



RESOURCE AND PATIENT MANAGEMENT SYSTEM

iCare Population Management GUI

(BQI)

Addendum to User Manual HIV/AIDS Management in iCare User Manual

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Preface

The purpose of this manual is to provide you with the information you need to use the iCare (BQI) population management application, specifically for the care and management of Patients Living With HIV/AIDS (PLWH/A). In 2005, the Indian Health service developed and deployed a software application related to the care of this population. That software, HIV Management System (HMS) has now been integrated in the iCare GUI. The original roll and scroll version is no longer be available for use.

This manual contains reference information about iCare views, examples of its processes, and step-by-step procedures to show you how to perform the activities supported by the application, specifically for HIV/AIDS patient management.

Refer to the main iCare User Manual for more complete, in-depth information about the mechanics of using iCare, such as getting started, logging in, establishing User Preferences, creating patient panels, and using the panel and patient views.

1.0 Introduction

AIDS (Acquired Immunodeficiency Syndrome) was first reported in the United States in 1981 and has since become a major worldwide epidemic. AIDS is caused by HIV (human immunodeficiency virus). By killing or damaging cells of the body's immune system, HIV progressively destroys the body's ability to fight infections and certain cancers. People diagnosed with AIDS may get life-threatening diseases called opportunistic infections, which are caused by microbes such as viruses or bacteria that usually do not make healthy people sick.

More than 1 million cases of AIDS have been reported in the United States since 1981. Reports show that 21 percent of those infected with HIV are unaware of their infection. The epidemic is growing most rapidly among minority populations.

iCare provides Indian Health Service/Tribal/Urban (I/T/U) healthcare providers with another tool for improving the care and management of PLWH/A as well as those who are at risk for the disease.

This information in this document has been developed for physicians, mid-level practitioners, nurses, and case managers responsible for the care of this population. It provides descriptions of and instructions for the following:

- The setup and maintenance of the site-populated taxonomies related to specific medications and laboratory exams. Section 6.0 provides more information.
- The entry of HIV/AIDS-specific patient data. Section 2.0 provides more information.
- The creation and population of panels with PLWH/A patients living with HIV/AIDS. Section 3.0 provides more information.
- Report generation. Section 4.0 provides more information.
- Clinical decision support such as Reminders, Best Practice Prompts and Performance Measures. Appendix B: provides more information.

1.1 Key Functional Features

iCare does not duplicate the data from any other RPMS component. All data displayed in or entered will pass to and reside in the appropriate underlying RPMS component (e.g., PCC, HMS)

Key functional features of iCare include:

- The ability to identify a group of patients based on the HIV/AIDS Diagnostic Tag definition.

- The ability to create and manage a panel of patients living with HIV/AIDS and/or At Risk patients.
- The ability to automatically repopulate the panel with new patients who meet the definition.
- An HIV/AIDS Health Supplement that presents condition-specific patient data.
- An HIV Quality of Care report for a population and/or individual that provides care statistics that can be used to evaluate care at the local level and be sent to the Area and/or Headquarters as requested.
- The incorporation of artificial intelligence algorithms to provide reminders for tests, immunizations and other procedures related specifically to HIV/AIDS.
- The provision of both population and patient management and reporting capabilities.
- The identification of patients for state/CDC surveillance reporting.

1.2 Sensitive Patient Data

Using iCare and accessing sensitive patient data requires compliance with all procedures related to the security of protected health information.

2.0 Patient Management

The individual patient management functions include displaying, entering, and editing data specifically related to HIV/AIDS.

2.1 Data Specifically Related to HIV/AIDS

iCare contains data fields that are specific to HIV/AIDS patient management. To view all the HIV/AIDS-related data fields in a Panel View:

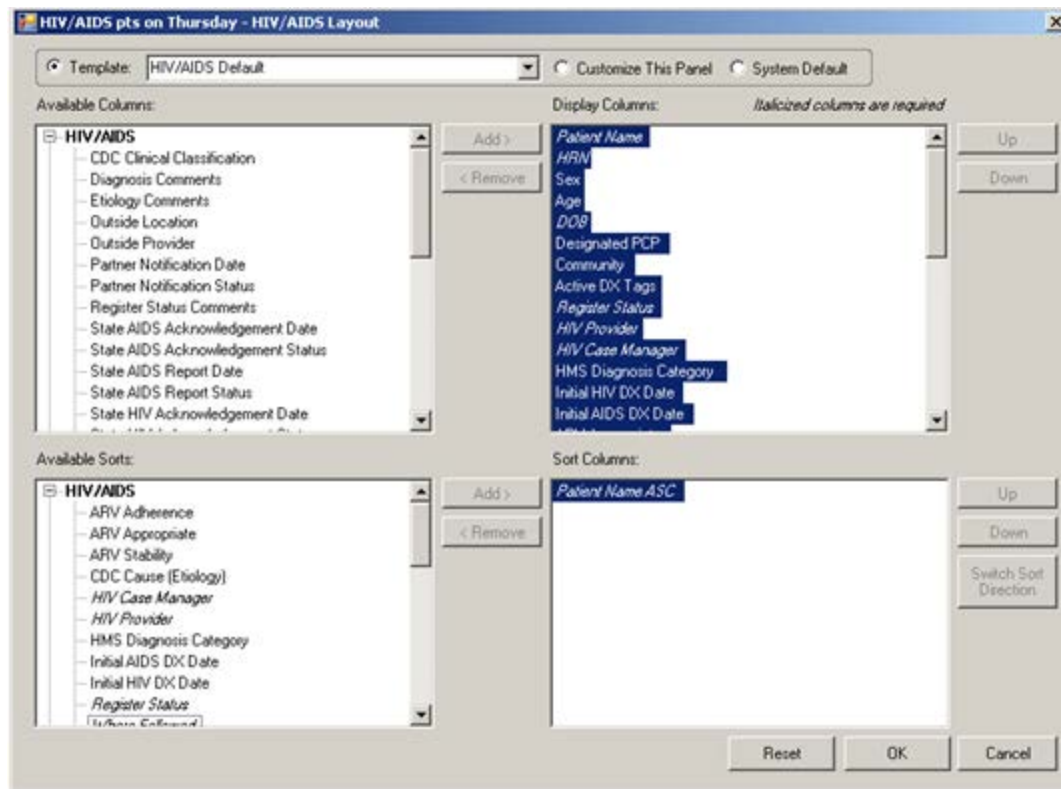
1. Click the **Care Management** tab.
2. From the **Please Select a Group** drop-down list, select **HIV/AIDS**.

Patient Name	HRN	Sex	Age	DOB	Designated PCP	Community
ADAMS, QUINN ANTHONY	171760-CI 171761-URA	M	30 YRS	Aug 05, 1980		TENNESSEE UNK
BELL, ME-LI SUE	119017-CI 119016-CH 119018-URA	F	96 YRS	Apr 03, 1915	RKPROVIDER, VALE RIA A	BIG COVE
CATCHER, VELMA JEAN	117732-CI 117731-CH 117733-URA	F	31 YRS	Jun 10, 1979	DXPROVIDER, AMBER N	BIG Y
GAMBRELL, GARY GEORGE	175492-CI	M	62 YRS	Feb 20, 1949		CULLOWHEE

Figure 2-1: Sample Care Mgmt tab with HIV/AIDS group data

3. Under the **Main** sub-tab, click the **Layout** button.
4. The **HIV/AIDS Layout** window opens.

Located in the top left of the window is the **Available Columns** area. Click the plus sign (+) next to **HIV/AIDS**. All of the sub-items are the iCare data fields specific to HIV/AIDS.

Figure 2-2: Sample **HIV/AIDS Layout** window

Note: If you cannot move any of the fields from the right panel to the left panel and vice versa, select the “Customize This Panel” radio button located at the top of the window. This action causes the Add and Remove buttons to become active.

Below is a list of all the data fields and associated field options.

Field	Field Option
Register status	Active; Deceased; Inactive; Transient
Register status comments	
HMS Diagnosis Category	<ul style="list-style-type: none"> • AIDS • HIV • At Risk – Exposed source Unknown • At Risk – Infant Exposed • At Risk – Non-occupational Exposure • At Risk – Occupational Exposure
Diagnosis comment	
Initial HIV Diagnosis (DX) Date	
Initial AIDS Diagnosis (DX) Date	

Field	Field Option
CDC Cause (Etiology)	<p>The Centers for Disease Control has categorized the ways in which an individual is exposed to HIV. Standardizing exposure categories enable epidemiologists to compare the same type of data and better understand the exposure trends regionally and nationally. The CDC will use this information anonymously in their semiannual Surveillance reports.</p> <ul style="list-style-type: none"> • BL – Receipt of blood transfusion, blood components or tissue • HEM – Hemophiliac/coagulation disorder • HET – Heterosexual contact • IDU – Injection drug use • MID – Male to male sexual contact + injection drug use • MOT – Mother with or at risk for HIV Infection • MTM – Male to male sexual contact • OCC – Occupational exposure • OTH – Other
Etiology comments	
CDC Clinical Classification	<ul style="list-style-type: none"> • A1 – Asymptomatic HIV infection + CD4 count > or = 500 • A2 – Asymptomatic HIV infection + CD4 count between 200 and 499 • A3 – Asymptomatic HIV infection + CD4 count less than 200 • B1 – Symptoms attributable to HIV infection + CD4 count >= 500 • B2 – Symptoms attributable to HIV infection + CD4 count between 200 and 499 • B3 – Symptoms attributable to HIV infection + CD4 count less than 200 • C1 – AIDS defining condition(s) + CD4 count > or = 500 • C3 – AIDS defining condition(s) + CD4 count less than 200
HIV Provider	
HIV Case Manager	
Where Followed	
Outside Location	
Outside Provider	
Partner Notification Status	<p>This notification type is to document the notification of a patient's partner of a potential exposure to HIV. The public health recommendation to notify the patient's partner is a practice that is encouraged in all I/T/U facilities. Options: N/A; No; Remind Me Later; Unknown; Yes</p>
Partner Notification Date	

Field	Field Option
ARV Appropriate	<p>Anti-retroviral Therapy refers to specific combinations of ARV medications used to treat HIV/AIDS patients by reducing viral load and improving immunological function. ARV is a complex medication regimen and is not suitable for all patients. Appendix F: provides the definition of ARV medication regimens.</p> <ul style="list-style-type: none"> • Date • Status • Comment • Last Edited By • Last Edited Date
ARV Adherence	<ul style="list-style-type: none"> • Date • Adherent • Comments • Last Edited By • Last Edited Date
State HIV Report Status	This notification type involves the requirement to notify the appropriate state Health Department of new HIV/AIDS diagnoses. Options: N/A; No; Remind Me Later; Unknown; Yes.
State HIV Report Date	
State HIV Acknowledgement Status	
State HIV Acknowledgement Date	
State AIDS Report Status	This notification type involves the requirement to notify the appropriate state Health Department of new HIV/AIDS diagnoses. Options: N/A; No; Remind Me Later; Unknown; Yes.
State AIDS Report Date	
State AIDS Acknowledgement Status	
State AIDS Acknowledgement Date	

2.2 Search for and View a Patient Record

Below are two methods for searching and viewing a patient record: (1) using a panel and (2) using quick search.

2.2.1 Using a Panel

Section 3.0 provides more information about creating an HIV/AIDS-related panel specific for your site.

Once you have created a panel, you can open a specific patient's record by simply double-clicking the patient's name. The patient's record will open.

2.2.2 Using Quick Search

The **Quick Patient Search** is located in the top right corner of the main iCare window (also in the Tools menu).



Figure 2-3: **Quick Patient Search** field

To search for and view a patient's record:

1. In the **Quick Patient Search** field, type your search criteria, such as the patient's last name (e.g., Willis), HRN (e.g., 111222), or date of birth (e.g., 12/20/1965).
2. Click the green arrow icon or press Enter.
3. A **Quick Patient Search** window opens, displaying the search results.

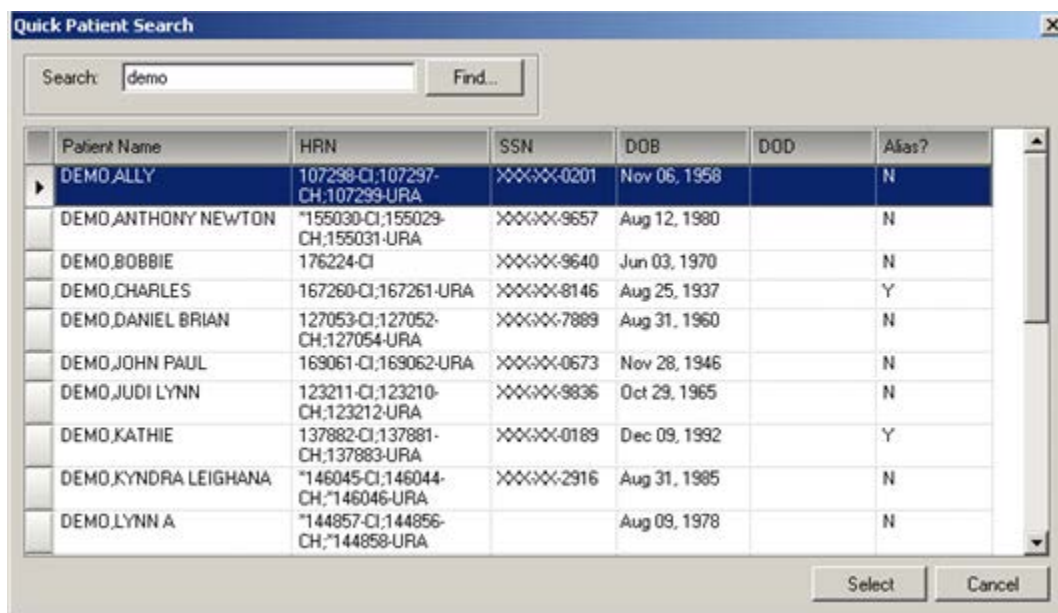


Figure 2-4: Sample **Quick Patient Search** results

You can search for a name (when the list of names is long) by typing at least 3 characters of the patient's last name, the patient's HRN, or the patient's date of birth in the **Search** field and then click **Find**.

The application will list the search results.

4. In the search results, do one of the following:
 - a. Select the patient's name for which you are searching and click **Select**.
 - b. Double-click the patient's name.
5. The patient's record displays.

2.3 Displaying Care Management as Default Tab

The Care Management tab can be setup as the default tab when a Patient Record is opened.

1. From any iCare window select **Tools | User Preferences**.
2. Click the **Patient View** tab.

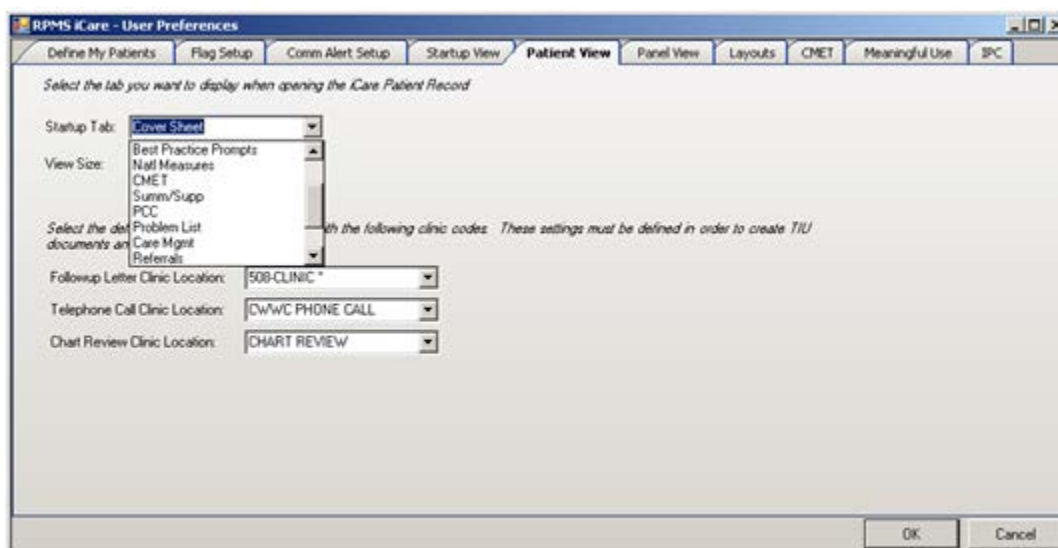


Figure 2-5: **Patient View** tab of **User Preferences**

3. From the **Start Up** drop down list, select **Care Mgmt**.

2.4 Add/Edit Care Management Data

To enter Care Management information on the Patient Record window using the Care Management tab, follow these steps:

1. Open a patient record.
2. Click the **Care Management** tab.
3. Select **HIV/AIDS** from the drop-down list for the **Please Select a Group** field.

Note: If you selected a patient record from the Care Management tab on the panel view, the patient record opens to the Care Management tab and the HIV/AIDS group is already selected.

If the patient does not have HIV/AIDS data, continue with the following steps to add care management data:

4. Click **Enter Data**.
5. The data entry area on the Main sub-tab is organized into four sections: General, Partner Notification; Antiretroviral (ARV) Status, and State Notification.

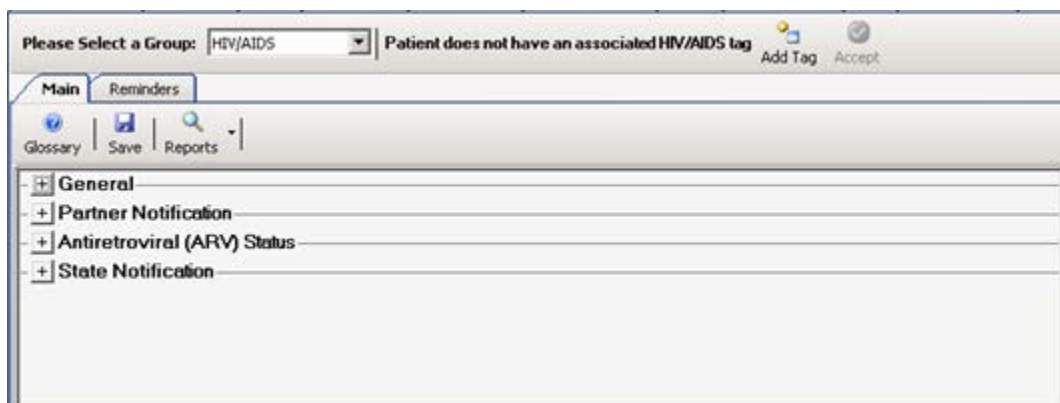


Figure 2-6: **Main** sub-tab showing all sections

6. Enter data in each section.

Note: It is highly recommended that you print and refer to the HIV/AIDS Glossary when entering data. To do so, click the Glossary button located above the General section. Section 7.0 provides for more information about the glossary.

2.4.1 Entering Data on the General Area

Expand the **General** category to display the fields on the **General** group box.

Figure 2-7: Fields for the General group box

All fields with an asterisk (*) are required.

Register Status: select an option from the drop-down list that indicates the status of the patient on this register.

Register Status Comments: type comments about the register status selection in this Free Text field (limited to 50 characters).

HMS Diagnosis Category: select a specific HIV-related diagnosis category from the drop-down list.

Diagnosis Comments: type comments about the HMS Diagnosis Category selection in this Free Text field (limited to 50 characters).

Initial HIV DX Date: select the date from the calendar on the drop-down list when this patient was first diagnosed with HIV. You can enter a month and year only; in this case the entry will be stored in BKM as MM-01-YYYY. This field is active only when you have populated the HMS Diagnosis Category field with HIV.

Note: A proposed date might be displayed, based on the earliest RPMS data that meets the HIV/AIDS tag definition. You must enter the actual date even if you want to “accept” the proposed date.

Initial AIDS DX Date: select the date from the calendar on the drop-down list for this field when this patient was first diagnosed with AIDS. You can enter a month and year only; in this case the entry will be stored in BKM as MM-01-YYYY. This field is active only when you have populated the HMS Diagnosis Category field with AIDS.

Note: A proposed date might be displayed, based on the AIDS logic defined above in the HMS Diagnosis Category field. You must enter the actual date even if you want to “accept” the proposed date.

CDC Cause (Etiology): select an option from the drop-down list that indicates the cause (etiology) of the patient’s DX. The Centers for Disease Control has categorized the ways in which an individual is exposed to HIV.

Etiology Comments: type comments about the CDC Cause selection in this Free Text field (limited to 50 characters). (This field is active only when the CDC Cause (Etiology) field is populated.) A comment should always be entered if you select “OTH - Other” in the CDC Cause field.

CDC Clinical Classification: this field is active when the HMS Diagnosis Category contains AIDS or HIV. Select the clinical classification from the drop-down list.

The current CDC classification system combines three categories of the CD4 count with three symptom categories. The use of both the CD4 cell count and clinical categories provides shorthand for where the patient stands in the course of the HIV/AIDS continuum. While there are guidelines in place, assign the classification only after clinical evaluation. The decision of which category to assign is always made by a clinical person. The CDC proposed that the clinical classification system be used to “guide clinical and therapeutic actions in the management of HIV infected adolescents and adults.”

The HIV Provider, HIV Case Manager, and Where Followed fields are populated by using the Table Lookup dialog.

HIV Provider: click the ellipsis button to search for a HIV provider name at your facility. This information is pulled from the RPMS Designated Specialty Provider Management (DSPM) application, if available, and displayed here. If this patient is cared for at an outside facility, enter the provider in the “Outside Provider” field.

HIV Case Manager: click the ellipsis button to search for a case manager name at your facility. This information is pulled from the RPMS Designated Specialty Provider Management (DSPM) application, if available, and displayed here.

Where Followed: click the ellipsis button to search for name of a facility that primarily follows the patient’s care related to HIV/AIDS. If this is not your facility, select OTHER from the list; you can identify the specific facility in the outside location field and the provider in the Outside Provider field.

Outside Location: manually type the name of the facility or outside physician’s office where the patient is followed. This is Free Text field limited to 50 characters.

Outside Provider: manually type the name of the patient’s HIV provider at the outside location. This is Free Text field limited to 50 characters.

2.4.2 Entering Data on the Partner Notification Area

This notification type is to document the notification of a patient’s partner of a potential exposure to HIV. The public health recommendation to notify the patient’s partner is a practice that is encouraged in all I/T/U facilities.

Expand the **Partner Notification** category to display the following fields on the **Partner Notification** group box:



The screenshot shows a software interface for 'Partner Notification'. It features a blue header bar with a minus sign icon and the text 'Partner Notification'. Below this, there are two fields: 'Partner Notification Status' with a dropdown arrow, and 'Partner Notification Date' with a dropdown menu showing 'none'.

Figure 2-8: Fields for **Partner Notification** group box

Partner Notification Status: Select an option from the drop-down list that indicates the partner notification status.

Partner Notification Date: This field is active when the Partner Notification Status contains Yes. Either manually type a date that the partner was notified, or select the date from the calendar by using the drop-down list.

2.4.3 Entering Data on the Antiretroviral Status Area

Expand the ARV category to display the fields on the Antiretroviral ARV (Status) group box.

Use this group box to enter ARV (Anti-Retro Viral Medications) data for ARV Appropriate, ARV Adherence, and ARV Stability. The medications are used to treat HIV/AIDS patients by reducing the viral load and improving the immunological function.

Because the ARV status might change over time, HMS maintains a history of ARV Appropriate and Compliance statuses for the patient. The entire ARV history will be displayed on this screen with the most recent status listed first; this feature allows the provider to easily view the continuum of assessment.

Antiretroviral (ARV) Status

ARV Appropriate:

Date	Status	Comment	Last Edited By	Last Edited Date
May 21, 2010	Yes, Appropriate	testing	FELIX.LINDSAY	May 21, 2010

ARV Adherence:

Date	Adherent	Comments	Last Edited By	Last Edited Date
May 21, 2010	Adherent	testing	FELIX.LINDSAY	May 21, 2010
May 14, 2010	Non-adherent	testing	FELIX.LINDSAY	May 21, 2010

ARV Stability:

Date	Stability	ARV Regimen	Comments	Last Edited By	Last Edited Date
May 21, 2010	Stable	U	testing	FELIX.LINDSAY	May 21, 2010

Figure 2-9: Fields on the ARV group boxes

For **ARV Appropriate**, click the **Add** (Add (F2)) button to add data. Each of the fields on the row will have either a drop-down list from which to select or a Free Text field where you type information. Data can be entered at any time and can be done so retrospectively.

Date: This is the date the patient was assessed for suitability for ARV (required). Either manually type a date, or click the drop-down list to select a date from a calendar.


Status: Select an option from the drop-down list that indicates the status of the ARV Appropriate record.


Comment: Type a comment, if appropriate, in this Free Text field, using up to 50 characters.

Last Edited By: The name of the person who last edited the record (system populated).

Last Edited Date: The date the record was last edited (system populated).

After you click Save, iCare confirms that you want to add the record. After clicking **Yes**, iCare populates the **Last Edited By** field (name of user who populated the record) and today's date in the **Last Edited Date**.

For **ARV Appropriate**, you can delete your own selected records by clicking the **Delete**  button to display the **Delete Rows** information message. Click **Yes** to remove the records. (Otherwise, click **No**.)

For **ARV Adherent**, click the **Add**  button to add data. Each of the fields in the row will have either a drop-down list from which to select or a **Free Text** field where you type information.

Date: This is the date the patient was assessed for adherence to the prescribed ARV regimen (required). Either manually type the date or click the drop-down list to select the date from a calendar.


Adherent: Select an option from the drop-down list that indicates the adherent status of the record.


Comment: Type a comment, if appropriate, in this **Free Text** field, using up to 50 characters.

Last Edited By: The name of the person who last edited the record (system populated).

Last Edited Date: The date the record was last edited (system populated).

After you click **Save**, iCare confirms that you want to add the record. After clicking **Yes**, iCare populates the **Last Edited By** field (name of user who populated the record) and today's date in the **Last Edited Date**.

For **ARV Adherent**, you can delete your own selected records by clicking the **Delete** () button to display the Delete Rows information message. Click **Yes** to remove the records. (Otherwise, click No.)

For **ARV Stability**, click the **Add** () button to add data. Each of the fields in the row will have either a drop-down list from which to select or a **Free Text** field where you enter information.

Date: This is the date the patient was assessed for ARV stability. Either manually type the date or click the drop-down list to select the date from a calendar.

Stability: Select an option from the drop-down list that indicates the stability status of the record.


ARV Regimen: Click the drop-down list and select one of the options that determines the status of the ARV Regimen.

Comments: Type any comments regarding the ARV Stability data in the Free Text field (limited to 50 characters).

Last Edited By: The name of the person who last edited the record (system populated).

Last Edited Date: The date the record was last edited (system populated).

After you click **Save**, iCare confirms that you want to add the record. After clicking **Yes**, iCare populates the **Last Edited By** field (name of user who populated the record) and today's date in the **Last Edited Date**.

For **ARV Stability**, you can delete your own selected records by clicking the **Delete** () button to display the Delete Rows information message. Click **Yes** to remove the records. (Otherwise, click No.)

2.4.4 Completing the State Notifications Area

This notification type involves the requirement to notify the appropriate state Health Department of new AIDS diagnoses; most states also require notification of HIV diagnoses as well. Sites must follow the guidance set forth by their state and use the appropriate forms issued by the state.

Expand the **State Notification** category to display the following fields on the **State Notification** group box:

State Notification

State HIV Report Status:	<input type="text"/>	State HIV Report Date:	<input type="text" value="(none)"/>
State HIV Acknowledgement Status:	<input type="text"/>	State HIV Acknowledgement Date:	<input type="text" value="(none)"/>
State AIDS Report Status:	<input type="text"/>	State AIDS Report Date:	<input type="text" value="(none)"/>
State AIDS Acknowledgement Status:	<input type="text"/>	State AIDS Acknowledgement Date:	<input type="text" value="(none)"/>

Figure 2-10: Fields on **State Notification** group box

If the HMS Diagnosis is HIV or AIDS, then the fields in this group box are active. The fields assist in tracking the notification process.

State HIV Report Status: Select the State HIV Report Status from the drop-down list: N/A, No, Remind Me Later, Unknown, Yes. This answers the question: Has the state health department been notified about this patient's HIV status?

State HIV Report Date: This field is active if the State HIV Report Status field contains Yes. You can select from a calendar by using the drop-down list. This is the date the State HIV status report was submitted to the state health department.

State HIV Acknowledgment Status: Select the State HIV Acknowledgment status from the drop-down list: No, Unknown, Yes. This answers the question: Has your facility received an acknowledgement from the state health department?

State HIV Acknowledgment Date: This field is active if the State HIV Acknowledgment Status field contains Yes. You can select a date from a calendar by using the drop-down list. This is the date the state acknowledged receipt of HIV report, if any.

State AIDS Report Status: Select the State AIDS Report Status from the drop-down list: N/A, No, Remind Me Later, Unknown, Yes. This answers the question: Has the state health department been notified about this patient's AIDS status?

State AIDS Report Date: This field is active if the State AIDS Report Status field contains Yes. You can select a date from a calendar by using the drop-down list. This is the date the AIDS status report was submitted to the state health department.

State AIDS Acknowledgment Status: Select the State AIDS Acknowledgment status from the drop-down list: No, Unknown, Yes. This answers the question: Has your facility received acknowledgement from the state's health department? NOTE: Most sites report that they do not receive this acknowledgment.

State AIDS Acknowledgment Date: This field is active if the State AIDS Acknowledgment Status field contains Yes. You can select a date from a calendar by using the drop-down list. This is the date the state acknowledged receipt of AIDS report.

2.4.5 Completing the Data Entry Process

When the four areas have been updated, click **Save**. The application displays the **Confirm save to Care Mgmt** dialog:

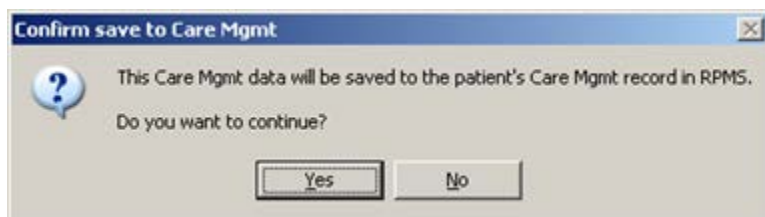


Figure 2-11: **Confirm save to Care Mgmt** information message

Click **Yes** to save the record in RPMS. (Otherwise, click **No**).

If you use **No**, you exit the data entry process.

If you use **Yes**, the application displays the RPMS iCare dialog about changing the tag status.

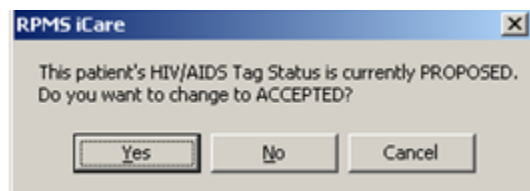


Figure 2-12: **RPMS iCare** dialog about changing the tag status

If you click **Cancel**, the system asks if you want to cancel the entire Save process. If you click **Yes**, you exit the save process.

If you click **No**, the system displays the message: HMS Register data has been saved successfully to RPMS. You need to click **OK** to dismiss the message.

Click **Yes** to change the tag status. (Otherwise, click **No**.) If you use **Yes**, the application displays **Update Diagnostic Tag** dialog.

Figure 2-13: **Update Diagnostic Tag** dialog with status of **ACCEPTED**

Complete the information and click **OK** to change the status to **Accepted**.
(Otherwise, click **Cancel**.)

After clicking **OK**, the application displays the message: HIV Management System, ARV Appropriate data has been saved successfully to RPMS. Click **OK** to dismiss the message (required).

2.5 HIV/AIDS Diagnostic Tags

Tagging is a term that refers to running a series of logic algorithms on one or multiple patients that identifies (“tags”) them with one or more diagnoses. These definitions are defined nationally and are consistent with other RPMS applications.

The HIV/AIDS Diagnostic Tag is based upon the following logic algorithm:

- At least two HIV POVs ever or 1 instance of HIV/AIDS active problem on the Problem List

OR

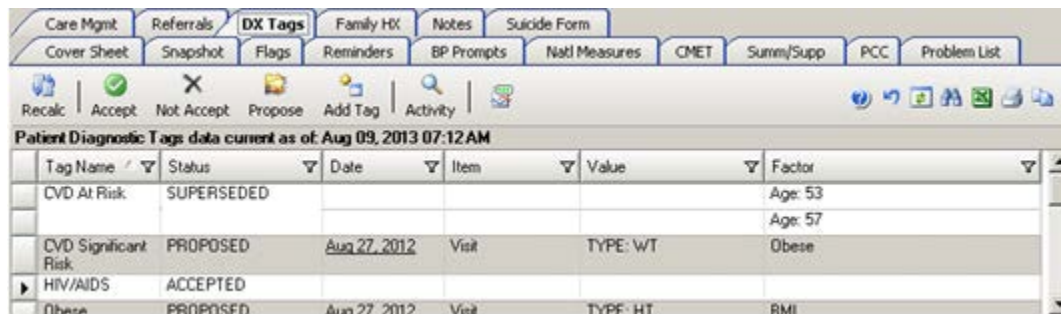
- Positive HIV screening test

OR

- At least 2 CD4 or HIV Viral Load lab tests in the past two years, at least 60 days apart.

2.5.1 Accept/Do Not Accept Proposed HIV/AIDS Diagnostic Tab

When a patient meets the diagnostic tag criteria, the system automatically tags the patient with the HIV/AIDS Diagnostic Tag. The tag will have a status of **Proposed**.



Tag Name	Status	Date	Item	Value	Factor
CVD At Risk	SUPERSEDED				Age: 53 Age: 57
CVD Significant Risk	PROPOSED	Aug 27, 2012	Visit	TYPE: WT	Obese
HIV/AIDS	ACCEPTED				
Obese	PROPOSED	Aug 27, 2012	Visit	TYPE: HT	BMI

Figure 2-14: Patient DX Tags data on Patient Record window

To change the status to either **Accepted** or **Not Accepted**:

1. Open a patient record.
2. Click the **DX Tags** tab.
3. Select the row that contains the HIV/AIDS Diagnostic Tag.
4. To accept the tag, click the **Accept** button.

To deny the tag, click the **Not Accept** button.

5. The **Update Diagnostic Tag** window opens.

In the **New Status** drop-down list, select **Accepted** or **Not Accepted**.

6. In the **Status Change Reason** area, select the **Patient Data Supports Acceptance** radio button.
7. Click **OK**.

Note: You can also change the status of a Diagnostic Tag from the Care Management tab.

2.5.2 Change a Diagnostic Tag to Proposed

To change an Accepted or Not Accepted diagnostic tag to proposed:

1. Open a patient record.

2. Click the **DX Tags** tab.
3. Select the row that contains the HIV/AIDS Diagnostic Tag.
4. Click **Propose**.
5. The **Update Diagnostic Tag** window opens.
In the **New Status** drop-down menu, select **Proposed**.
6. In the **Status Change Reason** area, select the **Manually Designated** radio button.
7. Click **OK**.

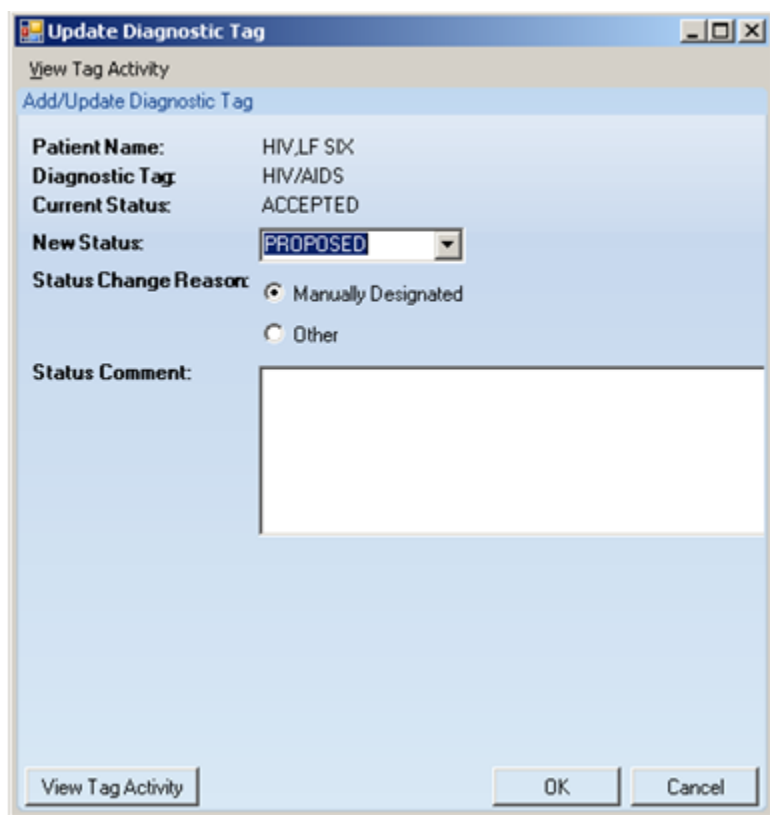


Figure 2-15: Sample **Update Diagnostic Tag** dialog

Note: You can also change the status of a Diagnostic Tag from the Care Management tab.

2.5.3 Manually Add an HIV/AIDS Diagnostic Tag

You have the option of manually adding an HIV/AIDS Diagnostic tag.

1. Open a patient record.

2. Click the **DX Tags** tab.

A patient can only have one HIV/AIDS Diagnostic Tag. If a patient already has an HIV/AIDS Diagnostic Tag, an additional one cannot be added.

3. Click **Add Tag**.

4. The **Add Diagnostic Tag** dialog opens.

In the **Diagnostic Tag** drop-down list, select **HIV/AIDS**.

5. In the **New Status** drop-down menu, select **Accepted**.

6. In the **Status Change Reason** area, select the appropriate radio button.

- Patient Data Supports Acceptance
- Manually Designated
- Other

7. For a manually-added HIV/AIDS Diagnostic Tag, you must enter a comment in the **Status Comment** field.

8. Click **OK**.

The screenshot shows the 'Add Diagnostic Tag' dialog box. The title bar reads 'Add Diagnostic Tag'. Below the title bar is a link 'View Tag Activity'. The main section is titled 'Add/Update Diagnostic Tag'. It contains the following fields and controls:

- Patient Name:** TEST, LITTLE DONNA
- Diagnostic Tag:** HIV/AIDS (selected in a dropdown menu)
- New Status:** ACCEPTED (selected in a dropdown menu)
- Status Change Reason:** Three radio buttons are present: 'Patient Data Supports Acceptance' (selected), 'Manually Designated', and 'Other'.
- Status Comment:** A large text area for entering a comment.

At the bottom of the dialog are three buttons: 'View Tag Activity', 'OK', and 'Cancel'.

Figure 2-16: Sample Add Diagnostic Tag dialog

Note: You can also change the status of a Diagnostic Tag from the Care Management tab.

2.6 HMS Patient Care Supplement

The HMS Patient Care Supplement displays information specifically related to HIV/AIDS. The provider will be able to see, at a glance, the relevant labs, related diagnoses, medications and reminders. Appendix F: provides the logic for the HMS Patient Care Supplement. Also, Section III of the HIV/AIDS Glossary provides information about this supplement.

2.6.1 Search Methods for the Supplement

There are two methods for viewing the HIV/AIDS Patient Care Supplement.

2.6.1.1 Method One

The first method is to access it from the Summary/Supplement tab.

1. Open a patient record.
2. Select the **Summary/Supplement (Summ/Supp)** tab.
3. From the **Type** drop-down list, select **Supplement**.
4. Another drop-down list opens beside it. From this new drop-down list, select the **HMS Patient Care Supplement** option.

The supplement displays.

2.6.1.2 Method Two

The second method for viewing the HIV/AIDS Patient Care Supplement is to access it from the Care Management tab.

1. Open a patient record.
2. Click the **Care Management (Care Mgmt)** tab.
3. If not already selected, select the **HIV/AIDS** group from the **Care Management Group** drop-down menu.
4. On the **Main** sub-tab, click **Reports**.
5. Select **HMS Patient Care Supplement**.

If your site has any empty taxonomies, you will receive the following message: “The following taxonomies do not have any entries...” is generated by the application. Click **OK** to continue, and to generate the HMS Patient Care Supplement.

6. The report displays.

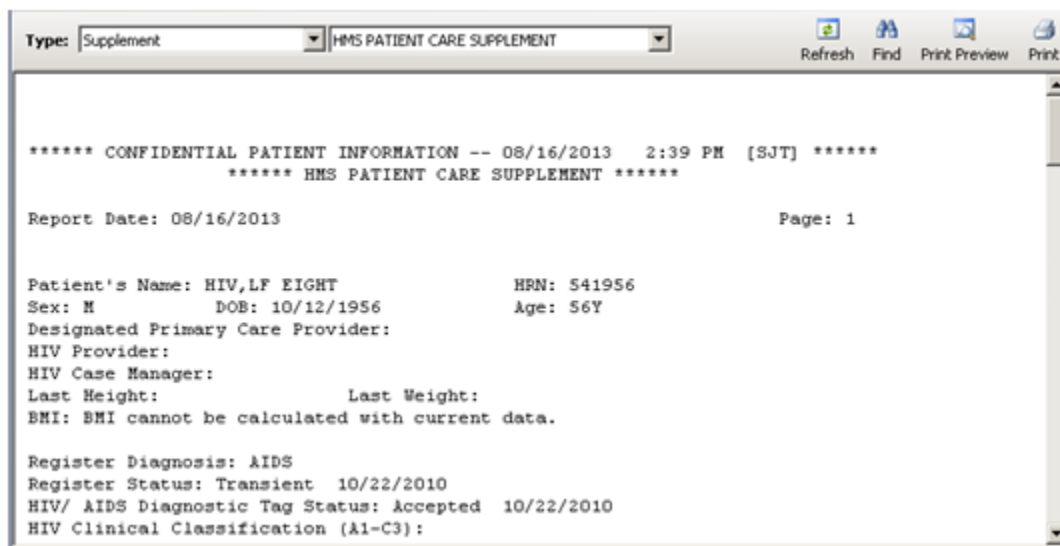





Figure 2-17: Sample HMS Patient Care Supplement

2.6.2 Using the Controls on the Report

Click the Refresh () button to update any RPMS field values with new data from the server.

Click the Find () button to access a search tool to find data in the current window.

Click the Print Preview () button to access the Print Preview dialog. You can print the information in the supplement from this dialog.

Click the Print () button to access the Print dialog where you specify the printer to output the contents of the pop-up, the page range, and number of copies.

2.7 Related Conditions

This section provides information about the most recent occurrence of any of HIV Opportunistic infections and/or AIDS Defining Illnesses recorded on the patient's PCC Problem List, all status categories.

2.7.1 Opportunistic Infections/AIDS Defining Illnesses

Opportunistic infections are conditions that many HIV/AIDS patients contract. HIV doesn't kill anybody directly but rather weakens the body's ability to fight disease. Infections that are rarely seen in those with normal immune systems are serious and may be deadly to those with HIV. They need to be treated, and some can be prevented. Many of these conditions are considered "reportable" to the State Health Department.

AIDS Defining Illnesses are conditions that are used in conjunction with an HIV diagnosis to determine if a patient has progressed to AIDS. The definition of AIDS Defining Illness is established by the Centers for Disease Control (CDC) as part of its case definition of AIDS.

If the patient has one or more of these infections documented as the POV or on the Problem List, they will display from the patient record. The Opportunistic Infections are also displayed on the HMS Patient Care Supplement.

The definitions for AIDS Defining Illnesses and Opportunistic Infections overlap. The following are the current definitions used in iCare.

Diagnosis	ICD codes	OI	AIDS DI
Aspergillosis	117.3	X	
Bartonellosis	088.0	X	
Campylobacter Enteric Disease	008.43	X	
Candidiasis, Bronchi	112.89; 112.9		X
Candidiasis, Esophageal	112.84		X
Candidiasis, Lung	112.4		X
Candidiasis, Oral	112.0	X	
Candidiasis, Trachea	112.89; 112.9		X
Carcinoma, invasive cervical	180*		X
Coccidioidomycosis	114.1-3	X	X
Cryptococcosis	117.5	X	X
Cryptosporidiosis	007.4	X	X
Cytomegalovirus disease	078.5	X	X
Hemophilus Influenzae Respiratory Disease	041.5; 519.9	X	
Hepatitis B Virus	070.20-23; 070.30-33	X	
Hepatitis C Virus	070.41; 070.44; 070.51; 070.54; 070.70-71	X	
Herpes simplex	054*	X	X
Histoplasmosis	115*	X	X
HIV Encephalopathy	042; 348.3*		X
Human Papillomavirus	079.4	X	
Isosporiasis	007.2	X	X
Kaposi's Sarcoma	176*		X
Lymphoma Burkitt's	200.20-200.28		X

Diagnosis	ICD codes	OI	AIDS DI
Lymphoma Immunoblastic	200.80-200.88		X
Lymphoma, primary in brain	202.8; 191*; 196*		X
Microsporidiosis	136.8	X	
Mycobacterium avium Complex (MAC)	031.0; 031.1; 031.2; 031.9	X	X
Mycobacterium Tuberculosis	010-018	X	X
Pneumocystis carinii Pneumonia (PCP)	136.3	X	X
Pneumonia	480*- 486; 487.0		X
Progressive Multifocal Leukoencephalopathy	046.3	X	X
Pseudomonas respiratory Disease	519.9; 041.7	X	
Salmonella Enteric Disease	003.0; 003.8; 003.9	X	
Salmonella Septicemia	003.1		X
Shigella Enteric Disease	004.0-3; 004.8-9	X	
Staphylococcus Respiratory Disease	041.10; 041.11; 041.19; 519.9	X	
Streptococcal Respiratory Disease	041.0* 519.9	X	
Syphilis	090* - 097*	X	
Toxoplasmosis	130.0-9	X	X
Varicella Zoster Virus	053*	X	
Wasting syndrome	261; 799.4		X

OI = Opportunistic Infections

AIDS DI = AIDS Defining Illnesses

2.7.2 AIDS Defining Illnesses

AIDS Defining Illnesses are conditions that are used in conjunction with an HIV diagnosis to determine if a patient has progressed to AIDS. The definition of an AIDS Defining Illness is established by the Centers for Disease Control (CDC) as part of its case definition of AIDS. Section A.2 provides a full list of ICD codes that are included as AIDS Defining Illnesses.

2.8 HIV/AIDS-Related Reminders

HIV/AIDS-related reminders are generated in order to “remind” the provider of the need for a particular lab test, procedure, immunization, health screen, or education session regarding HIV/AIDS patient care. These reminders are created based on current, expert recommendations and serve as a means to notify the provider when one of these functions is due or overdue. The decision to act on the reminder remains a clinical decision.

There are 23 HIV/AIDS Reminders available. Appendix B: describes the logic for the HIV/AIDS-related reminders in detail.

You can view the reminders in one of three ways:

Method 1: **Panel View** | **Reminders** tab. Follow these steps:

1. From a **Panel** view, click the **Reminder** tab.

Patient Name	HRN	DOB	CD4 Test	HIV Viral Load Test	PPD Test (TB)	Syphilis (RPR) Test	Syphilis (TAABS) Test	Hepatitis C Screening Test
ABERNATHY ANGEL GABRIELLE	174795-CI	Nov 08, 1954	Feb 22, 2011	Oct 03, 2010	Feb 21, 2013	Feb 21, 2013	Feb 22, 2013	Feb 21, 2013
	171760-CI	Aug 05, 1980	Feb 16, 2013	Feb 16, 2013	Feb 16, 2013	Feb 16, 2013	Feb 22, 2013	Feb 22, 2013
	171761-URA							
	104914-CI	Feb 07, 1953	Feb 16, 2013	Feb 16, 2013	Nov 10, 2006	Nov 07, 2000	Feb 22, 2013	Feb 16, 2013
	104913-CH							
	104915-URA							
	118600-CI	Feb 07, 1981	Oct 01, 2010	Oct 01, 2010	Feb 16, 2013	Dec 07, 2009	Feb 22, 2013	Dec 07, 2009
	118599-CH							
	118601-URA							
	120980-CI	Feb 03, 1984	Feb 16, 2013	Feb 16, 2013	Aug 16, 2005	Mar 18, 2011	Feb 22, 2013	Feb 22, 2013
	120979-CH							
	120915-URA							
	114016-CI	Mar 23, 1972	Feb 16, 2013	Feb 16, 2013	Feb 16, 2013	Mar 04, 2010	Feb 22, 2013	Mar 04, 2010
	114015-CH							
	114017-URA							
	117798-CI	Jul 31, 1979	Feb 16, 2013	Feb 16, 2013	Mar 02, 1997	Aug 01, 1997	Feb 22, 2013	Feb 16, 2013

Figure 2-18: Sample **Reminders** tab on **Panel View** window

OR

Method 2: From the **Panel** view, click the **Care Mgmt** tab. Select the **HIV/AIDS** group. Click the **Reminder** sub-tab.

Patient Name	HRN	DOB	CD4 Test	HIV Viral Load Test	PPD Test (TB)
HIV_FIFTEEN	150015-CI	Jan 01, 1955	NDA	NDA	NDA
HIV_FOUR	555555-CI	Jun 03, 1946	NDA	NDA	NDA
HIV_LF EIGHT	541956-CI	Oct 12, 1956	NDA	NDA	NDA
HIV_LF FIVE	421968-CI	Oct 12, 1968	Jan 01, 2011	Jan 01, 2011	Aug 10, 2013
HIV_LF NINE	761934-CI	Oct 12, 1934	Oct 05, 2010	Aug 10, 2013	Aug 10, 2013
HIV_LF SIX	721938-CI	Oct 12, 1938	Jan 05, 2011	Jan 05, 2011	Aug 10, 2013
HIV_LF THREE	551955-CI	Oct 12, 1955	NDA	NDA	NDA
HIV_NINETEEN	29816-CI	Mar 20, 1950	NDA	NDA	NDA
HIV_SEVEN	99111-CI	May 21, 1947	NDA	NDA	NDA
HIV_SIX	222111-CI	Dec 01, 1967	NDA	NDA	NDA
HIV_SIXTEEN	161616-CI	Jan 01, 1935	NDA	NDA	NDA
HIV_THREE	333333-CI	Nov 07, 1950	NDA	NDA	NDA

Figure 2-19: Sample Reminders sub-tab data

OR

Method 3: From the Patient record view, click the **Reminders** tab.

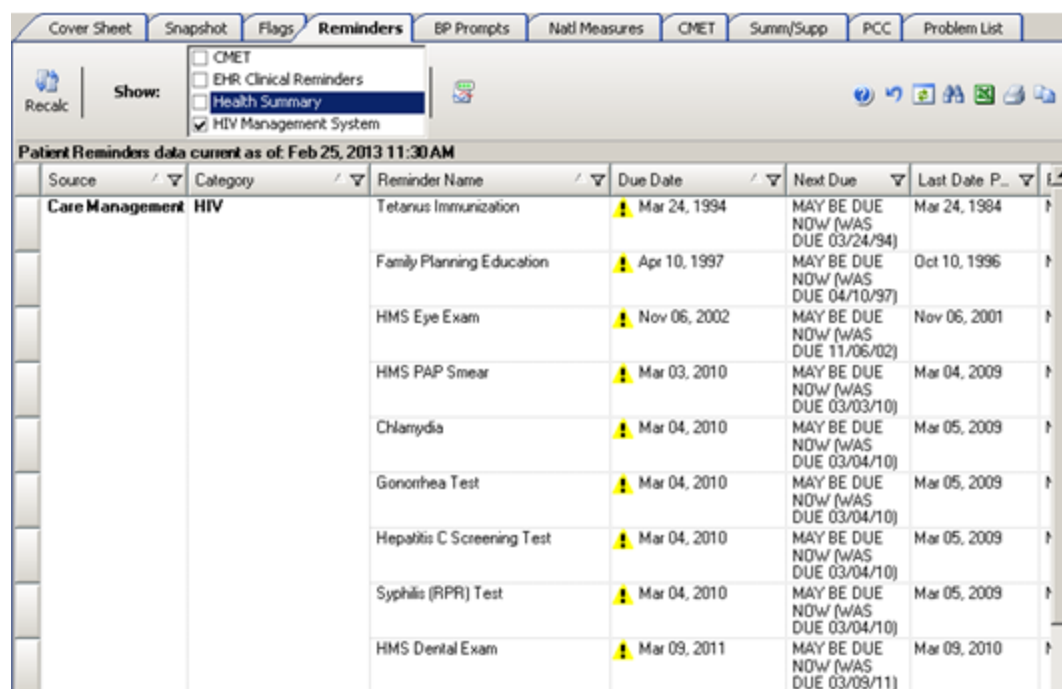


Figure 2-20: Sample Reminders tab from the patient record window

Appendix B: provides more detailed logic information associated with the reminder logic.

Reminder Type	Frequency	Factors for Display
CD4 Test	Every 4 months	
Chlamydia	Variable, depending on age, diagnoses, or test	Displays for patients ages 18 and older
Family Planning Education	Every 6 months	Displays for female patients ages 13-44 and male patients ages 13 and older
Gonorrhea Test	Variable, depending on age, diagnoses, or test	Displays for patients ages 18 and older
Hepatitis A IZ	Once, or a Hep A diagnosis	
Hepatitis B IZ	Once, or a Hep B diagnosis	
Hepatitis B Retest	After 3 Hep B immunizations	Displays for patients with no documented Hep B test after 3 Hep B immunizations
Hepatitis B Test	Once	
Hepatitis C Confirmatory Test	After a positive Hep C EIA	Displays for patients with positive Hep C EIA only
Hepatitis C Screening Test	Annually	
HIV Viral Load Test	Every 4 months	
HMS Dental Exam	Variable depending on CD4	
HMS Eye Exam	Annually unless recent CD4 Absolute is <50, then 6 months	
HMS Influenza IZ	Annually	

Reminder Type	Frequency	Factors for Display
HMS Mammogram	Annually	Displays for female patients ages 50-69 without documented bilateral mastectomy
HMS Pap Smear	Variable, depending on CD4	Displays only for female patients ages 18 through 64 without documented hysterectomy
HMS Pneumovax IZ	Every five years	
PPD Test (TB)	Annually	
Safe Sex Education	Every 6 months	Displays for patients ages 13 and older.
Syphilis (FTA-ABS) Test	After a positive RPR	Displays for patients with positive RPR
Syphilis (RPR) Test	Variable, depending on diagnoses	
Tetanus IZ	Every 10 years	
Toxoplasmosis Test	Annually	Displays for patients with no history of positive Toxoplasmosis test

3.0 Panel Management

A panel is an automated tool for maintaining a list of patients who meet criteria set by the user and providing various condition-specific reports, reminders, and plans to assist providers in managing the disease or condition.

iCare can be used to maintain a list of all HIV/AIDS patients.

There are many methods to creating an HIV/AIDS panel in iCare.

The following information applies to the **Panel Definition** window. You access this window from the **Panel List** window by doing any of the following:

- Click the **New** () button
- Select the **New** option on the context menu
- Select **File | Panel | New**

The application displays the **Panel Definition** window with focus on the **Definition** tab.

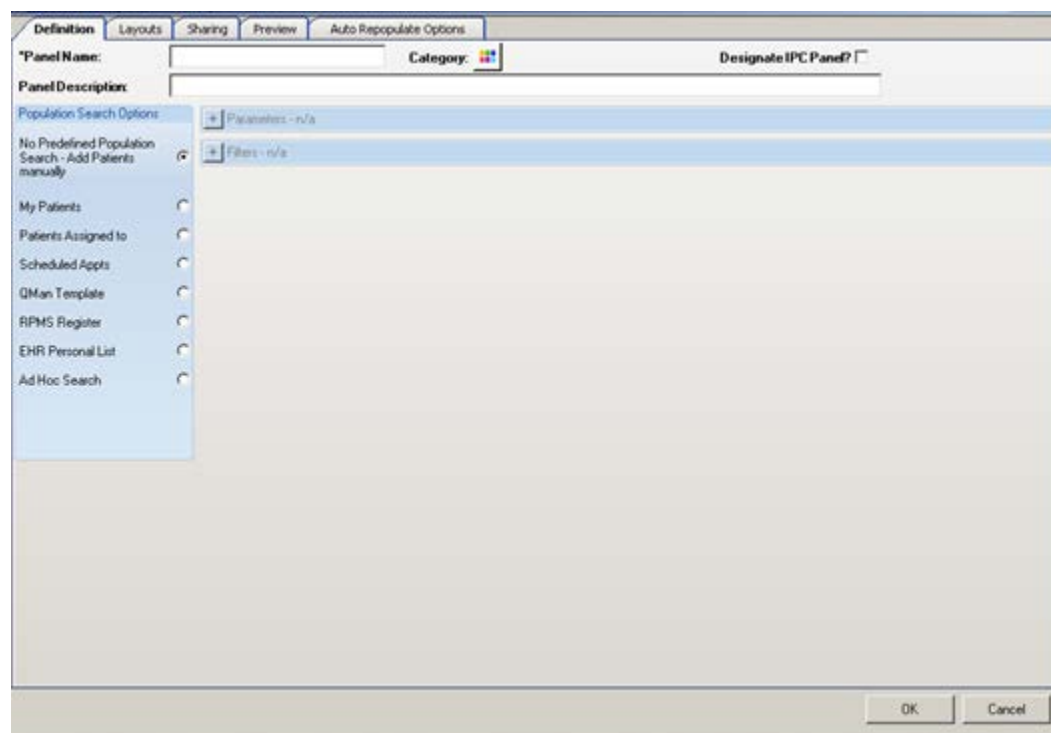


Figure 3-1: Initial **Definition** tab

3.1 Using the No Predefinition/Population Search

You can manually add all known HIV/AIDS patients at your site by using this search method. This method might be used by sites with a small HIV/AIDS patient population. Section 2.2 provides information about how to search for a patient.

3.2 Using the Patients Assigned To Search

The objective is to find the Specialty Providers with a Specialty Type of HIV/AIDS.

After selecting the **Specialty Provider** radio button, you need to specify the specialty provider types. Click **Edit** to access the **Add/Remove Specialty Provider Types** dialog.

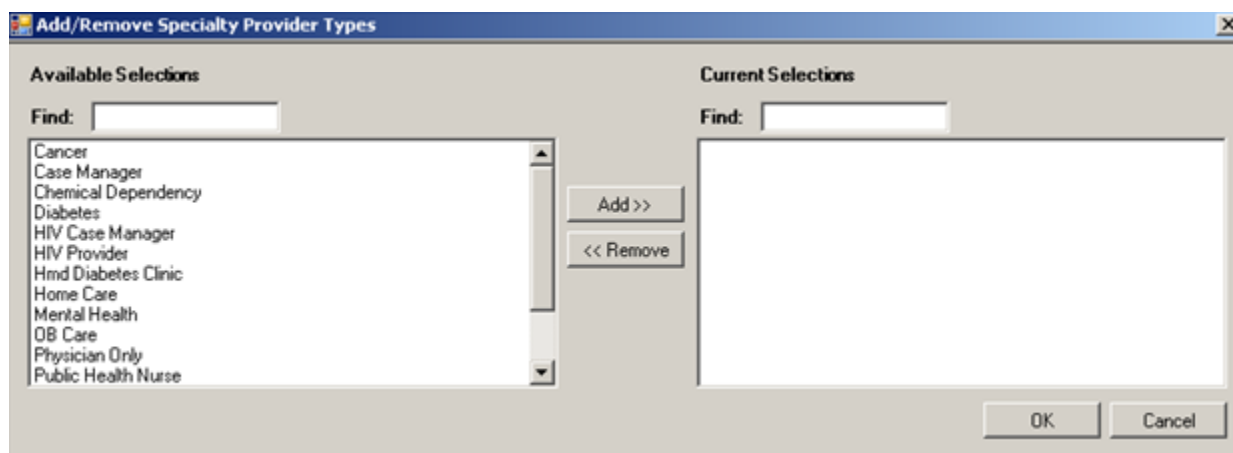


Figure 3-2: Sample **Add/Remove Specialty Providers Types** dialog

3.3 Using the Qman Template Search

Find the template in iCare and the panel will be automatically populated with the QMAN search results.

QMan Template Parameters

Template Name:

+ Filters - n/a

Template Name	Template Type	Created By	Completed Date
[1998PREGNANCY	P	RPROVIDER,DI...	
[3RD QTR 97	P	CDEMO.SANJIV	
[CRB-2002 DM AUDIT	P	MIPROVIDER,M...	
[ICARE COMMUNITY 2	P	MIPROVIDER,M...	
[ICARE TEST COMMUNITY	P	MIPROVIDER,M...	
[MB-HEP2-3	P	XPROVIDER,R...	
[MB-IMMHEPB	P	XPROVIDER,R...	
ABNORMAL BREAST 00-07	P	ARPROVIDER,...	

Figure 3-3: Selecting the QMan Template

3.4 Using the RPMS Register Parameters Search

If your site has been using the roll-and-scroll HIV Management System (HMS) application to create a register, you may want to populate your iCare panel with that register.

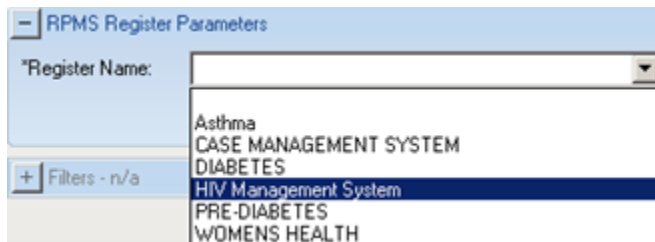


Figure 3-4: Selecting the **HIV Management System** in **RPMS Register Parameters**

3.5 Patients with HIV/AIDS Diagnostic Tag Search

This search for patients would be under the Ad Hoc search using the **Diagnostic Tag** filter.

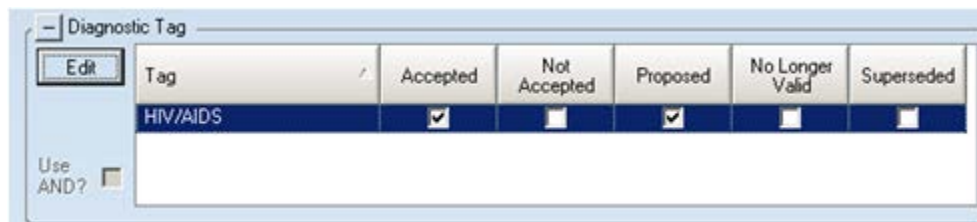


Figure 3-5: Using HIV/AIDS tag under the **Diagnostic Tag** group box

3.6 Patients with AIDS or HIV on Problem List Search

This option is under the Ad Hoc Search using the **Problem** filter.

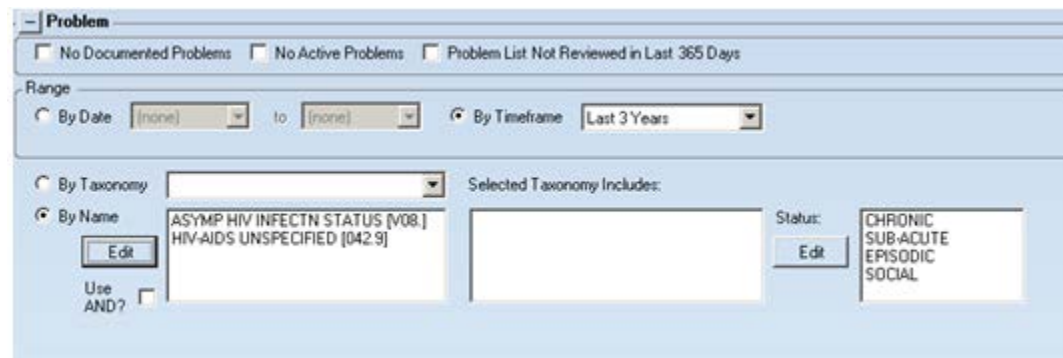


Figure 3-6: AIDS or HIV on Problem List for any patient

3.7 Patients with AIDS or HIV Reminder Search

This option is under the Ad Hoc Search using the **Reminder** filter.

Reminder: HIV SCREENING (HS)

☐ Overdue ☒ Due

Range: ☐ By Date [none] to [none] ☒ By Timeframe [Next 30 Days]

Figure 3-7: Patient with AIDS or HIV Reminder

3.8 Patients Who Visit HIV/AIDS Clinic Search

This option is under the Ad Hoc Search using the **Visit** filter.

Visit Range: ☐ By Date [none] to [none] ☒ By Timeframe [Last Year]

Visit Detail:

# of Visits in Range	Visit Clinic	Provider
greater than or equal to 1		

Buttons: Add, Edit, Delete, Use AND? ☐

Figure 3-8: Patients who visit HIV/AIDS clinic search

When searching for a **Visit Clinic** name, there might not be one with 'HIV' or 'AIDS' in its name. However, you could use one with 'Early Intervention' or 'Chronic Disease' in its name.

4.0 Reports

Below is information about the various HIV/AIDS reports.

4.1 HMS Patient Care Supplement

From any patient's record on the **Summary/Supplement** (Summ/Supp) tab, you can view and print the patient's HMS Patient Care Supplement. Section 2.6 provides information about how to generate the HMS Patient Care Supplement.

The HMS Patient Care Supplement displays information specifically related to HIV/AIDS. The provider will be able to see, at a glance, the relevant labs, related diagnoses, medications and reminders. Appendix F: provides the logic for the HMS Patient Care Supplement. Also, Section III of the HIV/AIDS Glossary provides information about this supplement.

4.2 State Surveillance Report (SSR)

The State Surveillance report is a multi-page report that can be filled out and sent to the state when a patient has been diagnosed with HIV or AIDS. The report format is based on standard CDC reporting requirements.

The State Surveillance Report is exclusively located in a patient's record on the **Care Management** (Care Mgmt) tab.

The State Surveillance Report is just a guide for a site to use; it is not state-specific.

The State Surveillance Report fills in some of the patient information that may be available, such as name, race, ethnicity, and address. The blank does not include this information.

Below is an example of part of the State Surveillance Report:

SECTION III: DEMOGRAPHIC INFORMATION

Diagnostic status at report:

(Check one) ☐ HIV ☐ AIDS

Age at Diagnosis: 32

Date of Birth: 12/11/1980

Current Status: Alive

Date of Death:

(mm/dd/yyyy)

State/Territory of Death:

Gender: FEMALE

Ethnicity:

☐ Hispanic ☐ Not Hispanic ☐ Unknown

Race: AMERICAN INDIAN OR ALASKA NATIVE

Country of Birth: U.S.A.

Figure 9: Section III of the State Surveillance Report

You can select to print out a blank report form and fill in all of the data manually, or print a patient-specific form. The patient-specific form will display many data items directly from RPMS, but several elements will still have to be confirmed and filled in manually.

Regardless of which form you choose to print, providers should review this report, manually correct or fill in any incorrect or missing data, then send the report to the appropriate state agency.

If your state has a specific format, running the SSR for a patient may provide you with RPMS data that can be transferred to your state's form.

To generate the report, follow these steps:

1. Open a patient record.
2. Click the **Care Management** tab.
3. Select **HIV/AIDS** in the **Please Select a Group** field.
4. Click **Reports** on the **Main** sub-tab.
5. Do one of the following:
 - a. Select **State Surveillance (Blank)** option to access a blank **State Surveillance** report.
 - b. Select **State Surveillance** option to access the **State Surveillance** report.

4.3 Quality of Care (QOC) Report

The Quality of Care (QOC) report provides a snapshot of key care indicators for HIV/AIDS patients at the provider's site. Use the report to assess how well care is being extended to HIV/AIDS patients, and to justify activities at the provider's site.

The general format is based on HIVQual, an HRSA-sponsored program built upon a model of quality improvement consultation that was developed in New York State. The goal of the HIVQual Continuous Quality Project is to improve the quality of care delivered to persons with HIV.

Clinical elements that are documented in the Quality of Care report include the following:

- CD4 (T cell) and HIV Viral load test dates and categorization by test results
- STD testing: Completion of tests and categorization of test results for sexually-transmitted diseases (STDs), including syphilis (RPR (rapid plasma reagin)), chlamydia, and gonorrhea
- Infectious disease prevention: testing for or immunization against tuberculosis, pneumococcal diseases, and tetanus.
- Relevant exams and procedures: completion of eye exam, dental exams and pap smears (for women)
- Medications: categorizes patients by types of medications, including ARV (anti-retroviral) therapy, PCP and MAC prophylaxis
- Related health factors: categorizes patient by Tobacco and substance abuse screening and use.

Appendix E: provides a description of the logic used to create the Quality of Care report.

In order for the QOC report to be accurate and effective, Case Managers should ensure that the register fields and taxonomies are up-to-date, and that the report is run every month.

Some sites may opt to run the QOC report only on HIV patients, and another only on AIDS patients.

The QOC report is exclusively located in the panel view (not in a patient's individual record).

The report can run on everyone in your panel or on specific patients in your panel. The report can also be run on patients with an HIV/AIDS Diagnostic Tag or patients from the HMS Register.

To generate the report, follow these steps:

1. In your panel view, select the patients to be included in the QOC report on the **Care Mgmt** tab (under the **Main** sub-tab).
2. Click **Reports**.
3. Select **Quality of Care** to access the **Quality of Care** dialog.



Figure 4-10: Sample **Quality of Care** dialog

4. The population for the report is determined by either the **Report Population** or **Diagnostic Tag Status** field.
 - a. From the **Report Population** drop-down menu, select the population on which you want to run the report. As mentioned above, you can select individual patients. The options are : Active HIV/AIDS Diagnostic Tag, Active HMS Patients, or Selected Patients.
 - b. The **Diagnostic Tag Status** field is active when you select the **Active HIV/AIDS Diagnostic Tag** option in the **Report Population** field. Select the status of the Diagnostic Tag: Accepted, Proposed, Proposed and Accepted.
5. In the **Ending Date** field, the default date is today.

Note: It is important to understand that the QOC report is an annual, retrospective report, meaning that the start date of the report is always set at one year.

You can change the end date by typing in a new date or selecting it from the calendar.

6. Click **OK** (otherwise, click **Cancel**). After clicking **OK**, the report displays.

RPMS iCare - HIV/AIDS - Panel View (Shared) (Read Only) - Quality of Care

File

HIV QUALITY OF CARE
HIV/AIDS
User Selected
PERIOD ENDING: Sep 22, 2009
**** CONFIDENTIAL PATIENT INFORMATION ****

Total Patients Reviewed: 4
4 patients are included in this report.

	#	%
Gender: Male	3	75.0%
Female	1	25.0%
Age <15 yrs	0	0.0%
15-44 yrs	3	75.0%
45-64 yrs	1	25.0%
>64 yrs	0	0.0%
LABORATORY EXAMS		
# w/ CD4 count in last 4 months	0	0.0%
most recent <50	0	0.0%
most recent 50-199	0	0.0%
most recent >=200	0	0.0%
Undetermined	0	0.0%

Figure 4-11: Sample **Quality of Care** report

5.0 HIV/AIDS Community Alert

iCare generates anonymous Community Alerts for the incidence of suicidal behavior, public health concerns and the Center for Disease Control's (CDC) Nationally Notifiable Diseases (NND) about HIV/AIDS. During a nightly background job in iCare, POVs are mined for the incidence of each of these. The display of these community alerts are a user-specific preference, meaning that individual iCare users may choose whether or not to see a particular community alert.

For display, the NNDs are divided into three levels of alerts: Mandatory, Recommended, and Optional.

- Mandatory alert displays are automatically set to display and users cannot be turned off.
- Recommended alert displays are automatically set to display but users can opt to turn these off.
- Optional alert displays are automatically set as off, but users can turn them on. The HIV/AIDS alert is an Optional alert.

To view the setting of your HIV/AIDS community alert:

1. Open the **Tools** menu.
2. Select **User Preferences**.
3. Go to the **Comm Alert Setup** tab. Scroll down to the **HIV/AIDS** alert under the **Optional** sub-tab. Click the check box so that the alert is **On**.

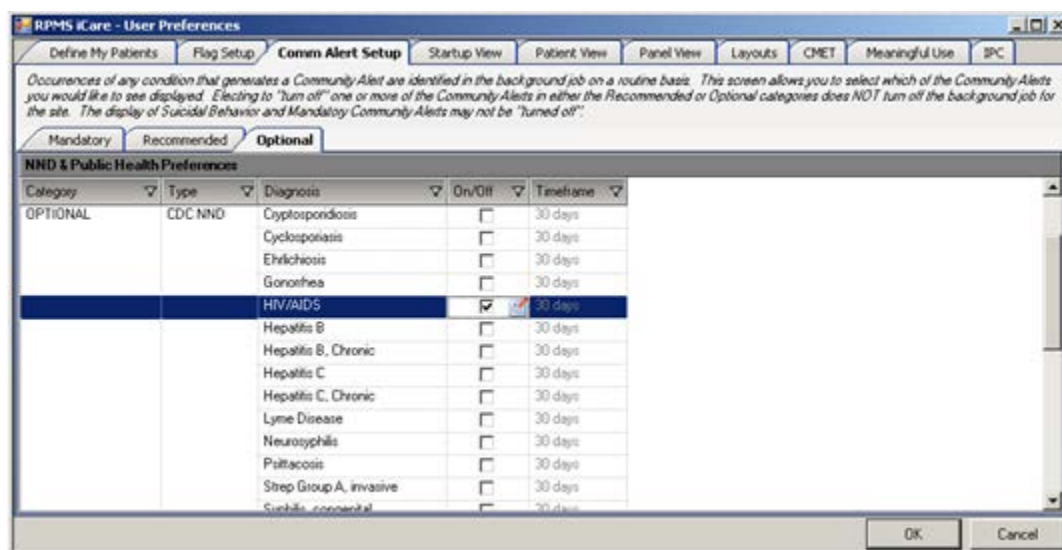


Figure 5-1: Scroll to HIV/AIDS alerts and click the check box

6.0 Taxonomy Management

This section describes the purpose of taxonomies, and how to view, edit, and add a site-populated taxonomy.

6.1 What is a Taxonomy

A taxonomy is the RPMS structure that holds the codes or terms that comprise any clinical definitions used by iCare and other RPMS clinical applications to calculate reminders and to construct reports.

iCare is similar to other clinical applications that use programmed logic (algorithms or artificial intelligence) to compute due and overdue HIV/AIDS-related reminders and other calculations related to constructing a complex report. Appendix D: provides the detailed algorithm logic used by iCare. The logic is composed of individual definitions of clinical elements, such as tests, immunizations, or diagnoses.

In order to provide comparable reminders and reporting across all I/T/U facilities, as much logic as possible is based on standard national codes. These codes include ICD-9, CPT, LOINC, drug class and national IHS standard codesets (e.g., Health Factors, patient education codes, or exam codes). For lab test and medication terminology that is not standardized across each facility, iCare uses taxonomies that are populated by each individual facility with its own codes.

Therefore, there are two different types of taxonomies distributed: software-defined (“hard-coded”) and site-populated.

6.2 Taxonomy Nomenclature

Codes and terms contained in a taxonomy are referred to as “members” of the taxonomy.

The names of the taxonomies generally describe the type of content. Each type of code (CPT, ICD, etc.) requires a separate taxonomy. The following terms are typically used in the taxonomy name:

- CPTS: CPT codes for procedures, tests, etc.
- CVX: standardized immunization codes maintained by the CDC and used by the RPMS Immunization application
- DXS: ICD9 codes used to describe diagnoses in the RPMS Purpose of Visit (POV) or Problem List
- FACTORS or HLTH FACTORS: IHS Health Factor codes

- LOINC: standardized codes used to identify lab tests, in addition to the site-populated lab test taxonomies
- NDCS: NDC (National Drug Classification) codes used to identify medications, in addition to the site-populated medication taxonomies
- PROC or PROCEDURES: ICD9 Procedure codes

Appendix C: provides a complete list of clinical definitions and associated taxonomies. Note that some of the taxonomies are new, while many have been in existence for quite some time and are used throughout RPMS.

6.3 Software-Defined (Hard-coded) Taxonomies

One clinical definition might be comprised of multiple code types with corresponding multiple taxonomies. For data elements like diagnoses, procedures, or lab tests identified by LOINC codes, a taxonomy is created for each code type within a definition that contains the standard codes that a software program should look for. These codes are hard-coded by the programmer into software-defined taxonomies that are distributed with the software. These taxonomies are defined nationally and cannot be modified at the local level. An example of a software-defined taxonomy is BGP CPT PAP that contains the list of CPT codes that define a pap smear.

You should become familiar with the contents of the taxonomies in order to understand how your site can better document patient records. If you feel that an existing, nationally defined taxonomy requires editing, the user should contact the OIT Help Desk.

6.4 Site Populated Taxonomies

Site-populated taxonomies are used to moderate the variations in terminology for medication and laboratory test names from one facility to another. PCC programs cannot deal with variations in spelling, spacing, and punctuation. Rather than attempting to find all potential spellings of a particular medication, the application looks in a specified taxonomy for the exact medication names that have been entered by that site.

Site-populated taxonomies are distributed without content, that is, the taxonomies are “empty.” The individual facility will enter all medication or lab test names used at that particular facility. This means that one site’s Hepatitis B test data, called Hep B Surface Antigen, can be compared to another site’s test called Hbsag Hep B Surface Ant. Or, one site’s NRTI medication data can be compared to another site, even though the same names are not used for these medications (“Zidovudine 100MG Cap” or “Zidovudine Cap/100 MG”).

If there is content in an existing site-populated taxonomy, it will not be overwritten/deleted in iCare.

There are numerous site populated laboratory and medication taxonomies that must be populated by the Case File Manager. The population of these taxonomies will increase the accuracy of iCare reporting and the generation of Community Alerts. New taxonomies added through the installation of updated software releases will by default, be empty, requiring site intervention to populate based on the site's needs.

A separate table for the laboratory and the medication site-populated taxonomies are provided below to use as a checklist.

Taxonomy names beginning with "BGP" are created and "owned" by the Clinical Reporting System (CRS) and should already be populated on your server. However, you should still plan to review the content for all site-populated taxonomies to ensure that they are accurate.

Note: All taxonomies should be reviewed for completeness and potential updates before running any functions.

6.4.1 Lab Test Taxonomies

The following is a list of lab taxonomies that must be populated by the site. It is recommended that you consult with your laboratory supervisor in order to include all lab tests that are being performed at your site. Each taxonomy has examples of common names for these lab tests, which may assist you in locating all appropriate tests for your site.

Note: To provide the most accurate reporting, you should include all test names that have been used by your facility at least since 1995, even if these codes are currently inactive. Some measures search for tests as far back as 10 years, e.g., tuberculosis.

Many sites designate inactive lab tests by adding one of the following characters at the beginning of the test name: "Z," "Z," "xx," "X," or "*." Search for these characters in your lab file and include these tests in your site-populated taxonomies because these tests may have been in use at one time.

The following table provides taxonomy names, their descriptions, examples of member and associated CPT codes. Please note the column labeled "Example of Members" are just example; your site might or might not use this terminology.

Taxonomy Name	Description	Example of Members	Associated CPT Code
BGP CD4 TAX	All test names related to any element of a CD4 Lab Test, used to evaluate immune system status (Also known as: T4 count, T-helper cells) This taxonomy is used to determine that a patient had the test, but is not used to determine the test result (see BKM CD4 ABS TAX below). This taxonomy is also used by CRS NOTE: do NOT include HIV panels in this taxonomy.	CD4 Cells CD4 Lymphocytes CD4 Absolute or ABS CD4 Helper T-Lymphocyte Marker T-Lymphocyte Helper / Suppressor Profile T-Cell Activation Profile	86359, 86360, 86361
BGP CHLAMYDIA TESTS TAX	All lab tests for Chlamydia trachomatis, including panels	Chlamydia Culture Chlamydia IgG Chlamydia IgM Chlamydia Screen Chlamydia, DNA Probe Chl/Gc Combo Chlamydia & Gonorrhea Probe Pap/HPV/Chlam/Gonorrhea Combo	
BGP HIV TEST TAX	All lab tests to test for HIV NOTE: make sure you are NOT including any test name that is actually referring to an HIV panel (see CD4 and/or HIV Viral Load)	HIV Test HIV Screen HIV Proviral DNA HIV-1; by EIA; Abs by EIA HIV-2 by PCR; HIV2QUAL by PCR	86689, 86701-86703, 87390, 87391, 87534-87539
BGP HIV VIRAL LOAD TAX	All HIV viral load tests (as measured by PCR or comparable test); used to assess prognosis of disease progression and to monitor the efficacy of antiretroviral therapy by measuring changes in HIV-1 RNA levels during the course of therapy. This taxonomy is also used by CRS. NOTE: do NOT include HIV panels in this taxonomy.	HIV Viral Load HIV RNA QNT	87536, 87539
BGP PAP SMEAR TAX	All Pap Smear tests	Pap Smear Pap/HPV/Chlam/Gonorrhea Combo	88141-88167, 88174-88175, Q0091

Taxonomy Name	Description	Example of Members	Associated CPT Code
BKM CD4 ABS TAX	Only CD4 Absolute tests. This taxonomy is used to identify the absolute count, or numeric value, of the result, which is a key identifying value for the health status of a patient. Any test included in this taxonomy should also be included in the BGP CD4 TAX (all CD4 lab tests). NOTE: do NOT include panels in this taxonomy.	CD4 Absolute ABS CD4 CD4 Lymphocytes	86361
BKM CMVTEST TAX	All lab tests for Cytomegalovirus (CMV)	CMV CMV Ab, IgG, Quantitative CMV Antibodies CMV by DFA, Direct Detection CMV Culture CMV DNA CMV IgG CMV IgM CMV PCR Rapid Viral Culture CMV	86644, 86645, 87271, 87496, 87497
BKM COCCI ANTIBODY TAX	All lab tests for Coccidioides Antibodies	Coccidioides Coccidioides Antibodies	86635
BKM FTA-ABS TEST TAX	All FTA-ABS (Fluorescent Treponemal Antibody Absorption) Tests to confirm syphilis	FTA-Ab FTA-ABS TP-PA Antibodies	86781
BKM GONORRHEA TEST TAX	All lab tests for gonorrhea (<i>Neisseria gonorrhoeae</i>)	Gonorrhea, DNA Probe Chlamydia & Gonorrhea Probe GC Culture GC-PCA	87081, 87590-87592, 87850

Taxonomy Name	Description	Example of Members	Associated CPT Code
BKM HEP B TAX	Lab tests to assess hepatitis B virus infection; evaluation of possible immunity in individuals who are at increased risks for exposure NOTE: do NOT include Hepatitis Panel as a member of this taxonomy	Anti-HBe; HBeAb HBV DNA PCR Hep B Carrier Screen w/AFP Hep B Core AB, IgM Hep B Surface Ab Titer; Hbsab Hep B Surface Antibody; Hbsab Hep B Surface Antigen; Hbsag Hep B Tests Hepatitis B Core Antibodies Screen For Hep B Vaccination	86704-86707; 87340-87350, 87515-87517
BKM HEP C EIA TAX (screening)	Includes any <i>initial</i> screening lab tests for Hepatitis C used at your site. Hep C confirmation tests should be included in the Hep C RIBA taxonomy below. NOTE: do NOT include Hepatitis Panel as a member of this taxonomy	Hepatitis C Virus AB HCV-Ab HEP Anti HCV	86803, 87520
BKM HEP C RIBA TAX (confirmatory)	Includes any confirmatory lab tests for Hepatitis C, including RIBA (Recombinant Immunoblot Assay), RNA Viral Load or Genotype. NOTE: do NOT include Hepatitis Panel as a member of this taxonomy	Hepatitis C Virus Antibody Supplemental Testing; Hep C RIBA Recombinant Immunoblot Assay HCV RNA Hep C RNA NAT Hep C Genotype	86804, 87521, 87522
BKM HEPATITIS PANEL TAX	To include Hepatitis Panels <i>only</i> , containing Hepatitis A antibody, IgM; hepatitis B core antibody, IgM; hepatitis B surface antigen; hepatitis C virus antibody NOTE: do NOT include the individual component parts of the panel in this taxonomy	Hepatitis Panel Acute Hepatitis Panel	80074
BKM PPD TAX	Any PPD skin test for tuberculosis. NOTE: PPDs are generally recorded through the skin test function of the Immunization application		86580, 86585

Taxonomy Name	Description	Example of Members	Associated CPT Code
BKM RPR TAX	All lab tests for Syphilis (Rapid Plasma Reagin (RPR))	RPR RPR Quant	86592, 86593
BKM TOXOPLASMO SIS TESTS TAX	All lab tests for Toxoplasmosis	Toxoplasma Toxoplasma IgG or IgM	86777, 86778
BKM TRICH TESTS TAX	All lab tests for Trichomoniasis	Trichomonas	None
BKMV HIV GENOTYPE TESTS TAX	Genotype tests for drug resistance NOTE: most sites are not currently using this test	HIV Genotype Resistance Testing Retroviral Genotype	87901
BKMV HIV PHENOTYPE TESTS TAX	Phenotype tests for drug resistance NOTE: most sites are not currently using this test	HIV Phenotype	87903

6.4.2 Medication Taxonomies

The following medication taxonomies will need to be populated by the Case File Manager with the drug names that are included on your site's formulary. The table below includes the list of drugs that should be considered. Some sites might not have medications for all the taxonomies. Case File Managers should consult with their site pharmacists to ensure accurate population of the medication taxonomies.

	NRTI Meds	NNRTI Meds	NRTI Comb	NRTI/ NNRTI	PI Meds	PI Booster	EI Meds	II Meds	PCP PROPH Meds	MAC PROPH Meds	TB Med s
Abacavir (Ziagen, ABC)	X										
Didanosine (Videx, Videx EC)	X										
Emtricitabine (Emtriva)	X										
Lamivudine (Epivir)	X										
Lamivudine/Abacavir (Epzicom)	X										
Stavudine (Zerit)	X										
Tenofovir (Viread)	X										
Zalcitibine (Hivid)	X										
Zidovudine (Retrovir)	X										
Zidovudine/Lamivudine (Combivir)	X										
Zidovudine/Lamivudine/Abacavir (Trizivir)	X										
Delaviridine (Rescriptor)		X									
Efavirenz (Sustiva)		X									
Nevirapine (Viramune)		X									

	NRTI Meds	NNRTI Meds	NRTI Comb	NRTI/ NNRTI	PI Meds	PI Booster	EI Meds	II Meds	PCP PROPH Meds	MAC PROPH Meds	TB Med s
Etravirine (TMC-125) (Intelence)		X									
Tenofovir/Emtricitabine (Truvada)			X								
Tenofovir/Emtricitabine/Efavi renz (Atripla)				X							
Amprenavir (Agenerase)					X						
Atazanavir (Reyataz)					X						
Fosamprenavir (Lexiva)					X						
HGC Saquinavir (Invirase)					X						
Indinavir (Crixivan)					X						
Lopinavir/Ritonavir (Kaletra)					X						
Nelfinavir (Viracept)					X						
SCG Saquinavir (Fortovase)					X						
Tipranovir (Aptivus)					X						
Darunavir (Prezista)					X						
Ritonavir (Norvir)						X					
Enfuvirtide (Fuzeon)							X				
Maraviroc (Selzentry)							X				
Raltegravir (Isentress)								X			
Atovaquone (Mepron)									X		
Dapsone									X		
Pentamidine, Pentam 300, Pentacarinat (NebuPent)									X		

	NRTI Meds	NNRTI Meds	NRTI Comb	NRTI/ NNRTI	PI Meds	PI Booster	EI Meds	II Meds	PCP PROPH Meds	MAC PROPH Meds	TB Med s
Sulfamethaxazole & Trimethoprim/Cotrimoxazole (Bactrim; Septra)									X		
Trimethoprim (Proloprim, Trimex)									X		
Trimetrexate, Glururonate &Leucovorin (Neutrexin)									X		
Azithromycin (Zithromax)										X	
Clarithromycin (Biaxin, Klacid)										X	
Rifabutin (Mycobutin, Ansamycin)										X	
Ethambutol (Myambutol)											X
Isoniazid (INH)											X
Pyrazinamide											X
Rifamate											X
Rifampin											X
Rifater											X
Streptomycin											X

6.5 View a Taxonomy

The majority of the taxonomies are hard coded (software-defined) and users will not have the ability to change their contents; however, users will be able to view them.

To view the members of a taxonomy in iCare:

1. From the main iCare window, open the **Tools** menu.
2. Select **Taxonomy Maintenance** | Select **View/Edit Taxonomy Entries**.
3. The **iCare Taxonomy View/Edit** window opens. In the left pane of the window, a tree view of the taxonomy organization displays.
4. Click the plus sign (+) next to the title of the taxonomy you want to view. Click any applicable sub-menu item(s).
5. Click the title of the taxonomy you want to view. The taxonomy members display in the right pane.

For example, to view the diagnosis codes associated with an HIV/AIDS diagnosis:

1. From the **iCare Taxonomy View/Edit** window, click the plus sign (+) next to **Diagnoses**.
2. Select the **BGP HIV/AIDS DXS** taxonomy.

The list of diagnosis codes associated with HIV/AIDS is listed on the right, to include diagnosis codes 042, 795.71, and V08.

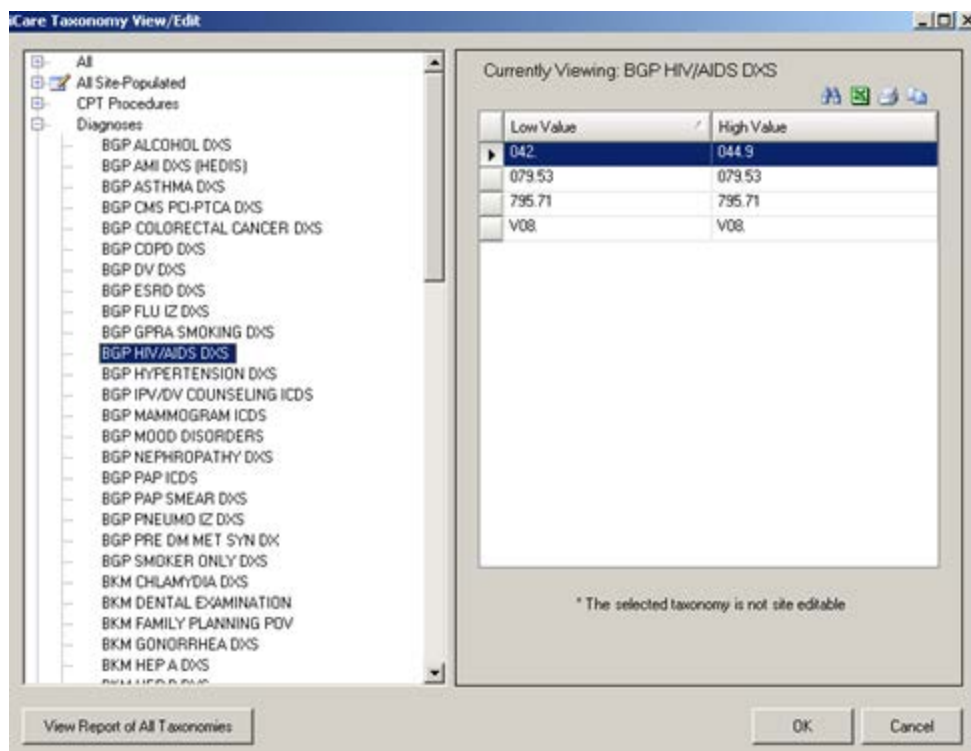


Figure 6-1: List of diagnosis taxonomies

6.6 View a Report of All Taxonomies

You can generate a report that displays all taxonomies and all associated members. To do so, from the **iCare Taxonomy View/Edit** window, click the **View Report of All Taxonomies** button. The application displays the **RPMS iCare - Taxonomy Report**.

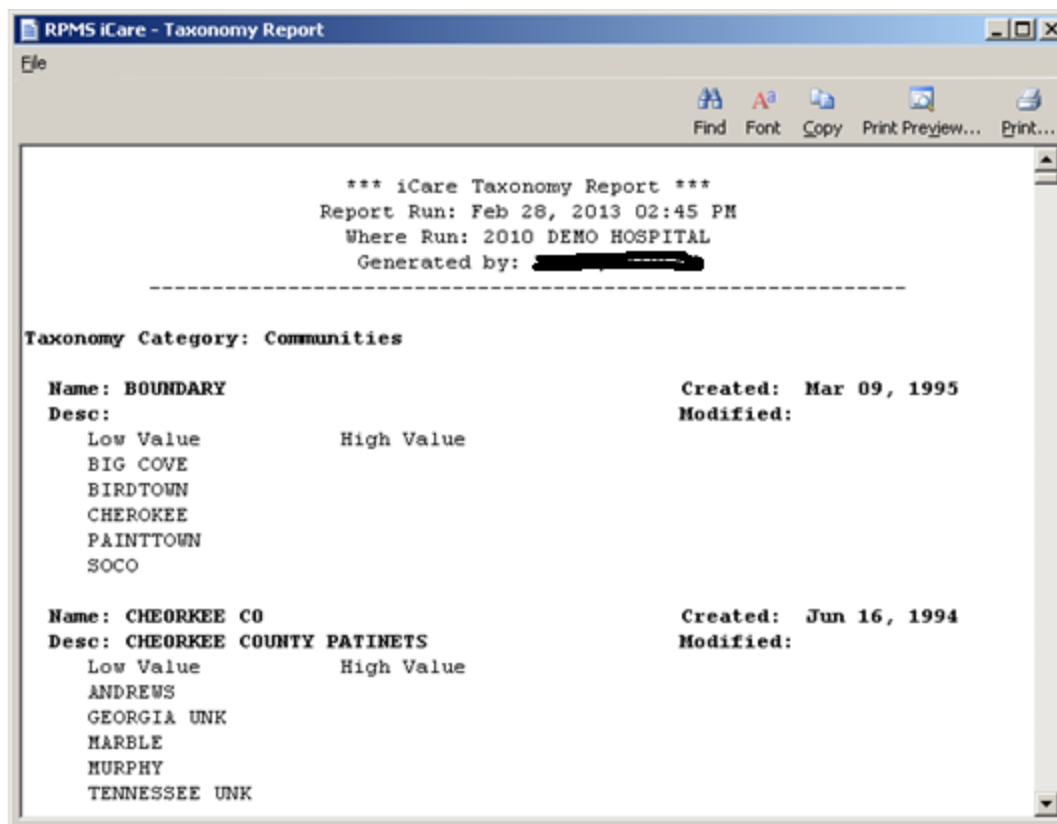


Figure 6-2: Sample RPMS iCare – Taxonomy Report

6.7 Identify Empty Taxonomies

In the left pane of the **iCare Taxonomy View/Edit** window, some taxonomy names may have a yellow exclamation point icon next to them.

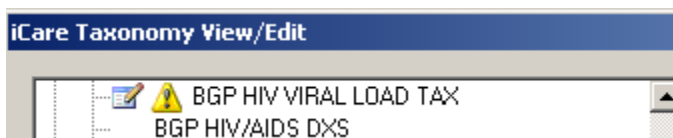


Figure 6-3: Sample of yellow exclamation point icon next to a taxonomy name

This icon indicates that the taxonomy is empty. If you select an empty taxonomy name, no taxonomy members will display in the right pane.

If you attempt to run a report involving an empty taxonomy, iCare will notify you that your report was not successful because the taxonomy was not populated.

6.8 Add a Member to a Site-Populated Taxonomy

Only users with the appropriate access rights can edit taxonomies. To edit taxonomy entries, you will need to have the iCare Taxonomy Editor security key. If you will be

responsible for editing these taxonomies, discuss this with the iCare Package Manager at your site so that you can be assigned taxonomy editor access.

In order to readily identify which of the taxonomies are site-populated, a pencil icon is displayed next to a taxonomy name. There is also a category labeled 'Site Populated.'

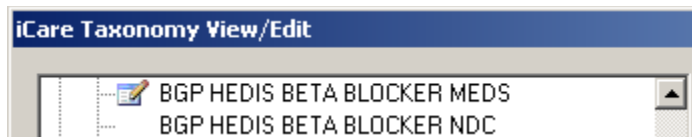


Figure 6-4: Sample of paper/pencil icon next to a taxonomy name

At some point, you may want to add a member to a taxonomy; for example, to add a new lab test to the CD4 taxonomy.

The example below demonstrates how to add lab test members to a lab taxonomy. The steps are the same to add medication members.

1. From the main iCare window, open the **Tools** menu.
2. Select **Taxonomy Maintenance** | Select **View/Edit Taxonomy Entries**.
3. The **iCare Taxonomy View/Edit** window opens. In the left pane of the window, a tree view of the taxonomy organization displays.

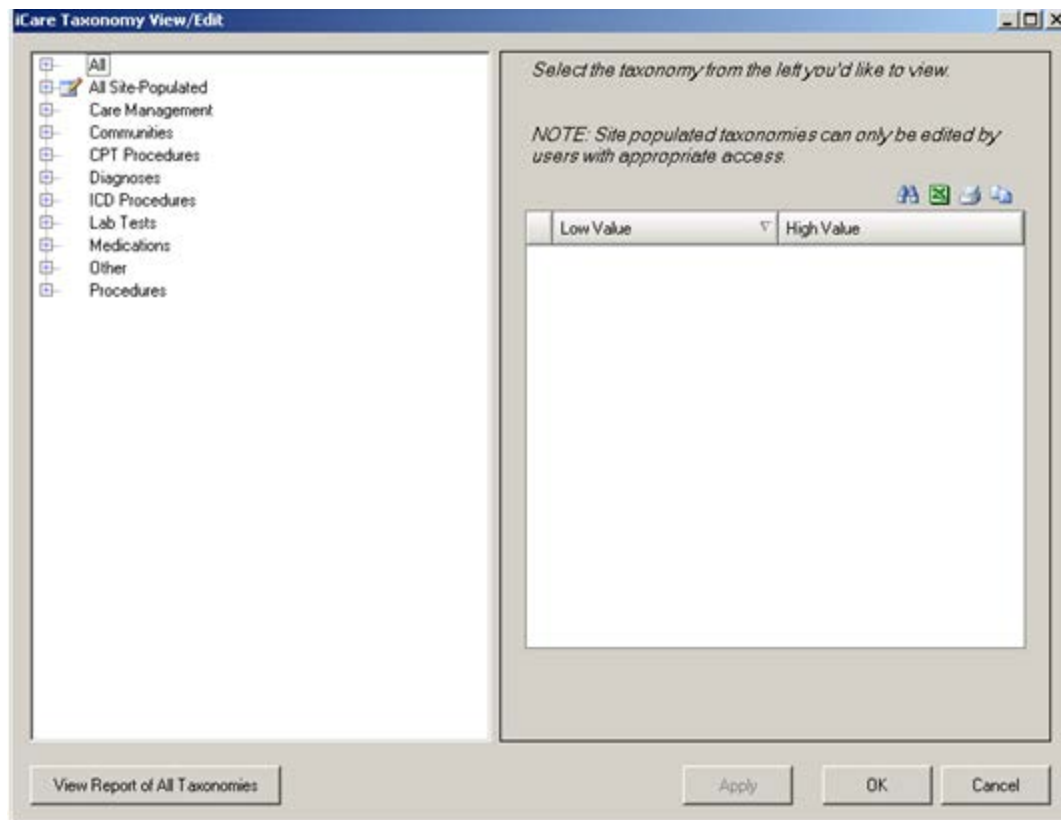


Figure 6-5: Sample initial **iCare Taxonomies View/Edit** window

4. Click the plus sign (+) next to **Lab Tests**.
5. Click the title of a taxonomy you want to edit.

Note: The pencil icon should be next to the taxonomy title, indicating that you have access rights to edit the taxonomy.

The taxonomy displays in the right pane.

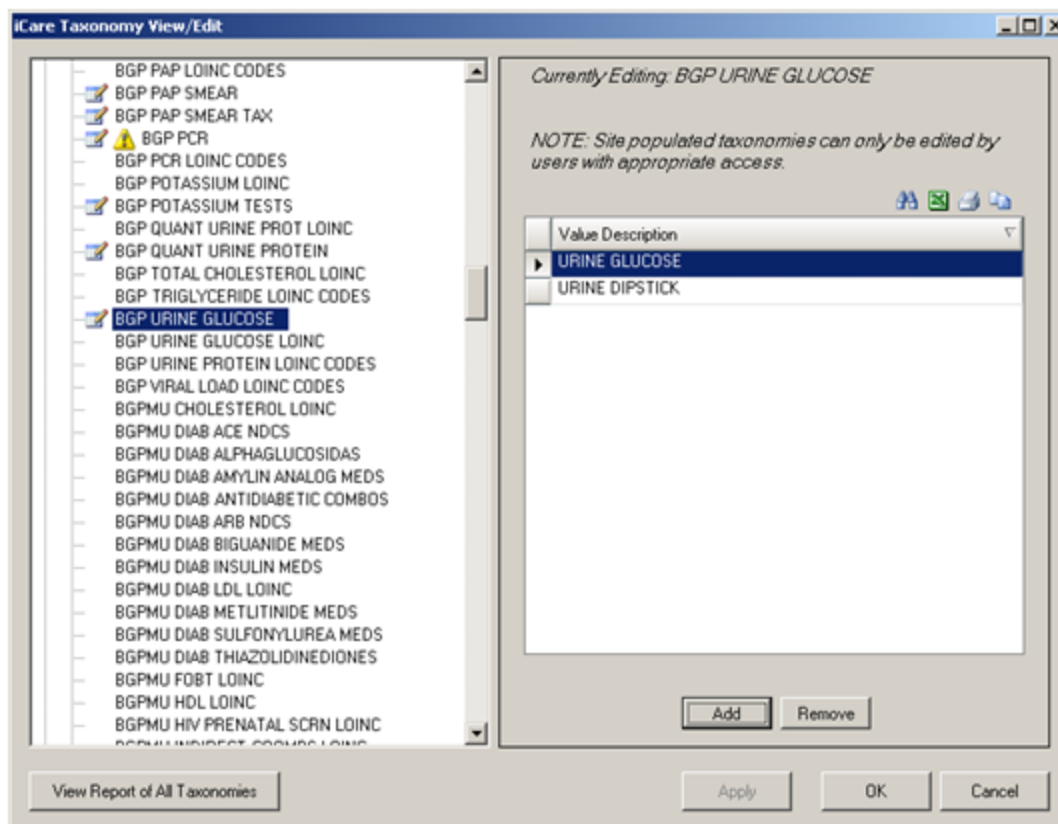


Figure 6-6: Values of selected lab test

6. To add a member to the selected taxonomy, click **Add**.
7. The **Select Taxonomy Item** window opens. In the search field, enter the name of the lab test to add to the taxonomy.

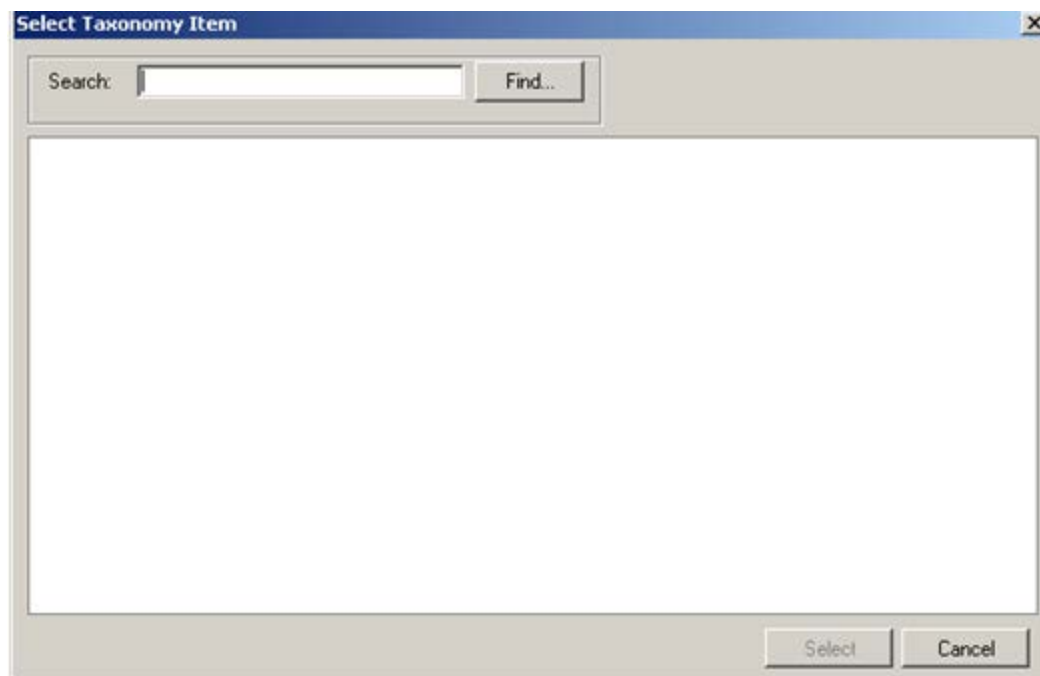


Figure 6-7: **Select Taxonomy Item** dialog

“Urine” is used in the following example.

8. Click **Find** and enter **Urine**. The results display.

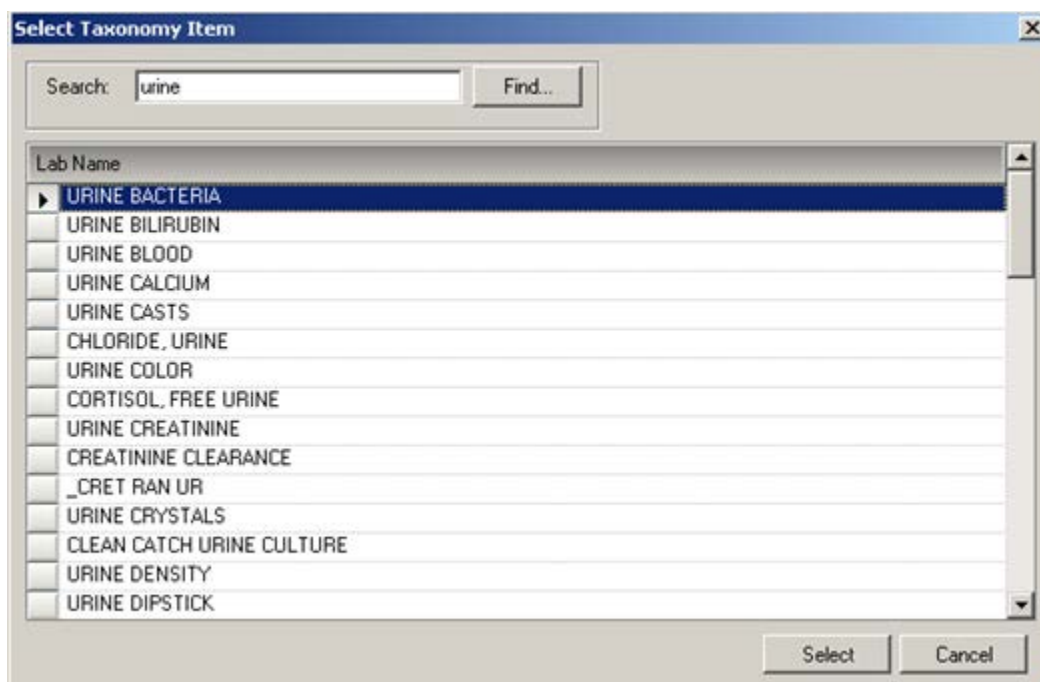


Figure 6-8: Results from search for urine

9. Select the lab test to add to the taxonomy. In this example, “Urine Casts” is selected.
10. Click **Apply**. The item is now a member of the taxonomy.

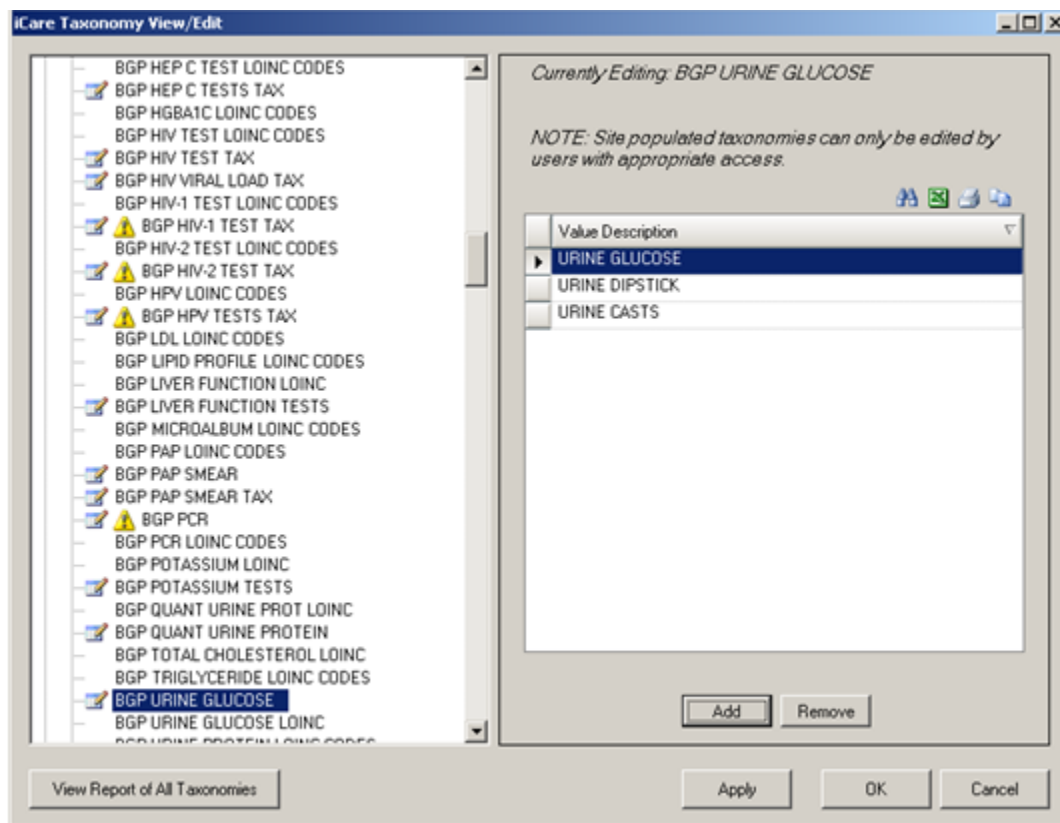


Figure 6-9: New item “Urine Casts” added to the taxonomy

If you want to work with another taxonomy, click **Apply** before selecting the next taxonomy.

6.9 Remove a Member from a Site-Populated Taxonomy

The example below demonstrates how to remove lab test members from a lab taxonomy. The steps are the same to remove medication members.

1. From the main iCare window, open the **Tools** menu.
2. Select **Taxonomy Maintenance** | Select **View/Edit Taxonomy Entries**.
3. The **iCare Taxonomy View/Edit** window opens. In the left pane of the window, a tree view of the taxonomy organization displays.
4. Click the plus sign (+) next to **Lab Tests**.
5. Click the title of a taxonomy you want to edit.

Note: The pencil icon should be next to the taxonomy title, indicating that you have access rights to edit the taxonomy.)

The taxonomy displays in the right pane.

6. In the right pane, select the member you want to remove from the taxonomy.

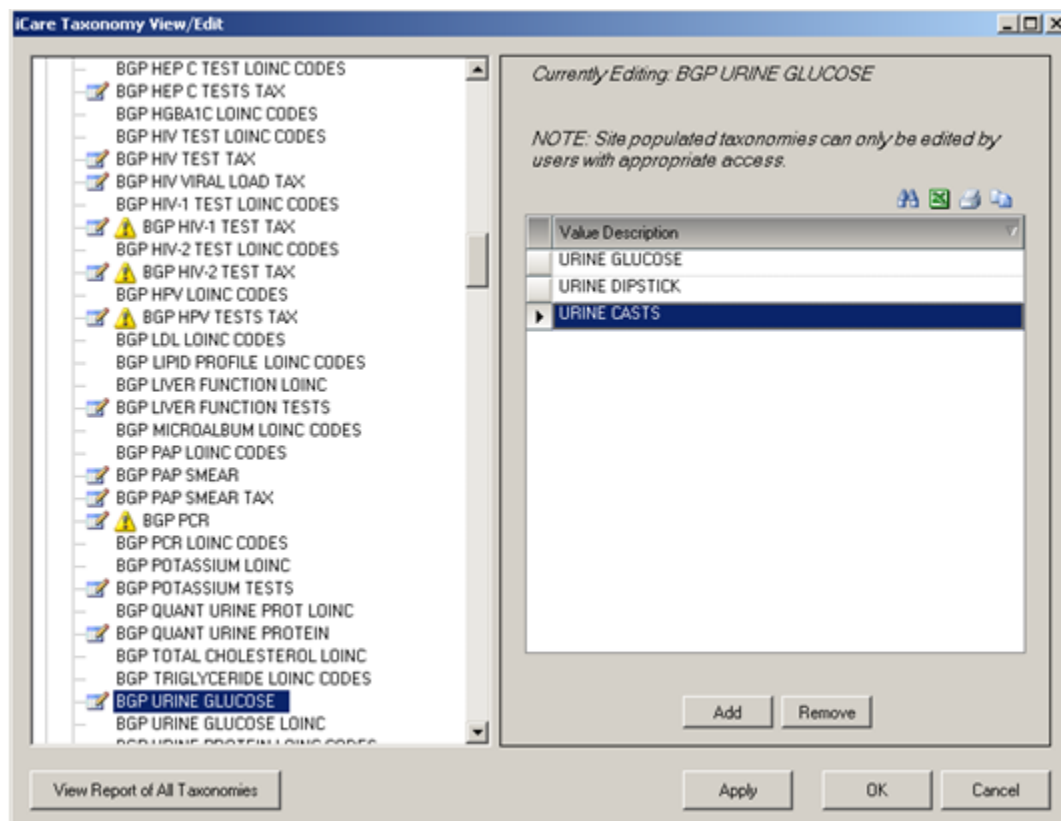


Figure 6-10: Item to remove is selected

7. Click **Remove**.
8. The application displays a warning message that asks: **NOTE: Editing site populated taxonomies can affect many existing processes in RPMS. Be certain of your edits prior to clicking "OK."** Click **OK** to remove the item from the taxonomy. (Otherwise, click **Cancel**.) After selecting **OK**, the application displays the Confirm taxonomy item remove message that asks: Are you sure you want to remove 1 selected taxonomy item(s)? Click **Yes** to remove the item. (Otherwise, click **No**.)

7.0 Using the HIV/AIDS Glossary

The HIV/AIDS Glossary is a valuable reference tool that can assist you with managing HIV/AIDS patient data. For example, you could reference the glossary to determine why you might be receiving CD4 reminders or to see what the logic is behind the Quality of Care report.

The HIV/AIDS Glossary describes in detail the logic and definitions pertaining to the following information:

- The HIV/AIDS Diagnostic Tag definition
- The HIV/AIDS specific data entry
- The panel layout options for the HIV/AIDS Care Management tab
- Taxonomy maintenance
- The HIV/AIDS Health Supplement logic
- The HIV/AIDS Reminder logic
- The HIV/AIDS Quality of Care Report logic

The glossary will deepen your understanding of the HIV/AIDS-related data used in iCare; therefore, you might want to consider printing this glossary for easy reference when entering and interpreting data related to this population.

To open the glossary:

1. Open the **Help** menu.
2. Select **Care Management Glossaries | HIV/AIDS Glossary** to access the glossary.

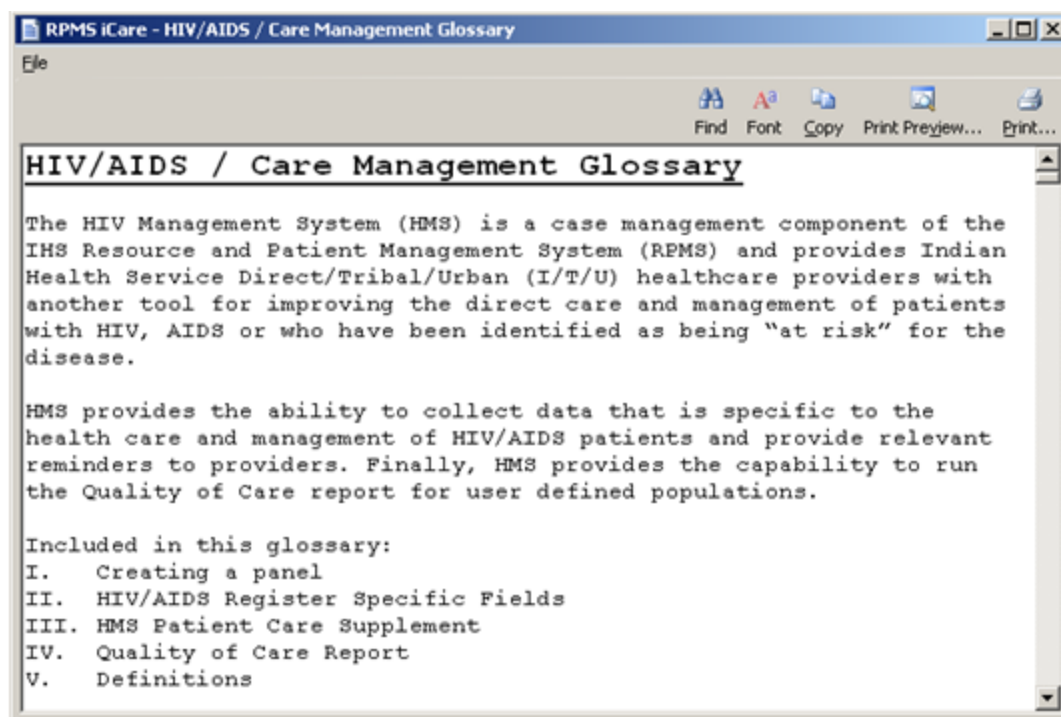
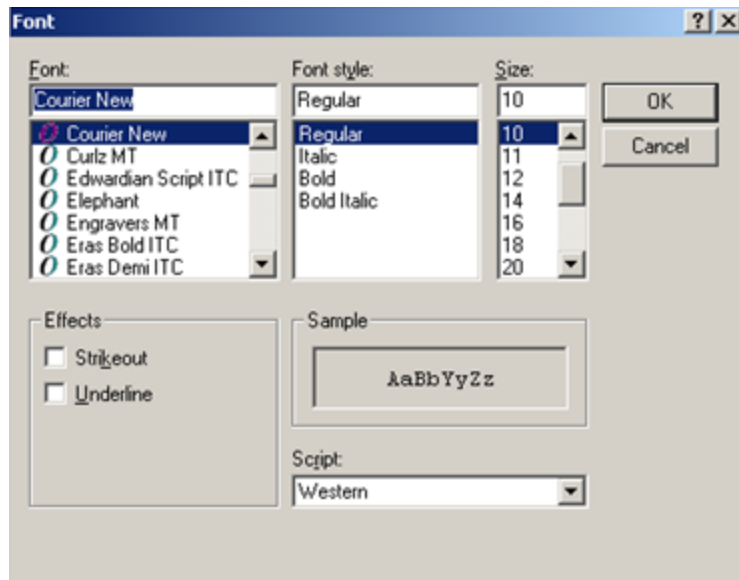


Figure 7-1: **HIV/AIDS Care Management Glossary**

You can take the following actions on this pop-up window:




- Navigate through the information by using the scroll bar.
- Click the **Find** (Find) button to access a search tool to find data in the current window.
- Click the **Font** (Font) button to display the **Font** dialog.

Figure 7-2: **Font** Dialog

Here you can change the Font name, style, and size of the text in the pop-up (applies to all of the text). In addition, you can add effects like **Strikeout** and **Underline** - these perform like those effects indicated in MS Word.

Change the Script option if you need to see the text displayed in another language and you have that language pack installed on your computer. If the language pack is not installed, the display does not change by selecting another script.

Click **OK** to apply your changes to the text in the current pop-up. These changes are only effective for the current view of the pop-up. (Otherwise, click **Cancel**.)

- Click the **Copy** () button to copy the selected text to the **Windows** clipboard.
- Click the **Print Preview** () button to view the **Print Preview** dialog. You can print the contents of the pop-up from this dialog.
- Click the **Print** () button to display a **print** dialog where you specify the printer to output the contents of the pop-up, the page range, and number of copies.

The **File** menu contains the print actions (like the **Print Preview** and **Print** buttons), the **Page Setup** function, the find and copy functions, as well as a **Close** function (dismisses the pop-up).

Appendix A: Definitions and Taxonomies Content

A.1 Opportunistic Infections

DIAGNOSIS	ICD 9 CODE(S)
Aspergillosis	117.3
Bartonellosis	088.0
Campylobacter Enteric Disease	008.43
Candidiasis, Oral	112.0
Coccidioidomycosis	114.1-3
Cryptococcosis	117.5
Cryptosporidiosis	007.4
Cytomegalovirus disease	078.5
Hemophilus Influenza Respiratory Disease	041.5; 519.9
Hepatitis B Virus	070.20-23; 070.30-33
Hepatitis C Virus	070.41; 070.44; 070.51; 070.54; 070.70-71
Herpes Simplex virus	054*
Histoplasmosis	115*
Human Papillomavirus	079.4
Microsporidiosis	136.8
Mycobacterium Avium Complex	031.0; 031.1; 031.2; 013.9
Mycobacterium Tuberculosis	010-018
Pneumocystitis carinii Pneumonia	136.3
Progressive Multifocal Leukoencephalopathy	046.3
Pseudomonas respiratory Disease	519.9; 041.7
Salmonella Enteric Disease	003.0; 003.8; 003.9
Shigella Enteric Disease	004.0-3; 004.8-9
Staphylococcus Respiratory Disease	041.10; 041.11; 041.19; 519.9
Streptococcal Respiratory Disease	041.0* 519.9
Syphilis	090* - 097*
Toxoplasmosis	130.0-9
Varicella Zoster Virus	053*

A.2 AIDS Defining Illnesses

DIAGNOSIS	ICD 9 CODE(S)
Candidiasis, Bronchi	112.89; 112.9
Candidiasis, Esophageal	112.84
Candidiasis, Lung	112.4
Candidiasis, Trachea	112.89; 112.9
Carcinoma, invasive cervical	180*
Coccidioidomycosis	114.1; 114.2; 114.3

DIAGNOSIS	ICD 9 CODE(S)
Cryptococcosis	117.5
Cryptosporidiosis	007.4
Cytomegalovirus disease	078.5
Herpes simplex	054*
Histoplasmosis	115*
HIV Encephalopathy	042; 348.3*
Isosporiasis	007.2
Kaposi's Sarcoma	176*
Lymphoma Burkitt's	200.20-200.28
Lymphoma Immunoblastic	200.80-200.88
Lymphoma, primary in brain	202.8; 191*; 196*
Mycobacterium avium Complex (MAC)	031.0; 031.1; 031.2; 031.9
Mycobacterium Tuberculosis	010 - 018
Pneumocystis carinii Pneumonia (PCP)	136.3
Pneumonia	480*- 486; 487.0
Progressive Multifocal Leukoencephalopathy	046.3
Salmonella Septicemia	003.1
Toxoplasmosis	130.0-9
Wasting syndrome	261; 799.4

A.3 HIV/AIDS Definitions, Codes, Taxonomies, Attributes

Table updated as of 09/10/2009

The code definitions listed in the table should be located within RPMS PCC “V” files, as identified below:

CPT: 1) V CPT, CPT field; 2) if a procedure related to any radiology, also V Radiology, CPT Code field

ICD Diagnoses: 1) V POV, POV field; 2) also Problem List but only if specified in the individual definition below, (PROBLEM file, file number 9000011. .01 field is a pointer to ICD Diagnosis.

ICD Procedures: 1) V Procedure, Procedure field

LOINC: 1) V Lab, LOINC Code field

NDC: The NDC is not stored in the V MEDICATION file, you would get at it by using the .01 field which points to the DRUG file (file #50). There is a field in the drug file called NDC.

Site-Defined Lab Tests: 1) V Lab, Lab Test field

Site-Defined Medications: 1) V Medication, Medication field

Health Factors: 1) V Health Factors, Health Factor field

Dental (ADA) Code: V Dental, Service Code field, the .01 field called service code that points to the ADA code table

Patient Education: 1) V Patient Ed, Topic field

Clinic Codes: 1) V Visit, Clinic field -- .08 field in VISIT file is a pointer to the CLINIC STOP file, file 40.7 which has the name of the clinic and the code Immunization Codes: 1) V Immunization, the .01 field called immunization points to the standard immunization table

Exam Codes: 1) V Exam, Exam Code field

Provider Codes: 1) Visit Providers are entered into the V PROVIDER file. The .01 field (PROVIDER) points to file 200, the NEW PERSON file. The provider's discipline and codes can be found in file 200.

ID		CPT	ICD	LOINC	Site-Defined Taxonomy (Labs or Meds)	Other
DX.1	AIDS Defining Illnesses		BKMV AIDS DEF ILL DXS 003.1; 007.2; 007.4; 010.00-018.96; 031.0; 031.1; 031.2; 031.9; 046.3; 054*; 078.5; 112.4; 112.84; 112.89; 112.9; 114.1; 114.2; 114.3; 115*; 117.5; 130.0-9; 136.3; 176*; 180*; 191*; 196*; 200.20-200.28; 200.80-200.88; 202.80-202.88; 261; 348.3*; 480*; 482*; 483*; 484*; 485*; 486*; 487*; 799.4;			
DX.2	Chlamydia DX		BKM CHLAMYDIA DXS 078.8*, 079.88, 079.98, 099.41, 099.5*			
DX.18	Colorectal Cancer	BGP COLORECTAL CANCER CPTS G0213-G0215; G0231	BGP COLORECTAL CANCER DXS 153.*, 154.0, 154.1; 197.5; V10.05			
DX.4	Gonorrhea		BKM GONORRHEA DXS 098.0 – 098.89			
DX.5	Hepatitis A		BKM HEP A DXS POV: 070.0; 070.1			
DX.15	Hepatitis B		BKM HEP B DXS POV or Problem List: 070.20-.23; 070.30-.33			

ID		CPT	ICD	LOINC	Site-Defined Taxonomy (Labs or Meds)	Other
DX.16	Hepatitis C		BKM HEP C DXS POV or Problem List: 070.41; 070.44; 070.51; 070.54; 070.70-.71			
DX.6	HIV/AIDS DX		BGPHIV/AIDS DXS POV or Problem List 042.-044.9; V08; 795.71; 079.53			
DX.7	Non Tobacco Users					BGP NON TOBACCO USER FACTORS Health Factors: Non Tobacco User; Previous Smokeless; Previous Smoker
DX.8	Opportunistic Infections		BKMV HIV OPP INF DXS 003.0; 003.8; 003.9; 004.0-3; 004.8-9; 007.4; 008.43; 010- 018.96; 031.0; 031.1; 031.2; 031.9; 041.0*; 041.10; 041.11; 041.19; 041.5; 041.7; 046.3; 053*; 054*; 070.20-23; 070.30-33; 070.41; 070.44; 070.51; 070.54; 070.70; 070.71; 078.5; 079.4; 088.0; 090*; 091*; 092*; 093*; 094*; 095*; 096*; 097*; 112.0; 114.1-3; 115*; 117.3; 117.5; 130.0-9; 136.3; 136.8; 519.9;			
DX.9	Other STD		BKM OTHER STD DXS 099.1-099.3; 099.40; 099.49; 099.8; 099.9			

ID		CPT	ICD	LOINC	Site-Defined Taxonomy (Labs or Meds)	Other
DX.17	State Reportable Diagnoses		BKM STATE REPORTABLE DXS 003.1; 007.2; 007.4; 011*; 031.2; 031.9; 042; 046.3; 054*; 078.5; 112.4; 112.84; 112.89; 112.9; 114.1; 114.2; 114.3; 115*; 117.5; 130*; 136.3; 176*; 180.-180.9; 200.20-200.28; 200.80- 200.88; 202.80-202.88; 261; 348.3-348.39*; 363.15; 363.20; 480*; 482.89; 483.8; 486.0; 487.0; 799.4			
DX.11	Syphilis		BKM SYPHILIS DXS 090.0-093.9; 094.1-097.9			
DX.12	Tobacco Users	BGP TOBACCO USER CPTS 1034F; 1035F	BGP SMOKER ONLY DXS POV or Current Problem List 305.1; 305.10-305.12; 649.00- 649.04;			BGP TOBACCO USER HLTH FACTORS Health Factors: Current Smokeless, Current Smoker, Current Smoker & Smokeless, Cessation Smoker, Cessation-Smokeless, Cessation Smoker and Smokeless
DX.13	Trichomoniasis		BKM TRICHOMONIASIS DXS 131.0-.9			
DX.14	Tuberculosis (TB)		DM AUDIT PROBLEM TB DXS 010.00-018.96; 137.0-137.4; 795.5; V12.01			

ID		CPT	ICD	LOINC	Site-Defined Taxonomy (Labs or Meds)	Other
ED.1	Family Planning Education		BKM FAMILY PLANNING POV V25.0-.9,V26.4			Patient education (V PED) codes containing "FP-"
ED.2	HIV Counseling/ Education		BKMV HIV ED DXS V65.44			Patient education codes containing "HIV-", "-HIV" or any HIV ICD codes (e.g., 042.-044.9, 795.71, V08
ED.3	Safe Sex Education					BKM SAFE SEX ED CODES Patient education codes containing: STD-P, HIV-P, FP-FC, MH-RS, WL-SX, WH-RS, ATO-LA, HEP-P, HEP-LA
ED.4	STD Education		BKMV STD ED DXS V65.45 sexually transmitted disease counseling			BKM STD ED CODES Patient education codes containing "STD-", "-STD", "STI-", "-STI" or "HEP-" or MH-RS, WL-SX, WH-RS, WH-STD, WH-STI, CD-C
ED.5	Tobacco Cessation Counseling	BGP TOBACCO CESS CPTS 99406, 99407, G0375, G0376, 4000F				Clinic code 94 Patient Ed codes: containing "TO-", "-TO" or "-SHS" (NOTE: update to current CRS logic) BGP TOBACCO CESS DENTAL CODE Dental code 1320

ID		CPT	ICD	LOINC	Site-Defined Taxonomy (Labs or Meds)	Other
IZ.1	BCG Tuberculosis Vaccine	BKM BCG IZ CPTS 90585, 90586, 90728	BKM BCG IZ PROCEDURE V03.2 Tuberculosis (BCG)			BKM BCG IZ CVX CODES Immunization Codes (CVX): 19 BCG vaccine
IZ.2	CMV (IgG)	BKM CMV IZ CPTS 90291				BKM CMV IZ CVX CODES Immunization Codes (CVX): 29 CMV-IGIV
IZ.3	Hep A vaccine (defined as 2 occurrences of any of the codes at least 5 months apart – NOTE to programmers, start with most recent and work backwards)	BKM HEP A IZ CPTS 90632-34, 90636, 90730				BKM HEP A IZ CVX CODES Immunization Codes (CVX): 85 Hep A NOS; :52 HEP A Adult; 83 HEP A PED 2; 84 HEP A PED 3; 31 HEP A PED NOS; 104 HepA & B
IZ.4	Hep B vaccine (defined as at least 3 occurrences of any of the codes where 1 st and last are separated by at least 6 months)	BKM HEP B IZ CPTS 90636, 90723, 90731, 90740, 90743- 90748				BKM HEP B IZ CVX CODES Immunization Codes (CVX): 30 HBIG; 08 HEP B PED; 43 HEP B ADLT; 45 HEP B NOS; 42 HEP B Adol/High Risk Inf dosage; 44 dialysis/ immunosup patient dosage; 51 HepB-HIB; 102 DTP/Hep B; 104 HEP A&B; 110 DTaP-HepB- IPV

ID		CPT	ICD	LOINC	Site-Defined Taxonomy (Labs or Meds)	Other
IZ.5	Influenza IZ	BGP CPT FLU 90655-90662; 90724; G0008; G8108	BGP FLU IZ DXS POV: V04.8, V04.81, V06.6 BGP FLU IZ PROCEDURES V Procedure: 99.52			BGP FLU IZ CVX CODES Immunization Code (CVX): 88 INFL NOS; 111 INFL intranasal; 15 INFL Split; 16 INFL Whole
IZ.6	Pneumococcal IZ	BGP PNEUMO IZ CPTS 90669, 90732, G0009, G8115	BGP PNEUMO IZ DXS POV: V06.6; V03.82 BGP PNEUMO IZ PROCEDURES V Procedure: 99.55			BKM PNEUMO IZ CVX CODES Immunization Code (CVX): 33 PNEUMO- PS; 100 PNEUM CONJ; 109 PNEUMO NOS
IZ.7	Tetanus IZ	BKM TETANUS IZ CPTS 90698, 90700-90703, 90711, 90718, 90720-21, 90723, 90839	BKM TETANUS IZ DXS V03.7 Tetanus Vac; V06.1 DTP; V06.2 DTP+TAB; V06.3 DTP+polio; V06.5 DT BKM TETANUS IZ PROCEDURES V Procedure 99.38; 99.39 (DPT)			BKM TETANUS IZ CVX CODES Immunization Code (CVX): 01 DTP; 20 DTaP; 28 DT-PEDS; 09 Td-Adult; 35 Tetanus Toxoid; 13 TIG; 106 DTaP 5; 107 DTaP NOS; 22 DTP
M.09	Entry Inhibitors (EI) Medications				BKMV EI MEDS	BKMV EI MED NDCS
M.10	Integrase Inhibitors				BKMV II MEDS	BKMV II MED NDCS
M.01	MAC Prophylaxis Medications				BKMV MAC PROPH MEDS	BKMV MAC PROPH MED NDCS

ID		CPT	ICD	LOINC	Site-Defined Taxonomy (Labs or Meds)	Other
M.02	NNRTIs (Non-Nucleoside Reverse Transcriptase Inhibitors) M.1				BKMV NNRTI MEDS	BKMV NNRTI MED NDCS
M.03	NRTIs (Nucleoside/Nucleotide Reverse Transcriptase Inhibitors) M.1				BKMV NRTI MEDS	BKMV NRTI MED NDCS
M.12	NRTI Combo (Nucleoside/Nucleotide Reverse Transcriptase Inhibitors Combinations)				BKMV NRTI COMBO MEDS	BKMV NRTI COMBO MED NDCS
M.11	NRTI/NNRTI				BKMV NRTI/NNRTI MEDS	BKMV NRTI/NNRTI MED NDCS
M.04	PCP Prophylaxis Medications				BKMV PCP PROPH MEDS	BKMV PCP PROPH MED NDCS
M.13	PI Booster				BKMV PI BOOSTER MEDS	BKMV PI BOOSTER MED NDCS
M.05	PIs (Protease Inhibitors) M.1				BKMV PI MEDS	BKMV PI MED NDCS
M.08	Tuberculosis (TB) Treatment				BKM TB MEDS	BKM TB MED NDCS

ID		CPT	ICD	LOINC	Site-Defined Taxonomy (Labs or Meds)	Other
P.01	Mastectomy, Bilateral	BGP BILATERAL MASTECTOMY CPTS 19300-19307, 19180, 19200, 19220, 19240 (all codes to include modifier .50 or 09950 to indicate bilateral procedure)	BGP MASTECTOMY PROCEDURES 85.42, 85.44, 85.46, 85.48			
P.07	Mastectomy, Unilateral	BGP UNI MASTECTOMY CPTS 19300-19307, 19180, 19200, 19220, 19240	BGP UNI MASTECTOMY PROCEDURES 85.41, 85.43, 85.45, 85.47			
P.02	Dental Exam		BKM DENTAL EXAMINATION V72.2 Dental Examination			BGP DENTAL EXAM DENTAL CODE ADA code 0000; 0190 V Exam 30
P.03	Dilated Eye Exam	BGP DM EYE EXAM CPTS 92002-92014, 67028, 67038, 67039, 67040 BGP RETINAL EXAM CPTS 2022F, 2024F, 2026F, S0620, S3000	POV V72.0			Provider codes 79. 24. 08 Clinic codes 17, 18, 64, A2 V Exam code: 03 Procedure: 95.02
P.04	Hysterectomy	BGP HYSTERECTOMY CPTS 51925; 56308; 58150-58152; 58200-58294; 58548- 58554; 58951; 58953-58954; 58956; 59135	BGP HYSTERECTOMY PROCEDURES V Procedure: 68.4-68.8			V POV 618.5

ID		CPT	ICD	LOINC	Site-Defined Taxonomy (Labs or Meds)	Other
P.05	Mammogram	BGP CPT MAMMOGRAM VRad or VCPT 76090-76092; G0202; G0204; G0206; 76083; 77051-77059	BGP MAMMOGRAM ICDS POV: V76.11, V76.12; 793.80, 793.81, 793.89 BGP MAMMOGRAM PROCEDURES V Procedure: 87.36 – 87.37			Women's Health: Screening Mammogram, Mammogram Dx Bilat, Mammogram Dx Unilat
P.06	Total Colectomy	BGP TOTAL CHOLECTOMY CPTS 44150-44151,44152, 44153, 44155-44158, 44210-44212	BGP TOTAL CHOLECTOMY PROCS 45.8			
S.1	Alcohol Screen	BGP ALCOHOL SCREENING CPTS 99408, 99409, G0396, G0397, H0049	BGP ALCOHOL SCREEN ICDS V POV: V79.1, V11.3 BGP ALCOHOL DXS 291.0-291.9. 303.00-303.93, 305.00-305.03, 357.5 BGP ALCOHOL PROCEDURES 94.46; 94.53; 94.61-94.63; 94.67-94.69			BGP ALCOHOL HLTH FACTOR Any Alcohol Category Health Factor Any Patient Ed codes containing "CD-", "-CD", "AOD-" or "-AOD" OR any alcohol diagnosis Exam Code 35 V Measurement AUDT, AUDC or CRFT BHS Problem codes: 29.1 BHS POV 10,27,29

ID		CPT	ICD	LOINC	Site-Defined Taxonomy (Labs or Meds)	Other
S.05	Colorectal Cancer Screen	BGP COLO CPTS 44388-44394, 44397, 45355, 45378-45387, 45391, 45392, G0105; G0121 BGP FOBT CPTS 82270; 82274; 89205; G0107; G0328; G0394 BGP SIG CPTS 45330-45345; G0104 BGP BE CPTS 74280, G0106, G0120	BGP SIG PROCS 45.24; 45.42 BGP COLO PROCS 45.22; 45.23; 45.25; 45.43 Colonoscopy VPOV V76.51	BGP FOBT LOINC CODES	BGP GPRA FOB TESTS	
S.2	Depression Screen		BGP MOOD DISORDERS 291.89; 292.84; 293.83; 296.*; 300.4; 301.13; 311.			Exam Code 36 BHS Problem Code 14.1 POV V79.0
S.6	IPV/ DV Screen		BGP DV DXS 995.80-83; 995.85; V15.41- V15.49 BGP IPV/DV COUNSELING ICDS V61.11			Exam Code 34 Any Patient Education codes containing "DV-" or "-DV"
S.3	Substance Use (not including Alcohol or Tobacco) Screen		BKM OTHER SUBSTANCE ABUSE DXS 304.00-.93, 305.20-305.93, 292.0-.9, 648.30-.34, 357.6			

ID		CPT	ICD	LOINC	Site-Defined Taxonomy (Labs or Meds)	Other
S.4	Tobacco Use Screen	BGP SMOKING CPTS 99406; 99407; G0375; G0376; 1034F; 1035F; 1036F	BGP GPRA SMOKING DXS POV or Current Problem List: 305.1-305.13; 649.00-649.04, V15.82			BGP TOBACCO SCREEN HLTH FACTOR Any health factor for category Tobacco Any Patient Ed codes containing "TO-", "-TO" or "-SHS" or any containing diagnosis codes BGP TOBACCO CESS DENTAL CODE Dental code 1320 Clinic code 94
T.2	CD4 Tests	BGP CD4 CPTS 86359-86361		BGP CD4 LOINC CODES	BGP CD4 TAX	
T.1	CD4 Absolute Tests	BKMV CD4 ABS CPTS 86361		BKMV CD4 ABS LOINC CODES 5472-6; 20605-2; 8127-3; 20606-0; 8128-1; 17822-8; 16274-3	BKM CD4 ABS TESTS TAX	
T.3	Chlamydia Test	BGP CHLAMYDIA CPTS 86631; 86632; 87110; 87270; 87320; 87490- 87492; 87810	BGP CHLAMYDIA TEST PROCEDURES V73.88, V73.98	BGP CHLAMYDIA LOINC CODES	BGP CHLAMYDIA TESTS TAX	
T.6	CMV Test	BKM CMV TEST CPTS 86644, 86645; 87271; 87496; 87497		BKM CMV LOINC CODES	BKM CMV TEST TAX	
T.7	Cocci Antibody Screen	BKM COCCI ANTIBODY CPTS 86635		BKM COCCI ANTIBODY LOINC CODES	BKM COCCI ANTIBODY TAX	

ID		CPT	ICD	LOINC	Site-Defined Taxonomy (Labs or Meds)	Other
T.9	FTA-ABS (Syphilis)	BKM FTA-ABS CPTS 86781;		BKM FTA-ABS LOINC CODES	BKM FTA-ABS TEST TAX FTA-ABS	
T.10	Gonorrhea Test	BKM GONORRHEA TESTS CPTS 87590-87592, 87850		BKM GONORRHEA LOINC CODES	BKM GONORRHEA TEST TAX	
T.29	Hepatitis Panel	BKM HEPATITIS PANEL CPTS 80074		BKM HEP PANEL LOINC CODES	BKM HEPATITIS PANEL TAX	
T.31	Hepatitis A Tests	BKM HEP A TESTS CPTS 86708, 86709		BKM HEP A LOINC CODES	BKM HEP A TAX	
T.27	Hepatitis B	BKM HEP B TESTS CPTS 86704-86707; 87340- 87350; 87515-87517		BKM HEP B LOINC CODES	BKM HEP B TAX	
T.13	Hepatitis C test (EIA)	BKM HEP C SCREEN TESTS CPTS 86803, 87520		BKM HEP C SCREEN LOINC CODES	BKM HEP C SCREENING TAX	
T.14	Hepatitis C test (RIBA)	BKM HEP CONFIRM TESTS CPTS 86804, 87521, 87522		BKM HEP C CONFIRM LOINC CODES	BKM HEP C CONFIRMATORY TAX	
T.15	HIV Genotype	BKMV HIV GENOTYPE CPTS 87901			BKMV HIV GENOTYPE TESTS TAX	
T.16	HIV Phenotype	BKMV HIV PHENOTYPE CPTS 87903			BKMV HIV PHENOTYPE TESTS TAX	

ID		CPT	ICD	LOINC	Site-Defined Taxonomy (Labs or Meds)	Other
T.17	HIV Tests	BGP CPT HIV TESTS 86689; 86701-86703; 87390; 87391; 87534- 87539		BGP HIV TEST LOINC CODES	BGP HIV TEST TAX	
T.30	Lipid Profile	BGP LIPID PROFILE CPTS 80061		BGP LIPID PROFILE LOINC CODES	DM AUDIT LIPID PROFILE TAX	
T.20	Pap Smear	BGP CPT PAP 88141-88167; 88174- 88175; Q0091; G0101; G0123; G0124; G0141; G0143-G0145; G0147; G0148; P3000; P3001	BGP PAP SMEAR DXS POV: V72.3-V72.31; V72.32; V76.2; V76.47; 795.0-795.09; V67.01; BGP PAP PROCEDURES V Procedure: 91.46	BGP PAP LOINC CODES	BGP PAP SMEAR TAX	Women's Health: procedure called Pap Smear Refusals: Lab Test Value Pap Smear
T.21	PPD (Tuberculosis Test)	BKM PPD CPTS 86580, 86585, 87555- 87557	BKM PPD ICDS V74.1 Special Screening Pulmonary Tuberculosis (PPD)	In addition to V Lab, look in V Skin Test BKM PPD LOINC CODES	In addition to V Lab, look in V Skin Test BKM PPD TAX	BKM PPD CVX CODES Immunization Codes (CVX): 95, 96, 97, 98 tuberculin skin tests
T.22	RPR (Syphilis)	BKM RPR CPTS 86592, 86593; 87285		BKM RPR LOINC CODES	BKM RPR TAX	
T.28	Toxoplasmosis	BKM TOXOPLASMOSIS CPTS 86777, 86778		BKM TOXOPLASMOSIS LOINC CODES	BKM TOXOPLASMOSIS TESTS TAX	
T.24	Trichomoniasis		Same as DX.13	BKM TRICH LOINC CODES	BKM TRICH TESTS TAX	
T.26	HIV RNA Viral Load Tests	BGP HIV VIRAL LOAD CPTS 87536, 87539		BGP VIRAL LOAD LOINC CODES	BGP HIV VIRAL LOAD TAX	

Appendix B: HIV/AIDS-Related Reminders – Logic and Tooltip Text

This information was updated March 3, 2009.

B.1 CD4 Test

B.1.1 Description Fields Text

Category: Care Management

Clinical Group: HIV

Reminder Name: CD4 Test

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS.

Definition (Frequency): Every 4 months

LOGIC DETAIL:

CD4 Test Definition:

- Procedures (CPT Codes): VCPT 86359-86361 [BGP CD4 CPTS]
- LOINC Codes: V Lab as predefined in [BGP CD4 LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined tests in [BGP CD4 TAX]

Site Configurable? No

B.1.2 Tooltip Text

A CD4 lab test is due every four months.

B.2 Chlamydia Test

B.2.1 Description Field Text

Category: Care Management

Clinical Group: HIV

Reminder Name: Chlamydia Test

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

AND

With a history of POV diagnosis of Gonorrhea, Syphilis, Trichomoniasis or other STD WITHOUT a negative Chlamydia test since the diagnosis

OR

With a history of positive test results for Gonorrhea or Syphilis since date of last Chlamydia test

OR

Most recent Chlamydia test was positive

OR

Greater than or equal to 18 years of age

Definition (Frequency): Variable

- Now if there has been a diagnosis for either Gonorrhea, Syphilis, Trichomoniasis or other STD since the most recent Chlamydia test

OR

- Now if there has been a positive test result for Gonorrhea or Syphilis since the date of the last Chlamydia test

OR

- 8 weeks after most recent positive Chlamydia test to check for cure

OR

- Annually if greater than or equal to 18 years of age

LOGIC DETAIL:

Chlamydia Test Definition:

- Procedures (CPT Codes): V CPT 86631, 86632, 87110, 87270, 87320, 87490-87492, 87810 [BGP CHLAMYDIA CPTS]
- LOINC Codes: V Lab as predefined in [BGP CHLAMYDIA LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined tests in [BGP CHLAMYDIA TESTS TAX]

Gonorrhea Test Definition:

- Procedures (CPT Codes): 87590-87592, 87850 [BKM GONORRHEA TESTS CPTS]
- LOINC Codes: V Lab as predefined in [BKM GONORRHEA LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined in [BKM GONORRHEA TEST TAX]

RPR Lab (Syphilis) Test Definition:

- Procedures (CPT Codes): V CPT 86592, 86593, 87285 [BKM RPR CPTS]
- LOINC Codes: V Lab as predefined in [BKM RPR LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined tests in [BKM RPR TAX]

FTA-ABS (Syphilis) Test Definition:

- Procedures (CPT Codes): V CPT 86781 [BKM FTA-ABS CPTS]
- LOINC Codes: V Lab as predefined in [BKM FTA-ABS LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined tests in [BKM FTA-ABS TEST TAX]

Chlamydia Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 078.8*, 079.88, 079.98, 099.41, 099.5*[BKM CHLAMYDIA DXS]

Gonorrhea Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 098.0-.89 [BKM GONORRHEA DXS]

Syphilis Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 090-093.9, 094.1-097.9 [BKM SYPHILIS DXS]

Trichomoniasis Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 131.0-.9 [BKM TRICHOMONIASIS DXS]

Other STD Diagnoses Definition:

- Diagnosis (ICD Codes): POV or Problem List 099.1-099.3, 099.40, 099.49, 099.8, 099.9 [BKM OTHER STD DXS]

Site Configurable? No

B.2.2 Tooltip Text

A Chlamydia Test is due: 1) immediately after infection with Gonorrhea, Syphilis, Trichomoniasis or other sexually transmitted infection; 2) 8 weeks after a positive Chlamydia test to check for cure; 3) annually for all patients.

B.3 HMS Dental Exam

B.3.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: HMS Dental Exam

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

Definition (Frequency): Annually

LOGIC DETAIL:

Dental Exam Definition:

- Procedure Code: V72.2 [BKM DENTAL EXAMINATION]
- Dental Code: ADA code 0000; 0190 [BGP DENTAL EXAM DENTAL CODE]
- V Exam Code: 30

Site Configurable? No

B.3.2 Tooltip Text

A Dental Exam is due annually for all patients.

B.4 HMS Eye Exam

B.4.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: HMS Eye Exam

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

Definition (Frequency): Variable

- Every 6 months if most recent CD4 Absolute Count is less than 50
- Annually if most recent CD4 Absolute Count is greater than or equal to 50

LOGIC DETAIL:

Eye Exam Definition:

- Procedures (CPT Codes): V CPT 67028, 67038, 67039, 67040, 92002, 92004, 92012, 92014, [BGP EYE EXAM CPTS]
- Procedures (ICD Codes): POV 72.0
- Procedure Code 95.02
- Provider Codes: 79; 24; 08
- Clinic Codes: 17; 18; 64; A2
- V Exam Code: 03

CD4 Absolute Count Test Definition:

- Procedures (CPT Codes): 86361 [BKMV CD4 ABS CPTS]
- LOINC Codes: V Lab as predefined in [BKMV CD4 ABS LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined in [BKM CD4 ABS TESTS TAX]

Site Configurable? No

B.4.2 Tooltip Text

An Eye Exam is due: 1) every 6 months for patients whose most recent CD4 Absolute Count is less than 50; 2) annually for all patients whose most recent CD4 Absolute Count is greater than or equal to 50.

B.5 Family Planning Education

B.5.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: Family Planning Education

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

AND

Females starting at age 13 years through age 44 years.

OR

Males greater than or equal to age 13 years.

Definition (Frequency): Every 6 months

LOGIC DETAIL:

Family Planning Definition:

- ICD Codes: V25.0-.9; V26.4 [BKM FAMILY PLANNING POV]
- Patient Education Codes: V PED Visits containing “FP”

Site Configurable? No

B.5.2 Tooltip Text

Family Planning Education is due every 6 months for: 1) all females ages 13 – 44; 2) all males starting at age 13.

B.6 Syphilis (FTA-ABS) Test

B.6.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: Syphilis (FTA-ABS) Test

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

AND

With positive results on most recent RPR lab and no FTA-ABS test documented after the date of the positive RPR test

Definition (Frequency): Due 14 days after the positive RPR test

LOGIC DETAIL:

FTA-ABS Test Definition:

- Procedures (CPT Codes): V CPT 86781 [BKM FTA-ABS CPTS]
- LOINC Codes: V Lab as predefined in [BKM FTA-ABS LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined tests in [BKM FTA-ABS TEST TAX]

RPR Test Definition:

- Procedures (CPT Codes): V CPT 86592, 86593, 87285 [BKM RPR CPTS]
- LOINC Codes: V Lab as predefined in [BKM RPR LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined tests in [BKM RPR TAX]

Site Configurable? No

B.6.2 Tooltip Text

The FTA-ABS (Syphilis) Test is due 14 days after the date of positive test results on their most recent RPR (Syphilis) Test.

B.7 Gonorrhea Test

B.7.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: Gonorrhea Test

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

AND

With a history of POV diagnosis of Chlamydia, Syphilis, Trichomoniasis or other STDs WITHOUT a negative Gonorrhea test since the diagnosis

OR

With a history of positive test results for Chlamydia or Syphilis since date of last Gonorrhea test

OR

Greater than or equal to age 18 years

Definition (Frequency): Variable

- Now if there has been a diagnosis for either Chlamydia, Syphilis Trichomoniasis or other STD since the most recent Gonorrhea test
- Now if there has been a positive test result for either Chlamydia, Syphilis, Trichomoniasis or other STDs since the most recent Gonorrhea test

OR

- Annually if greater than or equal to age 18 years.

LOGIC DETAIL:

Gonorrhea Test Definition:

- Procedures (CPT Codes): 87590-87592, 87850 [BKM GONORRHEA TESTS CPTS]
- LOINC Codes: V Lab as predefined in [BKM GONORRHEA LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined in [BKM GONORRHEA TEST TAX]

Chlamydia Test Definition:

- Procedures (CPT Codes): V CPT 86631, 86632, 87110, 87270, 87320, 87490-87492, 87810 [BGP CHLAMYDIA CPTS]
- LOINC Codes: V Lab as predefined in [BGP CHLAMYDIA LOINC CODES]

- Site Defined Lab Tests: V Lab site-defined tests in [BGP CHLAMYDIA TESTS TAX]

RPR Lab (Syphilis) Test Definition:

- Procedures (CPT Codes): V CPT 86592, 86593, 87285 [BKM RPR CPTS]
- LOINC Codes: V Lab as predefined in [BKM RPR LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined tests in [BKM RPR TAX]

FTA-ABS (Syphilis) Test Definition:

- Procedures (CPT Codes): V CPT 86781 [BKM FTA-ABS CPTS]
- LOINC Codes: V Lab as predefined in [BKM FTA-ABS LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined tests in [BKM FTA-ABS TEST TAX]

Gonorrhea Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 098.0-.89 [BKM GONORRHEA DXS]

Chlamydia Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 077.98, 078.88, 079.88, 079.98, 099.41, 099.50-59 [BKM CHLAMYDIA DXS]

Syphilis Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 090-093.9, 094.1-097.9 [BKM SYPHILIS DXS]

Trichomonas Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 131.0-.9 [BKM TRICHOMONIASIS DXS]

Other STD Diagnoses Definition:

- Diagnosis (ICD Codes): POV or Problem List 099.1-099.3, 099.40, 099.49, 099.8, 099.9 [BKM OTHER STD DXS]

Site Configurable? No

B.7.2 Tooltip Text

A Gonorrhea Test is due: 1) immediately after infection with Chlamydia, Syphilis, Trichomoniasis or other sexually transmitted infection; 2) annually for all patients.

B.8 Hepatitis A IZ

B.8.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: Hepatitis A IZ

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

AND

With NO documented history of Hepatitis A diagnosis.

Definition (Frequency): Series is given once in a lifetime. Series consists of 2 doses at least 5 months apart.

LOGIC DETAIL:

Hepatitis A Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 070.0, 070.1 [BKM HEP A DXS]
- Hepatitis A Immunization Definition:
- Procedures (CPT Codes): V CPT 90632-34, 90636, 90730 [BKM HEP A IZ CPTS]
- Immunization (CVX Codes): 85 Hep A NOS; 52 HEP A Adult; 83 HEP A PED 2; 84 HEP A PED 3; 31 HEP A PED NOS; 104 HepA & B [BKM HEP A IZ CVX CODES]

Site Configurable? No

B.8.2 Tooltip Text

A Hepatitis A Immunization (series of 2) is due for all patients with NO documented history of Hepatitis A.

B.9 Hepatitis B IZ

B.9.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: Hepatitis B IZ

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

AND

With NO documented history of Hepatitis B diagnosis

Definition (Frequency): Series is given once in a lifetime. Series consist of 3 doses where the first and last doses are at least 6 months apart

LOGIC DETAIL:

Hepatitis B Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 070.20-.23, 070.30-.33 [BKM HEP B DXS]

Hepatitis B Immunization Definition:

- Procedures (CPT Codes): V CPT 90636, 90723, 90731, 90740, 90743-90748 [BKM HEP B IZ CPTS]
- Immunization (CVX Codes): 30 HBIG; 08 HEP B PED; 43 HEP B ADLT; HEP B NOS; HEP B Adol/High Risk Inf dosage; 44 dialysis/ immunosup patient dosage; 51 HepB-HIB; 102 DTP/Hep B; 104 HEP A&B; 110 DTaP-HepB-IPV [BKM HEP B IZ CVX CODES]

Site Configurable? No

B.9.2 Tooltip Text

A Hepatitis B Immunization (series of 3 doses where the first and last doses are at least 6 months apart) is due for all patients with NO documented history of Hepatitis B.

B.10 Hepatitis B Retest

B.10.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: Hepatitis B Retest

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

AND

With 3 Hepatitis B immunization doses and no Hepatitis B test documented after the final dose

Definition (Frequency): Once, after final dose in the Hepatitis B series

LOGIC DETAIL:

Hepatitis B Test Definition:

- Procedures (CPT Codes): V CPT 86704-86707; 87340-87350; 87515-87517 [BKM HEP B TESTS CPTS]
- LOINC Codes: V Lab as predefined in [BKM HEP B LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined in [BKM HEP B TAX]

Hepatitis B Immunization Definition:

- Procedures (CPT Codes): V CPT 90636, 90723, 90731, 90740, 90743-90748 [BKM HEP B IZ CPTS]
- Immunizations (CVX Codes): 30 HBIG; 08 HEP B PED; 43 HEP B ADLT; 45 HEP B NOS; 42 HEP B Adol/High Risk Inf dosage; 44 dialysis/ immunosup patient dosage; 51 HepB-HIB; 102 DTP/Hep B; 104 HEP A&B; 110 DTaP-HepB-IPV [BKM HEP B IZ CVX CODES]

Site Configurable? No

B.10.2 Tooltip Text

A Hepatitis B Retest is due for all patients after they have received all 3 doses of the Hepatitis B Immunization.

B.11 Hepatitis B Test

B.11.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: Hepatitis B Test

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

AND

Patients with NO documented history of Hepatitis B Diagnosis ever AND NO documented Hepatitis B test results ever.

Definition (Frequency): Once

LOGIC DETAIL:

Hepatitis B Test Definition:

- Procedures (CPT Codes): V CPT 86704-86707; 87340-87350; 87515-87517 [BKM HEP B TESTS CPTS]
- LOINC Codes: V Lab as predefined in [BKM HEP B LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined in [BKM HEP B TAX]

Hepatitis B Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 070.20-.23, 070.30-.33 [BKM HEP B DXS]

Site Configurable? No

B.11.2 Tooltip Text

A Hepatitis B Test is due for all patients who have never had a test for or been diagnosed with Hepatitis B.

B.12 Hepatitis C Confirmatory Test

B.12.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: Hepatitis C Confirmatory Test

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

AND

With a history of positive Hepatitis C Screening test and NO documentation of a positive Hepatitis C Confirmatory test after AND NO documented history of Hepatitis C diagnosis.

Definition (Frequency): Immediately following a positive result on a Hepatitis C Screening Test

LOGIC DETAIL:

Hepatitis C Confirmatory Test Definition:

- Procedures (CPT Codes): 86804, 87521, 87522 [BKM HEP C CONFIRM TESTS CPTS]
- LOINC Codes: V Lab as predefined in [BKM HEP C CONFIRM LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined in [BKM HEP C CONFIRMATORY TAX]

Hepatitis C Screening Test Definition:

- Procedures (CPT Codes): V CPT 86803, 87520 [BKM HEP C SCREEN TESTS CPTS]
- LOINC Codes: V Lab predefined tests in [BKM HEP C SCREEN LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined in [BKM HEP C SCREENING TAX]

Hepatitis C Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 070.41, 070.44, 070.51, 070.54, 070.70-.71 [BKM HEP C DXS]

Site Configurable? No

B.12.2 Tooltip Text

A Hepatitis C Confirmatory Test is due for all patients who have a positive Hepatitis C Screening Test.

B.13 Hepatitis C Screening Test

B.13.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: Hepatitis C Screening Test

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

AND

With NO documented history of Hepatitis C diagnosis ever

Definition (Frequency): Annually

LOGIC DETAIL:

Hepatitis C Screening Test Definition:

- Procedures (CPT Codes): V CPT 86803, 87520 [BKM HEP C SCREEN TESTS CPTS]
- LOINC Codes: V Lab predefined tests in [BKM HEP C SCREEN LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined tests in [BKM HEP C SCREENING TAX]

Hepatitis C Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 070.41, 070.44, 070.51, 070.54, 070.70-.71 [BKM HEP C DXS]

Site Configurable? No

B.13.2 Tooltip Text

A Hepatitis C Screening Test is due annually for all patients who have never been diagnosed with Hepatitis C.

B.14 HMS Influenza IZ

B.14.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: HMS Influenza IZ

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

Definition (Frequency): Annually

LOGIC DETAIL:

Influenza Immunization Definition:

- Procedures (CPT Codes): V CPT 90655-90662; 90724, G0008, G8108 [BGP CPT FLU]
- Procedures (ICD Codes): POV: V04.8, V04.81, V06.6 [BGP FLU IZ DXS]
- Procedures: V Proc 99.52 [BGP FLU IX PROCEDURES]
- Immunization (CVX Codes): 88 INFL NOS; 111 INFL intranasal; 15 INFL Split; 16 INFL Whole [BGP FLU IZ CVX CODES]

Site Configurable? No

B.14.2 Tooltip Text

An Influenza Immunization is due annually for all high-risk patients.

B.15 HMS Mammogram

B.15.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: HMS Mammogram

Default Status: On

Denominator: Female patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS starting at age 50 years through 69 years WITHOUT documented bilateral mastectomy or 2 unilateral mastectomies.

Definition (Frequency): Annually

LOGIC DETAIL:

Mammogram Definition:

- Procedures (CPT Codes): VRad or VCPT 76090-76092, G0202, G0204, G0206, 76083; 77051-77059 [BGP CPT MAMMOGRAM]
- Procedures (ICD Codes): POV: V76.11, V76.12, 793.80, 793.81, 793.89 [BGP MAMMOGRAM ICDS]
- Procedure Codes: V Proc: 87.36-87.37 [BGP MAMMOGRAM PROCEDURES]
- Women's Health: Screening Mammogram, Mammogram Dx Bilat; Mammogram Dx Unilat

Bilateral Mastectomy Definition:

- Procedures (CPT Codes): V CPT 19300-19307; 19180; 19200; 19220; 19240 (all codes to include modifier .50 or 09950 to indicate bilateral procedure) [BGP BILATERAL MASTECTOMY CPTS]
- Procedures Codes (ICD Codes): V Procedure 85.42, 85.44, 85.46, 85.48 [BGP MASTECTOMY PROCEDURES]

Unilateral Mastectomy Definition:

- Procedures (CPT Codes): V CPT 19300-19307; 19180; 19200; 19220; 19240 [BGP UNI MASTECTOMY CPTS]
- Procedure Codes (ICD Codes): 85.41; 85.43; 85.45; 85.47 [BGP UNI MASTECTOMY PROC]

Site Configurable? No

B.15.2 Tooltip Text

A Mammogram is due annually for all females ages 50-69 without a history of bilateral mastectomy or 2 unilateral mastectomies.

B.16 HMS Pap Smear

B.16.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: HMS Pap Smear

Default Status: On

Denominator: Female patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

starting at age 18 years through 64 years WITHOUT a documented hysterectomy

Definition (Frequency): Variable

- Every 6 months if most recent CD4 Absolute Count is less than 200
- Annually if most recent CD4 Absolute Count is greater than or equal to 200

LOGIC DETAIL:

Pap Smear Definition:

- Procedures (CPT Codes): V CPT 88141-88167, 88174-88175, Q0091 G0101; G0123; G0124; G0141; G0143-G0145; G0147; G0148; P3000; P3001 [BGP CPT PAP]
- Procedures (ICD Codes): POV V67.01, V72.3-V72.31, V72.32, V76.2, V76.47, 795.0-795.09 [BGP PAP SMEAR DXS]
- Procedure Codes: V Procedure 91.46 [BGP PAP PROCEDURES]
- LOINC Codes: V Lab as predefined in [BGP PAP LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined in [BGP PAP SMEAR TAX]
- Women's Health: Any procedure called Pap Smear

Hysterectomy Definition:

- Procedures (CPT Codes): V CPT 51925, 56308, 58150-58152, 58200-58294, 58548-58554, 58951, 58953-58954, 58956, 59135 [BGP HYSTERECTOMY CPTS]

- Procedures (ICD Codes): V Procedure: 68.4-68.9 [BGP HYSTERECTOMY PROCEDURES]

- Visit Codes: V POV 618.5

CD4 Absolute Count Definition:

- Procedures (CPT Codes): V CPT 86361 [BKMV CD4 ABS CPTs]
- LOINC Codes: V Lab as predefined in [BKMV CD4 ABS LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined in [BKMV CD4 ABS TESTS TAX]

Site Configurable? No

B.16.2 Tooltip Text

A Pap Smear is due: 1) every 6 months for females ages 18-64 if most recent CD4 Absolute Count is less than 200; 2) annually for females ages 18-64 if most recent CD4 count is greater than or equal to 200.

B.17 HMS Pneumovax Immunization

B.17.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: Pneumovax Immunization

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

Definition (Frequency): Every 5 years

LOGIC DETAIL:

Pneumococcal Immunization Definition:

- Procedures (CPT Codes): V CPT 90669; 90732, G0009, G8115 [BGP PNEUMO IZ CPTS]
- Procedures (ICD Codes): POV V06.6; V03.82 [BGP PNEUMO IZ DXS]
- Procedures: V Proc 99.55 [BGP PNEUMO IZ PROCEDURES]
- Immunization (CVX Codes): 33 PNEUMO-PS; 100 PNEUM CONJ; 109 PNEUMO NOS [BKM PNEUMO IZ CVX CODES]

Site Configurable? No

B.17.2 Tooltip Text

A Pneumovax Immunization is due every 5 years for all patients.

B.18 PPD Test (TB)

B.18.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: PPD Test (TB)

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

AND

Without documentation of:

- history of Tuberculosis diagnosis ever
- history of treatment for Tuberculosis ever
- history of positive PPD results (Positive defined as: Positive in the Results field or greater than 5 in the Reading field)

Definition (Frequency): Annually

LOGIC DETAIL:

PPD Test Definition:

- Procedures (CPT Codes): V CPT 86580, 86585, 87555-87557 [BKM PPD CPTS]
- Procedures (ICD Codes): V74.1 [BKM PPD ICDS]
- LOINC Codes: V Lab as predefined in [BKM PPD LOINC CODES]
- Site Defined: Site-defined tests in [BKM PPD TAX]

Tuberculosis Diagnosis Definition

- Diagnosis (ICD Codes): POV or Problem List 010.00-018.96, 137.0-137.4, 795.5, V12.01 [DM AUDIT PROBLEM TB DXS]

Tuberculosis Treatment Definition:

- Medications (NDC Codes): V Medication as predefined in [BKM TB MED NDCS]
- Site Defined Medications: V Medication site-defined tests in [BKM TB MEDS]

Site Configurable? No

B.18.2 Tooltip Text

A PPD Skin Test is due annually for all patients WITHOUT a history of: 1) treatment for TB; 2) previous positive PPD results.

B.19 Syphilis (RPR) Test

B.19.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: Syphilis (RPR) Test

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

AND/OR

With a history of POV diagnosis of Chlamydia, Gonorrhea, Trichomoniasis or other STDs WITHOUT a negative Syphilis test since the diagnosis

OR

With a history of positive test results for Chlamydia or Gonorrhea since date of last Syphilis test

Definition (Frequency): Variable

- Now if there has been a diagnosis of either Gonorrhea, Chlamydia, Trichomoniasis or other STD since the most recent Syphilis test
- Now if there has been a positive test result for either Chlamydia or Gonorrhea since the most recent Syphilis test

OR

- Annually

LOGIC DETAIL:

RPR (Syphilis) Test Definition:

- Procedures (CPT Codes): V CPT 86592, 86593, 87285 [BKM RPR CPTS]
- LOINC Codes: V Lab as predefined in [BKM RPR LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined tests in [BKM RPR TAX]

Gonorrhea Test:

- Procedures (CPT Codes): 87590-87592, 87850 [BKM GONORRHEA TESTS CPTS]
- LOINC Codes: V Lab as predefined in [BKM GONORRHEA LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined in [BKM GONORRHEA TEST TAX]

Chlamydia Test Definition:

- Procedures (CPT Codes): V CPT 86631, 86632, 87110, 87270, 87320, 87490-87492, 87810 [BGP CHLAMYDIA CPTS]
- LOINC Codes: V Lab as predefined in [BGP CHLAMYDIA LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined tests in [BGP CHLAMYDIA TESTS TAX]

Gonorrhea Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 098.0-.89 [BKM GONORRHEA DXS]

Chlamydia Diagnosis Definition:

- Diagnosis (ICD Codes): POV or Problem List 077.98, 078.88, 079.88, 079.98, 099.41, 099.50-59 [BKM CHLAMYDIA DXS]

Trichomoniasis Diagnosis Definition

- Diagnosis (ICD Codes): POV or Problem list 131.0-.9 [BKM TRICHOMONIASIS DXS]

Other STD Diagnosis Definition

- Diagnosis (ICD Codes): POV or Problem list 099.1-099.3, 099.40, 099.49, 099.8, 099.9 [BKM OTHER STD DXS]

Site Configurable? No

B.19.2 Tooltip Text

An RPR Syphilis Test is due: 1) immediately after infection with Gonorrhea, Chlamydia, Trichomoniasis or other sexually transmitted infection; 2) annually for all patients.

B.20 Safe Sex Education

B.20.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: Safe Sex Education

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS starting at age 13 years

Definition (Frequency): Every 6 months

LOGIC DETAIL:

Safe Sex Education Definition:

- Patient Education Codes: V PED STD-P, STI-P, HIV-P, FP-FC, MH-RS, WL-SX, WH-RS, ATO-LA, HEP-P, HEP-LA [BKM SAFE SEX ED CODES]

Site Configurable? No

B.20.2 Tooltip Text

Safe Sex Education is due every 6 months for all patients starting at age 13 years.

B.21 Tetanus Immunization

B.21.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: Tetanus Immunization

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

Definition (Frequency): Every 10 years

LOGIC DETAIL:

Tetanus Immunization Definition:

- Procedures (CPT Codes): V CPT 90698, 90700-90703, 90711, 90718, 90720-21, 90723, 90839 [BKM TETANUS IZ CPTS]

- Procedures (ICD Codes): V03.7 Tetanus Vac, V06.1 DTP, V06.2 DTP+TAB;; V06.3 DTP+polio, V06.5 DT [BKM TETANUS IZ DXS]
- Procedure Codes: V Proc 99.38, 99.39 [BKM TETANUS IZ PROCEDURES]
- Immunization (CVX Codes): 01 DTP; 20 DTaP; 28 DT-PEDS; 09 Td-Adult; 35 Tetanus Toxoid; 13 TIG; 106 DTaP 5; 107 DTaP NOS; 22 DTP [BKM TETANUS IZ CVX CODES]

Site Configurable? No

B.21.2 Tooltip Text

A Tetanus Immunization is due every 10 years for all patients.

B.22 Toxoplasmosis

B.22.1 Description Field Text

Type: Care Management

Category: HIV

Reminder Name: Toxoplasmosis Test

Default Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

AND

Without a history of positive Toxoplasmosis test

Definition (Frequency): Annually

LOGIC DETAIL:

Toxoplasmosis Test Definition:

- Procedures (CPT Codes): V CPT 86777, 86778 [BKM TOXOPLASMOSIS CPTS]
- LOINC Codes: V Lab as predefined in [BKM TOXOPLASMOSIS LOINC CODES]
- Site Defined: V Lab site-defined in [BKM TOXOPLASMOSIS TESTS TAX]

Site Configurability: No

B.22.2 Tooltip Text

A Toxoplasmosis test is due annually for all patients WITHOUT a history of positive Toxoplasmosis test

B.23 HIV Viral Load Test

B.23.1 Description Field Text

Type: Care Management

Category: HMS

Reminder Name: HIV Viral Load Test

Status: On

Denominator: Patients with a proposed or accepted tag for HIV OR Active on HMS Register with Diagnosis Category of HIV or AIDS

Definition (Frequency): Every 4 months

LOGIC DETAIL:

HIV Viral Load Test Definition:

- Procedures (CPT Codes): V CPT 87536, 87539 [BGP HIV VIRAL LOAD CPTS]
- LOINC Codes: V Lab as predefined in [BGP VIRAL LOAD LOINC CODES]
- Site Defined Lab Tests: V Lab site-defined tests in [BGP HIV VIRAL LOAD TAX]

Site Configurable? No.

B.23.2 Tooltip Text

An HIV Viral Load Test is due every 4 months for all patients.

Appendix C: CDC Clinical Classification

Classification of HIV disease can be undertaken for several purposes and should be distinguished from disease staging. Staging is disease classification that aims primarily to make groupings that have different prognosis and can be used in guiding treatment decisions. A number of classification and staging systems have been proposed for HIV disease, but the classification scheme constructed by the Centers for Disease Control and Prevention (CDC) has gained the widest acceptance.

The current CDC classification system, from the revision in 1993, combines three categories of the CD4 count with three symptom categories. It was first put forth as a categorization of HIV-related signs and symptoms and was explicitly for “public health purposes” and not intended as a staging system, although it is frequently treated as such. The CDC proposed that it be used to “guide clinical and therapeutic actions in the management of HIV-infected adolescents and adults.”

The three categories relating to the CD4+ cell count:

- Category 1 includes counts of 500 or more cells per microliter
- Category 2 includes counts from 200 to 499
- Category 3 includes counts below 200 cells

The three clinical categories for people who test HIV-positive:

- Category A includes individuals who have been asymptomatic except for persistent generalized lymphadenopathy and/or seroconversion syndrome.
- Category B comprises those who have never had an AIDS-defining illness but have had some of the less serious complications of HIV infection, including oral or vaginal candidiasis, constitutional symptoms such as fever or persistent diarrhea, oral hairy leukoplakia, herpes zoster, idiopathic thrombocytopenic purpura, listeriosis, peripheral neuropathy, cervical dysplasia, bacillary angiomatosis, or pelvic inflammatory disease.
- Category C is used to describe those who have had one or more of the AIDS-defining illnesses.

The use of both the CD4+ cell count and clinical categories provides shorthand for where the patient stands in the course of the HIV/AIDS continuum. A person placed in Category A1 has the least immune damage and fewest clinical complications; someone scoring C3 is seriously ill. Anyone placed in Category 3 and/or Category C has an AIDS diagnosis under the 1993 CDC case definition. A somewhat different classification scheme is used for pediatric cases: three classes using the letter P for pediatric matched with the numeral 0, 1, or 2 to indicate the stage, along with subclasses and categories of specific types of diseases.

While there are guidelines in place, assignment of this classification is made only after clinical evaluation. The decision of which category to assign is always made by a clinical person.

The table below provides a summary of the CDC clinical classification. The sections following describe these classifications in more detail.

A1	Asymptomatic HIV infection + CD4 count > or = 500
A2	Asymptomatic HIV infection + CD4 count between 200 and 499
A3	Asymptomatic HIV infection + CD4 count less than 200
B1	Symptoms attributable to HIV infection + CD4 count >= 500
B2	Symptoms attributable to HIV infection + CD4 count between 200-499
B3	Symptoms attributable to HIV infection + CD4 count less than 200
C1	AIDS defining condition(s) + CD4 count > or = 500
C2	AIDS defining condition(s) + CD4 count between 200 and 499
C3	AIDS defining condition(s) + CD4 count less than 200

The definitions of the three **CD4 count categories** are as follows:

Category 1: > 500 cells/mm³ (or CD4% > 28%)

Category 2: 200-499 cells/mm³ (or CD4% 14% - 28%)

Category 3: < 200 cells/mm³ (or CD4% < 14%)

The lowest, most accurate CD4 count should be used for classification purposes. This will not necessarily be the most recent count but the most representative for the time frame being evaluated. This is a modifiable field and the user should expect to re-evaluate and change this frequently.

The definitions of the three **clinical condition categories** are as follows:

Category A: Asymptomatic HIV infection; persistent generalized lymphadenopathy; acute, primary HIV infection with accompanying illness or history of acute HIV infection.

Category B: Symptomatic conditions in an HIV-infected adolescent or adult that are not included among conditions listed in clinical Category C and that meet at least one of the following criteria: (a) the conditions are attributed to HIV infection or are indicative of a defect in cell-mediated immunity; or (b) the conditions are considered by physicians to have a clinical course or to require management that is complicated by HIV infection. Examples of conditions in clinical category B include but are not limited to are:

- Bacillary angiomatosis
- Candidiasis, oropharyngeal (thrush)

- Candidiasis, vulvovaginal; *persistent, frequent, or poorly responsive to therapy*
- Cervical dysplasia (*moderate or severe*)/cervical carcinoma *in situ*
- Constitutional symptoms, *such as fever (38.5 degrees centigrade) or diarrhea lasting greater than 1 month*
- Hairy leukoplakia, oral
- Herpes zoster (shingles), *involving at least two distinct episodes or more than one dermatome*
- Idiopathic thrombocytopenic purpura
- Listeriosis
- Pelvic inflammatory disease, *particularly if complicated by tubo-ovarian abscess*
- Peripheral neuropathy

Category C: Any incidence of one or more of the clinical conditions listed in the 1993 AIDS surveillance case definition, i.e., AIDS Defining Illnesses (Section A.2 provides information about AIDS Defining Illnesses). For classification purposes, once a Category C condition has occurred, the person will remain in Category C.

A patient's clinical classification is dynamic. You can see from the definitions above that the numeric portion of the classification (1, 2, or 3) could change at each visit depending on the CD4 count. The alpha portion of the classification can change or progress from A to B to C but it cannot go back from C to B to A. In other words, once a patient has been assigned to the C classification which indicates AIDS, the clinical classification will never revert to an HIV classification even if the condition improves.

Appendix D: Medications

D.1 ARAV/HAART Definitions

ARV (Antiretroviral Therapy)/HAART (Highly Active Antiretroviral Therapy) is a specific treatment regimen defined as:

- 2 or more NRTI (M.03) together with at least one NNRTI (M.02) or PI (M.05)

OR

- 2 or more PIs (M.05) with at least 1 NRTI (M.03)

OR

- at least 3 NRTIs (M.03)

D.2 Medication Categorization for Taxonomy Setup

Use the following medication list to assist you in setting up the medication taxonomies that are used by the HIV Management System. The following lists the medications that are commonly prescribed for each of the categories.

You should work with a pharmacist to determine which medications are available and how they are categorized at your facility.

	NRTI MEDS	NNRTI MEDS	NRTI COMBO	NRTI/ NNRTI	PI MEDS	PI BOOSTER	EI MEDS	II MEDS	PCP PROPH MEDS	MAC PROPH MEDS	TB MEDS
Abacavir (Ziagen, ABC)	X										
Didanosine (Videx, Videx EC)	X										
Emtricitabine (Emtriva)	X										
Lamivudine (Epivir)	X										
Lamivudine/Abacavir (Epzicom)	X										
Stavudine (Zerit)	X										
Tenofovir (Viread)	X										

	NRTI MEDS	NNRTI MEDS	NRTI COMBO	NRTI/ NNRTI	PI MEDS	PI BOOSTER	EI MEDS	II MEDS	PCP PROPH MEDS	MAC PROPH MEDS	TB MEDS
Zalcitibine (Hivid)	X										
Zidovudine (Retrovir)	X										
Zidovudine/Lamivudine (Combivir)	X										
Zidovudine/Lamivudine/Abacavir (Trizivir)	X										
Delaviridine (Rescriptor)		X									
Efavirenz (Sustiva)		X									
Nevirapine (Viramune)		X									
Etravirine (TMC-125) (Intelence)		X									
Tenofovir/Emtricitabine (Truvada)			X								
Tenofovir/Emtricitabine/Efavirenz (Atripla)				X							
Amprenavir (Agenerase)					X						
Atazanavir (Reyataz)					X						
Fosamprenavir (Lexiva)					X						
HGC Saquinavir (Invirase)					X						
Indinavir (Crixivan)					X						
Lopinavir/Ritonavir (Kaletra)					X						
Nelfinavir (Viracept)					X						
SCG Saquinavir (Fortovase)					X						
Tipranavir (Aptivus)					X						
Darunavir (Prezista)					X						
Ritonavir (Norvir)						X					
Enfuvirtide (Fuzeon)							X				
Maraviroc (Selzentry)							X				
Raltegravir (Isentress)								X			
Atovaquone (Mepron)									X		
Dapsone									X		

	NRTI MEDS	NNRTI MEDS	NRTI COMBO	NRTI/ NNRTI	PI MEDS	PI BOOSTER	EI MEDS	II MEDS	PCP PROPH MEDS	MAC PROPH MEDS	TB MEDS
Pentamidine, Pentam 300, Pentacarinate (NebuPent)									X		
Sulfamethaxazole & Trimethoprim/Cotrimoxazole (Bactrim; Septra)									X		
Trimethoprim (Proloprim, Trimex)									X		
Trimetrexate, Glururonate &Leucovorin (Neutrexin)									X		
Azithromycin (Zithromax)										X	
Clarithromycin (Biaxin, Klacid)										X	
Rifabutin (Mycobutin, Ansamycin)										X	
Ethambutol (Myambutol)											X
Isoniazid (INH)											X
Pyrazinamide											X
Rifamate											X
Rifampin											X
Rifater											X
Streptomycin											X

Appendix E: Quality of Care Logic

The Quality of Care report provides a snapshot of the status of key care indicators for HIV/AIDS patients in the past 12 months. The general format is based on HIVQual, a HRSA-sponsored program built upon a model of quality improvement consultation that was developed in New York State. The goal of the HIVQual Continuous Quality Project is to improve the quality of care delivered to persons with HIV.

Users select an end date for the report, usually “today,” and the report will display the status and categorization of the various elements listed above for the patients you have chosen to include in the report. The patients are selected from an iCare panel, either created by or shared with the user. iCare users will then select one of three ways to further define the denominator for this report.

E.1 Denominator and Numerator Definitions

Denominator

- 1) Patients on this panel who have an Active HMS Register Status with HMS Dx Category values empty, HIV or AIDS (i.e., no “At Risk” patients)
- 2) Patient on this panel who have a Proposed or Accepted Dx tag of HIV/AIDS (user selects either or both Tag Status)

or

- 3) Specified (by highlighting) patients on this particular panel.

Any denominator is filtered automatically by the following logic: patients must have at least one HIV/AIDS POV or Active Problem List or HMS Initial HIV Dx Date or HMS Initial AIDS Dx Date 6 months or more prior to report end date. Patient names selected by the user that do not meet these criteria will be identified on the report.

Numerator

- 1) Gender breakdowns: 1A) Male patients; and 1B) Female patients.
- 2) Age breakdowns: 2A) younger than (<) 15; 2B) ages 15 through 44; 2C) ages 45 through 64; and 2D) older than 64. Age of patient is determined as of Report End date.
- 3) Most recent CD4 count in 4 months prior to end of Report period: Total # of patients reviewed with any completed CD4 test (either CD4 All (T.2) or CD4 Absolute (T.1)). 3A) CD4 Absolute (T.1) results less than (<) 50. 3B) CD4 Absolute (T.1) results equal to or greater than (=>) 50 and less than (<) 200. 3C) CD4 Absolute (T.1) results => 200. 3C) # with undetermined results.

If there are more than one test in the timeframe for the patient, use most recent result.

If most recent test result is undetermined (no appropriate value), look for next test in the timeframe (past 4 months) with results. If no tests are found with appropriate results within past 4 months, count as “Undetermined.”

- 4) Most recent Viral Load (T.26): Total # of patients with Viral Load test in 4 months prior to end of Report period. 4A) test results less than (<) 100,000 copies/ml. 4B) test results equal to or greater than (=>) 100,000 copies/ml. 4C) tests with undetermined results.

If there are more than one test in the timeframe for the patient, use most recent result.

If most recent test result is undetermined (no appropriate value), look for next test in the timeframe (past 4 months) with results. If no tests are found with appropriate results, count as “Undetermined.”

- 5) RPR (Rapid plasma reagin) (Syphilis screening): # with RPR or FTA-ABS (T.22 & T.09) completed or refused in year prior to end of report period. Use most recent results or refusal, if more than 1 test in the timeframe, to categorize as follows: 5A) # reactive (positive) tests r or R or Reactive; wr or WR or Weakly Reactive. 5B) # Non-reactive tests. n or N or Nonreactive. 5C) Undetermined values. 5D) Refused (Refusal type REF) 5E) NMI (Not Medically Indicated) (Refusal type NMI).
- 6) Chlamydia: # with Chlamydia test (T.3) completed or refused in year prior to end of report period. Use most recent results or refusal, if more than 1 test in the timeframe, to categorize as follows: 6A) # Females. 6B) # Males. 6C) # positive tests p or P or Positive or POS. 6D) # Negative tests n or N or Negative or NEG. 6E) Undetermined values. 6F) Refused (Refusal type REF). 6G) NMI (Not Medically Indicated) (Refusal type NMI).
- 7) Gonorrhea: # with gonorrhea test (T.10) completed or refused in year prior to end of report period. Break the total number in the Numerator into # Males and # Females. Use most recent results or refusal, if more than 1 test in the timeframe, to categorize as follows: 7A) # Females. 7B) # Males. 7C) # positive tests p or P or Positive or POS. 7D) # Negative tests n or N or Negative or NEG 7E) Undetermined values. 7F) Refused. 7G) NMI (Not Medically Indicated)
- 8) Tuberculosis Status: Total # of patients who needed PPD during Report Year, i.e., year previous to the end of the Report Period. Defined as including patients with 1) No TB diagnosis ever (DX.14); 2) No PPD ever; 3) no positive PPD results (T.21) on test performed more than one year previous to the end of the Report period, i.e., before the Report Year (see #8B below for definition of “positive”; or 4) No history of TB treatment (M.08) before the Report Year;

Use most recent results or refusal, if more than 1 test in the timeframe, to categorize as follows:

- 8A) # PPD received or refused (T.21) in previous year, regardless of result, with percentage of denominator Need PPD.

8B) # with positive PPD results in Report year, with percentage of denominator # PPD received. "Positive" result is defined as 1) Result field containing "p" or "P" or "POS" or "positive" or "+"; or 2) no value in Result field but Reading field ≥ 5 .

8C) # from 8B who had treatment given (M.08) or refused treatment or treatment contraindicated ON or AFTER date of positive PPD result, with percentage of denominator Pos PPD.

8D) # with negative PPD results in previous year, with percentage of denominator # PPD received. "Negative" result defined as 1) Result field containing "n" or "-" or "N" or "NEG" or "negative" or "0"; or 2) no value in Result field but Reading field < 5 .

8E) # who have documented PPD refusals, with percentage of denominator # PPD received. If the most recent test is a refusal, look for a previous test within the time frame and categorize as above. If only the refusal exists, categorize here as a refusal. (NOTE: this logic was not provided on the original document, but was included on the format layout.)

8F) # with undetermined results in previous year, with percentage of denominator # PPD received.

- 9) Lipids Screening: Total # of patients with Lipid Profile (T.30) completed or refused in year prior to end of report period. Use most recent panel or refusal, if more than 1 panel in the timeframe. Further categorize by: 9A) # of patients who had a Lipid panel AND are receiving any ARVs (M.02; M.03; M.05; M.09; M.10; M.11; M.12; M.13); 9B) # of refusals
- 10) Colorectal Cancer Screen: Total # of patients who needed a Colorectal Cancer (CRC) Screen (S.05) in the 10 years prior to end date of the report. Defined as including patients: 1) Greater than or equal to 50 years of age on the date of the beginning of the report period. 2) No CRC diagnosis ever (DX.18); 3) No history of a total Colectomy (P.06). Use most recent screening or refusal, if more than 1 test in the timeframe, to categorize as follows: 10A) Total # of patients who received or refused CRC Screens in previous 10 years, with percentage of denominator Need CRC; 10B) # of refusals.
- 11) Hepatitis C Screen Baseline: Total # of patients with a Hepatitis C Screen (T.13; T.14) baseline completed ever or refused in past year.
- 12) Pneumovax Status: Total # of patients with 1 pneumovax (IZ.6) documented in the 5 years prior to the end of the Report period OR 2 pneumovax ever OR pneumovax refusal in past year.
- 13) Tetanus Status: Total # of patients with tetanus vaccine (IZ.7) in past 10 years, or contraindicated, or refusal in past year. NOTE: logic for contraindications is not currently provided.

- 14) Eye Exam Status: Total # of patients with any completed or non-DNKA ophthalmology eye exam (P.03) or refusal documented in year prior to end of Report period.
- 15) Dental Exam Status: Total # of patients with any completed or non-DNKA dental exam or refusal (P.02) documented in year prior to end of Report period.
- 16) Pap Smear Status: Total # of female patients ages 19 through 64 with no documented history of Hysterectomy (P.04) with Pap smear (T.20) or refusal documented in 1 year period to end of Report period.
- 17) ARV Therapy: # of patients for whom any ARV medications (M.02; M.03; M.05; M.09; M.10; M.11; M.12 M.13;) have been prescribed (Total of 17A, B, C) as their most recent regimen in 4 months previous to end of Report Period, with percentage of Total Patients.
- 17A) HAART: # of patients on HAART medications in most recent regimen during past 4 months, with percentage of ARV total. A HAART regimen can be defined by an Active or Chronic (not Discontinued or Expired) prescription for one of the following 9 regimens.
- At least 1 PI (M.05) medication AND 2 NRTI (M.03) medication
 - At least 1 PI (M.05) medication AND 1 NRTI Combo (M.12) medication
 - At least 2 NRTI (M.03) medications AND 1 NNRTI (M.02) medication
 - At least 1 NRTI Combo (M.12) medication AND 1 NNRTI (M.02) medication
 - At least 1 EI (M.09) medication AND 2 of any NNRTI (M.02); NRTI (M.03); OR PI (M.05) medications
 - At least 1 EI (M.09) medication AND 1 NRTI Combo (M.12) medication
 - At least 1 II (M.10) medication AND 2 of any NNRTI (M.02); NRTI (M.03); OR PI (M.05) medications
 - At least 1 II (M.10) medication AND 1 NRTI Combo (M.12) medication
 - At least 1 NRTI/NNRTI (M.11) medication
- 17B) Mono therapy: # of patients who have had any one of the ARV medications prescribed for them one at a time in past 4 months. Defined as Active or Chronic (not Discontinued or Expired), with percentage of ARV total.
- 17C) Other Combination: # of patients who have had any other ARV medication combination (not included in 17A or 17B) prescribed for them in past 4 months. Defined as Active or Chronic (not Discontinued or Expired), with percentage of ARV total.
- 18) PCP Prophylaxis: from # of patients with any CD4 Absolute (T.1) results less than 200 in past 12 months, how many received PCP Prophylaxis (M.04), with percentage of patients (CD4 < 200). Look at date of appropriate CD4 Absolute

result (T.1) and count any medications prescribed on or after that date (prior to end of Report period). NOTE: the total number of patients in this value range may be more than the number of patients in the same range documented in the CD4 Lab Exam section, which documents most recent value rather than any value during the time period.

19) MAC Prophylaxis: from # of patients with any CD4 Absolute (T.1) results <50 in past 12 months, how many received MAC prophylaxis (M.01), with percentage of patients (CD4 <50). Look at date of appropriate CD4 Absolute (T.1) result and count any medications prescribed on or after that date (prior to end of Report period). NOTE: the total number of patients in this value range may be more than the number of patients in the same range documented in the CD4 Lab Exam section, which documents most recent value rather than any value during the time period.

20) Tobacco Use: Total # of patients screened for tobacco use (S.04) in year prior to end of Report Period.

20A) # patients identified as tobacco users (DX.12) in year prior to end of Report Period.

20B) # counseled about tobacco use (ED.5) in past year.

20C) # identified as not current tobacco users (DX.7) in past year.

20D) # patients with undetermined tobacco use (Total patients minus any patient not categorized in 20A or 20B or 20C).

21) Substance Use: Total # of patients screened for substance use (S.1 and S.3) in year prior to end of Report Period.

The last page of the report will provide an overview of the Report logic and a list of the user-selected patients who were and were not included on the report. The following text and data should be included:

HMS Quality of Care Report.

This report includes all patients who meet the criteria of the selected denominator:

1) HMS Register Status Active with HMS Dx Category values empty, HIV or AIDS (i.e., no “At Risk” patients);

OR

2) Proposed and/or Accepted Dx tag of HIV/AIDS (user selects either or both Tag Status);

OR

3) Specific patients on the grid.

Any denominator is filtered automatically by the following logic: patients must have at least one HIV/AIDS POV or Active Problem List or HMS Initial HIV Dx Date or HMS Initial AIDS Dx Date 6 months or more prior to report end date.

Total Patients Reviewed (All patients in denominator): [#]

Number of Patients included on Report (filtered denominator): [#]

Number of Patients NOT included on Report: [#]

The following user-selected patients are included on this report:

- Name (Last Name, First Middle format)
- HRN
- Age
- Gender
- Current Register Diagnosis
- Initial HIV Diagnosis Date
- Initial AIDS Diagnosis Date
- HIV/AIDS Diagnostic Tag Status

The following user-selected patients are NOT included on this report:

- Name (Last Name, First Middle format)
- HRN
- Age
- Gender
- Current Register Diagnosis
- Initial HIV Diagnosis Date
- Initial AIDS Diagnosis Date
- HIV/AIDS Diagnostic Tag Status

E.2 Sample Format, Quality of Care Audit

[Initials] = initials of user who runs the report

[Denominator Population] is identified from Step 1 above, e.g., HMS Active Patients; All RPMS HIV POV; Patients with Designated Provider [Name]; or Patient Panel [Name]

ALA	Oct 02, 2008	
	DEMO HOSPITAL	
	HMS CUMULATIVE AUDIT REPORT	
	HIV QUALITY OF CARE	
	Copy of HMS patients	
	Active HMS Register Patients	
	PERIOD ENDING: Oct 01, 2008	
	****	CONFIDENTIAL PATIENT INFORMATION

Total Patients Reviewed: 35		
12 patients are included in this report.		
	#	%
Gender: Male	4	33.3%
Female	8	66.7%
Age		
<15 yrs	1	8.3%
15-44 yrs	4	33.3%
45-64 yrs	6	50.0%
>64 yrs	1	8.3%
LABORATORY EXAMS		
# w/ CD4 count in last 4 months	0	0.0%
most recent<50	0	0.0%
most recent 50-199	0	0.0%
most recent=>200	0	0.0%
Undetermined	0	0.0%
# w/ Viral Load in last 4 months	0	0.0%
<100,000 copies/ml	0	0.0%
=>100,000 copies/ml	0	0.0%
Undetermined	0	0.0%
# w/ RPR (Syphilis Test) in the last 12 month	0	0.0%
Reactive	0	0.0%
Non-Reactive	0	0.0%
Refused	0	0.0%
NMI	0	0.0%
Undetermined	0	0.0%
# w/ Chlamydia Screen in the last 12 months	1	8.3%
# Men	1	100.0%
# Women	0	0.0%
Positive	0	0.0%
Negative	1	100.0%
Refused	0	0.0%
NMI	0	0.0%
Undetermined	0	0.0%
# w/ Gonorrhea Screen in the last 12 months	1	8.3%
# Men	1	100.0%
# Women	0	0.0%
Positive	0	0.0%
Negative	1	100.0%
Refused	0	0.0%
NMI	0	0.0%
Undetermined	0	0.0%
# w/ Tuberculosis test needed	12	100.0%
PPD Received	1	8.3%

PPD+	1	100.0%
w/ Treatment Given	0	0.0%
PPD-	0	0.0%
PPD Refused	0	0.0%
PPD Status Unknown	0	0.0%
# w/ Lipids Screen	0	0.0%
# on ARV	0	0.0%
# Refused	0	0.0%
# Hep C Screen Baseline	3	25.0%
VACCINATION		
# w/ Pneumovax in last 5 years (or 2 ever)	2	16.7%
# w/ Tetanus in past 10 years	4	33.3%
EXAMS - Yearly		
# w/ Eye Exam	0	0.0%
# w/ Dental Exam	0	0.0%
# w/ Pap Smear	1	12.5%
# Colorectal Cancer Screens Needed	4	33.3%
# CRC screen in past 10 yrs	1	25.0%
# CRC screen refused	1	25.0%
TREATMENT (past 4 months)		
ARV Therapy Given	3	25.0%
HAART	2	66.7%
Mono Therapy	1	33.3%
Other Combination	0	0.0%
PCP Prophylaxis given if CD4 <200 in last 12 months	0	0.0%
MAC Prophylaxis given if ANY CD4 <50 in last 12 months	0	0.0%
RISK FACTORS		
Tobacco Use Screening	1	8.3%
Current Tobacco User	1	100.0%
If Yes, Counseled	0	0.0%
Not a Current User	0	0.0%
Not Documented	0	0.0%
Substance Use Screening	0	0.0%
ALA		
Oct 02, 2008		
DEMO HOSPITAL		
HMS CUMULATIVE AUDIT REPORT		
HIV QUALITY OF CARE		
Copy of HMS patients		
Active HMS Register Patients		
PERIOD ENDING: Oct 01, 2008		
****	CONFIDENTIAL PATIENT INFORMATION	****

HMS Quality of Care Report		
This report includes all patients who meet the criteria of the selected denominator:		
1) HMS Register Status Active with HMS Dx Category values empty, HIV or AIDS		

(i.e., no "At Risk" patients);

OR

2) Proposed and/or Accepted Dx tag of HIV/AIDS (user selects either or both Tag Status);

OR

3) Specific patients on the grid.

Any denominator is filtered automatically by the following logic: patients must have at least one HIV/AIDS POV or Active Problem List or HMS Initial HIV Dx Date or HMS Initial AIDS Dx Date 6 months or more prior to report end date.

Total patients reviewed (All patients in denominator): 35

Number of Patients included on Report (filtered denominator): 12

Number of Patients NOT included on Report: 23

ALA

Oct 02, 2008
DEMO HOSPITAL
HMS CUMULATIVE AUDIT REPORT
HIV QUALITY OF CARE
Copy of HMS patients
Active HMS Register Patients
PERIOD ENDING: Oct 01, 2008

**** CONFIDENTIAL PATIENT INFORMATION ****

The following user selected patients are included on this report:

PATIENT NAME	HRN	AGE	SEX	REG DX	INITIAL HIV DX DATE	INITIAL AIDS DX DATE	TAG STATUS
TEST,PATIENT AA	nnnnnn	nn	F	HIV	01/01/1981		A
TEST,PATIENT AB	nnnnnn	nn	F	AIDS	01/01/2000	01/01/2000	V
TEST,PATIENT AC	nnnnnn	nn	F	HIV	02/01/2008		V
TEST,PATIENT AD	nnnnnn	nn	M	HIV	08/24/1995		A
TEST,PATIENT AE	nnnnnn	nn	F	AIDS	06/02/2005	06/17/2007	V
TEST,PATIENT AF	nnnnnn	nn	F	HIV	01/01/2006		V
TEST,PATIENT AG	nnnnnn	nn	M	HIV	02/01/2008		V
TEST,PATIENT AH	nnnnnn	nn	F	HIV	02/01/2008		V
TEST,PATIENT AI	nnnnnn	nn	F	HIV	11/01/2001		V
TEST,PATIENT AJ	nnnnnn	nn	M	HIV	12/01/2003		A
TEST,PATIENT AK	nnnnnn	nn	M	AIDS	03/26/2007	05/06/2008	V
TEST,PATIENT AL	nnnnnn	nn	F	HIV	04/05/1968		V

ALA

Oct 02, 2008
DEMO HOSPITAL
HMS CUMULATIVE AUDIT REPORT
HIV QUALITY OF CARE
Copy of HMS patients
Active HMS Register Patients
PERIOD ENDING: Oct 01, 2008

**** CONFIDENTIAL PATIENT INFORMATION ****							

The following user selected patients are NOT included in the report:							
PATIENT NAME	HRN	AGE	SEX	REG DX	INITIAL HIV DX DATE	INITIAL AIDS DX DATE	TAG STATUS

TEST,PATIENT BA	nnnnnnn	nn	F				V
TEST,PATIENT BB	nnnnnnn	nn	M				V
TEST,PATIENT BC	nnnnnnn	nn	F				V
TEST,PATIENT BD	nnnnnnn	nn	F	HIV	06/02/2008		V
TEST,PATIENT BE	nnnnnnn	nn	M	AIDS	06/02/2008	06/05/2008	V
TEST,PATIENT BF	nnnnnnn	nn	F				V
TEST,PATIENT BG	nnnnnnn	nn	F	HIV	06/02/2008		V
TEST,PATIENT BH	nnnnnnn	nn	F				V
TEST,PATIENT BI	nnnnnnn	nn	M				V
TEST,PATIENT BJ	nnnnnnn	nn	F				V
TEST,PATIENT BK	nnnnnnn	nn	F				V
TEST,PATIENT BL	nnnnnnn	nn	M				V
TEST,PATIENT BM	nnnnnnn	nn	F				V
TEST,PATIENT BN	nnnnnnn	nn	M				V
TEST,PATIENT BO	nnnnnnn	nn	F				V
TEST,PATIENT BP	nnnnnnn	nn	M				V
TEST,PATIENT BQ	nnnnnnn	nn	F				V
TEST,PATIENT BR	nnnnnnn	nn	M	HIV	06/03/2008		V
TEST,PATIENT BS	nnnnnnn	nn	M	HIV	05/07/2008		V
TEST,PATIENT BT	nnnnnnn	nn	F				V
TEST,PATIENT BU	nnnnnnn	nn	F	AIDS			V
TEST,PATIENT BV	nnnnnnn	nn	M				V
TEST,PATIENT BW	nnnnnnn	nn	F				V
**** END CONFIDENTIAL PATIENT INFORMATION ****							

Appendix F: HMS Patient Care Supplement

F.1 Supplement Logic

ITEM	DESCRIPTION	HOW DATA OBTAINED FROM RPMS
Report Date	Date Health Supplement was generated	Date Health Supplement was generated
Patient's Name	Last Name, First Name, Middle Initial of patient.	Patient File
HRN	Patient's Health Record Number	Patient Registration
Sex	Gender of patient	Patient Registration
DOB	Patient's date of birth (mmm/dd/yyyy)	Patient Registration
Age	Age of patient in years on the date the summary was generated	Calculated
Designated Primary Care Provider	Name of the Primary Care Provider on the date the Health Supplement was generated	Designated Specialty Provider Management System (DSPM) or Patient File
HIV Provider	Name of the HIV Provider	Designated Specialty Provider Management System (DSPM) or Patient File
HIV Case Manager	Name of HIV Case Manager	Designated Specialty Provider Management System (DSPM) or Patient File
Last Height	The last height in inches and the date of the last height	PCC V Measurement. The last height value in inches and the date of the last height recorded in PCC is displayed
Last Weight	The last weight in pounds and the date of the last weight	PCC V Measurement. The last weight value in pounds and the date of the last weight recorded in PCC is displayed
BMI	The BMI is calculated using the last height and weight data for the patient	Calculated using NHANES II. For ages 18 and under, the most recent height and weight must be taken on the same day. For ages 19 through 50, both the most recent height and weight must be documented within last five years, not required to be on same day. For ages over 50, both the most recent height and weight must be documented within last two years, not required to be on same day. If BMI cannot be calculated, display "BMI cannot be calculated with current data."
Register Diagnosis	Field value and date. Assigned by HMS user.	HMS, field [Register Diagnosis] + [Diagnosis Date]
Register Status	Most recent field value and date assigned.	HMS field [Register status] + [Date assigned]
HIV/ AIDS Diagnostic Tag Status	Most recent field value and date assigned.	iCare field [HIV/ AIDS Diagnostic Tag Status] + [Date Assigned]

ITEM	DESCRIPTION	HOW DATA OBTAINED FROM RPMS
HIV Clinical Classification	Field value and date. The HIV/AIDS related clinical category of either: A-1; A-2; A-3; B-1; B-2; B-3; C-1; C-2; or C-3; as assigned by the HMS user	HMS, field [Clinical Classification] + [Clinical Classification Date]
Diagnosis Comments	Field value and date. Entered by the HMS user	HMS, field [Diagnosis Comment]
Initial HIV diagnosis	Date assigned by HMS user; generally the first recorded date of either a positive HIV test or an HIV diagnosis	HMS, field [Date of Initial HIV Dx] If no field value, use logic provided for field default value. Add [**] at the end of the date value to indicate the value is not in the Register. Otherwise, no value.
Initial AIDS diagnosis	Date assigned by HMS user; the first recorded date of an AIDS diagnosis	HMS, field [Date of Initial AIDS Dx] If no field value, use logic provided for field default value. Add [**] at the end of the date value to indicate the value is not in the Register. Otherwise, no value.
Opportunistic infections / AIDS Defining Illnesses	A list of any incidence of Opportunistic infections (OI) or AIDS Defining Illnesses (ADI) recorded on the patient's Problem List.	The PCC Problem List file is scanned for any diagnoses contained in the DX.1 and DX.8 diagnosis definitions. If found, a list of OI or ADI will be displayed; [Onset date] + [Entry Date] + [ICD9] + [ICD Narrative] + [Provider Narrative] + [Status of Problem]. If the Problem List entry has no onset date, display the Entry date. If the Problem List has an onset date and an entry date that are different, display both dates. Display list in reverse order, most recent first.
State Notification(s)	Status and date the state of residence was notified of HIV/AIDS diagnosis	HMS, field [State Reporting Category] + [State Reporting Status] + [State Reporting Date], if any
Partner Notification	Status whether the patient's partner was notified	HMS, field [Partner Notification Status] + [Date of Assessment]
Last 6 CD4	The six most recent CD4 lab tests and results, if available	Look for the 6 most recent CD4 lab tests not on the same day defined in the T.1 (CD4 Absolute) and T.2 (CD4 All Tests) definitions. For each visit date with any CD4 test, if there is no test that meets the CD4 Absolute definition, then use the CD4 All Tests definition. <i>Only results for CD4 Absolute tests should be displayed.</i> Only display one test for any date; if there are 2 CD4 Absolute tests documented on the same day, display the test with a result. If found, the results (for CD4 Absolute only) and respective dates will be displayed, most recent value first.
Last 6 HIV/RNA Viral Load	The six most recent HIV/RNA Viral Load lab test results	Look for the 6 most recent lab tests not on the same day contained in the T.26 (HIV Viral Load Tests) definitions. Only display one test for any date; if there are 2 tests documented on the same day, display the test with a result. Once found, the results and respective dates will be displayed, most recent value first.

ITEM	DESCRIPTION	HOW DATA OBTAINED FROM RPMS
Lipid Profile	The last Lipid Profile Results	Look for the last panel contained in the T.30 (Lipid Profile). Once found, display all tests contained in the panel, if any, for the most recent date. If none found, then the refusals file is scanned for a patient refusal of a Lipid Profile. If a refusal is documented, indicate date and [refusal type] (e.g., REF, NMI) in result label. NOTE: Panels will have multiple line values. Display ALL of the related test data in the panel.
RPR	The last RPR result	Look for the last test contained in the T.22 (RPR) definitions. Once found, the date and results are displayed. Only display one test for any date; if there are 2 tests documented on the same day, display the test with a result. If none found, then the refusals file is scanned for a patient refusal of an RPR. If a refusal is documented, indicate date and [refusal type] (e.g., REF, NMI) in Result label.
PAP Smear	The last Pap Smear result	Look for the last test or procedure contained in the T.20 (Pap Smear) definitions. Once found, the date and results are displayed. Only display one test for any date; if there are 2 tests documented on the same day, display the test with a result. If none found, then the refusals file is scanned for a patient refusal of a Pap Smear. If a refusal is documented, indicate date and [refusal type] (e.g., REF, NMI) in Result label. If patient is Male, display "Not Applicable"
Chlamydia	The last Chlamydia test result	Look for the last test contained in the T.3 (Chlamydia Test) definitions. Once found, the date and results are displayed. Only display one test for any date; if there are 2 tests documented on the same day, display the test with a result. If none found, then the refusals file is scanned for a patient refusal of a Chlamydia Test. If a refusal is documented, indicate date and [refusal type] (e.g., REF, NMI) in Result label.
Gonorrhea	The last Gonorrhea test result	Look for the last test contained in the T.10 (Gonorrhea Test) definitions. Once found, the date and results are displayed. Only display one test for any date; if there are 2 tests documented on the same day, display the test with a result. If none found, then the refusals file is scanned for a patient refusal of a Gonorrhea Test. If a refusal is documented, indicate date and [refusal type] (e.g., REF, NMI) in Result label.

ITEM	DESCRIPTION	HOW DATA OBTAINED FROM RPMS
Hepatitis Panel	<p>The last Hepatitis Panel test results. Depending on the site-specific definition, all or some of the following tests may be displayed.</p> <p>Hepatitis A Antibody (HAAb) IgM antibody; Hepatitis A Antibody (HAAb) IgG Hepatitis B Core Antibody (HbcAb) IgM antibody; Hepatitis C Antibody Hepatitis C Screen Hepatitis C Confirm Hepatitis B surface Antigen (HbsAg). Hepatitis B Surface Antibody (HBs Antibody) Hepatitis B Virus Core Total Antibody</p>	<p>Look for the last panel contained in the T.29 (Hepatitis Panel) definitions. Once found, the dates and results for each element of the panel are displayed respectively. If none found, then the refusals file is scanned for a patient refusal of a Hepatitis Panel. If a refusal is documented, indicate date and [refusal type] (e.g., REF, NMI) in Result label.</p> <p>NOTE: Panels will have multiple line values Display ALL of the related test data in the panel.</p>
Hep A	The most recent Hep A tests not included in a panel	<p>Look for the last test contained in the T.31 (Hepatitis A) definitions. If there was a documented Hepatitis Panel (see above) and the Hep A test date is not later (more recent) than the Panel date, do not display.</p> <p>If found, the date and result are displayed respectively.</p> <p>If more than one test on the same day meets the Hep A definition, display ALL tests names and results.</p> <p>If none found, then the refusals file is scanned for a patient refusal of Hep A. If a refusal is documented, indicate date and [refusal type] (e.g.; REF, NME) in Result label.</p>
Hep B	The most recent Hep B test not included in a panel.	<p>Look for the last test contained in the T.27 (Hepatitis B) definitions. If there was a documented Hepatitis Panel (see above) and the Hep B test date is not later (more recent) than the Panel date, do not display.</p> <p>If found, the date and result are displayed respectively.</p> <p>If more than one test on the same day meets the Hep B definition, display ALL test names and results.</p> <p>If none found, then the refusals file is scanned for a patient refusal of Hep B. If a refusal is documented, indicate date and [refusal type] (e.g., REF, NMI) in Result label.</p>

ITEM	DESCRIPTION	HOW DATA OBTAINED FROM RPMS
Hep C	The most recent Hep C test not included in a panel.	<p>Look for the last test contained in either the T.13 (Hepatitis C Screening) or T.14 (Hepatitis C Confirmatory) definitions. If there was a documented Hepatitis Panel (see above) and the Hep C test date is not later (more recent) than the Panel date, do not display.</p> <p>If found, the dates and results are displayed respectively. If more than one test on the same day meets the Hep C definition, display ALL test names and results.</p> <p>If none found, then the refusals file is scanned for a patient refusal of Hep C. If a refusal is documented, indicate date and [refusal type] (e.g., REF, NMI) in Result label.</p> <p>If the test meets the T.13 Hep C Screening definition, add text "[SCREENING]" to the Hep C: label. If the test meets the T.14 Hep C Confirmatory definition, add "[CONFIRMATORY]" to the label.</p>
CMV	The last <u>Cytomegalovirus</u> test	<p>Look for the last test contained in the T.6 (CMV test) definitions. If found, the date and results are displayed. Only display one test for any date; if there are 2 tests documented on the same day, display the test with a result. If none found, then the refusals file is scanned for a patient refusal of a CMV test. If a refusal is documented, indicate date and [refusal type] (e.g., REF, NMI) in Result label.</p>
Toxoplasmosis	The last Toxoplasmosis test	<p>Look for the last test contained in the T.28 (Toxoplasmosis) definitions. If found, the date and results are displayed. Only display one test for any date; if there are 2 tests documented on the same day, display the test with a result. If none found, then the refusals file is scanned for a patient refusal of a Toxoplasmosis test. If a refusal is documented, indicate date and [refusal type] (e.g., REF, NMI) in Result label.</p>
Cocci test	The last Coccidiomycosis test	<p>Look for the last test contained in the T.7 (Cocci Antibody Screen) definitions. Once found, the date and results are displayed. Only display one test for any date; if there are 2 tests documented on the same day, display the test with a result. If none found, then the refusals file is scanned for a patient refusal of a Cocci test. If a refusal is documented, indicate date and [refusal type] (e.g., REF, NMI) in Result label.</p>

ITEM	DESCRIPTION	HOW DATA OBTAINED FROM RPMS
PPD Skin Test	The date of the last PPD applied and read	Look for the last test contained in the T.21 (PPD (Tuberculosis Test)) definitions. Once found, the date and results are displayed. Only display one test for any date; if there are 2 tests documented on the same day, display the test with a result. If none are found, then the PCC V POV are scanned for a diagnosis of V74.1 If one is found, the date is displayed along with a phrase "(by Diagnosis)". If none found, then the refusals file is scanned for a patient refusal of a PPD test. If a refusal is documented, indicate date and [refusal type] (e.g., REF, NMI) in Result label.
HIV Phenotype	HIV Phenotype Testing	Look for the last 5 tests contained in the T.16 (HIV Phenotype) definitions. If found, display [Yes] + [Date] for each test. Do not display the results
HIV Genotype	HIV Genotype Testing	Look for the last 5 tests contained in the T.15 (HIV Genotype) definitions. If found, display [Yes] + [Date] for each test. Do not display the results.
Pneumococcal Immunization	The date of the last Pneumococcal Immunization given	Look for last immunization defined in IZ.6 (Pneumococcal) definitions. If found, the date is displayed. If none is found, the refusals file is checked to see if a refusal of a pneumococcal immunization is documented. If so, indicate date and [refusal type] (e.g., REF, NMI) in Result label.
Influenza Vaccine	The date of the last Influenza Vaccine given	Look for the last immunization contained in the IZ.5 (Influenza IZ) definitions. If found, the date is displayed. If none is found, the refusals file is checked to see if a refusal of an influenza immunization is documented. If so, indicate date and [refusal type] (e.g., REF, NMI) in Result label.
Hepatitis A Diagnosis and/or Immunizations	The dates of any Hep A diagnosis and/or the last 2 Hepatitis A Immunizations given	Look for most recent documented Hep A diagnosis (DX.5) in POV or Active Problem List and display, if any. Display the DX label even if no date is available. Look for the last 2 documented immunizations not on the same date contained in the IZ.3 (Hep A) definitions. The dates of the last 2 immunizations are displayed, most recent first. If only 1 immunization is documented, that date will be displayed. If none are found, the refusals file is checked to see if a refusal of a Hepatitis A Vaccine is documented. If so, indicate date and [refusal type] (e.g., REF, NMI) in Result label.

ITEM	DESCRIPTION	HOW DATA OBTAINED FROM RPMS
Hepatitis B Diagnosis and/or Immunizations	The dates of any Hep B diagnosis and/or the last 3 Hepatitis B Vaccines given	Look for most recent documented Hep B diagnosis (DX.15) in POV or Active Problem List and display, if any. Display the DX label even if no date is available Look for the last 3 documented immunizations not on the same date contained in the IZ.4 (Hep B) definitions. The dates of the last 3 immunizations are displayed, most recent first. If only 1 or 2 immunizations are documented, then those dates will be displayed. If none are found, the refusals file is checked to see if a refusal of a Hepatitis B Vaccine is documented. If so, indicate date and [refusal type] (e.g., REF, NMI) in Result label.
Tetanus Vaccine	The date of the last Tetanus vaccine given	Look for the last immunization contained in IZ.7 (Tetanus) definitions. If found, the date is displayed. If none is found, the refusals file is checked to see if a refusal of a tetanus immunization is documented. If so, indicate date and [refusal type] (e.g., REF, NMI) in Result label.
ARV Appropriate	Display for the last 6 months any of the 3 field values associated with whether ARV is appropriate for the patient	HMS: If any value in [ARV Appropriate] field, display [Date] + [ARV Appropriate] + [ARV Not Appropriate Reasons] + {ARV Comment} – because these are visit-related fields, there may be multiple values – display any values for last 6 months, with most recent at top
ARV Adherence	Display for the last 6 months any of the 2 fields associated with whether patient is adherent with ARV regimen.	HMS: If any value in [ARV Adherent] field, display [Date] + [ARV Adherent] + [ARV Adherent Comment] – because these are visit-related fields, there may be multiple values – display any values for last 6 months, with most recent at top
Current ARV Medications	A list of ARV medications filled in past 6 months	Look for any (non discontinued) prescriptions filled in the prior 6 months for medications defined in M.02 (NNRTIs), M.03 (NRTIs), M.05 (PIs) and M.09 (EIs); M.10 (IIs); M.11 (NRTI/NNRTIs); M.12 (NRTI Combo) and M.13(PI Booster). The names of each individual medication, date last filled, SIG and quantity will be displayed. List by date filled, with most current at top. If none are found, the refusal file is scanned for any refusal of any ARV medications. If found, indicate date and [refusal type] (e.g., REF, NMI) in Result label.
MAC and PCP Prophylaxis	A list of medications prescribed in the past 6 months for the prevention of MAC (Disseminated Mycobacterium Avium Complex) or PCP (Pneumocystis Carinii Pneumonia)	Look for any prescriptions filled in the prior 6 months for medications defined in M.01 (MAC Proph) or M.04 (PCP Prophylaxis) definitions. The names of each individual medication and the date last filled, SIG and quantity will be displayed. If none are found, the refusal file is scanned for any refusal of MAC pr PCP Prophylaxis medications. If found, indicate date and [refusal type] (e.g., REF, NMI) in Result label.
Depression Screening	Date the patient was most recently screened for Depression in the past year.	Look for the last depression screening in the past year contained in the S.2 (Depression Screen) definitions. If found, display date, code type and identifying code (e.g., POV, Patient Education code, etc.)

ITEM	DESCRIPTION	HOW DATA OBTAINED FROM RPMS
IPV/DV Screening	Date the patient was most recently screened for Intimate Partner/Domestic Violence in the past year.	Look for the most recent IPV/DV screening in the past year contained in the S.6 (IPV/DV Screen) definitions. If found, display date, code type and identifying code (e.g., POV, Patient Education code, etc.) If patient is Male, display "Not Applicable"
Alcohol Screening	Date the patient was most recently screened for alcohol use in the past year.	Look for the last alcohol screening in the past year contained in the S.1 (Alcohol Screen) definitions. If found, display date, code type and identifying code (e.g., POV, Patient Education code, etc.)
Dilated eye exam	The date of the most recent dilated eye exam in the past year.	Look for the most recent dilated eye exam performed in the past year, defined as P.03 (Eye Exam) in definitions table. If found, display date. If none is found, the refusal file is checked to see if a refusal of the dilated eye exam is documented. If so, indicate date and [refusal type] (e.g., REF, NMI) in Result label.
Dental exam	Date of most recent documented dental exam.	Look for the most recent dental exam performed in the past year, defined as P.02 (Dental Exam) in definitions table. If found, display date. If none is found, the refusal file is checked to see if a refusal of the dilated eye exam is documented. If so, indicate date and [refusal type] (e.g., REF, NMI) in Result label.
Mammogram:	Date of most recent documented mammogram in the past year.	Look for the most recent mammogram performed in the past year, defined as P.05 (Mammogram) in definitions table. If none is found, the refusal file is checked to see if a refusal of the dilated eye exam is documented. If so, indicate date and [refusal type] (e.g., REF, NMI) in Result label. If patient is Male, display "Not Applicable"
HIV-related education	List any patient education provided in the past year that is related to HIV	Look for any patient education documented in the past year defined in ED.1 (Family Planning), ED.2 (HIV), ED.3 (Safe Sex), or ED.4 (STD) definitions. If found, display date, + POV and Provider Narrative – OR Patient Education topic and provider initials.
HIV-related Reminders	List any reminders here in due date order, beginning with overdue	Look at all HMS related reminders and display all in order of most overdue first. Display [Name of Reminder] + [Date Last Done] + [Date Due]. Dates are displayed in mm/dd/yyyy format. If there is no 'Date last done' leave a blank space NOTE: For PPD reminder, if patient has a history of Tuberculosis diagnosis (DX14) or history of positive PPD test (T.21), display [Name of Reminder (PPD)] + [the phrase "Diagnosis"] + [Date (if known)]. Positive PPD test results are defined in the reminder logic

F.2 Flow Sheet Logic

Look for the six most recent HIV Viral Load lab tests WITH RESULTS contained in the T.26 (HIV Viral Load Tests) definitions.

Look for the 6 most recent CD4 lab tests WITH RESULTS defined in the T.1 (CD4 Absolute Tests) and T.2 (CD4 Tests) definitions.

Display the results in columns associated with the date of the lab test. If both tests are within 7 days of each other, they can counted in the same column. Some columns may only have one test. Only 6 columns can be displayed, so not all of the “found” lab values may be used.

List all ARV medications for this patient active on each of the column dates. ARV medications are defined in M.02 (NNRTIs), M.03 (NRTIs), M.05 (PIs) and M.09 (EIs); M.10 (IIs); M.11 (NRTI/NNRTI); M.12 (NRTI Combo); M.13 (PI Booster)

“Active” medication is defined as:

- Has not been discontinued as of column date (NOTE: a single prescription may be “active” for one date and discontinued by the second date)
- [Date filled] + [Days] equals or is greater than column date

F.3 Example

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***** CONFIDENTIAL PATIENT INFORMATION -- 03/13/2008 1:37 PM [CG] *****
***** HMS PATIENT CARE SUPPLEMENT *****

Report Date: 03/13/2008 Page: 1

Patient's Name: MOUSE, MICKEY HRN: 111111
Sex: M DOB: 12/06/1969 Age: 38Y
Designated Primary Care Provider: CPROVIDER
HIV Provider: APROVIDER
HIV Case Manager: BPROVIDER
Last Height: 70 11/10/2005 Last Weight: 212 07/20/2007
BMI: 30.4

Register Diagnosis: AIDS 03/06/2008
Register Status: Active 03/01/2008
HIV/ AIDS Diagnostic Tag Status: Accepted 03/01/2008
HIV Clinical Classification (A1-C3): C1 03/13/2008
Diagnosis Comments:
Initial HIV Diagnosis: 11/16/2005
Initial AIDS Diagnosis: 04/17/2006

Opportunistic infections and AIDS Defining Illnesses
Onset Entry ICD ICD Provider Status of
Date Date Code Narrative Narrative Problem
06/23/2006 112.0 CANDIDI- Candidiasis Inactive
ASIS OF
MOUTH
04/17/2006 05/01/2006 117.5 CRYPTO Cryptococcal Inactive
Meningitis
04/07/2006 486. PNEUM Pneumonia Active
ONIA,
ORGANISM
UNSPEC PNEUMONIA

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State Notification(s):
Partner Notification:

RECENT LABORATORY RESULTS:
Last 6 CD4:

Last 6 HIV/RNA Viral Load:
Date: 04/08/2006 Result: >100000

Lipid Profile Date: 01/01/2006
RPR: Date: 04/07/2006 Result: NR
PAP: Not Applicable
Chlamydia:
Gonorrhea:
Hepatitis:
Hepatitis Panel: Date: 11/10/2005
HEPATITIS A,B,C PANEL
HBsAg HEP B SURFACE ANTIGEN Result:
HBcAb HEP B CORE ANTIBODY Result:
HCV-Ab HEPATITIS C ANTIBODY Result:
HEPATITIS A ANTIBODY TOTAL Result:
HAVAb IgG Result:
Hep A:
Hep B:
Hep C:
CMV: Date: 04/08/2006 Result: 2.70
Toxoplasmosis: Date: 04/08/2006 Result: 0.05
Cocci:
PPD: Date: 02/22/2008 Result: POSITIVE 8

HIV Phenotype:
HIV Genotype:

LAST DOCUMENTED IMMUNIZATIONS:

Pneumococcal: Date: 09/05/2006
Influenza: Date: 11/16/2005
Hepatitis A (last 2): Dx Date:
Hepatitis B (last 3): Dx Date:
Tetanus: Date: 11/16/2005

RECENT MEDICATIONS (past 6 months):

ARV Status:
ARV Appropriate:
ARV Adherence:

Current ARV Medications (past 6 months):

Prophylaxis Medications for MAC and/or PCP (past 6 months):

IN THE PAST 12 MONTHS:
Depression Screening: Date: 08/14/2007 311.
IPV/DV Screening: Date:
Alcohol Screening: Date:
Dilated eye exam: Date:
Dental exam: Date: 08/03/2007

Last HIV-related education given (past 12 months):

Calculating HIV-RELATED REMINDERS - Please wait.

HIV-RELATED REMINDERS:

Reminder	Last	Due
Lipid Profile	01/01/2006	01/01/2007)
CD4		[today's date]
Viral Load	04/08/2006	08/08/2006)
PPD	02/22/2008	Positive Test Result
RPR Syphilis Test	04/07/2006	04/07/2007)
Hep C EIA Test	11/10/2005	
Hep B Test	11/10/2005	
Toxoplasmosis Test	04/08/2006	04/08/2007)
Chlamydia Test		[today's date]
Gonorrhea Test		[today's date]
Hep B IZ		[today's date]
Hep A IZ		[today's date]
Pneumovax IZ	09/05/2006	09/05/2011
Influenza IZ	11/16/2005	11/16/2006)
Tetanus IZ	11/16/2005	11/16/2015
Dilated Eye Exam	10/15/1996	10/15/1997)
Dental Exam	08/03/2007	08/03/2008
Safe Sex Educ		[today's date]
Family Planning Educ		[today's date]

HIV FLOW SHEET

	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy
Viral Load	###.##	###.##		###.##	###.##	
CD4 Count	###.##	##.##	##.##		###.##	###.##
[Rx Name #1]	x	x			x	
[Rx #2]		x	x	x		
[Rx #3]					x	x
[Rx #4]						x

Glossary

AIDS Defining Illnesses

AIDS Defining Illnesses are conditions that are used in conjunction with an HIV diagnosis to determine if a patient has progressed to AIDS. The definition of AIDS Defining Illness is established by the Centers for Disease Control (CDC) as part of its case definition of AIDS.

Community Alerts

Alerts to the user showing the incidence of suicidal behavior, public health concerns and the Center for Disease Control's (CDC) Nationally Notifiable Diseases (NND) about HIV/AIDS. During a nightly background job in iCare, POVs are mined for the incidence of each of these. The display of these community alerts are a user-specific preference, meaning that individual iCare users may choose whether or not to see a particular community alerts.

HIV/AIDS-related Reminders

HIV/AIDS-related reminders are generated in order to "remind" the provider of the need for a particular lab test, procedure, immunization, health screen, or education session regarding HIV/AIDS patient care. These reminders are created based on current, expert recommendations and serve as a means to notify the provider when one of these functions is due or overdue. The decision to act on the reminder remains a clinical decision.

HMS Patient Care Supplement

Data that displays in a pop-up window that displays information specifically related to HIV/AIDS. The provider will be able to see, at a glance, the relevant labs, related diagnoses, medications and reminders.

Opportunistic Infections

Opportunistic infections are conditions that many HIV/AIDS patients contract. HIV doesn't kill anybody directly but rather weakens the body's ability to fight disease. Infections that are rarely seen in those with normal immune systems are serious and may be deadly to those with HIV. They need to be treated, and some can be prevented. Many of these conditions are considered "reportable" to the State Health Department.

Panel

A panel is an automated tool for maintaining a list of patients who meet criteria set by the user and providing various condition-specific reports, reminders, and plans to assist providers in managing the disease or condition.

Quality of Care

The Quality of Care (QOC) provides a snapshot of key care indicators for HIV/AIDS patients at your site. Use the report to assess how well care is being extended to HIV/AIDS patients at your site, and to justify activities at your site.

State Surveillance Report

The State Surveillance report is a multi-page report that can be filled out and sent to the state when a patient has been diagnosed with HIV or AIDS. The report format is based on standard CDC reporting requirements.

Tagging

Tagging is a term that refers to running a series of logic algorithms on one or multiple patients that identifies (“tags”) them with one or more diagnoses. These definitions are defined nationally and are consistent with other RPMS applications.

Taxonomy

A taxonomy is the RPMS structure that holds the codes or terms that comprise any clinical definitions used by iCare and other RPMS clinical applications to calculate reminders and construct reports.

Acronym List

AIDS	Acquired Immunodeficiency Syndrome
ARV	Antiretroviral Therapy
CDC	Center for Disease Control and Prevention
DOB	Date of Birth
DSPM	Designated Specialty Provider Management System
HAART	Highly Active Antiretroviral Therapy
PLWH/A	Patients Living With HIV/AIDS
HMS	HIV Management System
HRN	Health Record Number
HRSA	Health Resources and Services Administration
HIV	Human Immunodeficiency Virus
IHS	Indian Health Service
I/T/U	Indian Health Service/Tribal/Urban
LOINC	Standardized codes used to identify lab test in addition to site-populated lab test taxonomies
NDS	National Drug Classification
NND	National Notifiable Diseases
POV	Purpose of Visit
PROC	ICS9 Procedure Codes
QOC	Quality of Care
RPMS	Resource and Patient Management System

SSR	State Surveillance Report
STD	Sexually Transmitted Disease

Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk (IHS).

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