 65.

1. Select a report from the **Reports** menu. The **Registry Reports** window displays the reporting criteria selections for the selected report.

2. Select a **Date Range**, if applicable, for the selected report. See the Date Range Parameters topic for more information.

3. Select a date and time in the **Schedule to Run on** section. If no other date and time are specified, the report will begin running immediately.

   Note: Some reports require little processing and can quickly retrieve and display the data for the selected report. However, reports that are likely to require more processing time – such as those

with large numbers of patients and/or several variables – should be scheduled to run on a date and time when VistA server resources are not being used as heavily.

4. Select a **Repeat** interval, if desired: select **1D** to repeat this report each day after its first run, or select **1M** to repeat it one month from its first run. To run this report on the first of each month at 4:00 AM, select **1M(1@4AM)**. Leave this field blank if repeated reporting is not required.

5. Check one or more of the **Include Patients Confirmed to the Registry** checkboxes to include patients who were added to the registry before, during, and/or after the selected date range, or any combination of the three. See Include Patients Confirmed in the Registry for more information.

6. Select the additional criteria specific to the selected report that you want to include. Refer to the Local Reports section for detailed information regarding each of the reports.

7. Click the **Run** button to request the report.

The **Task Manager** tab will display the reports that have been requested. If the report is scheduled to run in the future, the date and time the report is scheduled to run will be displayed in the **Scheduled** column. The **Status** column will display the status of the report being run. The **Progress** column will display the progress of the report as a percentage of completion.

The generated report will be displayed in **Task Manager** for two weeks. After two weeks, the system will automatically delete the report from the list. You can access the report at any time during the two-week window to view, sort, print, delete, and/or save the report to an alternate location. Refer to the Managing Reports from Task Manager section for more information.

Scheduling a Report

Use the **Scheduled to Run on** section of the **Registry Reports** window to set a date, time, and frequency to run the selected report.

1. Enter the date on which you want to report to run in the **Day** field.

2. Select a time for the report to run in the **At** field. Click the hour in the time field, then use the arrow buttons to select the hour. Repeat this process for minutes, seconds, and AM/PM options.

3. To run the selected report once, leave the **Repeat** field empty. To automatically repeat the report, select a time interval from the **Repeat** drop-down list:

   - Select **1D** to run the report once each day at the selected time.

   - Select **1M** to run the report monthly on the same date each month.
     Note: Be sure that the date selected for monthly recurring reports occurs in each subsequent month. For example, a monthly recurring report that is set to run on the 31st will not be produced for months that have less than 31 days

   - Select **1M(1@4AM)** to run the report on the first day of each month at 4AM.
     Note: Enter a future date to prevent the report from running immediately.

4. Enter a comment up to 60 characters in the **Comment** field. This Comment will display on the Task Manager (but not on the finished report itself) and can be used to provide report characteristics to help distinguish reports if you are running multiple reports.

5. When you have completed each section of the report window, click **Run** to queue the report.

Discontinuing a Scheduled Report

If a report that is scheduled to run repeatedly at specified intervals is no longer needed, you can discontinue the report in the future by performing the following steps:

1. In the **Task Manager** tab view, locate the task description for the next date and time the report is scheduled to run. Click the task to select it.

2. Click the **Delete** button, or select **Delete** from the right-click menu. A confirmation dialog box displays.

3. Click **Yes**. The scheduled report will be discontinued.

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Local Reports

Fifteen local reports are available to both registries, and one additional report is available in CCR:HIV. These reports are intended to be set up and printed at local user sites and only contain local information..

Each report is described in detail in the next few sections, including step-by-step instructions for setting up the report and a sample of the report output.

The following reports are available in both Registries:

- Clinic Follow Up
- Combined Meds and Labs
- Current Inpatient List
- Diagnoses
- General Utilization and Demographics
- Inpatient Utilization
- Lab Utilization
- List of Registry Patients
- Outpatient Utilization
- Patient Medication History
- Pharmacy Prescription Utilization
- Procedures
- Radiology Utilization
- Registry Lab Tests by Range
- Registry Medications

One additional report is available in CCR:HIV:

- VERA Reimbursement

Clinic Follow Up report

The **Clinic Follow Up** report is designed to help you identify patients who have or have not attended specified clinics in your health care system. This report displays a list of living patients who were or were not seen in selected clinics, and/or received any care during the selected date range selected.

Generating a Clinic Follow Up report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **Clinic Follow Up** from the **Reports** menu. The Clinic Follow Up report window opens.

2. Set the **Date Range**, **Schedule to Run on**, and **Include Patients confirmed in the registry** parameters. (See the Generating a Report topic, page 60, for detailed instructions.)

3. Check one or more **Patients** checkboxes to include the following types of patients:

   - **Seen in selected clinics** includes patients seen (with a completed encounter) in the specified clinics. Patients who had appointments but were NO SHOWS or the appointment was cancelled will not show up as "Seen."

   - **Not seen in selected clinics** includes patients who were NOT seen in the specified clinics, including patients who died during or after the time period.

   - **Only patients who have received care during the date range** includes patients that have received some care of any type (clinic visit, inpatient stay, pharmacy refill, etc.) during the selected date range. If this checkbox is unchecked, the report will check all living patients in the registry against the selected clinics. Check this box in conjunction with the **Not seen in selected clinics** box to find a list of patients who had some type of utilization at your facility but who were not seen in the selected clinics.

4. Select one or more clinics in the **Clinics** section:

   - Click **Include All** to select all clinics to be included the report

   - Click **Selected only** to specify one or more particular clinics to be included in the report. Use the clinic selection panes to locate and select the clinics:

     - Enter the first few letters of the clinic name, then click the **Search** button. A list of matching clinic locations is displayed below the search field. Clinic names are the same ones used in the appointment scheduling process.

     - Select a clinic name, then click the right arrow to move it to the right pane. Repeat this procedure until all desired clinics are selected and appear in the right pane.

     - To remove a selected clinic, click the name of the clinic in the right pane and click the left arrow button.

5. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report to patients with HIV/HepC co-infection who also meet the above criteria.

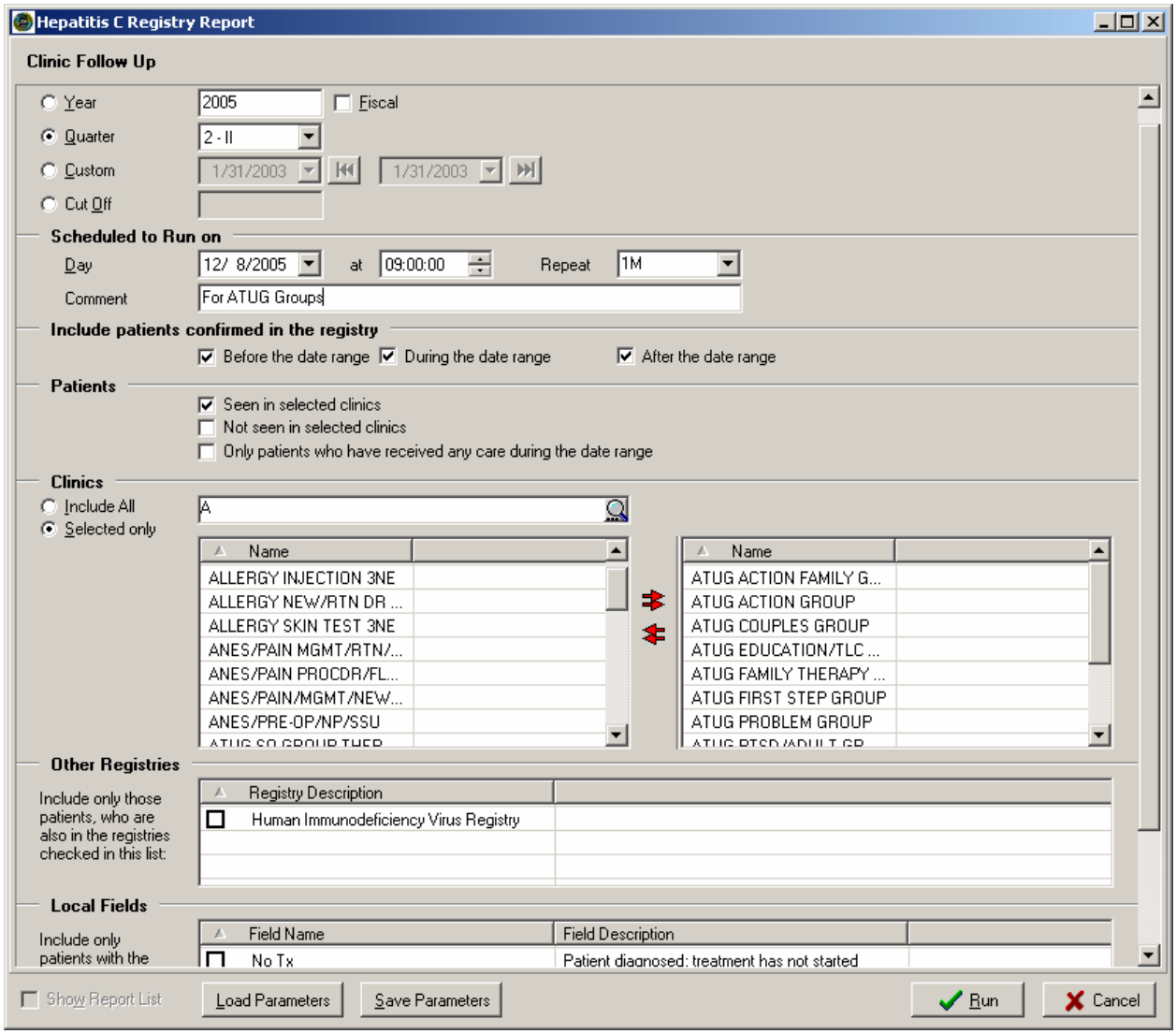
6. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

7. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a name for the template and click **Save**.

8. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

Sample Report Window

This example shows the **Registry Reports** window for the **Clinic Follow Up** report:



Sample Report Output

This example shows the **Clinic Follow Up** report:

Clinic Follow Up

Registry: VA HEPC
Date Range: 03/01/2004 - 04/30/2004
Patients: Added on any date, Seen
Clinics: ALL

Report Created: 12/20/2005@15:59
Task Number: 81791
Last Registry Update: 12/18/2005
Last Data Extraction: 12/18/2005

This report contains confidential patient information and must be handled in accordance with established policies.

#	Patient Name	SSN	Date of Death	Seen	Last Seen Date
1	AAAHY,PDAADH DDD III	9851		Yes	03/05/2004
2	AAAHY,UHRKHY H	5704		Yes	03/03/2004
3	AAAZLY,IHYYDT L	5964		Yes	03/04/2004
4	AAHOLYIHU,JXAGLO CU JR	6059		Yes	03/03/2004
5	AAHOLYIHU,ZDJELHA F	6252		Yes	03/03/2004
6	AAIUDIFH,UXIYHN L	6970		Yes	03/04/2004
7	AAQLUHM,LYSEXYN	2513		Yes	03/01/2004
8	AKULZ,IHUHB L	8714		Yes	03/04/2004
9	AQDAL,FHULAI E	5075		Yes	03/03/2004
10	ARKHUS,FHULAI	1290		Yes	03/01/2004
11	ARTSDY,ILYDHA I	3083		Yes	03/02/2004
12	ARTSDY,JLUA H	8636		Yes	03/05/2004
13	ATEHU,TDIYHN H CU	3638		Yes	03/01/2004
14	AUKRJBAH,HUQDY C	5677		Yes	10/20/2005
15	AULEX,HIPLUL	8471		Yes	03/02/2004

Combined Meds and Labs report

The **Combined Meds and Labs** report is a complex report that identifies patients in the registry who received specific medication and/or specific laboratory tests within a specified date range. This report can be run for pharmacy alone, laboratory alone, or both. In addition, a range can be placed on numeric lab test results to permit searching for patients with particular values.

This report identifies patients using the following basic logic:

- People who did or did not receive medication(s) (single or groups) and/or
- People who did or did not receive lab test(s) (you can filter values for numeric tests)
- People who had some type of utilization

The date ranges can vary between these three areas to permit, for example, the viewing of labs for an extended period beyond the prescription period. These three main filters along with specific medication and lab test selection can be used to run queries of the following types:

- Find patients with particular lab results who are not receiving medication for this condition (e.g. high cholesterol who are not on a statin)
- Find patients receiving a medication who are not receiving appropriate monitoring (e.g. on ribavirin who have not had a CBC)

Queries can also be constructed to answer complex questions such as "Are patients on contraindicated drug combinations and if there is a lab test marker for toxicity or treatment failure, who has abnormal labs?"

Generating a Combined Meds and Labs report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **Combined Meds and Labs** from the **Reports** menu. The report window opens.

2. Set **Schedule to Run on** and **Include Patients** confirmed in the registry parameters. (See the Generating a Report topic, page 60, for detailed instructions.)

3. Check one or more **Patients** checkboxes to include the following types of patients:

   - **Received selected medication(s)** includes patients who received the medications specified in the Medications section, during the Medications Date Range.

   - **Did not receive selected medication(s)** includes patients who did not receive any of the medications specified in the Medications section, during the Medications Date Range.

   - **Selected lab tests were performed** includes patients who received the lab test(s) specified in the Lab Tests section, during the selected Lab Date Range.

   - **No selected lab tests were performed** includes patients who did not receive the lab test(s) specified in the Lab Tests section, during the Lab Date Range.

   - **Only patients who have received care during the date range** includes patients that have received care of any type (clinic visit, inpatient stay, pharmacy refill, etc.) during the

Utilization Date Range. If this checkbox is unchecked, the report will check all living patients in the registry against the selected medications and/or lab tests.

4. If a medications-related box is checked in the **Patients** section, set a **Medications Date Range** and select one or more **Medications**:

   - Click **Include All** to select all medications for inclusion in the report

   - Click **Selected only** to specify one or more particular medications to be included in the report. Use the medication selection panes to find and select the meds:

     - Select a type of medication name from the drop-down list. Medications are listed by formulation, VA generic name, VA Drug class codes or names, and by other registry-specific groups (registry meds, investigational drugs).

     - Enter the first few letters of the medication in the left-side field and click the **Search** button. A list of matching meds is displayed below the search field.

     - Select a medication name and then click the right arrow to move it to the right pane. The medications will be automatically categorized in the list. Repeat this procedure until all desired meds are selected and appear in the right pane.

       You can use Groups to find patients who received a combination of medications:

       - Before selecting any medications, type a name for the first group in the right-side field, then click the large plus sign (+) button. The Group Name is listed inside the right pane.

       - Search for and select the medications to be included in this group, then click the right-arrow button to move them to the right pane. The medications will be automatically categorized under the Group name in the list.

       - Type a name for the next group in the right-side field, then click the plus-sign button to add the new group name to the Medications list in the right pane. Add medications to this group using the steps above.

       - Repeat this process to create as many groups as you need. The report will look for patients that have at least one prescription fill from each group.

       CCR uses "OR" logic within a group and uses "AND" logic between groups. If you have only one group on your report, the report includes any patient who received at least one drug in the group. If you have multiple groups, it includes patients who received at least one medication from ALL groups.

     - To remove a selected medication, click the name of the medication in the right pane and click the left arrow button.

   Note: Selected medications remain on the selected list, so be sure to remove them if you do not want to include them the next time you run this report. Review your selections by clicking the + or – signs to expand or collapse the lists in the right pane.

- Click an **Aggregate By** option button to format the final report by either the generic drug name or by each formulation. Use the formulation option for investigational drugs or newly-approved medications where a Generic Name does not yet exist in the local pharmacy file. (If a medication is missing on a report, re-run it using individual formulations to see if it shows up.) **Note:** This button does not affect the report set-up form.

5. If a lab-related box is checked in the **Patients** section, set a **Lab Tests Date Range** and select one or more **Lab Tests:**

   - Click **Include All** to select all lab tests to be included the report

   - Click **Selected only** to specify one or more particular tests to be included in the report. Use the lab test selection panes to locate and select the tests:

     - Enter the first few letters of the lab test name and then click the **Search** button. A list of matching lab tests is displayed below the search field.

     - Select a lab test name and then click the right arrow to move it to the right pane. Optionally, enter a Low and/or High value to search for a particular result on that test. (Decimals are acceptable, but do not use commas in these fields.)

     - Repeat this procedure until all desired tests are selected and appear in the right pane.

     - To remove a selected test, click the name of the clinic in the right pane, then click the left arrow button.

     Note: If more than one test is selected, the report will include patients with *any one* of those tests in the selected time period. The Low and High ranges will place an additional filter on the test such that the patient must have at least ONE result within the range to be included in the report. The search is *inclusive* of the values listed in low and high fields, and if only a low or high value is listed, the report will return patients with a result above the low or below the high, respectively.

6. If the "Only patients who…" box is checked in the **Patients** section, set a **Utilization Date Range**. (See the Generating a Report topic, page 60, for detailed instructions on date ranges.)

7. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report to patients with HIV/HepC co-infection who also meet the above criteria. (See Other Registries for more information)

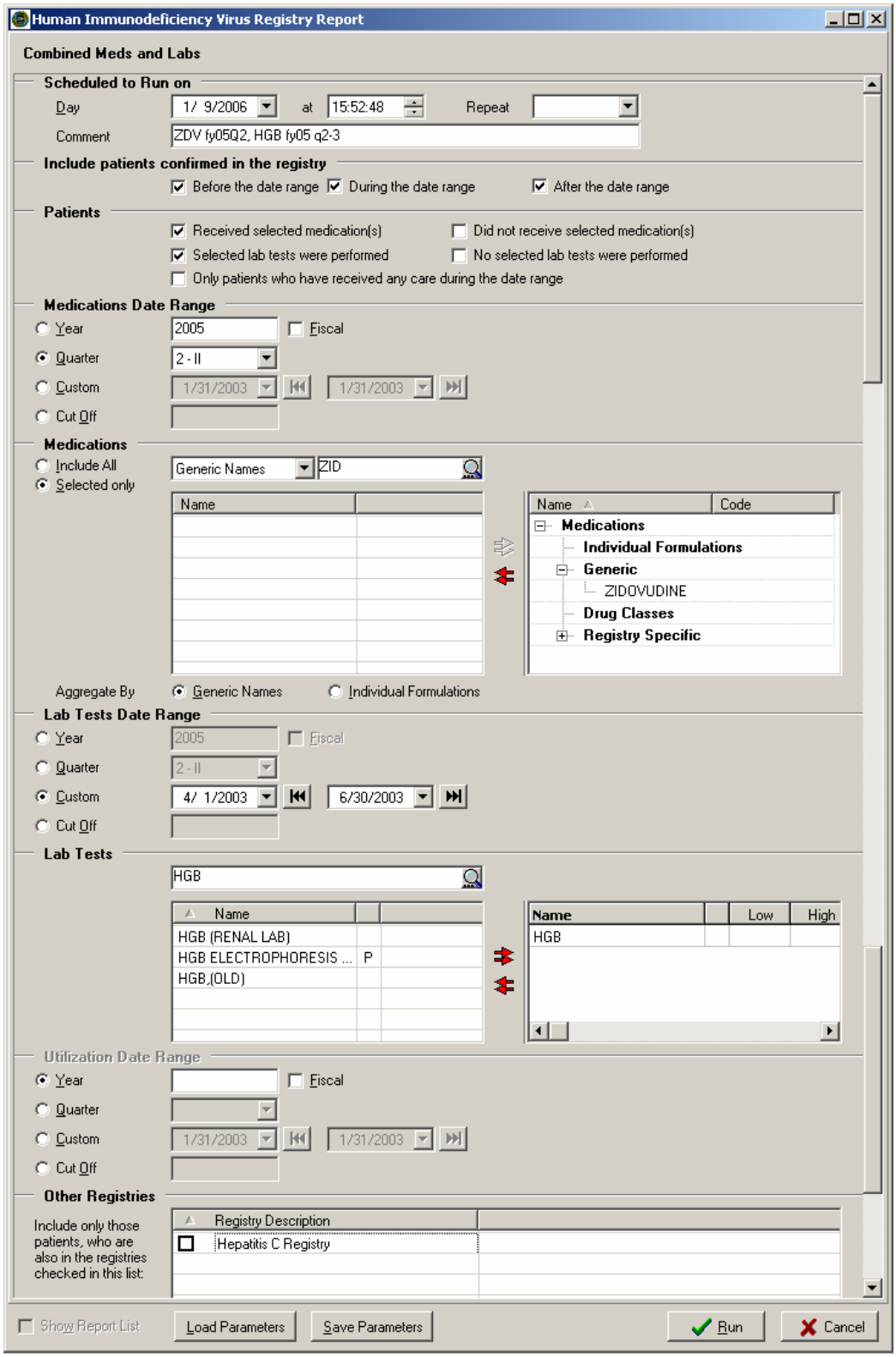
8. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

9. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a name for the template and click **Save**.

10. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

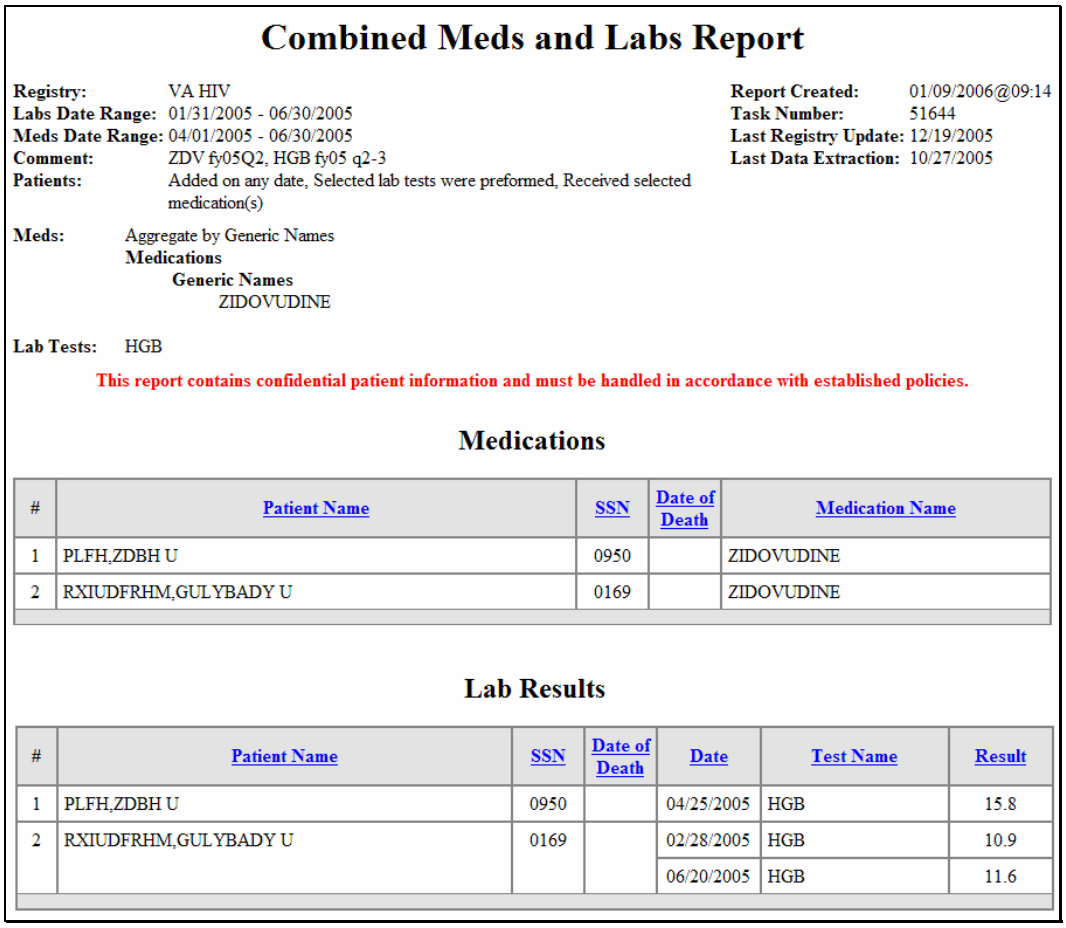
Sample Report Window

This example shows the Registry Reports window for the **Combined Meds and Labs** report:



Sample Report Output

This example shows the **Combined Meds and Labs** report:



Combined Meds and Labs Report

Registry: VA HIV
Labs Date Range: 01/31/2005 - 06/30/2005
Meds Date Range: 04/01/2005 - 06/30/2005
Comment: ZDV fy05Q2, HGB fy05 q2-3
Patients: Added on any date, Selected lab tests were preformed, Received selected medication(s)

Report Created: 01/09/2006@09:14
Task Number: 51644
Last Registry Update: 12/19/2005
Last Data Extraction: 10/27/2005

Meds: Aggregate by Generic Names
Medications
Generic Names
ZIDOVUDINE

Lab Tests: HGB

This report contains confidential patient information and must be handled in accordance with established policies.

Medications

#	Patient Name	SSN	Date of Death	Medication Name
1	PLFH,ZDBH U	0950		ZIDOVUDINE
2	RXIUDFRHM,GULYBADY U	0169		ZIDOVUDINE

Lab Results

#	Patient Name	SSN	Date of Death	Date	Test Name	Result
1	PLFH,ZDBH U	0950		04/25/2005	HGB	15.8
2	RXIUDFRHM,GULYBADY U	0169		02/28/2005	HGB	10.9
				06/20/2005	HGB	11.6

Current Inpatient List report

The **Current Inpatient List** report lists the names of patients who are assigned an inpatient bed at the time the report is run. If no active patients are currently inpatients, no report will be generated; however, a notification alert will be sent to the requestor of the report. **Note:** To identify a list of inpatients during a specific time period, use the Inpatient Utilization report instead of this one.

Generating a Current Inpatient List report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **Current Inpatient List** from the **Reports** menu. The Current Inpatient List report window opens.

2. Set the **Schedule to Run on** parameters and enter a Comment, if necessary. (See the Generating a Report topic, page 60, for detailed instructions.)

3. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report output to patients with HIV / HepC co-infection who also meet the above criteria. (In the future, this feature will allow you to find subset populations across a variety of registries.)

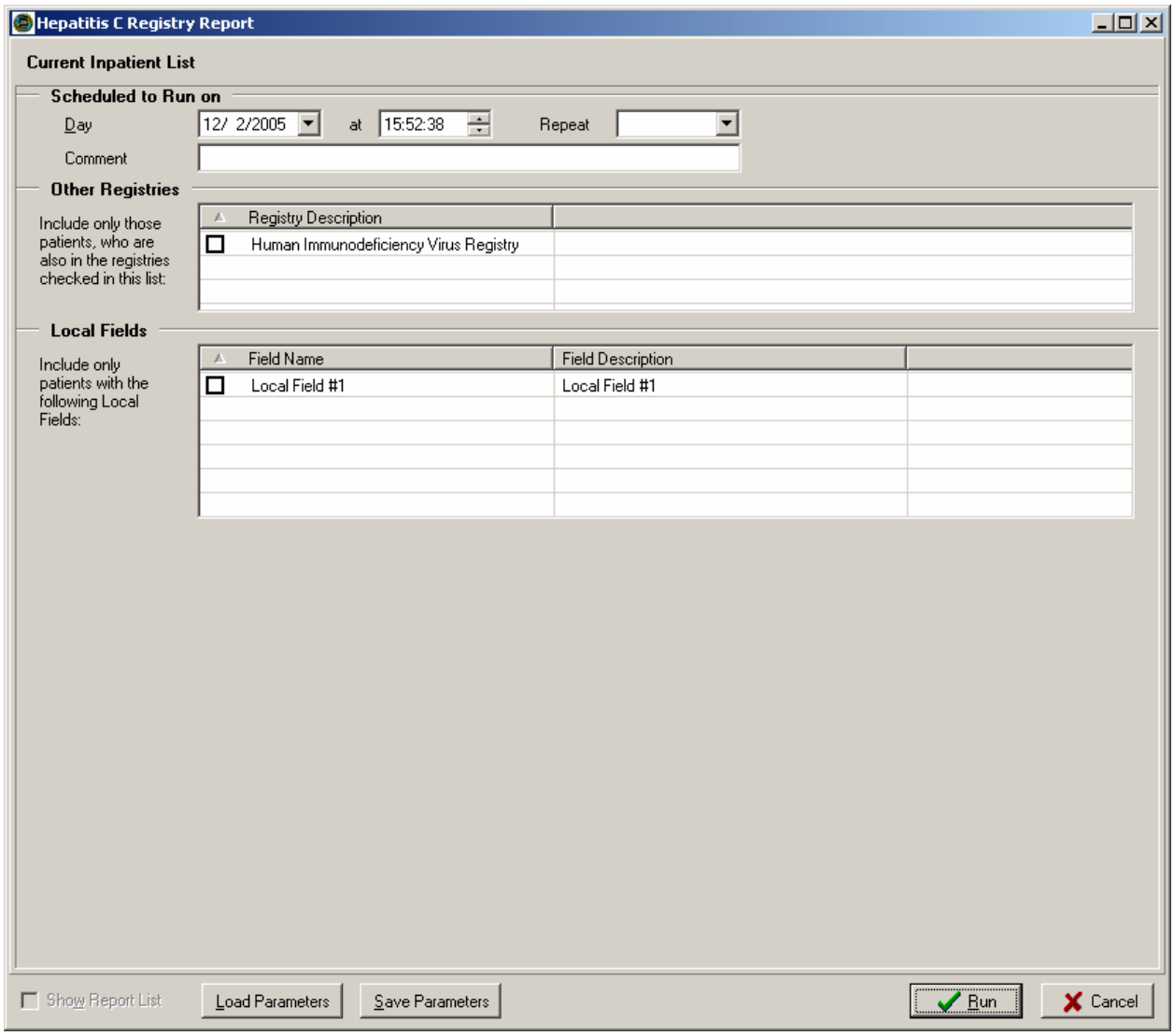
4. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

5. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a name for the template and click **Save**.

6. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

Sample Report Window

This example shows the **Registry Reports** window for the **Current Inpatient List** report:



Sample Report Output

This example shows the **Current Inpatient List** report, sorted by Patient Name:

Current Inpatient List

Registry: VA HEPC

Report Created: 12/20/2005@16:05
Task Number: 81793
Last Registry Update: 12/18/2005
Last Data Extraction: 12/18/2005

This report contains confidential patient information and must be handled in accordance with established policies.

#	Patient Name	SSN	Date of Death	Ward	Room-Bed
1	AUKRJBAH,HUQDY C	5677		3SE	3D32-29
2	CULPGXUI,ILYDHA J	1822		3SE	3D36-33
3	GXXILAH,CXEY J	0083		1SO	1E146-17
4	HDAA,UXYLAI	3561		3SE	3D35-32
5	MDAALFH,UDJELUI A	5686		1SO	1E143-14
6	MJIXPHAA,ZDJELHA F	4667		2NE	2B520-5
7	MLNT,KHYYDH P	2267		4SW	4D60-29
8	MLUVRHM,LYLTSLJDX L CU	0798		1SO	1E104-43
9	MXUFLY,CXH T	1307		1SE	1E19-1
10	NHHAN,CXTHWE P	7534		4NW	4B16-5
11	NXUUDT,UDJELUI G	8464		1SO	1E121-59
12	PHUHM,CXTHWE U	8208		4SW	4D54-15
13	PUHRTT,HRFHYH L	8967		3SE	3D30-22
14	PXXA,YLSELY I	6384		1SO	1E116-54
15	RLZDUHM,CLZHT Q	2964		4NW	4B13-2
16	SLYGXUI,WLRA ULYIXAWE	8835		4NW	4B14-4
17	SSLZLYS,WLRA S	2242		3SE	3D25-14
18	TEXZWTXY,ZLUB L	4886		2NE	2B730-17
19	VDTKXUF,JHJDA J	1244		4NW	4B14-3
20	WLSTXY,IRKLUS	3333		1SO	1E082-23
21	WUXKAHTBD,LRFRTS CLJXK	2546		1SE	1E11-26

Diagnoses report

The **Diagnoses** report identifies patients who have particular ICD-9 codes for a particular condition. The system searches completed admissions, outpatient visits, and entries in the Problem List file for ICD-9 codes assigned to any registry patients within the selected date range.

Generating a Diagnoses report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **Diagnoses** from the **Reports** menu. The Diagnoses report window opens.

2. Set the **Date Range**, **Schedule to Run on**, and **Include Patients** parameters. (See the Generating a Report topic, page 60, for detailed instructions.)

3. Select a **Report Type**:

   - **Complete** report includes summary tables and a list of patients with specific codes

   - **Summary** report includes a summary table listing the number of patients with any of the specified codes

4. Select one or more diagnoses in the **ICD-9** section:

   - Click **Include All** to select all ICD-9 codes for inclusion in the report

   - Click **Selected only** to specify one or more particular ICD-9 codes to be included in the report. Use the selection panes to locate and select the codes:

     - Enter all or part of the description or diagnosis code, then click the **Search** button. A list of matching diagnoses is displayed below the search field.

     - Select a diagnosis, then click the right arrow to move it to the right pane. Repeat this procedure until all desired diagnoses are selected and appear in the right pane.

     - To remove a selected code, click the name of the code in the right pane and click the left arrow button.

   - Click the **Load Parameters** button to use a pre-defined set of ICD-9 codes for a particular condition, such as depression or diabetes:

     - Look in the **Common Templates** list to select a condition., then click **Open**. The associated diagnosis codes are loaded into the Registry Reports window.

     - Only one template can be loaded at a time, but you can search for and add more diagnosis codes to the list, if necessary.

   Note: If multiple diagnosis codes are selected, the report will include any patient who has at least one of the selected codes.

5. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report output to patients with HIV / HepC co-infection who also meet the above criteria. (In the future, this feature will allow you to find subset populations across a variety of registries.)

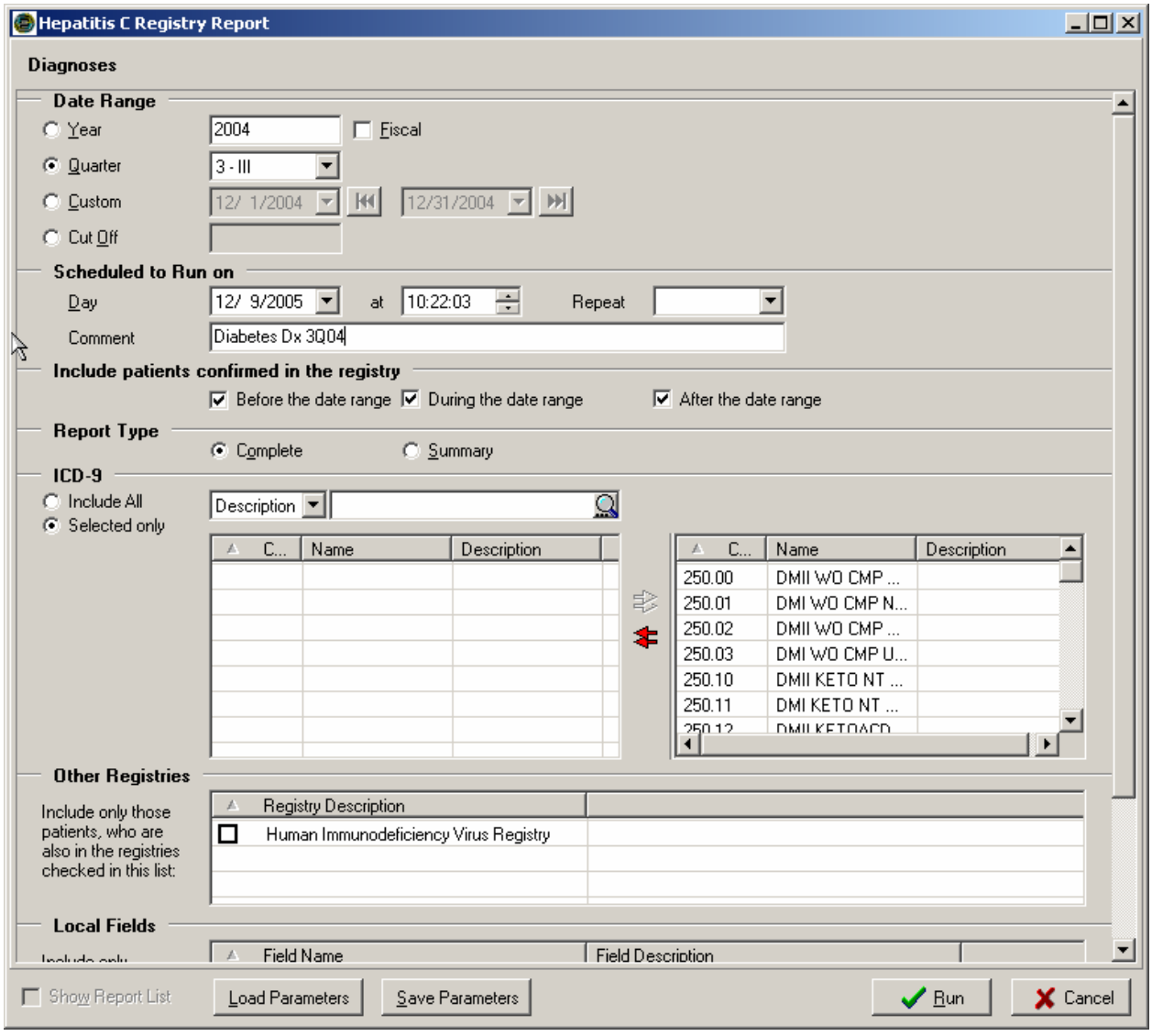
6. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

7. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a template name and click **Save**.

8. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

Sample Report Window

This example shows the **Registry Reports** window for the **Diagnoses** report:



Sample Report Output

This example shows the **Diagnoses** report with the **Complete** option selected:

Diagnoses

Registry: VA HEPC
Date Range: 07/01/2004 - 09/30/2004
Comment: Sample report for User Manual
Patients: Added on any date
Options: Complete Report
ICD-9: ALL

Report Created: 12/19/2005@12:15
Task Number: 2828
Last Registry Update: 04/18/2005
Last Data Extraction: 04/18/2005

This report contains confidential patient information and must be handled in accordance with established policies.

Number of Patients	Number of Codes	Number of Different Codes
926	20060	1111

ICD-9 Codes

#	Code	Diagnosis	Number of Patients	Number of Codes
1	008.8	VIRAL ENTERITIS NOS	1	1
2	011.90	PULMONARY TB NOS-UNSPEC	1	4
3	031.9	MYCOBACTERIAL DIS NOS	1	1
4	038.11	STAPH AUREUS SEPTICEMIA	1	1
5	038.9	SEPTICEMIA NOS	1	1

Patients

#	Patient Name	SSN	Date of Death	ICD-9	
				Code	Diagnosis
19	AYIHUTXY,IPLDY HIPLUI (G)	9380		070.54	CH HEP C W/O COMA
20	AYSEXYN,ELUUN C (O)	9815		070.51	HEPATITIS C W/O COMA
				078.11	OTHER DIS VIR&CHLA/CONDY ACUM
21	AZHT,CXEY Z (O)	0140		070.51	HEPATITIS C W/O COMA
				401.9	HYPERTENSION NOS
22	AZKRUFHN,HAZHU A (O)	1736		070.30	VIR HEP B W/O COMA, W/O DELTA

Source

Code	Description
I	Inpatient file
O	Outpatient file
PB	Problem list

General Utilization and Demographics report

The **General Utilization and Demographics** report provides a list of patients with specified types of utilization during a defined period. Additional demographic information, such as age and race, can be included in the final report. Patients that have been inactivated due to death are included in this report if they utilized health care within the selected date range.

Generating a General Utilization and Demographics report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **General Utilization and Demographics** from the **Reports** menu. The report window opens.

2. Set the **Date Range**, **Schedule to Run on** and **Include Patients** parameters. (See the Generating a Report topic, page 60, for detailed instructions.)

3. Select a **Report Type**:

   - **Complete** report includes a list of all patients who had utilization in the selected date range
   - **Summary** report includes a summary table of demographics and utilization types

4. Check one or more **Types of Utilization** checkboxes to include them in the report:

   - **Allergy** – patient had an allergy added
   - **Cytopathology** – a test performed
   - **Inpatient Data** – in an inpatient bed section
   - **Inpatient pharmacy** – unit dose medication orders, not necessarily dispensed
   - **IV Drugs** – any IV, including fluids, piggy packs, syringes, TPN (if in the system)
   - **Laboratory** – any laboratory test (except Microbiology)
   - **Microbiology** – any microbiology test
   - **Outpatient Clinic Stop** – any clinic stop
   - **Outpatient Pharmacy** – any original, refill, or partial prescription based on Fill date, not Release date (Fill is when the pharmacy put the medication in the bottle, Release is when it is actually given to the patient)
   - **Radiology** – any procedure performed
   - **Surgical Pathology** – any test performed

These 11 clinical areas can be used in any combination. If a patient died during the specified date range, they will be included in the report if they had utilization.

5. Check one or more **Report Options** to include detailed demographic information on your population with utilization:

   - **Age** – calculated at the midpoint of the specified date range, or at the time of death if applicable. The summary also reports average and median age for the selected population.

   - **Confirmation Date** – the date confirmed into the registry. With the initial CCR 1.5 registry build, all Hepatitis C registry patients will get the same confirmation date as this information is new for that registry.

   - **Date of Birth** – as listed in the local VistA patient file.

   - **Date of Death** – as listed in the local VistA patient file.

   - **Race** – categorized as: American Indian or Alaska Native, Asian, Black or African American, Declined to answer, Multiple values, No data, Unknown by patient, and White. Taken from the local VistA patient file.

   - **Risk** (HIV Registry only) – reflects the Patient History questions in the Patient Data Editor.

   - **Selection Date** – The first date that a selection rule criteria was found for the patient

   - **Sex** – Male or Female, as listed in the VistA patient file.

   - **SSN** – the full Social Security Number. **CAUTION:** Take special care to protect this confidential patient information when viewing or printing this report.

   - **Type of Utilization** – a list of type(s) of utilization found for a given patient.

6. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report output to patients with HIV / HepC co-infection who also meet the above criteria. (In the future, this feature will allow you to find subset populations across a variety of registries.)

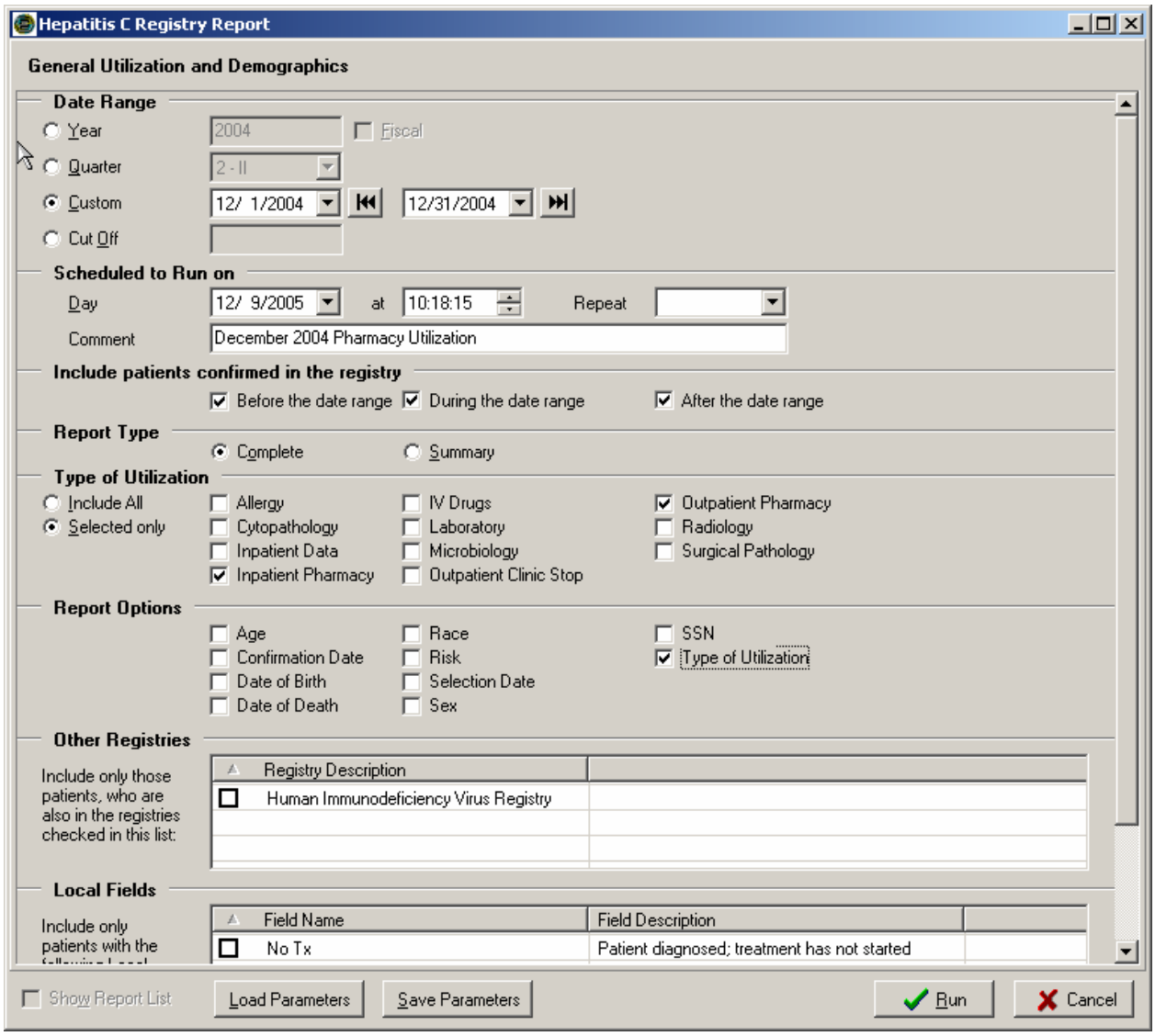
7. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

8. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a template name and click **Save**.

9. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

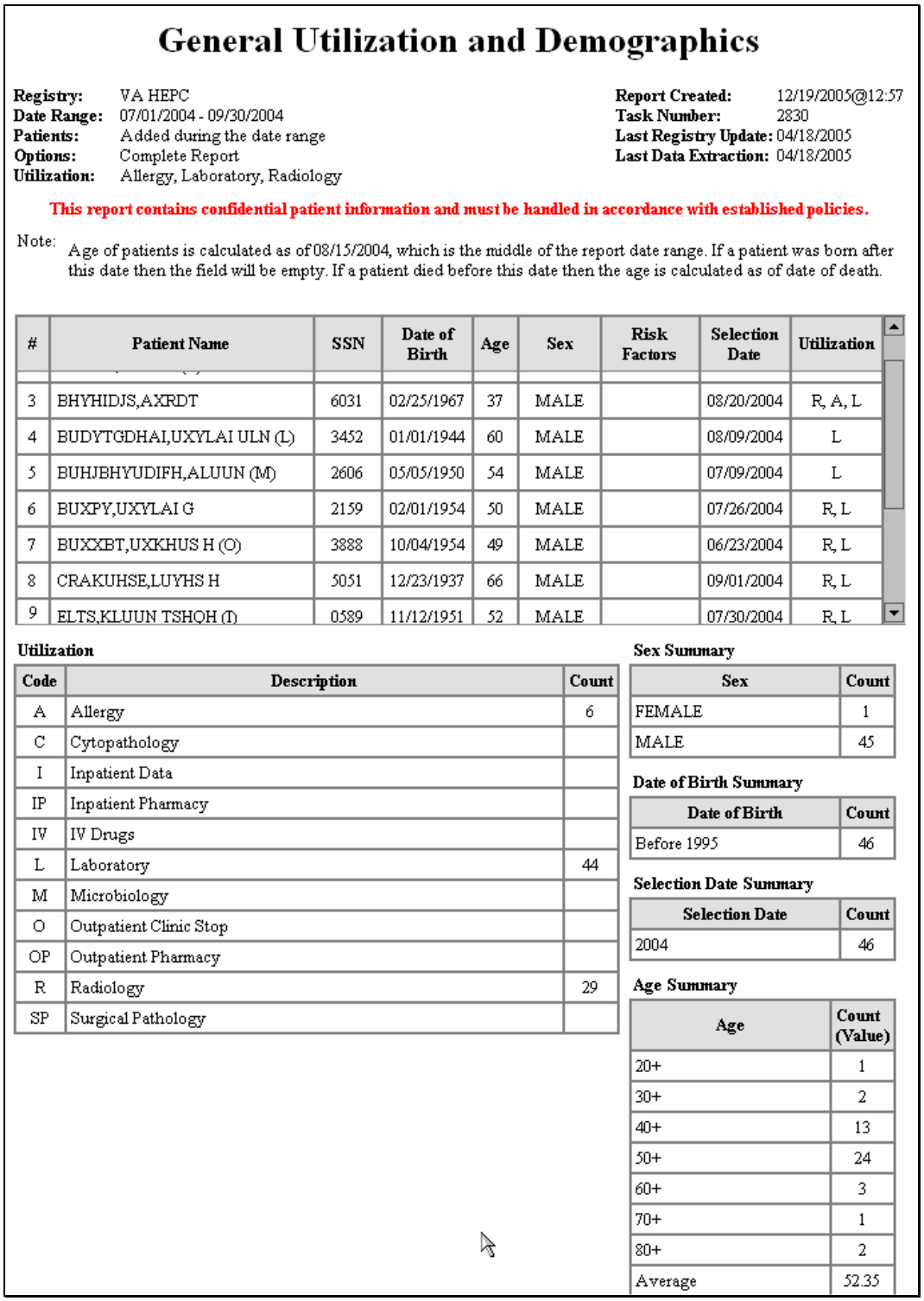
Sample Report Window

This example shows the **Reports** window for the **General Utilization and Demographics** report:



Sample Report Output

This example shows the complete **General Utilization and Demographics** report.



General Utilization and Demographics

Registry: VA HEPC
Date Range: 07/01/2004 - 09/30/2004
Patients: Added during the date range
Options: Complete Report
Utilization: Allergy, Laboratory, Radiology

Report Created: 12/19/2005@12:57
Task Number: 2830
Last Registry Update: 04/18/2005
Last Data Extraction: 04/18/2005

This report contains confidential patient information and must be handled in accordance with established policies.

Note: Age of patients is calculated as of 08/15/2004, which is the middle of the report date range. If a patient was born after this date then the field will be empty. If a patient died before this date then the age is calculated as of date of death.

#	Patient Name	SSN	Date of Birth	Age	Sex	Risk Factors	Selection Date	Utilization
3	BHYHIDJS,AXRDT	6031	02/25/1967	37	MALE		08/20/2004	R, A, L
4	BUDYTGDHAI,UXYLAI ULN (L)	3452	01/01/1944	60	MALE		08/09/2004	L
5	BUHJBHYUDIFH,ALUUN (M)	2606	05/05/1950	54	MALE		07/09/2004	L
6	BUXPY,UXYLAI G	2159	02/01/1954	50	MALE		07/26/2004	R, L
7	BUXXBT,UXKHUS H (O)	3888	10/04/1954	49	MALE		06/23/2004	R, L
8	CRAKUHSE,LUYHS H	5051	12/23/1937	66	MALE		09/01/2004	R, L
9	ELTS,KLUUN TSHQH (I)	0589	11/12/1951	52	MALE		07/30/2004	R, L

Utilization

Code	Description	Count
A	Allergy	6
C	Cytopathology	
I	Inpatient Data	
IP	Inpatient Pharmacy	
IV	IV Drugs	
L	Laboratory	44
M	Microbiology	
O	Outpatient Clinic Stop	
OP	Outpatient Pharmacy	
R	Radiology	29
SP	Surgical Pathology	

Sex Summary

Sex	Count
FEMALE	1
MALE	45

Date of Birth Summary

Date of Birth	Count
Before 1995	46

Selection Date Summary

Selection Date	Count
2004	46

Age Summary

Age	Count (Value)
20+	1
30+	2
40+	13
50+	24
60+	3
70+	1
80+	2
Average	52.35

Inpatient Utilization Report

The **Inpatient Utilization** report provides a list of patients or summary data on patients who were hospitalized in a specified period, with the option of additional filters.

Generating an Inpatient Utilization report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **Inpatient Utilization** from the **Reports** menu. The report window opens.

2. Set the **Date Range**, **Schedule to Run on** and **Include Patients** parameters. (See the Generating a Report topic, page 60, for detailed instructions.)

3. Select a report **Options** setting:

   - Click **Summary Only** to include total counts for numbers of patients and number of admissions.

   - Click **Include details** and set a **Number of users with highest utilization** value to include a list of the highest-utilizing patients and the number of stays and number of days utilized during the report period. To see this level of detail on all patients, enter a number equal to (or greater than) the number of all patients in the registry

4. Check one or more **Divisions** to select one or more locations where inpatient care is provided:

   - Click **Include All** to include all divisions in the report

   - Click **Selected only** to specify one or more specific divisions to be included in the report. Use the selection panes to locate and select the codes:

     - Enter all or part of the division name, then click the **Search** button. A list of matching locations is displayed below the search field.

     - Select a division, then click the right arrow to move it to the right pane. Repeat this procedure until all desired divisions are selected and appear in the right pane.

     - To remove a selected division, click its name in the right pane, then click the left arrow button.

5. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report output to patients with HIV / HepC co-infection who also meet the above criteria. (In the future, this feature will allow you to find subset populations across a variety of registries.)

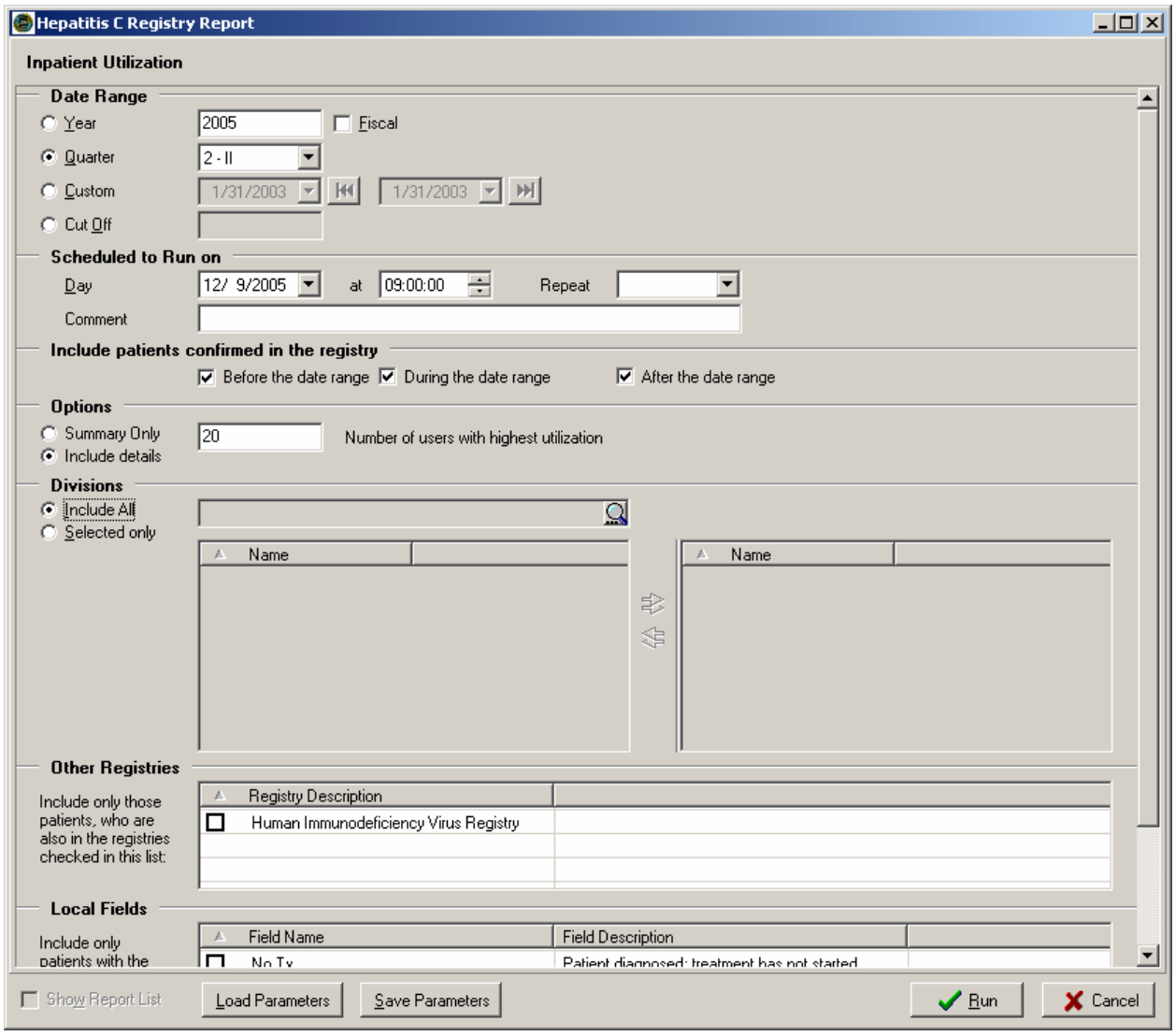
6. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

7. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a template name and click **Save**.

8. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

Sample Report Window

This example shows the **Registry Reports** window for the **Inpatient Utilization** report:



Sample Report Output

This example shows the **Inpatient Utilization** report with the **Include Details** option selected.

Inpatient Utilization

Registry: VA HEPC
Date Range: 04/01/2005 - 06/30/2005
Comment: Top 20 Utilization, 2Q05
Patients: Added on any date
Divisions: ALL
MaxUtil: 5 (maximum number of patients with highest utilization to display)

Report Created: 12/09/2005@10:06
Task Number: 80871
Last Registry Update: 12/06/2005
Last Data Extraction: 12/06/2005

This report contains confidential patient information and must be handled in accordance with established policies.

Number of Patients	Number of Stays	Number of Days	Median Length of Stay (MLOS)	Average Length of Stay	Number of Short Stays
21	21	1890	90.0	90.0	0

Number of Patients	Number of Stays
21	1

Distribution of Utilization among Bed Sections

Because of hospital stays split among multiple bed sections, information by bed section may not match the totals for complete hospital stays presented in the summary and highest utilization tables.

#	Bed Section	Number of Patients	Number of Stays	Number of Days	MLOS	Number of Short Stays
1	GENERAL SURGERY	3	3	270	90.0	
2	GENERAL(ACUTE MEDICINE)	6	6	540	90.0	
3	HIGH INTENSITY GEN PSYCH INPAT	2	2	180	90.0	

Highest Utilization

5 patient(s) with highest utilization by number of stays

#	Patient Name	SSN	Number of Stays	Number of Days	Number of Short Stays
1	WLSTXY,IRKLUS	3333	1	90	
2	VDTKXUF,JHJDA J	1244	1	90	
3	TEXZWTXY,ZLUB L	4886	1	90	
4	SSLZLYS,WLRA S	2242	1	90	
5	SLYGXUI,WLRA ULYIXAWE	8835	1	90	

5 patient(s) with highest utilization by number of days

#	Patient Name	SSN	Number of Stays	Number of Days	Number of Short Stays

Lab Utilization report

The **Lab Utilization** report provides a list of the number of lab orders and lab results during the selected date range. The report can be run for either individual tests or for panels (Hgb or CBC). This report includes only information about the *number* of tests performed, not about the results. The report only includes completed tests and does not cover the microbiology package..

Generating a Lab Utilization report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **Lab Utilization** from the **Reports** menu. The report window opens.

2. Set the **Date Range**, **Schedule to Run on** and **Include Patients** parameters. (See the Generating a Report topic, page 60, for detailed instructions.)

3. Select a report **Options** setting:

   - Click **Summary Only** to include total counts for numbers of patients and number of admissions.

   - Click **Include details** to request details on the patients with highest utilization and/or for tests with at least a minimum number of results. Set the **Number of users with highest utilization** to a number equal to or greater than the total number of patients in the registry if you want to see all lab utilization for all registry patients. Set the **Minimum number of procedures / results to display** to 1 to include every lab test or procedure that is selected in the report.

4. Select one or more **Lab Tests:**

   - Click **Include All** to select all lab tests to be included the report

   - Click **Selected only** to specify one or more particular tests to be included in the report. Use the lab test selection panes to locate and select the tests:

     - Enter the first few letters of the lab test name, then click the **Search** button. A list of matching lab tests is displayed below the search field.

     - Select a lab test name, then click the right arrow to move it to the right pane. Repeat this procedure until all desired tests are selected and appear in the right pane.

     - To remove a selected test, click the name of the clinic in the right pane, then click the left arrow button.

5. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report output to patients with HIV / HepC co-infection who also meet the above criteria. (In the future, this feature will allow you to find subset populations across a variety of registries.)

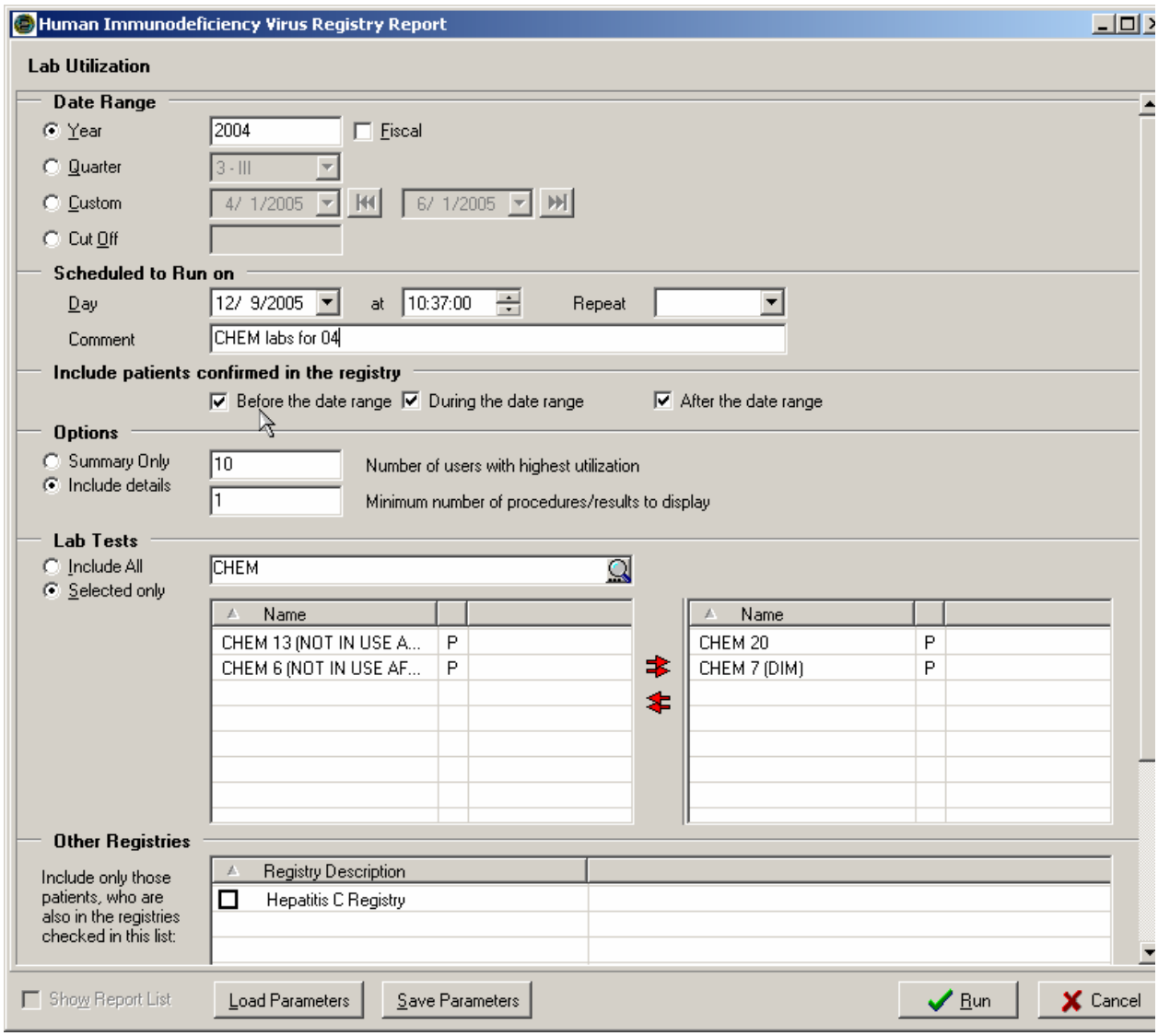
6. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

7. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a template name and click **Save**.

8. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

Sample Report Window

This example shows the **Registry Reports** window for the **Lab Utilization** report:



Sample Report Output

This example shows the **Lab Utilization** report:

Laboratory Utilization

Registry: VA HEPC
Date Range: 06/01/2004 - 06/30/2004
Patients: Added on any date
MinTest: 3 (minimum number of times a Lab test should be performed to be included in the report)
Lab Tests: ALL

Report Created: 12/19/2005@12:59
Task Number: 2831
Last Registry Update: 04/18/2005
Last Data Extraction: 04/18/2005

Number of Patients	Number of Orders	Number of Results	Number of Different Tests
354	2235	16184	286

Number of Patients	Number of Results
1	634
1	460
1	437
1	349
1	271
1	143

Laboratory tests performed 3 times or more

#	Name	Number of Patients	Number of Results	Maximum Number of Results per Patient	Number of Patients with Max. Utilization
1	'MB'	6	17	4	3
2	A/G RATIO	100	118	6	1
3	ALBUMIN	176	223	9	1
4	ALCOHOL(TOX)	135	179	4	1
5	ALKALINE PHOSPHATASE	176	221	9	1
6	ALPHA-FETOPROTEIN	10	10	1	10
7	ALT	188	235	9	1
8	AM URATE CRYSTALS	3	3	1	3
9	AMMONIA	7	16	7	1
10	AMPHETAMINE/METHANPHETAMINE(DA)	135	179	4	1
11	AMYLASE	14	17	3	1

List of Registry Patients report

The **List of Registry Patients** report displays a complete list of patients in the local registry. Users can select from patients who are pending validation into the registry or those already validated/confirmed or both. Registry specific information, such as date confirmed and some patient identifiers, can be printed with this report.

Generating a List of Registry Patients report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **List of Registry Patients** from the **Reports** menu. The report window opens.

2. Set the **Schedule to Run on** parameters and enter a Comment, if necessary. (See the Generating a Report topic, page 60, for detailed instructions.)

3. In the **Registry Status** section, check the appropriate box(es) to include Confirmed, Pending or Both types of patients in the report.

4. Check one or more **Report Options** checkboxes to include the field on the report. An additional column heading will be added to the report for each checkbox that is checked

   - **Coded SSN** –a scrambled patient identifier that Center for Quality Management (CQM) staff use when communicating with the field about patient safety or quality of care issues. When you receive a list of patients using the Coded SSN from CQM, you can run the report to match this 11 digit number with the actual patient name.

   - **Confirmation date** – the date the patient's status was changed from pending to confirmed

   - **Date of Death** – taken from the local VistA patient file

   - **Last 4 digits of SSN** – the patient's actual SSN, not the Coded SSN

   - **Reasons Selected for the Registry** – the selection rule (ICD-9 codes or lab test results) that identified the patient as a pending patient for the registry.

   - **Selection Date** – the earliest date that a registry specific selection rule was found.

   In the **Other Registries** section, click a registry's checkbox if you would like to limit this report output to patients with HIV / HepC co-infection who also meet the above criteria. (In the future, this feature will allow you to find subset populations across a variety of registries.)

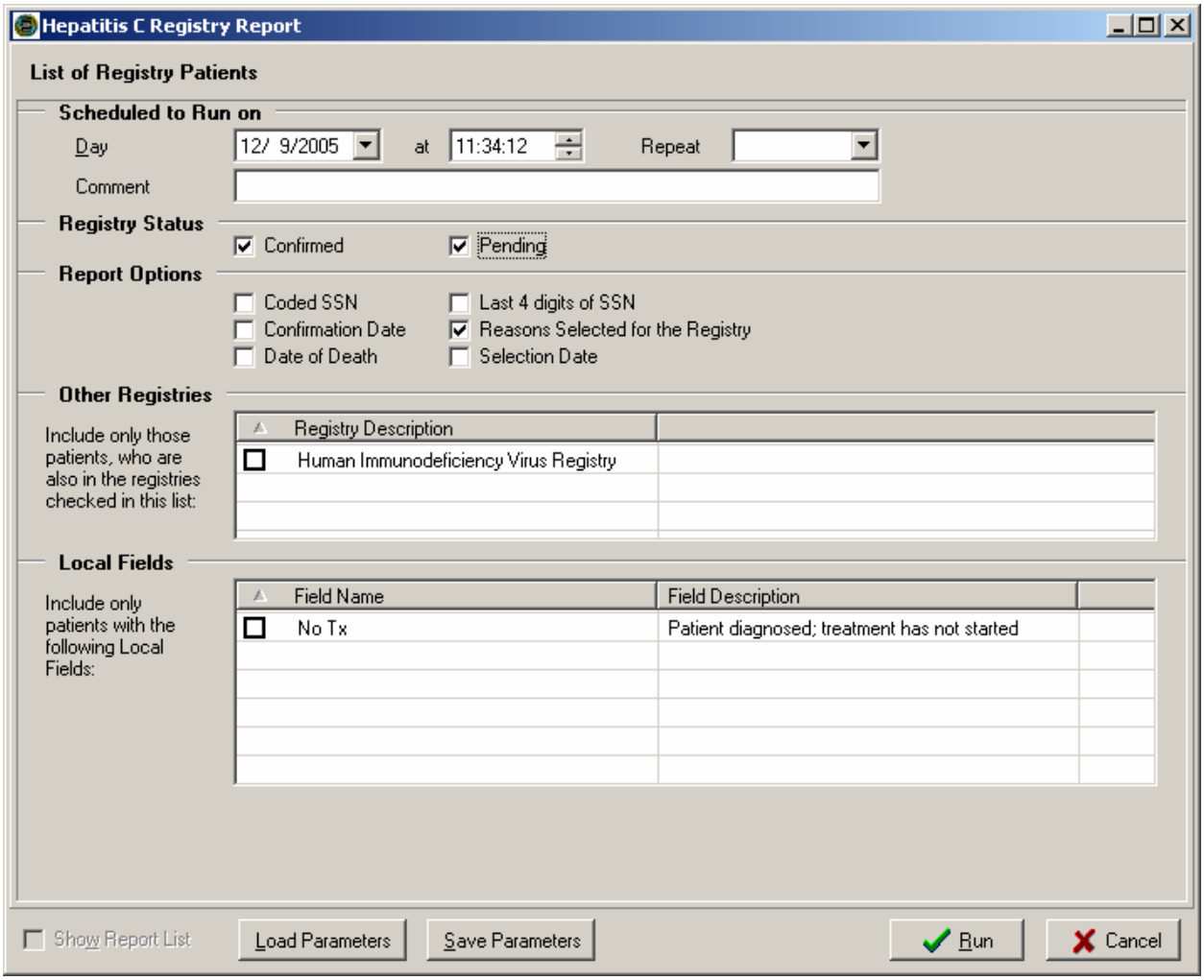
5. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

6. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a name for the template and click **Save**.

7. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

Sample Report Window

This example shows the **Registry Reports** window for the **List of Registry Patients** report:



Sample Report Output

This example shows the **List of Registry Patients** report with the **Reasons** report option included :

List of Registry Patients

Registry: VA HEPC
Patients: Both Confirmed and Pending

Report Created: 12/09/2005@11:39
Task Number: 30937
Last Registry Update: 12/09/2005
Last Data Extraction: 12/09/2005

This report contains confidential patient information and must be handled in accordance with established policies.

#	Patient Name	Reasons
1	AAAHY,HIPLUI D CU	Included from old registry HepC Ab test positive ICD-9 code in problem list ICD-9 codes in outpatient file
2	AAAHY,IHYQHU Z	ICD-9 code in inpatient file
3	AAAHY,JALNSXY C	Included from old registry HepC Ab test positive
4	AAAHY,PDAADH DDD III	Included from old registry HepC Ab test positive ICD-9 code in problem list ICD-9 codes in inpatient file ICD-9 codes in outpatient file
5	AAAHY,PDAADLZ HIIDH	Included from old registry HepC Ab test positive
6	AAAHY,PDAADLZ L	Included from old registry HepC Ab test positive

Outpatient Utilization Report

The **Outpatient Utilization Report** provides a count of outpatient clinic utilization during the specified date range with an option to identify patients with the highest utilization. There is no specific detail on who went when to which clinics – use the Clinic Follow Up report for that purpose.

Generating an Outpatient Utilization report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **Outpatient Utilization** from the **Reports** menu. The report window opens.

2. Set the **Date Range**, **Schedule to Run on** and **Include Patients** parameters. (See the Generating a Report topic, page 60, for detailed instructions.)

3. Select a report **Options** setting:

   - Click **Summary Only** to include total counts for numbers of patients and number of tests.

   - Click **Include details** and set a **Number of users with highest utilization** value to include a list of the highest-utilizing patients and the number of stops during the report period. To see utilization for all patients, enter a number equal to (or greater than) the number of all patients in the registry.

4. Check one or more **Divisions** to select one or more outpatient clinic locations:

   - Click **Include All** to include all divisions in the report.

   - Click **Selected only** to specify one or more specific divisions to be included in the report. Use the selection panes to locate and select the codes:

     - Enter all or part of the division name, then click the **Search** button. A list of matching locations is displayed below the search field.

     - Select a division, then click the right arrow to move it to the right pane. Repeat this procedure until all desired divisions are selected and appear in the right pane.

     - To remove a selected division, click its name in the right pane, then click the left arrow button.

5. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report output to patients with HIV / HepC co-infection who also meet the above criteria. (In the future, this feature will allow you to find subset populations across a variety of registries.)

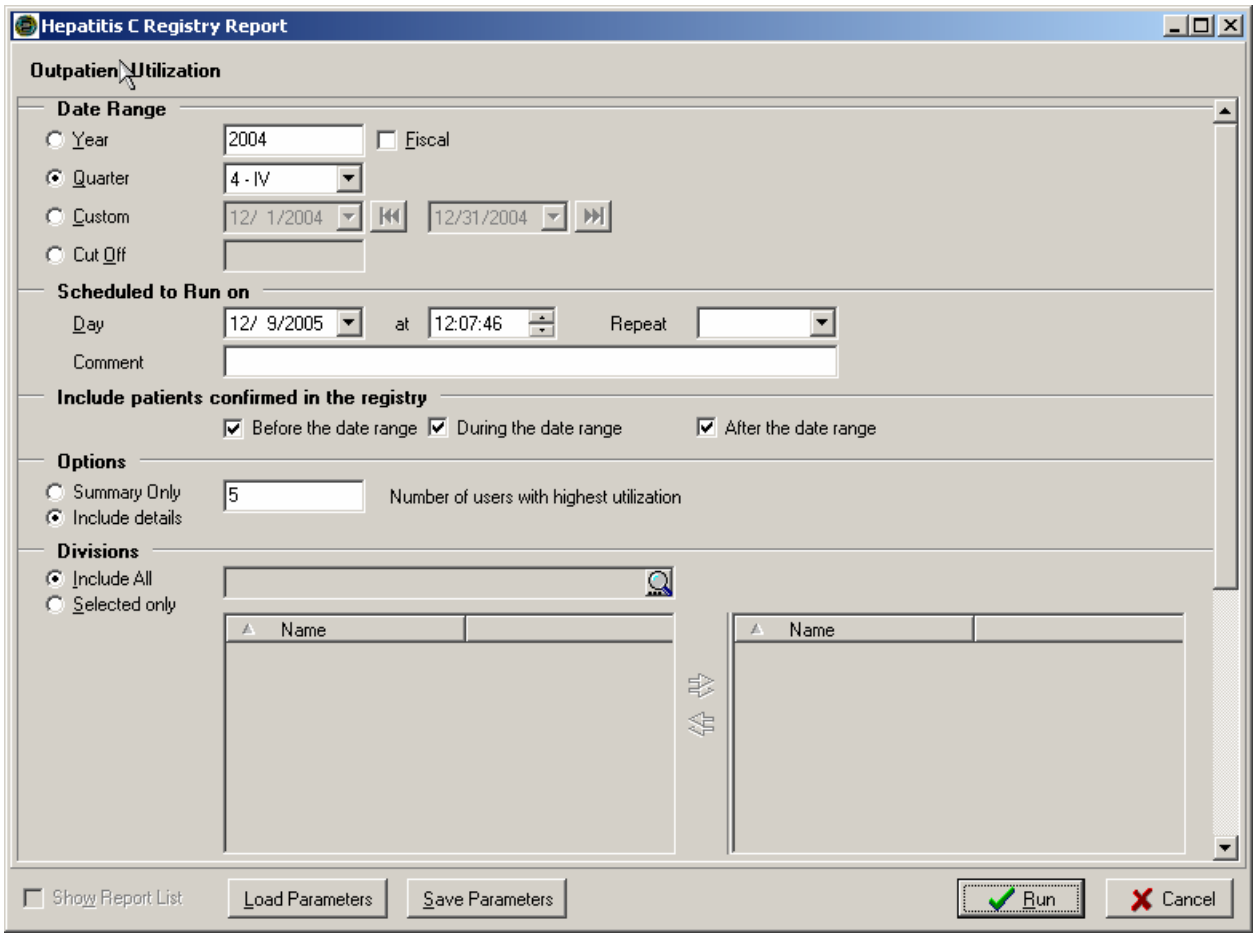
6. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

7. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a template name and click **Save**.

8. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

Sample Report Window

This example shows the **Registry Reports** window for the **Outpatient Utilization** report:



Sample Report Output

This example shows the **Outpatient Utilization** report with the **Include Details** option selected.

Outpatient Utilization

Registry: VA HEPC
Date Range: 07/01/2004 - 09/30/2004
Patients: Added during the date range
Divisions: ALL
MaxUtil: 10 (maximum number of patients with highest utilization to display)

Report Created: 12/19/2005@13:00
Task Number: 2832
Last Registry Update: 04/18/2005
Last Data Extraction: 04/18/2005

This report contains confidential patient information and must be handled in accordance with established policies.

A total of 1.00 visit is given for outpatient activity on a given date. A 'stop' is credited for each entry of a stop code, while a 'visit' is split among each stop credited on a given date. Thus, a single visit with two stop codes credited will show as 0.5 visit for each stop code.

Number of Patients	Number of Visits	Number of Stops
56	264	512

Number of Patients	Number of Stops
1	58
1	41
1	25
1	23
1	20

Distribution of Utilization among Clinics

#	Stop Code	Clinic	Number of Patients	Number of Visits	Number of Stops
1	102	ADMITTING/SCREENING	20	22.60	40
2	103	TELEPHONE TRIAGE	3	1.83	4
3	104	PULMONARY FUNCTION	2	0.53	2
4	105	X-RAY	21	8.84	26
5	107	EKG	10	2.83	10
6	108	LABORATORY	38	31.97	75
13	125	SOCIAL WORK SERVICE	8	6.48	16

Highest Utilization

10 patient(s) with highest utilization by number of stop codes

#	Patient Name	SSN	Number of Visits	Number of Stops	Number of Different Stops
1	SJEPLK,ULYIN LAGUHI	1410	20	58	21
2	PLNSXY HZHUTXY H CU	8707	33	41	13

Patient Medication History Report

The **Patient Medication History** report provides all inpatient and outpatient prescription fills for selected patients over a specified time period. This report searches inpatient unit dose, IV medications, and outpatient prescriptions for any or specified prescription fills.

Generating a Patient Medication History report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **Patient Medication History** from the **Reports** menu. The report window opens.

2. Set a **Date Range**, **Schedule to Run on** and **Include Patients** parameters. (See the Generating a Report topic, page 60, for detailed instructions.)

3. Check one or more **Activity** checkboxes to include Inpatients, Outpatients, or both.

4. Use the **Select Patients** panel to search for and select patients to be included the report:

   - Enter the first few letters of the patient's last name, then click the **Search** button. A list of matching patients is displayed below the search field.

   - Select a patient name, then click the right arrow to move it to the right pane. Repeat this procedure until all desired patients are selected and appear in the right pane.

   - To remove a patient, click the patient name in the right pane, then click the left arrow button.

5. Select one or more **Medications**:

   - Click **Include All** to select all medications to be included the report

   - Click **Selected only** to specify one or more particular medications to be included in the report. Use the medication selection panes to find and select the meds:

     - Select a type of medication name from the drop-down list. Medications are listed by formulation, VA generic name, VA Drug class codes or names, and by other registry-specific groups (registry meds, investigational drugs).

     - Enter the first few letters of the medication in the left-side field and click the **Search** button. A list of matching meds is displayed below the search field.

     - Select a medication name, then click the right arrow to move it to the right pane. The medications will be automatically categorized in the list. Repeat this procedure until all desired meds are selected and appear in the right pane.

       You can use Groups to find patients who received a combination of medications:

       - Before selecting any medications, type a name for the first group in the right-side field, then click the large plus sign (+) button. The Group Name is listed inside the right pane.

- Search for and select the medications to be included in this group, then click the right-arrow button to move them to the right pane. The medications will be automatically categorized under the Group name in the list.

- Type a name for the next group in the right-side field, then click the plus-sign button to add the new group name to the Medications list in the right pane. Add medications to this group using the steps above.

- Repeat this process to create as many groups as you need. The report will look for patients that have at least one prescription fill from each group.

CCR uses "OR" logic within a group and uses "AND" logic between groups. If you have only one group on your report, the report includes any patient who received at least one drug in the group, but if you have multiple groups, it includes patients who received at least one medication from ALL groups.

6. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report output to patients with HIV / HepC co-infection who also meet the above criteria. (In the future, this feature will allow you to find subset populations across a variety of registries.)

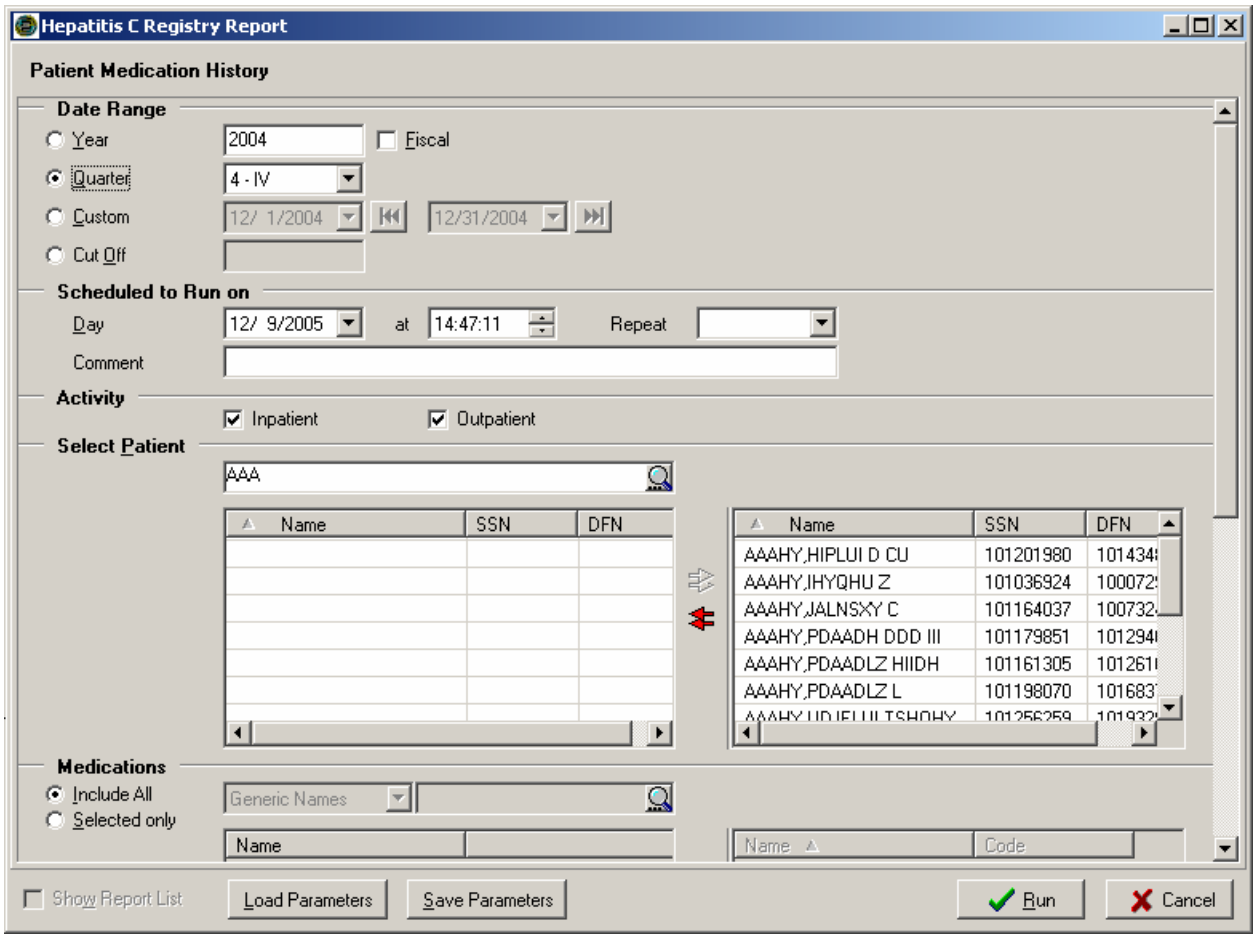
7. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

8. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a template name and click **Save**.

9. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

Sample Report Window

This example shows the **Registry Reports** window for the **Patient Medication History** report:



Sample Report Output

This example shows the **Patient Medication History** report:

Patient Medication History

Registry: VA HEPC
Date Range: 06/01/2004 - 06/30/2004
Comment: Patient Medication History sample for User Manual
Patients: Both Inpatients and Outpatients
Meds: ALL

Report Created: 12/19/2005@13:08
Task Number: 2833
Last Registry Update: 04/18/2005
Last Data Extraction: 04/18/2005

This report contains confidential patient information and must be handled in accordance with established policies.

Note:
Age of patients is calculated as of the date when the report is run (12/19/2005). If a patient died then the age is calculated as of date of death.

MJLIXUN,DTLLJ CU JR

SSN	Date of Birth	Age	Date of Death
9419	02/16/1950	51	03/11/2001

Drug History

No data has been found.

MXUALYI,PDAADH G CU

SSN	Date of Birth	Age	Date of Death
6928	10/11/1950	54	02/22/2005

Drug History

Date	Rx#	Type	Drug Name	Generic Name	Days Supply	Fill Type
06/02/2004	2544274	REFILL	FUROSEMIDE 20MG TAB	FUROSEMIDE	30	MAIL
06/02/2004	2544274	PARTIAL	FUROSEMIDE 20MG TAB	FUROSEMIDE	7	WINDOW
06/02/2004	2559140	ORIGINAL	HYDROXYZINE HCL 10MG TAB	HYDROXYZINE	30	MAIL
06/02/2004	2559146	ORIGINAL	TRIAMCINOLONE OINT 0.1%	TRIAMCINOLONE	30	MAIL

MXXUH,PDAADH J CU (O)

SSN	Date of Birth	Age	Date of Death
5812	02/21/1960	45	

Drug History

Pharmacy Prescription Utilization Report

The **Pharmacy Prescription Utilization** report provides a count of prescriptions filled during a specified date range, with the option of identifying patients with the highest utilization. This report does not include information about specific medications filled by individual patients; use the Patient Medication History report for that information.

Generating a Pharmacy Prescription Utilization report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **Pharmacy Prescription Utilization** from the **Reports** menu. The report window opens.

2. Set the **Date Range**, **Schedule to Run on** and **Include Patients** parameters. (See the Generating a Report topic, page 60, for detailed instructions.)

3. Check one or more **Activity** checkboxes to include Inpatients, Outpatients, or both.

4. Select a report **Options** setting:

   - Click **Summary Only** to include total counts for numbers of patients and number of tests.

   - Click **Include details** and enter a **Number of users with highest utilization** value to specify the number of patients to display who have the highest utilization by number of pharmacy fills. To include all utilization for all registry patients, enter a number equal to or greater than the total number of patients in the registry.

5. Select one or more **Medications**:

   - Click **Include All** to select all medications to be included the report

   - Click **Selected only** to specify one or more particular medications to be included in the report. Use the medication selection panes to find and select the meds:

     - Select a type of medication name from the drop-down list. Medications are listed by formulation, VA generic name, VA Drug class codes or names, and by other registry-specific groups (registry meds, investigational drugs).

     - Enter the first few letters of the medication in the left-side field and click the **Search** button. A list of matching meds is displayed below the search field.

     - Select a medication name, then click the right arrow to move it to the right pane. The medications will be automatically categorized in the list. Repeat this procedure until all desired meds are selected and appear in the right pane.

       You can use Groups to find patients who received a combination of medications:

       - Before selecting any medications, type a name for the first group in the right-side field, then click the large plus sign (+) button. The Group Name is listed inside the right pane.

- Search for and select the medications to be included in this group, then click the right-arrow button to move them to the right pane. The medications will be automatically categorized under the Group name in the list.

- Type a name for the next group in the right-side field, then click the plus-sign button to add the new group name to the Medications list in the right pane. Add medications to this group using the steps above.

- Repeat this process to create as many groups as you need. The report will look for patients that have at least one prescription fill from each group.

CCR uses "OR" logic within a group and uses "AND" logic between groups. If you have only one group on your report, the report includes any patient who received at least one drug in the group, but if you have multiple groups, it includes patients who received at least one medication from ALL groups.

- Click an **Aggregate By** option button to aggregate the drugs by generic or individual formulations in the report output. **Note:** This button does not affect the report set-up form.

6. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report output to patients with HIV / HepC co-infection who also meet the above criteria. (In the future, this feature will allow you to find subset populations across a variety of registries.)

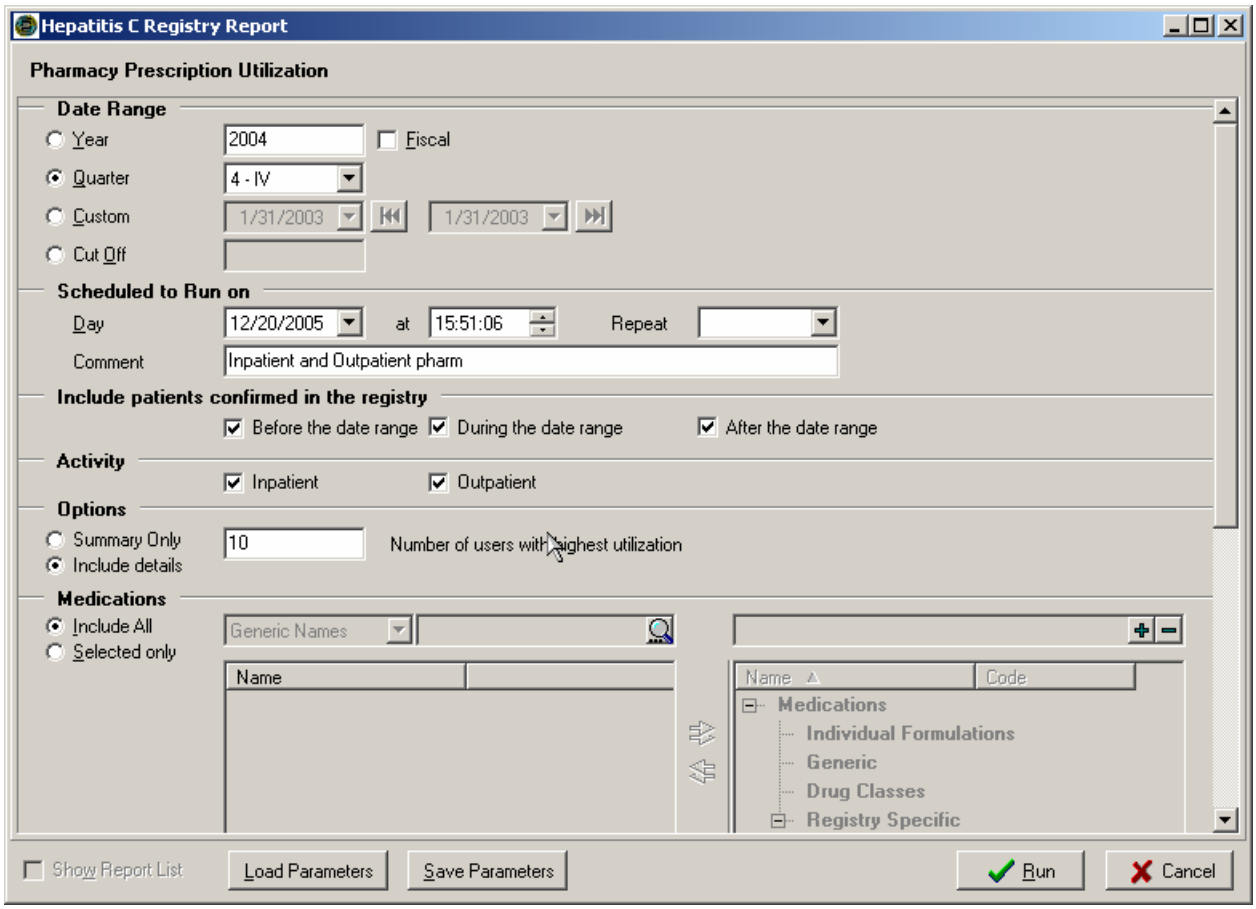
7. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

8. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a template name and click **Save**.

9. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

Sample Report Window

This example shows the **Registry Reports** window for the **Pharmacy Prescription Utilization** report:



Sample Report Output

The report displays utilization statistics for outpatient pharmacy, inpatient pharmacy, or both, depending on which report options were selected. This example shows the **Pharmacy Prescription Utilization** report. The Inpatient Activity sections are not visible, but have a similar format to the Outpatient sections:

Pharmacy Prescription Utilization

Registry: VA HEPC
Date Range: 01/31/2003 - 02/28/2003
Comment: Inpatient and Outpatient pharm for Feb 03
Patients: Added on any date, Both Inpatients and Outpatients
Meds: Aggregate by Generic Names
ALL
MaxUtil: 10 (maximum number of patients with highest utilization to display)

Report Created: 12/20/2005@15:52
Task Number: 81789
Last Registry Update: 12/18/2005
Last Data Extraction: 12/18/2005

This report contains confidential patient information and must be handled in accordance with established policies.

Selected Outpatient Activity

Number of Patients	Number of Fills	Number of Different Medications
1102	4588	361

Number of Patients	Number of Fills
1	37
3	27
1	23

Outpatient Medications

#	Drug Name	Number of Patients	Number of Fills	Maximum Number of Fills per Patient	Number of Patients with Max. Utilization
1	ACETAMINOPHEN/HYDROCODONE	165	206	4	1
2	LISINOPRIL	102	115	3	1
3	TRAZODONE	88	99	2	11
4	FOSINOPRIL	73	80	2	7
5	IBUPROFEN	74	77	2	3
6	ALBUTEROL	59	66	3	1

10 patient(s) with highest utilization by number of fills

#	Patient Name	SSN	Date of Death	Number of Fills	Number of Different Medications
1	HHUZXTDAAX,FDAKHUS	8194	03/18/2003	37	23
2	CLYIHALUDL,UDJLUIX	3515		27	19
3	GDKTXY,ALPUHYJH H	1844		27	17

Procedures report

The **Procedures** report provides a list of patients or summary data on patients who had a selected procedure during the specified date range, with the option of additional filters. This report searches on CPT codes.

Generating a Procedures report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **Procedures** from the **Reports** menu. The report window opens.

2. Set the **Date Range**, **Schedule to Run on** and **Include Patients** parameters. (See the Generating a Report topic, page 60, for detailed instructions.)

3. Select a **Report Type** setting:

   - Click **Complete** for a list of patient names and the procedures they received.

   - Click **Summary** for a total count of patients and procedures during the date range.

4. Select one or more **CPT** codes**:**

   - Click **Include All** to include all codes in the report

   - Click **Selected only** to specify one or more particular codes to be included in the report. Use the selection panes to locate and select the codes:

     - Enter a partial or full description of the code, then click the **Search** button. A list of matching codes is displayed below the search field.

     - Select a code, then click the right arrow to move it to the right pane. Repeat this procedure until all desired codes are selected and appear in the right pane.

     - To remove a selected code, click the name of the code in the right pane, then click the left arrow button.

     Note: Resources are available to determine the numbers of the ICD-9 code for specific conditions. Consult with local support staff for the tools available in your facility.

5. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report output to patients with HIV / HepC co-infection who also meet the above criteria. (In the future, this feature will allow you to find subset populations across a variety of registries.)

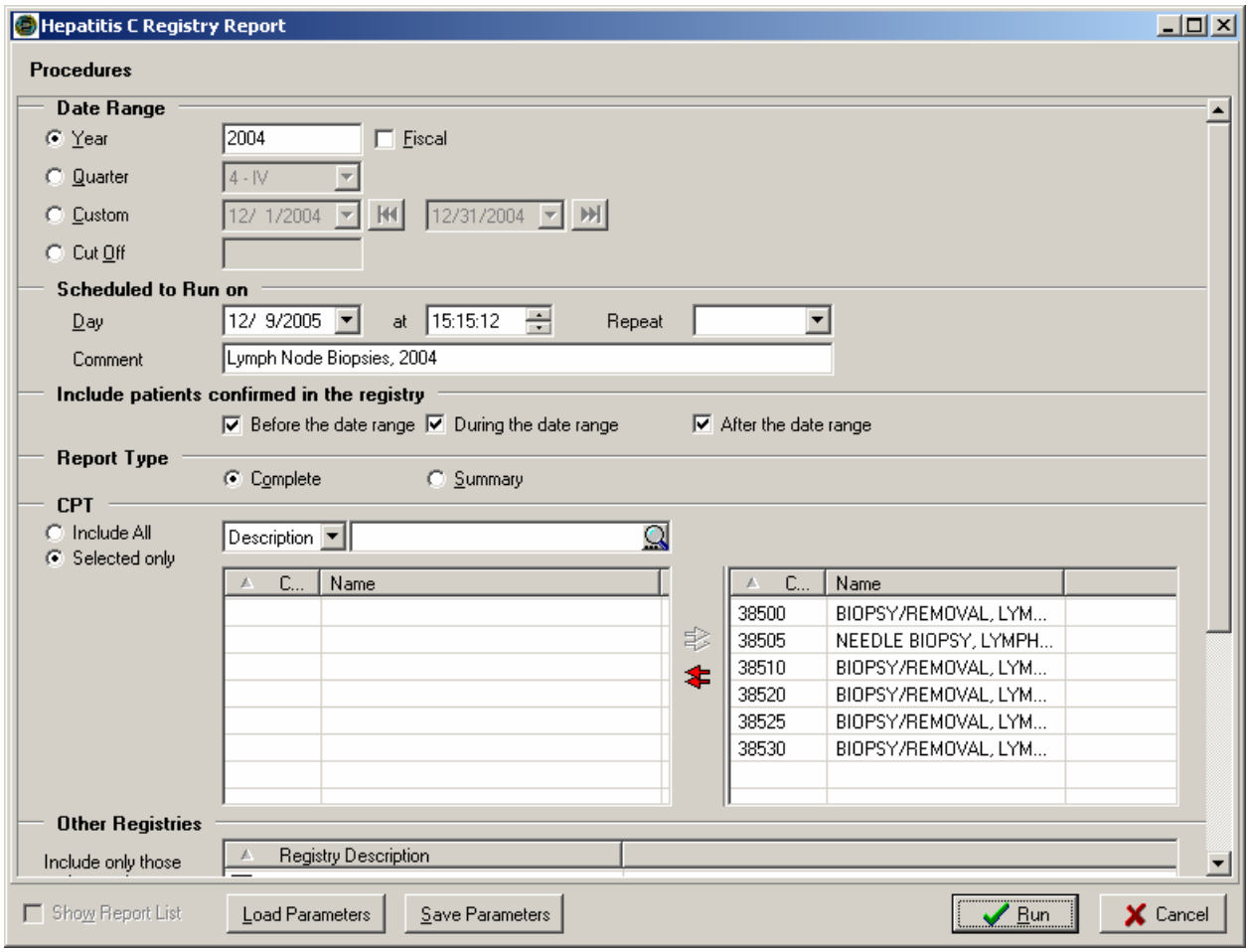
6. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

7. To save this report set-up for future use, click the **Save Parameters** button. The Save Report Parameters as window opens; enter a template name and click **Save**.

8. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

Sample Report Window

This example shows the **Registry Reports** window for the **Procedures** report:



Sample Report Output

This example shows the complete **Procedures** report:

Procedures

Registry: VA HEPC
Date Range: 07/01/2004 - 09/30/2004
Patients: Added during the date range
Options: Complete Report
CPT: ALL

Report Created: 12/19/2005@13:09
Task Number: 2834
Last Registry Update: 04/18/2005
Last Data Extraction: 04/18/2005

This report contains confidential patient information and must be handled in accordance with established policies.

Number of Patients	Number of Codes	Number of Different Codes
55	643	175

CPT Codes

#	Code	Short Name	Number of Patients	Number of Codes
1	00320	ANESTH, NECK ORGAN, 1 & OVER	1	1
2	11056	TRIM SKIN LESIONS, 2 TO 4	1	1
3	11720	DEBRIDE NAIL, 1-5	1	1
4	28060	PARTIAL REMOVAL, FOOT FASCIA	1	1
5	31502	CHANGE OF WINDPIPE AIRWAY	1	1

Patients

#	Patient Name	SSN	Date of Death	CPT			
				Code	Short Name	Date	Source
1	AYSEXYN,ELUUN C (O)	9815		99212	OFFICE/OUTPATIENT VISIT, EST	07/23/2004	O
				99213	OFFICE/OUTPATIENT VISIT, EST	09/30/2004	O
2	BALNAXJB,CXEY QHUYXY CU (B)	8166		36415	ROUTINE VENIPUNCTURE	08/30/2004	O
				43235	UPPR GI ENDOSCOPY, DIAGNOSIS	09/01/2004	O
				45384	LESION REMOVE COLONOSCOPY	09/01/2004	O
				45385	LESION REMOVAL COLONOSCOPY	09/01/2004	O
				81002	URINALYSIS NONAUTO W/O	08/30/2004	O

Source

Code	Description
I	Inpatient file
O	Outpatient file

Radiology Utilization report

The **Radiology Utilization** report provides a count of radiology procedures utilized within the specified date range, with an option to identify the patients with the highest utilization.

Generating a Radiology Utilization report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **Radiology Utilization** from the **Reports** menu. The report window opens.

2. Set the **Date Range**, **Schedule to Run on** and **Include Patients** parameters. (See the Generating a Report topic, page 60, for detailed instructions.)

3. Select a report **Options** setting:

   - Click **Summary Only** to include total counts for numbers of patients and number of tests.

   - Click **Include details** to request details on the patients with highest utilization and/or for tests with at least a minimum number of results. Set the **Number of users with highest utilization** to a number equal to or greater than the total number of patients in the registry if you want to see all utilization for all registry patients. Set the **Minimum number of procedures / results to display** to 1 to include every test or procedure that is selected in the report.

4. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report output to patients with HIV / HepC co-infection who also meet the above criteria. (In the future, this feature will allow you to find subset populations across a variety of registries.)

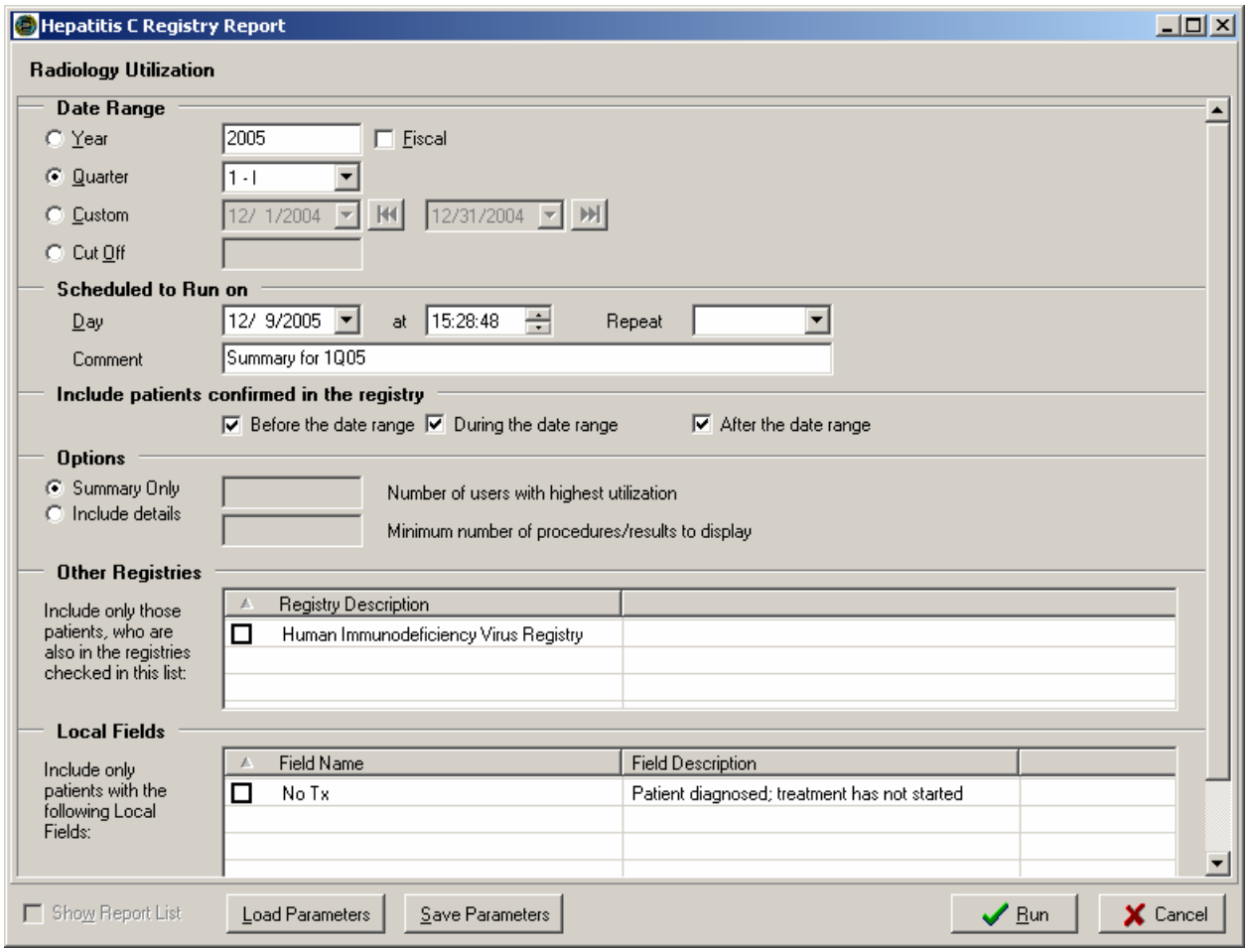
5. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

6. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a template name and click **Save**.

7. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

Sample Report Window

This example shows the **Registry Reports** window for the **Radiology Utilization** report:



Sample Report Output

This example shows the **Radiology Utilization** report:

Radiology Utilization

Registry: VA HEPC
Date Range: 06/01/2004 - 06/30/2004
Comment: Radiology Utilization sample for User Manual
Patients: Added during and after the date range
MaxUtil: 5 (maximum number of patients with highest utilization to display)
MinProc: 1 (minimum number of times a procedure should be performed to be included in the report)

Report Created: 12/19/2005@13:13
Task Number: 2836
Last Registry Update: 04/18/2005
Last Data Extraction: 04/18/2005

This report contains confidential patient information and must be handled in accordance with established policies.

Number of Patients	Number of Procedures	Number of Different Procedures
16	21	12

Procedures performed at least once

#	Name	CPT	Number of Patients	Number of Procedures
1	CHEST 2 VIEWS PA&LAT	71020	10	10
2	CHEST SINGLE VIEW	71010	1	1
3	CT NECK SOFT TISSUE W/CONT	70491	1	1
4	CT PELVIS W/CONT	72193	1	1
5	ECHOGRAM PELVIC COMPLETE	76805	1	1

5 patient(s) with highest utilization by number of procedures

#	Patient Name	SSN	Date of Death	Number of Procedures	Number of Different Procedures
1	TEXZWTXY,ZDJELHA LAAHY	6343		3	3
2	SSUHHS,ALUUN L (I)	0732		2	2
3	CRAKUHSE,LUYHS H	5051	03/10/2005	2	2
4	BUXXBT,UXKHUS H (O)	3888		2	2
5	DULWHU,ZDJELHA T	3958		1	1

Registry Lab Tests by Range report

The **Registry Lab Tests by Range** report allows the user to search for registry-specific lab tests and to filter on results of laboratory tests where the results are in a numeric format. In order for this report to work, the Registry Labs list must be set up and current at your facility: see the Adding Lab Tests section for details on how to set up local Registry Labs.

Generating a Registry Lab Tests by Range report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **Registry Lab Tests By Range** from the **Reports** menu. The report window opens.

2. Set the **Date Range**, **Schedule to Run on** and **Include Patients** parameters. (See the Generating a Report topic, page 60, for detailed instructions.)

3. Use the **Result Ranges** panel to select one or more Registry lab tests and set high and low limits for each test's results:

   - Click a Lab Test Group checkbox to select it, then enter a Low and/or a High value to limit the search for a particular result on that test. (Decimals are acceptable, but do not use commas in these fields.)

   - Specifying low and/or high ranges places an additional filter on the test: a patient must have at least ONE result within the range from each selected test to be included in the report.

   - The report includes results that are equal to the specified low or high and all values in between. If only low or only high values are selected, the report will return patients with a result at or above the low or at or below the high, respectively. For example, if you want a report of patients with a result less than 200, enter 199 as the upper limit.

4. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report output to patients with HIV / HepC co-infection who also meet the above criteria. (In the future, this feature will allow you to find subset populations across a variety of registries.)

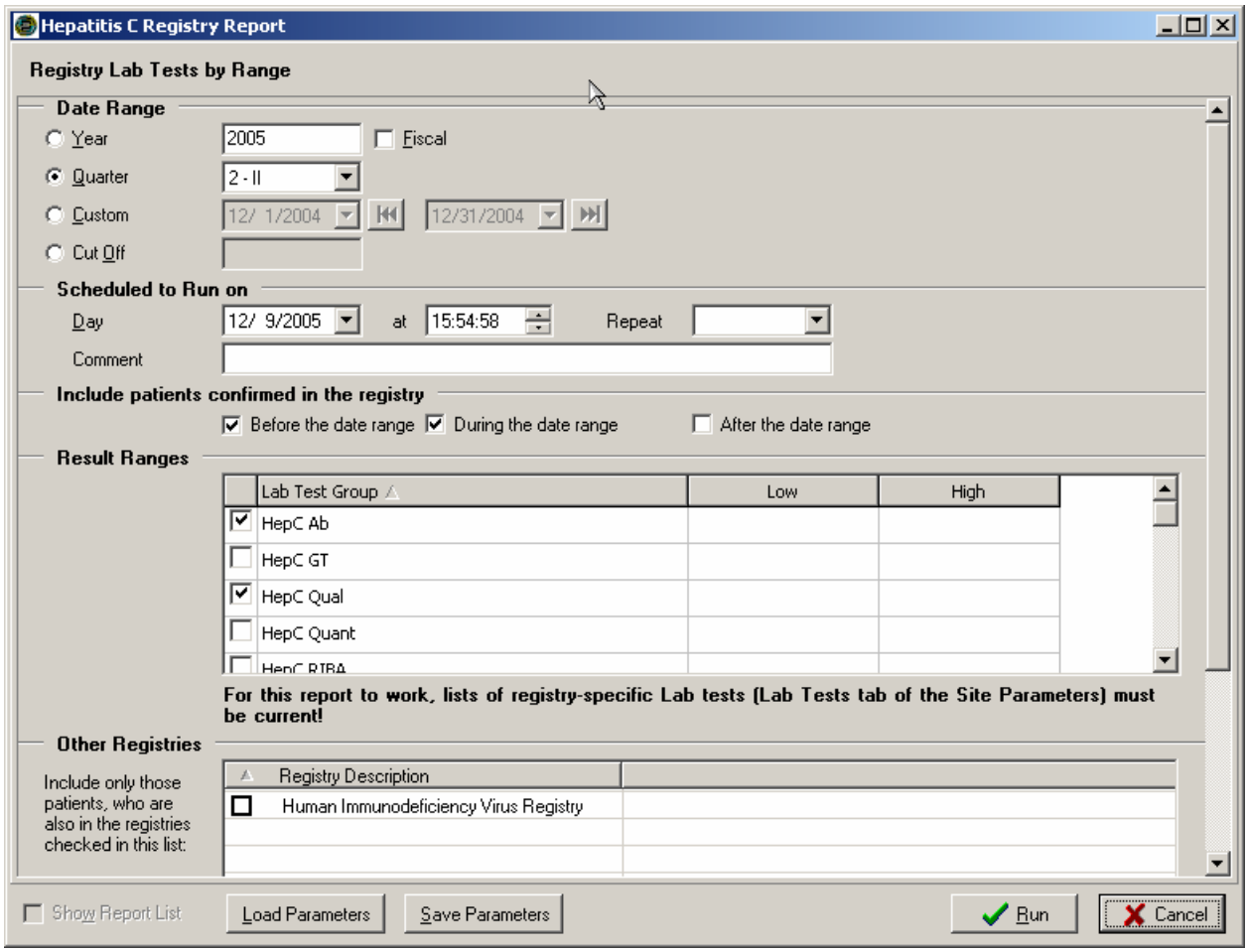
5. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

6. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a template name and click **Save**.

7. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

Sample Report Window

This example shows the **Registry Reports** window for the **Registry Lab Tests by Range** report:



Sample Report Output

This example shows the **Registry Lab Tests by Range** report output:

Registry Lab Tests by Range

Registry: VA HEPC
Date Range: 05/01/2004 - 06/30/2004

Report Created: 12/19/2005@16:09
Task Number: 2856
Last Registry Update: 04/18/2005
Last Data Extraction: 04/18/2005

Lab Results: HepC RIBA - all results

This report contains confidential patient information and must be handled in accordance with established policies.

#	Patient Name	SSN	Date of Death	Laboratory Tests			
				Group	Date	Test Name	Result
				HepC RIBA	06/07/2004@09:03	BASO %	0.7
330	SPHDSMHU,JLUA E (R)	0251		HepC RIBA	06/23/2004@09:55	BASO, ABSOLUTE	0.00
				HepC RIBA	06/23/2004@09:55	BASO %	0.0
331	SPLYB,ALUUN I (S)	4136		HepC RIBA	06/23/2004@14:13	BASO, ABSOLUTE	0.01
				HepC RIBA	06/23/2004@14:13	BASO %	0.1
332	SRAADQLY,FLUN P (B)	6660		HepC RIBA	05/12/2004@10:42	BASO, ABSOLUTE	0.03
				HepC RIBA	05/12/2004@10:42	BASO %	0.3
333	SSDAAT,YLSELYDHA UXKHUS CU (O)	5642		HepC RIBA	06/21/2004@15:56	BENZODIAZIPINE (DA)	NEG
				HepC RIBA	06/21/2004@15:56	BARBITUATES (DA)	NEG

Registry Medications report

The **Registry Medications** report provides counts and/or names of patients who received at least one prescription fill for a registry specific medication during a defined period.

Generating a Registry Medications report

The procedure for setting up this report is the same for both Registries.

1. In the main Registry window, select **Registry Medications** from the **Reports** menu. The report window opens.

2. Set a **Date Range**, **Schedule to Run on** and **Include Patients** parameters. (See the Generating a Report topic, page 60, for detailed instructions.)

3. Check one or more **Activity** checkboxes to include Inpatients, Outpatients, or both.

4. Select a **Report Type** setting:

   - Click **Complete** for a list of patient names and summary counts.

   - Click **Summary** for a total count of patients who received registry medications.

5. In the **Medications** panel, check the **Investigational Drugs** checkbox to add investigational medications to your report. If checked, the final report will aggregate by dispensed drug, as investigational medications are not assigned a VA generic name. If this box is not checked, the report will aggregate by generic name.

6. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report output to patients with HIV / HepC co-infection who also meet the above criteria. (In the future, this feature will allow you to find subset populations across a variety of registries.)

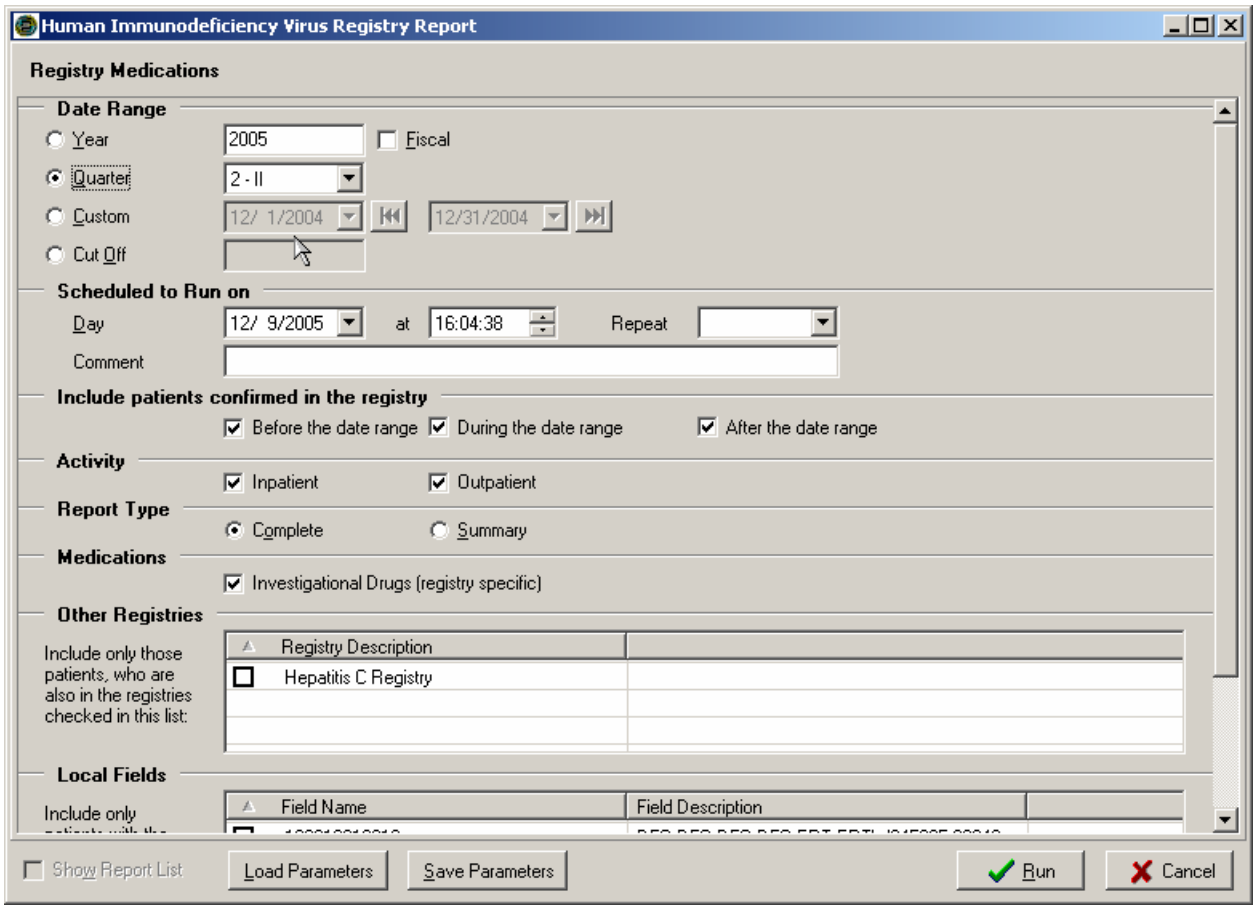
7. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

8. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a template name and click **Save**.

9. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

Sample Report Window

This example shows the **Registry Reports** window for the **Registry Medications** report:



Sample Report Output

This example shows the **Registry Medications** report output, with the **Complete** option selected:

Registry Medications Report

Registry: VA HIV
Date Range: 01/01/2005 - 12/31/2005
Comment: registry meds for 2005
Patients: Added on any date, Both Inpatients and Outpatients
Options: Complete Report
Meds: Aggregate by Generic Names, Registry Medications

Report Created: 01/18/2006@12:50
Task Number: 4599474
Last Registry Update: 01/12/2006
Last Data Extraction: 01/12/2006

This report contains confidential patient information and must be handled in accordance with established policies.

Number of Patients	Combination of Drugs		
	Patient Name	**SSN**	**Date of Death**
3	**EFAVIRENZ; LAMIVUDINE/ZIDOVUDINE**		
	LLAXHAINON, LOINOIJU	4420	
	KKOIUBG, ALNDFOW N	5440	
	AALNGONOIE, KLAHIUN A	7596	
2	**EFAVIRENZ; EMTRICITABINE/TENOFOVIR**		
	DJNFUIGB, LUSUYBG	4182	07/27/2005
	TTALOIVNFIGN, JAUB	7664	
7	**LAMIVUDINE; LOPINAVIR/RITONAVIR; TENOFOVIR**		
	LLKAUUDGBI, MJHUD	2722	
	HHKLAO, JREWJS	2636	
	GGLAAOINGION, LSOG K	5716	01/03/2006
	NNIKRE, KFDOIN W	2210	
	EEONGOINB, LFUEBB	6816	
	AAQOR, WSXEE	0221	
	WWTKGAOUN, SLUNGOR	2167	
6	**EFAVIRENZ; LAMIVUDINE; TENOFOVIR**		
	HHLUSKERQ, DRHH R	9150	
	SSKRENTO, RYNN A	0268	
	LLKUNGUSWL, ALOGUHH	0689	

VERA Reimbursement Report

The **VERA Reimbursement** report is available only in the HIV registry and can provide counts and/or names of patients who meet criteria for complex care or basic care reimbursement based on care received for HIV. The report can also include patients on investigational medications although these patients currently do not receive complex care reimbursement if they receive only investigational ARVs. Please note that it is possible that a patient who meets criteria for basic level based on HIV related factors could meet criteria for complex level based on other conditions. Also note that the report logic is based on the current (FY2006) VERA algorithms which may change in the future.

Generating a VERA Reimbursement report

This report is only available in the CCR:HIV Registry.

1. In the main Registry window, select **VERA Reimbursement** from the **Reports** menu. The report window opens.

2. Set the **Date Range**, **Schedule to Run on** and **Include Patients** parameters. (See the Generating a Report topic, page 60, for detailed instructions.)

3. Check one or more **Options** checkboxes to select the type(s) of patients to be included, and/or additional information to appear in the report:

   - **Complex Care –** patients with a clinical AIDS diagnosis as manually entered by local staff on the Patient Data Editor and/or those who have received at least one prescription (inpatient or outpatient) for any antiretroviral (ARV) in the specified time period - excluding investigational ARV drugs.

   - **Basic Care** – patients with utilization during the period and no clinical AIDS diagnosis and who did not receive an ARV.

   - **Include list of patients** – provides a full list of patients names by complex or basic care.

   - **Include Summary ARV use table** – provides a count of patients that received each medication, grouped by VA Generic name, in the specified time period.

4. In the **Medications** panel, check the **Investigational Drugs** checkbox to add investigational medications to your report. If checked, the final report will aggregate by dispensed drug, as investigational medications are not assigned a VA generic name. If this box is not checked, the report will aggregate by generic name.

5. In the **Other Registries** section, click a registry's checkbox if you would like to limit this report output to patients with HIV / HepC co-infection who also meet the above criteria. (In the future, this feature will allow you to find subset populations across a variety of registries.)

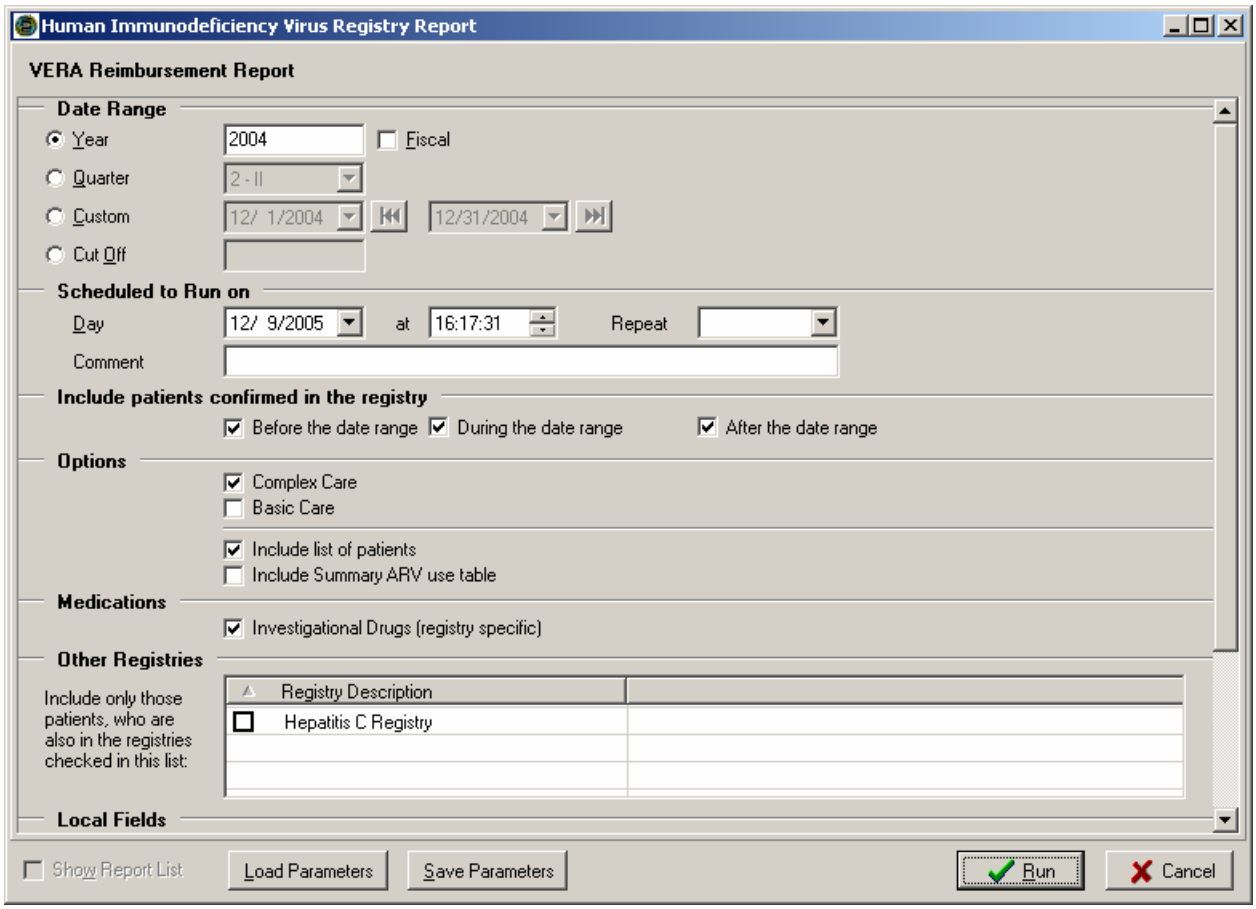
6. In the **Local Fields** section, click a field's checkbox if you would like to apply this condition to the report output. If you select more than one filter, the search will look for people with filter #1 AND filter #2 AND filter #3, and so on. (See Adding Local Fields for more information.)

7. To save this report set-up for future use, click the **Save Parameters** button. The **Save Report Parameters as** window opens; enter a template name and click **Save**.

8. When all sections have been completed, click **Run**. The report is added to the Task Manager tab and will run at the specified date and time.

Sample Report Window

This example shows the **Registry Reports** window for the **VERA Reimbursement** report:



Sample Report Output

This example shows the **VERA Reimbursement Report**: with the list of patients included:

VERA Reimbursement Report

Registry: VA HIV
Date Range: 10/01/2003 - 12/31/2003
Patients: Both Basic and Complex Care, Added during the date range
Options: List of Patients
Meds: Registry Medications

Report Created: 12/20/2005@09:31
Task Number: 2857
Last Registry Update: 04/18/2005
Last Data Extraction: 04/18/2005

This report contains confidential patient information and must be handled in accordance with established policies.

Number of Patients	Number of Basic Care Patients	Number of Complex Care Patients	Number of Patients Received ARV Drugs
3	0	3	3

Patients

#	Patient Name	SSN	Date of Death	AIDS OI	ARV Drugs	Complex Care
1	BUXPYHU,YXUUDT P	1775		Yes	Yes	Yes
2	BXTSXY,JLALK W	4728		No	Yes	Yes
3	WHAAT,JADGGXUI AHH (B)	9591		No	Yes	Yes

Appendix A – About CCR:HEPC

Overview

The Hepatitis C Case Registry (CCR:HEPC) contains important demographic and clinical data on all VHA patients identified with Hepatitis C infection. The registry extracts VistA pharmacy, laboratory, and pathology databases in order to provide the key clinical information needed to track disease stage, disease progression, and response to treatment. Data from the Hepatitis C Case Registry is used on the national, regional, and local level to track and optimize clinical care of Hepatitis C infected veterans served by VHA. National summary information (without personal identifiers) will be available to VA Central Office for overall program management as well as to inform Veterans Service Organizations, Congress, and to other federal public health and health care agencies.

Treatment Recommendations

The CCR software is meant to supplement data gathering that can be used by local clinicians in their patient care management model.

For patients with Hepatitis C infection, VA treatment guidelines for care can be viewed at the following World Wide Web (WWW) address: http://www.va.gov/hepatitisc/pved/treatmntgdlnes_00.htm .

Registry Selection Rules

The CCR:HEPC identifies patients with Hepatitis C-related ICD-9 codes or positive Hepatitis C antibody test results. The selection process is based on a set of rules that look for positive Hepatitis C antibody test results and specified Hepatitis C-related ICD-9 codes. The software recognizes the earliest instance of data that indicates Hepatitis C infection and adds the patient to the registry with a status of Pending. These patients must be reviewed and validated locally and when confirmed as having Hepatitis C infection confirmed in the local CCR:HEPC list of registry patients with Hepatitis C.

Patients are automatically added nightly to the local registry list with a status of Pending when one or more of the following ICD-9 diagnosis codes are listed on a patient's problem list, inpatient discharge diagnoses, or outpatient encounter diagnoses::

Hepatitis C-related Diagnoses	**ICD-9 CM Diagnostic Codes**
Hepatitis C Carrier	V02.62
Acute or unspecified hepatitis C with hepatic coma	070.41
Chronic hepatitis C with hepatic coma	070.44
Acute or unspecified hepatitis C without mention of hepatic coma	070.51
Chronic hepatitis C without mention of hepatic coma	070.54

The ICD-9 diagnostic codes are maintained as part of the standard software program. Updates will be released as needed in subsequent patches to the software and will be loaded by local IRM staff.

Patients are also automatically added nightly to the local registry with a status of Pending when a positive test result is reported for a Hepatitis C antibody test or a qualitative Hepatitis C RNA viral load. Hepatitis C antibody tests and RNA tests are identified using the following Logical Observation Identifiers Names Codes (LOINCs):

Hepatitis C-related Laboratory Tests	LOINC
Hepatitis C Antibody Test	**11259, 13955-0, 16128-1, 16129-9, 16936-7, 22327-1, 33462-3, 34162-8, 39008-8, 40762-2, 5198-7, 5199-5**
Hepatitis C RIBA Test	**24011-9**
Qualitative Hepatitis C RNA Test	**11259-9, 5010-4, 5011-2, 5012-0, 6422-0**

Positive results are identified as results that are equal to "P" or that contain "POS" "DETEC" or "REACT" and do not contain "NEG" "NON" or "IND." Comparisons are not case sensitive.

> **NOTE**: Because this information is a critical factor in the determination of a patient being added to this registry, it is important to validate, with the Laboratory Information Manager, the LOINC Code mapping and how results are entered for the Hepatitis C lab tests.

About historic Hepatitis C Case Registry patients

All patients in the previous Hepatitis C Case Registry are automatically "grandfathered" into CCR:HepC as confirmed registry patients. Previous versions of Hepatitis C Case Registry software did not include the use of a "pending" status nor require verification prior to activation in the registry, though local coordinators were tasked to routinely review lists of newly selected patients and delete any found not to meet registry criteria.

At the time the original HepC Case Registry software was first installed, a background process was run that applied these selection rules to historic data beginning January 1, 1996. For that one-time post installation process only, patients whose only indication of hepatitis C was ICD-9 codes (i.e., no antibody test result in the system) were required to have at least **two** instances of a HepC related ICD-9 code in order to be added to the registry. After that initial registry compilation, a single outpatient or inpatient HepC related ICD-9 code was sufficient to add a patient to the registry.

Facilities who are concerned that their CCR:HepC patient list includes a large number of patients who were inappropriately added can utilize CCR report functions (e.g., Lab test report to look for confirmatory testing) to identify and delete patients who do not truly meet registry criteria.

Appendix B – About CCR:HIV

Overview

The CCR:HIV contains important demographic and clinical data on VHA patients identified with HIV infection. The registry extracts data from VistA admissions, allergy, laboratory, outpatient, pathology, pharmacy, and radiology databases. This is done to provide the key clinical information needed to track disease stage, disease progression, response to treatment, and support administrative reporting.

Data from the CCR:HIV is used on the national, regional, and local level to track and optimize clinical care of HIV-infected veterans served by VHA. National summary information (without personal identifiers) will be available to VA Central Office for overall program management as well as to inform Veterans Service Organizations, Congress, and other federal public health and health care agencies.

Treatment Recommendations

CCR:HIV is meant to supplement data gathering that can be used by local clinicians in their patient care management model.

For patients with HIV infection, VA recommends clinicians consult the Kaiser Family Foundation-Department of Human Health Services treatment guidelines for HIV care. These guidelines can be viewed at the following World Wide Web (WWW) address: http://www.aidsinfo.nih.gov/guidelines/ and at the following intranet website: http://www.hiv.va.gov/vahiv?page=pr-home.

Registry Selection Rules

The CCR:HIV identifies patients with HIV-related ICD-9 codes or positive HIV antibody test results. The selection process is based on a set of rules that look for positive HIV antibody test results and specified HIV-related ICD-9 codes. The software recognizes the earliest instance of data that indicates HIV infection and adds the patient to the registry with a status of Pending. These patients must be reviewed and validated locally and when confirmed as having HIV infection confirmed in the local CCR:HIV registry list of registry patients with HIV.

Patients are automatically added nightly to the local registry list with a status of Pending when one or more of the following ICD-9 diagnosis codes are listed on a patient's problem list, inpatient discharge diagnoses, or outpatient encounter diagnoses:

HIV-related Diagnoses	ICD-9 Diagnostic Code
Asymptomatic Human Immunodeficiency Virus [HIV] Infection Status	**V08.**
Human Immunodeficiency Virus (HIV) Disease	**042.x**
HIV Causing Other Specific Disorder	**043.x**
HIV Causing Other Specific Acute Infection	**044.x**

HIV-related Diagnoses	ICD-9 Diagnostic Code
Human Immunodeficiency Virus, Type 2 (HIV 2)	**079.53**
Nonspecific Serologic Evidence Of HIV	**795.71**
Positive Serology/Viral HIV	**795.8**

The ICD-9 diagnostic codes are maintained as part of the standard software program. Updates will be released as needed in subsequent patches to the software and will be loaded by local IRM staff.

Patients are also automatically added nightly to the local registry pending patient list when a positive test result is reported for an HIV antibody test or HIV Western Blot test. HIV antibody tests and Western Blot tests are identified using the following Logical Observation Identifiers Names Codes (LOINCs):

HIV-related Laboratory Tests	LOINC
HIV 1 Antibody Test	**13499-9, 14092-1, 16974-8, 16975-5, 21007-0, 22356-0, 29327-4, 29893-5, 32571-2, 33866-5, 35437-3, 35438-1, 35438-9, 40732-0, 41143-9, 41144-7, 41145-4, 5220-9, 7917-8**
HIV 1 Western Blot Test	**21009-6**
HIV 1 And 2 Antibody Test	**22357-8, 31201-7, 32602-5, 40733-8, 5223-3, 7918-6**
HIV 2 Antibody Test	**22358-6, 30361-0, 33806-1, 33807-9, 5224-1, 5225-8, 7919-4**
HIV 2 Western Blot Test	**31073-0**

Positive results are identified as results that are equal to "P" or that contain "POS" "DETEC" or "REACT" and do not contain "NEG" "NON" or "IND." Comparisons are not case sensitive.

> **Note:** Because this information is a critical factor in the determination of a patient being added to this registry, it is important to validate, with the Laboratory Information Manager, the LOINC Code mapping and how results are entered for the HIV lab tests.

CCR:HIV Registry Pending Patient Worksheet

HIV Pending Patient Worksheet Name:_____ Last 4:_____Pt should be added to ICR: ❑ YES ❑ NO

1. HIV positive test result /other evidence: ❑ NONE - delete from registry

❑ + ELISA date_____ ❑ + Western Blot date _____ ❑ + HIV Viral load date _____ ❑ Narrative note date_____

2. HIV Risk info: ❑ UNKNOWN

- ❑ Sex with male
- ❑ Sex with female
- ❑ Injected nonprescription drug
- ❑ Received clotting factor for hemophilia/coagulation disorder
- ❑ HETEROSEXUAL relations with bisexual male
- ❑ HETEROSEXUAL relations with injection drug user
- ❑ HETEROSEXUAL relations with person with hemophilia/coagulation disorder
- ❑ HETEROSEXUAL relations with transfusion recipient with documented HIV infection
- ❑ HETEROSEXUAL relations with transplant recipient with documented HIV infection
- ❑ HETEROSEXUAL relations with PWA or documented HIV+, risk not specified
- ❑ Received transfusion of blood/blood component (other than clotting factor)
- ❑ Received transplant of tissue/organ(s) or artificial insemination
- ❑ Worked in health care or clinical laboratory setting

3. AIDS OI History ❑ NONE

- ❑ Candidiasis of bronchi, trachea, or lungs: date _____
- ❑ Candidiasis, esophageal: date _____
- ❑ Cervical cancer, invasive: date _____
- ❑ Coccidioidomycosis, disseminated or extrapulmonary: date _____
- ❑ Cryptococcosis, extrapulmonary: date _____
- ❑ Cryptosporidiosis, chronic intestinal (>1 month's duration): date _____
- ❑ Cytomegalovirus disease (other than liver, spleen, or nodes): date _____
- ❑ Cytomegalovirus retinitis (with loss of vision): date _____
- ❑ Encephalopathy, HIV-related: date _____
- ❑ Herpes simplex: chronic ulcer(s) (>1 month's duration); or bronchitis, pneumonitis, or esophagitis: date _____
- ❑ Histoplasmosis, disseminated or extrapulmonary: date _____
- ❑ Isosporiasis, chronic intestinal (>1 month's duration) : date _____
- ❑ Kaposi's sarcoma: date _____
- ❑ Lymphoma, Burkitt's (or equivalent term): date _____
- ❑ Lymphoma, immunoblastic (or equivalent term): date _____
- ❑ Lymphoma, primary, of brain: date _____
- ❑ Mycobacterium avium complex or M. kansasii, disseminated or extrapulmonary: date _____
- ❑ Mycobacterium tuberculosis, any site (pulmonary or extrapulmonary): date _____
- ❑ Mycobacterium, other species or unidentified species, disseminated or extrapulmonary: date _____
- ❑ Pneumocystis carinii pneumonia: date _____
- ❑ Pneumonia, recurrent: date _____
- ❑ Progressive multifocal leukoencephalopathy: date _____
- ❑ Salmonella septicemia, recurrent: date _____
- ❑ Toxoplasmosis of brain: date _____
- ❑ Wasting syndrome due to HIV: date _____

4. COMMENTS/

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Glossary

Term or Acronym	Description
AAC	Austin Automation Center
AIDS	Acquired Immunodeficiency Syndrome
AIDS-OI	AIDS-defining opportunistic infection
AMIS	Automated Management Information System
ARV	Antiretroviral medications
CCOW	Clinical Context Object Workgroup standard
CCR	Clinical Case Registries
CDC	Center for Disease Control
CPRS	Computerized Patient Record System
CPT	Current Procedural Terminology
DBIA	Database Integration Agreement
DFN	File Number—the local/facility patient record number (patient file internal entry number)
Extract Data Definition	This is a set of file and field numbers that identify the data that should be extracted during the extraction process.
Extract Process	This process is run after the update process. This function goes through patients on the local registry and, depending on their status, extracts all available data for the patient since the last extract was run. This process also updates any demographic data held in the local registry for all existing patients that have changed since the last extract. The extract transmits any collected data for the patient to the national database via HL7.
FDA	Food and Drug Administration
GUI	Graphical User Interface
HAART	Highly Active Antiretroviral Treatment
Hep C	Hepatitis C
HIV	Human Immunodeficiency Virus
HTML	Hypertext Mark-up Language
IEN	Internal Entry Number
ICD-9	International Classification of Diseases, version 9. A numeric code used for identifying patient diagnoses associated with inpatient and outpatient care.
ICN	Integration Control Number, or national VA patient record number
ICR	Immunology Case Registry: former name for CCR:HIV.
IRM	Information Resource Management service.
Local Registry	The local file of patients that have either passed the selection rules and been added automatically to the registry, or have been added manually by a designated Coordinator.
Local Registry Update	This process adds new patients (that have had data entered since the last update was run and pass the selection rules) to the local registry.
LOINC	Logical Observation Identifiers Names Code.

Term or Acronym	Description
National Case Registry	All sites running the CCR software transmit their data to the central database for the registry
NPCD	National Patient Care Database
Registry Medication	A defined list of medications used for a particular registry
ROR	Registry of Registries; the M namespace for the CCR application
Selection Rules	A pre-defined set of rules that define a registry patient.
Sensitive Information	Any information which requires a degree of protection and which should be made available only to authorized system users.
Site Configurable	A term used to refer to features in the system that can be modified to meet the needs of each local site.
VERA	Veterans Equitable Resource Allocation
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Networks
VistA	Veterans Health Information System and Technology Architecture
XML	Extensible Mark-up Language

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