RESOURCE AND PATIENT MANAGEMENT SYSTEM

iCare Population Management GUI

(BQI)

Panel Definition User Manual

Version 2.6
July 2017

Office of Information Technology
Division of Information Technology

Table of Contents

Preface

The purpose of this manual is to provide the user with the information needed to use the latest enhancements to the Panel Definition window in the iCare (BQI) population management application.

This manual contains reference information about iCare views, examples of its processes, and step-by-step procedures on how to perform activities related to the Panel Definition window in the latest version of the iCare application.

For more information about iCare basic functionality, iCare usage, or training for iCare, consult these resources:

- iCare – IHS OIT available at http://www.ihs.gov/icare/

- iCare Training available at https://www.ihs.gov/icare/training/

- Join the iCare listserv by sending an e-mail to icare@listserv.ihs.gov

1.0   Introduction

iCare is a Windows-based, client-server graphical user interface (GUI) to the IHS Resource and Patient Management System (RPMS). iCare retrieves key patient information from various components of the RPMS database and brings it together under a single, user-friendly interface. iCare is intended to help providers manage the care of their patients. The ability to create multiple panels of patients with common characteristics (e.g., age, diagnosis, community) allows users to personalize the way they view patient data.

The information included in this Panel Definition manual covers Panel Definition functionality in iCare Version 2.6. For more information about iCare basic functionality, iCare usage, or training for iCare, consult the resources listed above in the Preface.

1.1   Background

Along with the rest of the healthcare industry, IHS has already developed a set of chronic condition management (or register) applications, including for diabetes, asthma, and HIV. This type of application provides a way for healthcare providers to manage a specific group (register) of patients for a single disease state. Register management applications assist healthcare providers to identify high-risk patients, proactively track care reminders and health status of individuals or populations, provide more standardized and appropriate care by embedding evidence-based guidelines, and report outcomes.

Many patients, however, have more than one diagnosed disease. For instance, at the current time within the Indian Health system, a diabetic asthmatic woman could be a member of four RPMS registers (diabetes, asthma, women's health, and immunizations). This 'silo' approach to patient care could potentially result in fragmented care, and could increase the risk of inadequate patient care management due to misidentification of the true level of risk.

1.2   iCare Graphical User Interface

The iCare GUI is intended to allow providers to see a more complete view of patients with multiple conditions, while maintaining the integrity of the user-defined, disease-specific registers.

iCare can help IHS providers by:

- Proactively identifying and managing different groups (populations) of patients who share user-defined characteristics.

- Providing an integrated view of a patient's conditions that would minimize "stove piped" care management.

- Providing an intuitive and integrated interface to the diverse patient data elements of the RPMS database.

- Facilitating providers a review of clinical quality of care measures for their own patients to enable improvement in the quality of healthcare delivery.

- Enabling views of traditional healthcare information from the perspectives of community, population and public health.

- Providing the default tag selection as Proposed and Accepted. Change the tag selection for any record by selecting or de-selecting any checkbox.

- Clicking the "use AND?" check box when there are multiple tags selected. The "And" option searches for patients who have ALL of the user-defined tags.

1.3   Who Should Use iCare?

Any provider who needs to identify a group of patients for long-term management or to create a temporary list should think about using iCare. Do you fit any of the following scenarios?

- I am a nurse at a facility that assigns a primary care provider to each patient. Every day, I want to create a list of scheduled patients for two different doctors in my clinic.

- I want to identify which of my patients are considered obese so I can recommend nutrition counseling.

- Because providers at our clinic have performance goals related to annual GPRA clinical measures, I want to identify which of my patients are missing key clinical data.

- Our Women's Health Clinic wants to focus on two clinical performance improvement initiatives this year. We want to identify the performance problem areas for female patients between the ages of 18 and 50.

- I am one of two part-time case managers for a group of children, and I want to create a patient list that we both can use.

2.0   Panel Definition

The panel definition window can be used to create or modify a panel of patients. A patient panel is a group of patients that needs to be managed collectively. Some users will have only one patient panel while others will have many.

A panel can be created and used for a day, a month, or permanently. iCare provides many pre-defined search options to populate panels or patients can be added individually.

The key categories of a pre-defined population search include:

- "My Patients" definition, with additional filters such as visit date range, sex, age, community, and diagnosis

- Surrogate Provider - a different provider

- By scheduled appointments, defined by date range and/or clinics

- From reminder parameters

- From inpatient visits

- From ER visits

- From an existing QMan search template

- From a Register

- From an EHR personal list

- By any combination of patient data including age, sex, visit date range, primary visit provider, community, or pre-defined diagnosis
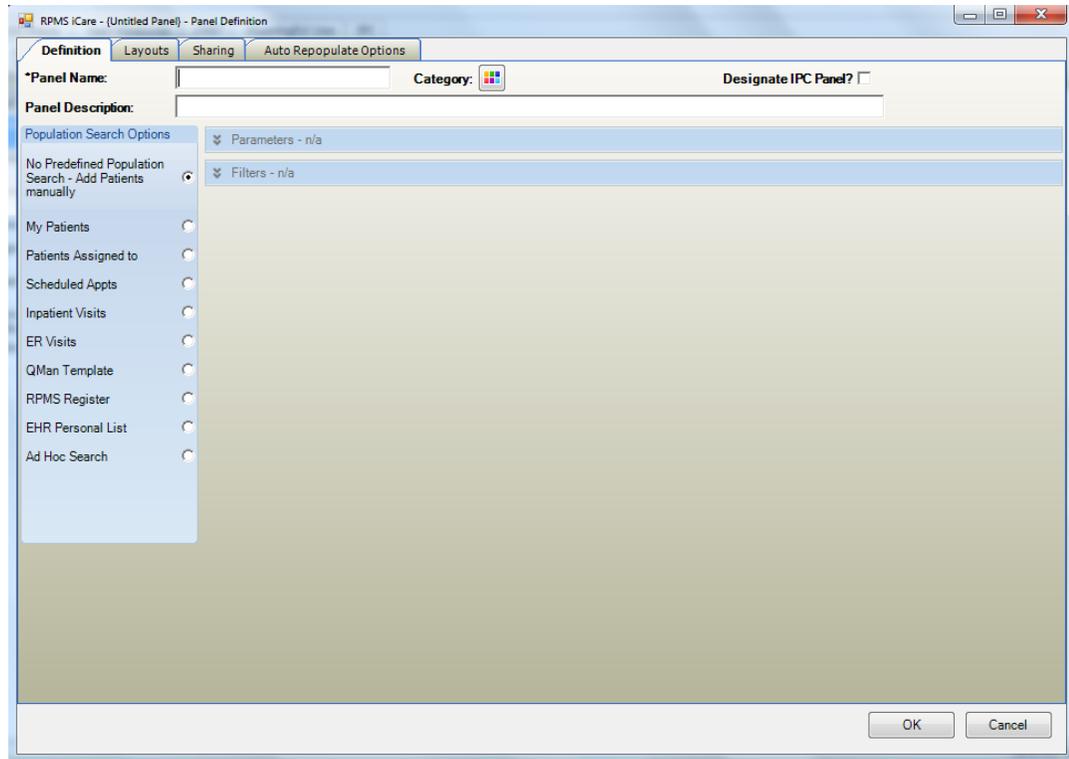
Figure 2-1: Initial Panel Definition window

Definition tab: used to define/edit search criteria to populate the list of patient members for a patient panel.

Layouts tab: used to customize user templates for defining the various layouts for the patient panel. In addition, the display can be reverted back to the system default layout.

Sharing tab: used to share a panel with other RPMS users.

Auto Repopulate Options tab: used to determine if the contents of a panel is to be dynamic, i.e., automatically refreshed.

3.0   Definition Tab

The Panel Definition window is used to create or modify a patient panel. A patient panel is a group of patients that needs to manage collectively. Some users will have only one patient panel while others will have many.

To create a new patient panel on the Panel List window, do any of the following:

- Click the New [New] button

- Select the New option on the context menu

- Select **File** | **Panel** | New

To modify a patient panel on the Panel List window, highlight the panel to be edited and then do any of the following:

- Click the **Modify** [Modify] button

- Select the Modify option on the context menu

- Select **File** | **Panel** | Modify

In either case, the application displays the Panel Definition window with focus on the **Definition** tab.
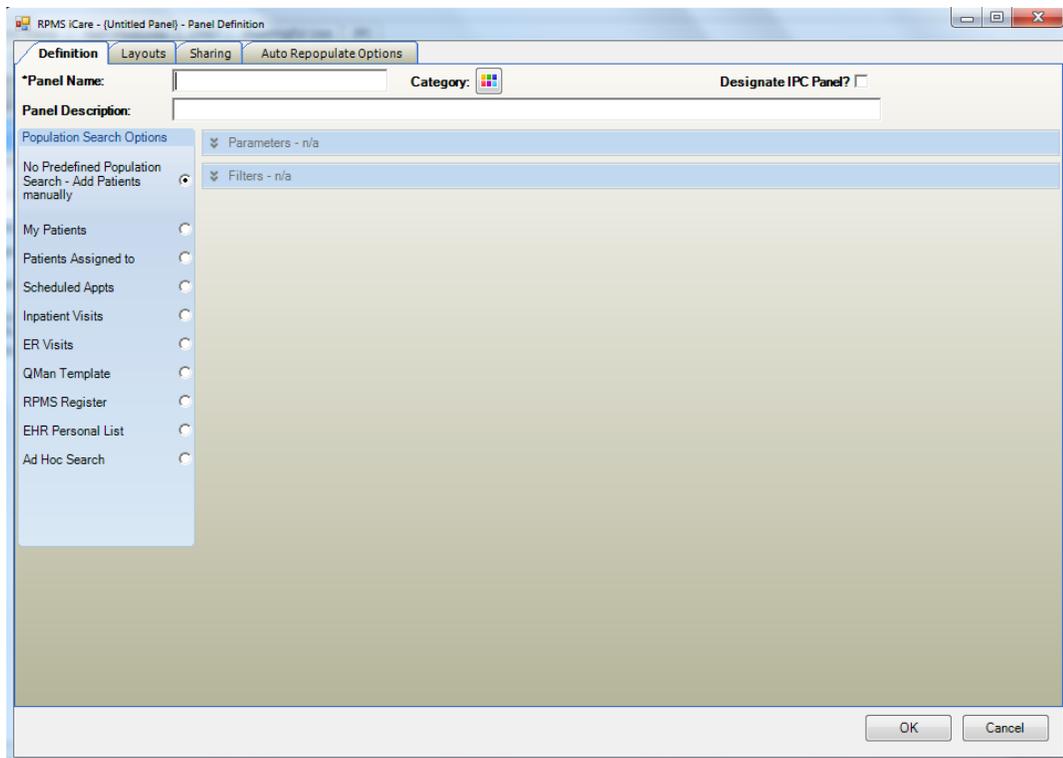

Figure 3-1: Sample **Definition** tab

Follow these steps to complete the Definition tab:

1. Type the unique name of the panel in the required Panel Name field, limited to 120 characters.

If a duplicate panel name is entered, iCare displays a warning that states: "It appears that you already have a panel by this name. Please change the panel name so that it is unique." The name must be unique in order to save.
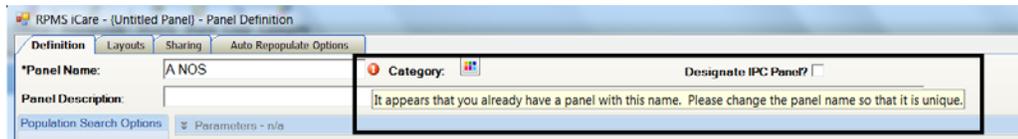

Figure 3-2: Sample **Warning** message

2. Use the Category option to group panels into a defined name and selectable color coded category. After defining this option, the category name and selected color categories will be visible on the Panel List tab.

Click the Category button to access the **Category Picker** dialog.
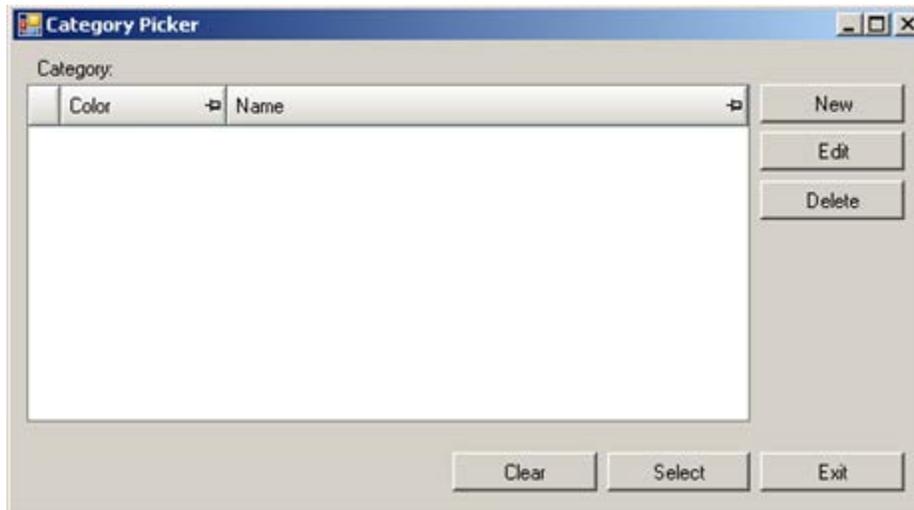
Figure 3-3: **Category Picker** dialog

Use the controls at the bottom as follows:

- Highlight a record in the grid and click **Select** to cause that color to display by the Category field on the Panel Definition window.

- Highlight a record in the grid and click **Clear** to cause that color to be removed by the Category field on the Panel Definition window.

- Click **Exit** when the dialog is complete.

New

Click **New** to create a new category color and name. The application displays the New Category dialog.
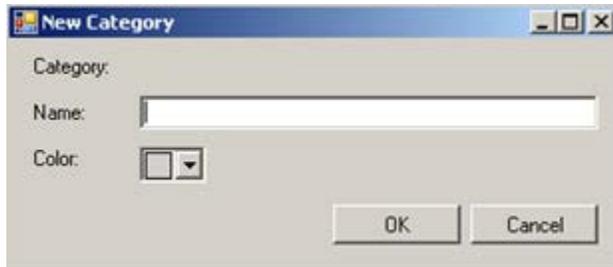

Figure 3-4**New Category** dialog

Type the name of the new category in the "Name" Free Text field.

Click the down-down list for Color and pick a color to represent the new category.

When the dialog is complete, click **OK** and the new category will appear in the grid on the Category Picker dialog. (Otherwise, click **Cancel**.)

Edit

Select a record in the grid on the Category Picker dialog and click **Edit** to display the Edit Category dialog. See "New" above to edit either field.

Delete

Select a record in the grid on the Category Picker dialog and click **Delete** to remove the record from the Category Picker dialog (there is no confirmation).

3. Select the **Designated IPC Panel?** check box to define a panel that will be displayed and can be selected on the IPC tab main view.

4. Type a description of the panel (limited to 250 characters) in the "Panel Definition" Free Text field. This is not a required field but is strongly recommended. The Panel Description displays as a tooltip for the Panel group box on the Cover Sheet tab of the Patient Record window.

5. Select one of the Population Search Options radio buttons.

   • No Predefined Population Search: a blank panel will be created and patients can be added individually. This panel will not have any search logic associated with it and therefore all panel patient members will have to be added manually.

   • My Patients: the panel will be based on the "My Patients" definition set in User Preferences.

- Patients Assigned to: the panel will be based on a definition for another provider or team of providers

- Scheduled Appointments: the panel will be based on the RPMS Scheduling application. An appointment date range and appointment locations are available search criteria

- Inpatient Visits: the panel will be based on current inpatients or non-current inpatients using on several types of parameters.

- ER Visits: the panel will be based on parameters associated with ER visits.

- Qman Template: the panel will be based on any existing saved QMan template.

- RPMS Register: the panel will be based on any existing Register that was created with case management software, including the Diabetes Management System (BDM), the Case Management System (ACM), the Asthma Register System (BAT), the HIV Management System (BKM), the Immunization Package (BI) or Women's Health (BW). This option searches for patients that are members of these various register applications on the RPMS server.

- EHR Personal List: the panel will be based on a selected personal list from the RPMS-EHR application.

- Ad Hoc Search: the panel will be based on one or more data items.

6. If the panel definition is complete, the panel is ready to save. Skip to step 10 below. Otherwise, perform the following actions (in steps 7–9) before the panel is saved.

7. To change the screen layout of the panel, click the Layouts tab.

8. To share the panel with others, click the Sharing tab.

9. To have the panel repopulated automatically (add or delete patients based on your panel logic), click the Auto Repopulate Options tab.

10. Click **OK** to save and close the panel or Cancel to discard the incomplete panel.

After all of the tabs have been completed, click **OK** on the Panel Definition dialog. The new patient panel will display on the Panel List window.

If the decision is to NOT create a Patient Panel, click **Cancel** on the Panel Definition window to display a warning message.
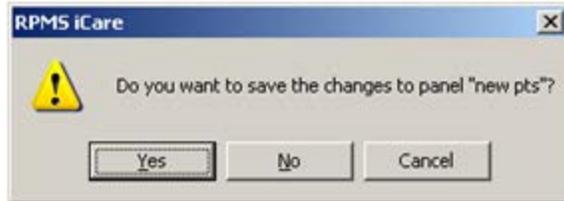
Figure 3-5: Warning Message About Saving Changes

- Click **Yes** to save the changes to the panel. Warnings will be displayed about any missing information, if any.

- Click **No** to exit the Panel Definition window.

- Click **Cancel** to return to the current panel where additional panel updates can take place.

After saving the panel, and later modify it, the top part of the Definition tab will have the "Properties" label (far, right side).

Figure 3-6: Changing a patient panel with Properties on Definition tab

Move the mouse over the Properties label to hover and the application will display information about the search criteria, for example.
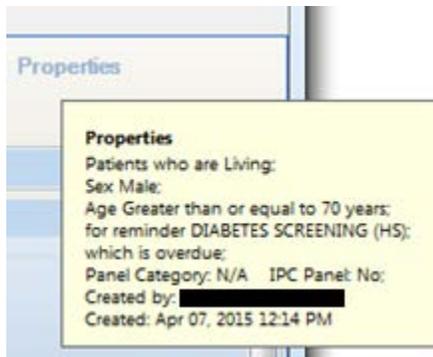

Figure 3-7: Sample Properties information

If any required information has been forgotten or not completed, the following warning message will display: Complete the required information in the highlighted field(s).

If **OK** is clicked the "Background populate?" information message will display. Click **OK** to populate the panel.
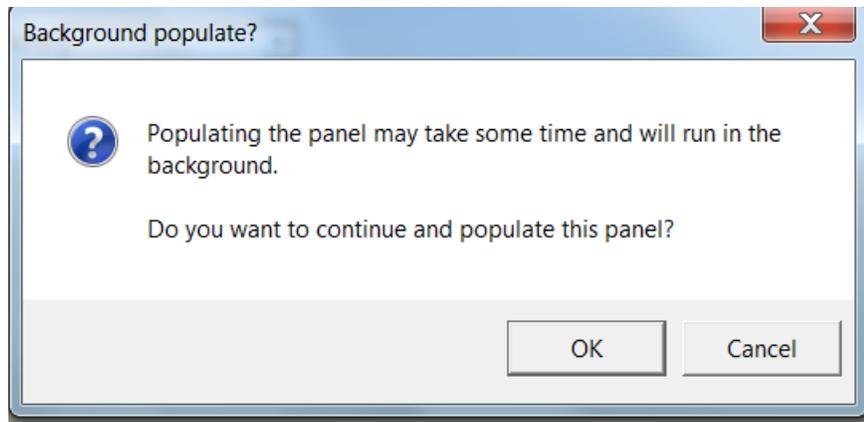
Figure 3-8: Sample Background populate message

3.1   No Predefined Population Search

The default option "No Predefined Population Search - Add Patients Manually" creates an empty panel. Patients can be added to the panel using a search tool.

The application displays the **Select Patients** dialog.
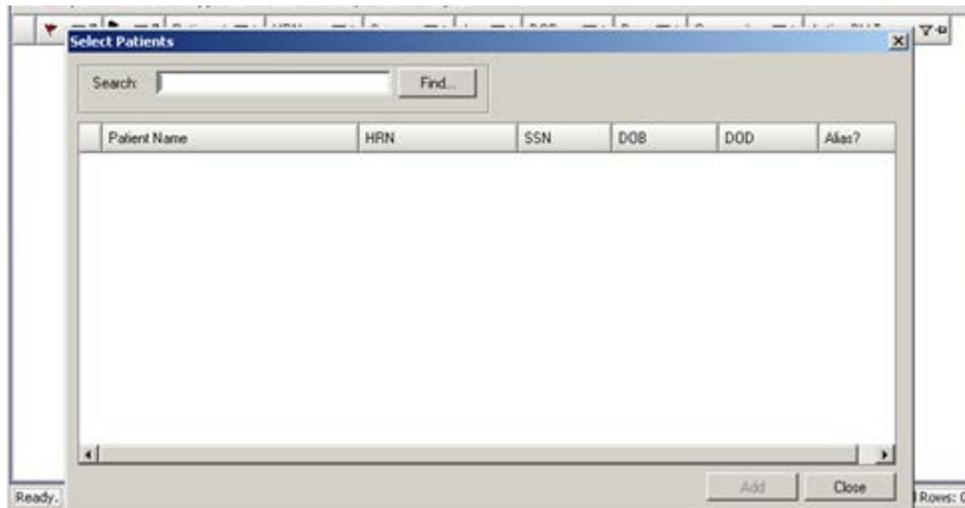
Figure 3-9: Empty New Panel with **Select Patients** dialog

Type the name, HRN, SSN, or DOB of the individual patient to be added to the panel in the Search field. Then click **Find**. There are two conditions: (a) one or more matches are found or (b) no matches are found.

- If one or more matches are found, they will be displayed in the grid on the Select Patients dialog.
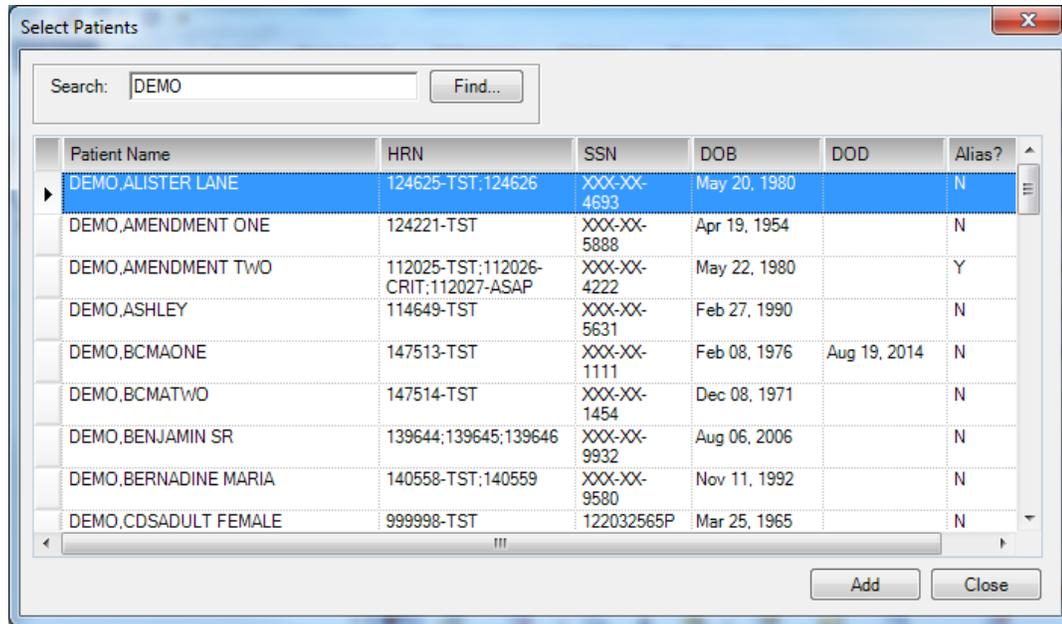
Figure 3-10: Sample Populated **Select Patients** dialog

Highlight the patients and click **Add**. This adds the selected patients to the new panel. The Search field will be cleared of data.

- If no matches are found, the following warning message will display: No matching patients were found. Click **OK** to dismiss the message. The program returns to the Select Patients dialog. Try other search criteria.

Search for additional patients by continuing to type the name, HRN, SSN, or DOB in the Search box. Continue to highlight and add patients.

Click **Add** when all patients have been selected and added. The Select Patients dialog will close and the panel will be displayed on the Panel List main window. (Otherwise, click **Close** to create a panel with no patients in it.)

3.2   My Patients

"My Patients" must be defined in the User Preferences (on Define My Patients Tab). This search logic applies to any panel created using the "My Patients" option.
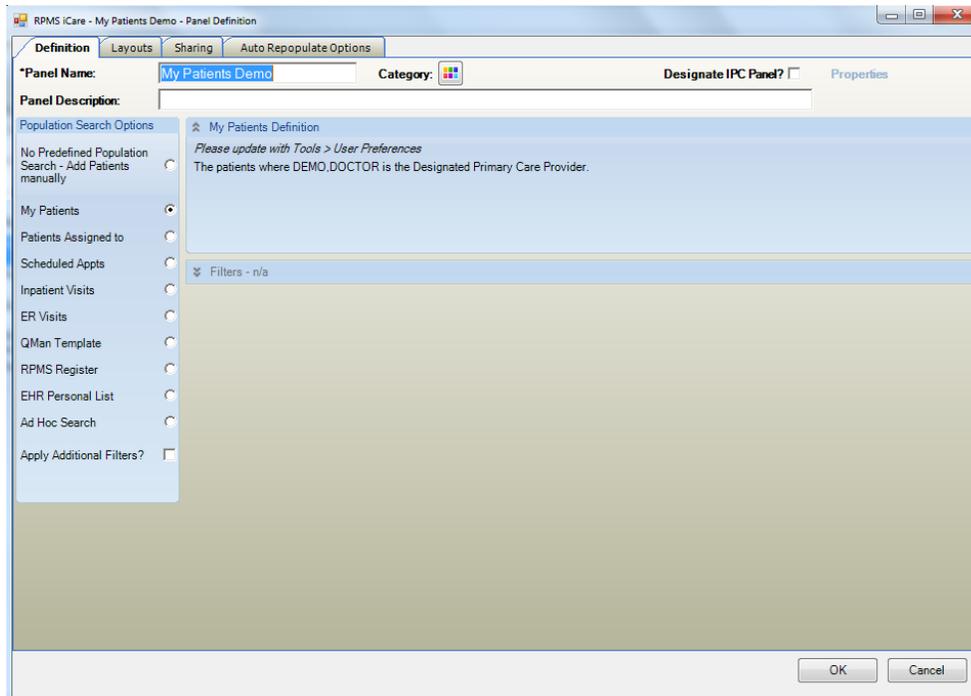
Figure 3-11: **My Patient Definition**

If "My Patient" is NOT defined, click **Cancel** to cancel the Panel Definition and go to **Tools** | User Preferences to set up a definition for "My Patients".Select the **Apply Additional Filters** check box to display additional data that can be used to refine the search. These are the same fields that display when the Ad Hoc Search radio button is selected.

After the Panel Definition dialog is complete, click **OK** (otherwise, click **Cancel**). After clicking **OK**, the application displays the "Background populate?" information message. Click **OK** to populate the panel.

Example of applying Additional Filters: The panel should contain female patients, ages 45 to 47 for whom a provider is either the Designated Primary Care Provider or the Primary Visit Provider for at least three years in the past two years.


Figure 3-12: Sample Panel Definition with Sex and Age Filters

In this example, here are the steps to follow:

1. Make sure the "My Patients" definition has the following selections: the DPCP type and Primary Visit Provider type with 3 visits in the past 2 years. This can be confirmed by holding the mouse over "Current Definition" phrase. If the "My Patient" definition needs to be modified, access it under **Tools** | **User Preferences.**

2. On the Panel Definition window, select **My Patients** and select the **Apply Additional Filters** check box.

3. Select Sex option Female.

4. Select Age "in range (inclusive)" and enter 45 and 47 for the age range.

> **Note**:   This same search logic by using the Patients Assigned To search option and selecting the provider name and provider definition.

3.3   Patients Assigned To

The "Patients Assigned to" option is similar to the "My Patients" definition but does not become a permanent User Preference. The provider's name is selected and then one or more provider types that best define the provider. Refer to Define My Patients Tab for a more detailed explanation of each provider name and timeframe option.
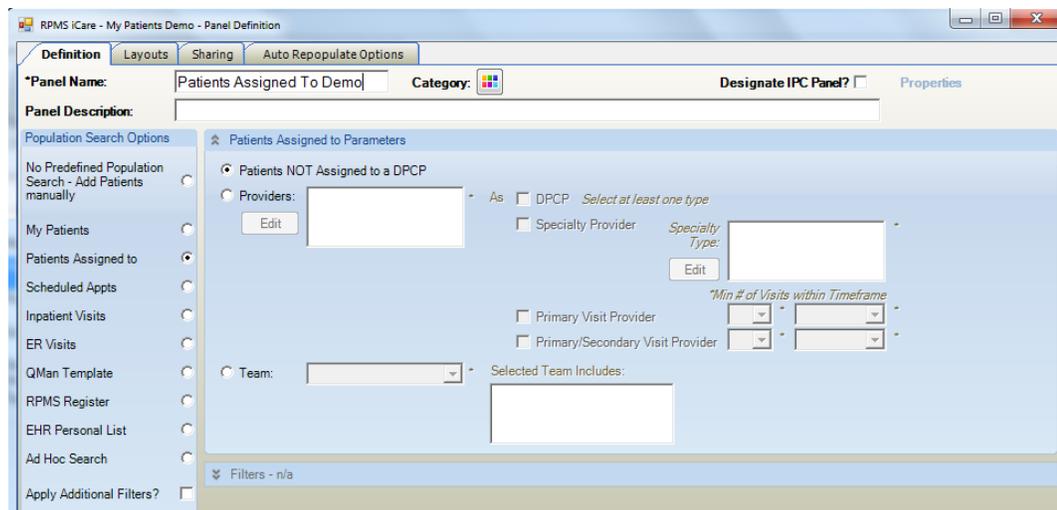

Figure 3-2: Sample **Patients Assigned to Parameters**

This is a good option to use for multiple providers. For example, patients can be assigned a specific Designated Primary Care Provider (DPCP) only, or both DPCP and primary visit provider can be used.

This is also a good option for nurses or case managers who are responsible for working with two or three individual physicians. Individual panels for each physician based on the physician's specific role can be quickly created

Patients NOT Assigned to a DPCP

Use the "Patient NOT Assigned to a DPCP" radio button to help identify patients who have not yet been assigned a Primary Care Provider.

> **Note**: Creating a panel based on this selection could yield a very large number of patients. It will include all patients unless additional filters are applied, such as only 'Living' patients or only patients in a specific community.

Providers

Use the Providers radio button to filter the patients by particular providers.

Click **Edit** to access the **Add/Remove Providers** dialog.
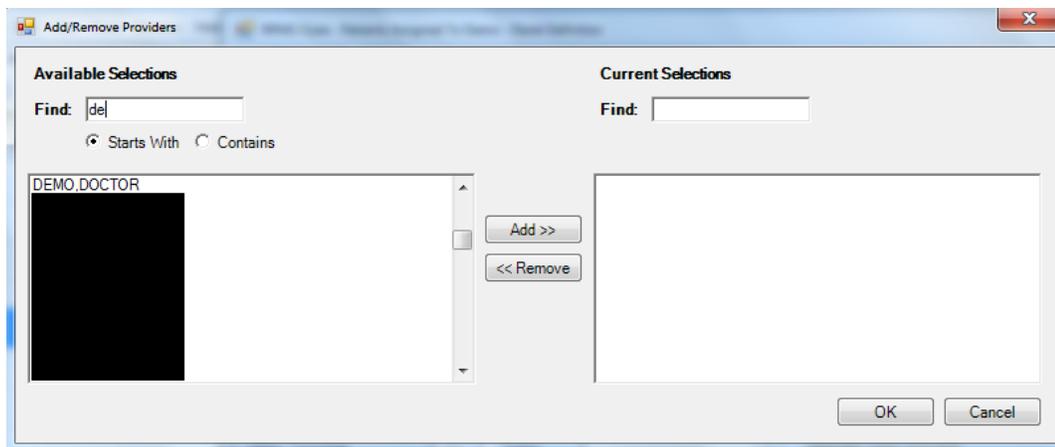
Figure 3-3: **Add/Remove Providers** dialog

When the Add/Remove dialog is complete, click **OK** and the names that appear in the Current Selections field will populate the Providers field. (Otherwise, click **Cancel**.)

After the **Providers** field is populated, indicate the type that selected provider is.

Figure 3-15: Populating the Providers option

The choices for the type of provider are: (at least one is required)

DPCP (Designated Primary Care Provider)

Any patient whose documented DPCP is the selected provider/surrogate. Use this option if the selected provider is using the Designated Specialty Provider Management (DSPM) option, in the RPMS application.

If the selected provider is NOT running DSPM, then use the last two options, the Primary Visit Provider or the Primary/Secondary Visit Provider.

Specialty Provider

Users are assigned as Specialty Providers to patients as defined in the Designated Specialty Provider Management (BDP) application.

After selecting the Specialty Provider radio button, specify the specialty provider type(s). Click the **Edit** button to access the **Add/Remove Specialty Provider Types** dialog.
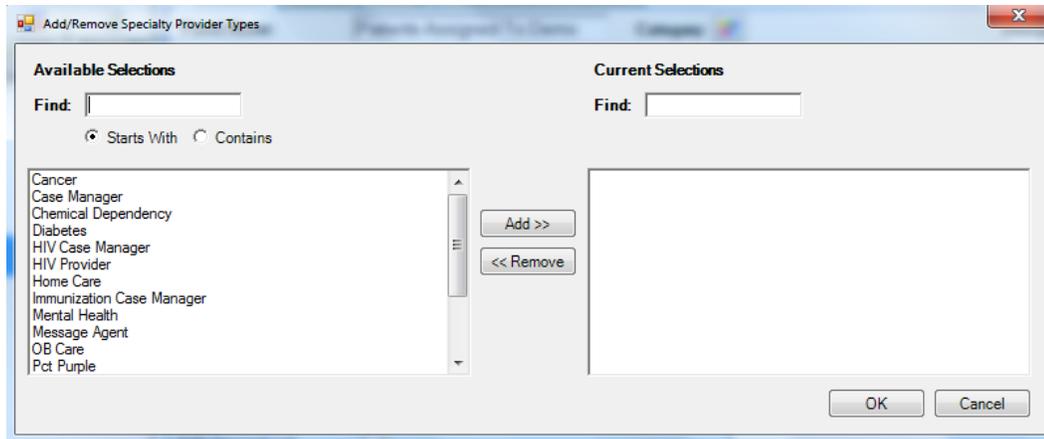
Figure 3-16: Sample **Add/Remove Specialty Providers Types** dialog

When the Add/Remove dialog is complete, click **OK** and the provider types in the Current Selections group box of the dialog will populate the **Specialty Type** field. (Otherwise, click **Cancel**.)

Primary Visit Provider

Any patient whose Primary Visit Provider is the selected provider/surrogate for a user-defined number of visits within a user-defined timeframe, e.g., a patient where the selected provider/surrogate was the Primary Visit Provider at least two times in the past six months. The defaults for the user-defined values are two visits within the past year.

Primary/Secondary Visit Provider

Any patient whose Primary/Secondary Visit Provider is the selected provider/surrogate for a user-defined number of visits within a user-defined timeframe. The defaults for the user-defined values are two visits within the past year.

Minimum Visits

Select the minimum number of visits used in combination with a time frame to define whether a patient "belongs" to a provider, e.g., two (2) visits in the past year. Values are 1 through 9; select the value from the drop-down list. The Minimum Visits option is used with Provider Types "Primary Visit" and "Primary/Secondary Visit" only.

Minimum Visit Timeframe

Select the timeframe to be used in combination with the minimum number of visits to define whether a patient "belongs" to a provider, e.g., 2 visits in the past year. Values are: 3 months, 6 months, 1 year, 18 months, 2 years or 3 years; select the value from the drop-down list. The Minimum Visit Timeframe option is used with Provider Types "Primary Visit Provider" and "Primary/Secondary Visit Provider" only.

If either the Primary Visit Provider or Primary/Secondary Visit Provider, is selected, specify both a minimum number of visits and a timeframe (required).

Figure 3-17: Sample **Primary or Primary/Secondary Visit Provider** dialog

Team

Use the Team parameter to filter the patients by a particular Team. The Team must contain at least one provider to whom patients are assigned to.

Figure 3-18: **Team** group box

Select an option from the Team drop-down list. If there are pre-determined team members, their names will populate the Selected Team Includes field.

Select the **Apply Additional Filters?** check box to display additional data that can be used to refine the search. These are the same fields that display when the Ad Hoc Search radio button is selected

3.4   Scheduled Appts

The Scheduled Appointments search option can be used to find the patients with scheduled appointments in a specified date range or time frame for the panel (required).

This is a good option to use for pre-planning patient care for patients coming into the facility for appointments.

Figure 3-19: Sample Scheduled Appointments Selection parameters

Appointment Range

Use the Appointment Range group box to set either a date range or a time frame. Select one of the radio buttons.

Figure 3-20: **Appointment Range** group box

By Date

Select the By Date radio button for a specific date range for the scheduled appointments. If the appointments are for one day only, both the beginning and end dates must be the same. The default is today's date.

By Timeframe

Select the By Timeframe radio button to select the time frame associated with the date range (cannot be blank). Valid choices are on the drop-down list.

After selecting the "By Timeframe" option on the Appointment Range and specific timeframe value and click **OK**, the application displays the message that states: This panel definition includes a Timeframe filter. It is recommended that this panel be set to Auto Populate. Do you agree? Click **Yes**, **No**, or **Cancel**.

- Click **Yes** to set the panel to Auto Panel. The application displays the message that states: Populating the panel may take some time and will run in the background. Do you want to continue and populate this panel? Click **OK** to run in background. (Otherwise, click **Cancel**).

- Click **No** to NOT set the panel to Auto Populate.

- Click **Cancel** to return focus to the Appointment Range group box.

Appointment Locations

Use the Appointment Locations group box to select the appointment locations by which to search. One of the radio buttons (By Scheduling Clinic or Visit Clinic) must be selected.

Figure 3-21: **Appointment Locations** group box

By Scheduling Clinic

A Scheduling Clinic is a clinic that is defined at each facility that identifies clinics for appointment scheduling. The names are unique to each facility.

Select the By Scheduling Clinic radio button and then click **Edit** to access the **Add/Remove Scheduling Clinics** dialog.

Figure 3-22: Sample **Add/Remove Scheduling Clinics** dialog

When the Add/Remove dialog is complete, click **OK** and the options in the Current Selections group box populate the By Scheduled Clinic field on the Panel Definition window. iCare searches for the patients in the clinics in the By Scheduled Clinic field. (Otherwise, click **Cancel**.)

By Visit Clinic

A Visit Clinic is a way that Scheduling Clinics can be linked by the Clinic Code. A facility might have multiple Scheduling Clinics that happened to be defined as PEDIATRIC (20). Instead of selecting all Scheduling Clinics individually, select Visit Clinic of PEDIATRIC and all Scheduling Clinics will be included.

Select the **By Visit Clinic** radio button and then click **Edit** to access the **Add/Remove Visit Clinic** dialog.
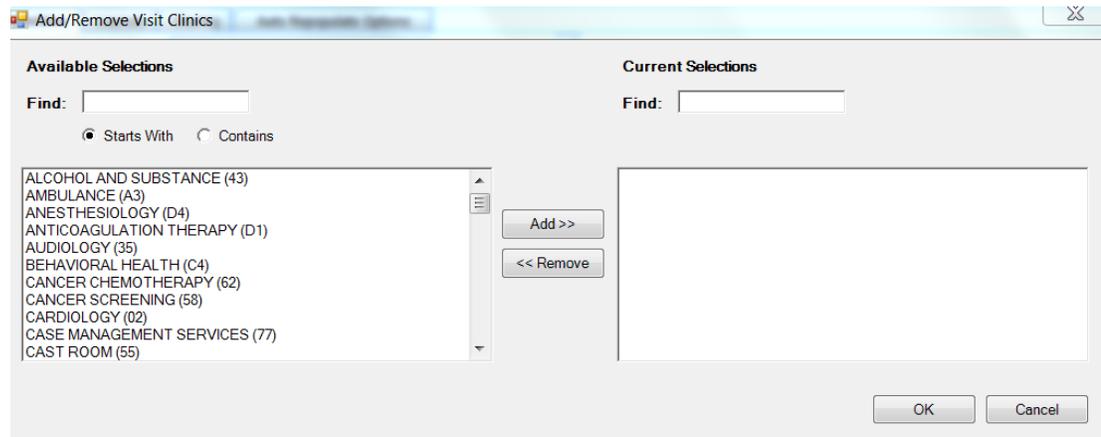

Figure 3-23: Sample **Add/Remove Visit Clinic** dialog

When the Add/Remove dialog is complete, click **OK** and the visit clinics in the Current Selections group box populate the By Visit Clinic field. iCare searches for the patients in the clinics displayed in the By Scheduled Clinic field. (Otherwise, click **Cancel**.)

Appointment Status

The Appointment Status field is populated by clicking the **Edit** button to access the Add/Remove Appt Types dialog. The intent of this option is to define a panel once and have it auto populate every day without having to manually change the date range. If this optionis used, the panel should be set to Auto Repopulate (refer to Auto Repopulate Options Tab for more information).
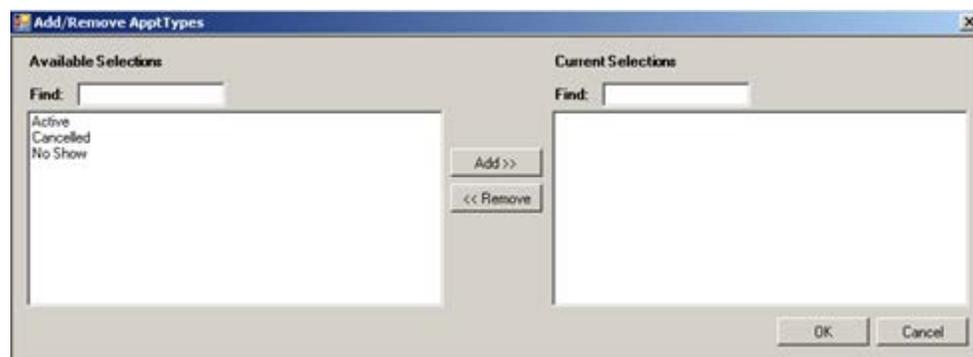

Figure 3-24: **Add/Remove Appt Types** dialog

When the Add/Remove dialog is complete, click **OK** and the appointment types in the Current Selections group box populate the Appointment Status field. (Otherwise, click **Cancel**.)

Select the **Apply Additional Filters?** check box to display additional data that can be used to refine the search. These are the same fields that display when the Ad Hoc Search radio button is selected.

3.5   Inpatient Visits

The Inpatient Visits search option can be used to restrict the search to current inpatient visits or to non-current inpatient visits where particular characteristics of the visit can be defined.

Figure 3-25: Sample **inpatient visits parameters**

Current Inpatient?

Select the **Current Inpatient?** check box to restrict the search to only current inpatients. This action causes the fields in the lower panel to become active and the fields in the Discharge Range to become inactive.

To search for inpatients in the past, do not select the **Current Inpatient?** check box. The search can then be defined to a specified admit date range and a specified discharge date range.

Admit Range group box

Use the Admit Range group box to restrict the search for patients in a particular admit date range.

Figure 3-26: **Admit Range** group box

By Date

Select the **By Date** radio button to enter the date range for the admit dates. If only one day is wanted, both the beginning and end dates must be the same.

By Timeframe

If **By Timeframe** is selected, the panel should be set to automatically Auto Repopulate (refer to Auto Repopulate Options Tab for more information).

Select the **By Timeframe** radio button to select the time frame associated with the admit date range (cannot be blank). Valid choices are on the drop-down list.

The various fields on the lower group box define the restrictions for the search for current inpatients by admit type, attending provider, specialty, and ward.

Discharge Range group box

Use the discharge range group box to restrict the search to patients in a specified discharge date range. The "By Date" and "By Timeframe" work like those for the Admit Range group box (above).

The lower group box becomes active when a "Discharge Range" check box clicked and dates or a timeframe has been selected.

Figure 3-27: Lower group box for current inpatient status

The various fields on the lower group box define the restrictions for the search for discharged inpatients by admit type, attending provider, specialty, ward, nurse and disposition type... They all operate in the same manner. Below is how to use the "Admit Type" restriction.

Admit Type

Use the Admit Type to restrict the search for inpatients to particular admit types. Click **Edit** to access the **Add/Remove Inpatient Admit Types** dialog.
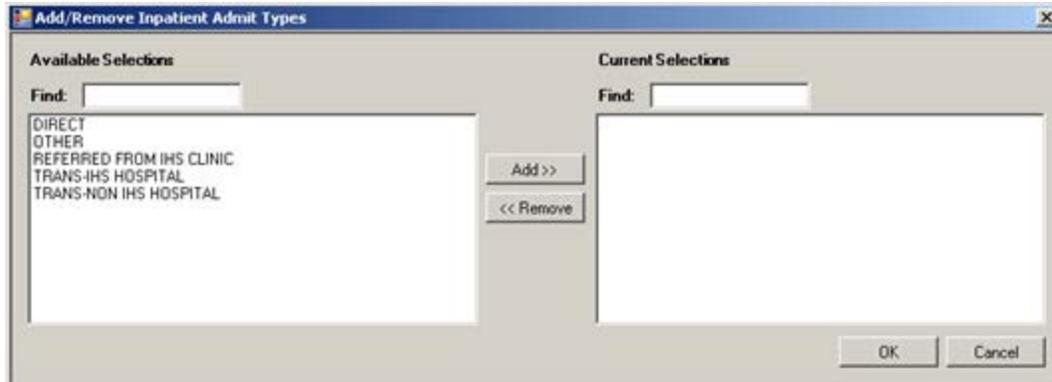
Figure 3-28: **Add/Remove Inpatient Admit Types** dialog

When the Add/Remove dialog is complete, click **OK** and the items in the Current Selections group box populates the field by the Edit button for Admit Type. (Otherwise, click **Cancel**.)

3.6 ER Visits

Use the ER Visits search option to restrict the search for patients with ER visits.
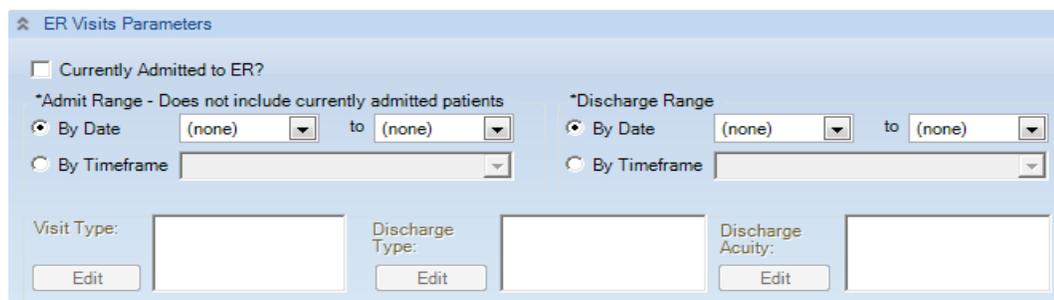

Figure 3-29: **ER Visits Parameters**

Populate the Admit Range or Discharge Range group box and the fields in the lower group box become active.

The group boxes on the ER Visits work like those for Inpatient Visits.

3.7 QMan Template

Use the QMan Template option to populate a panel with the patients identified in a specified QMan search template.

This is a good option to use if time has already been spent time creating QMan searches.. For the expert user, QMan can produce highly complex searches.
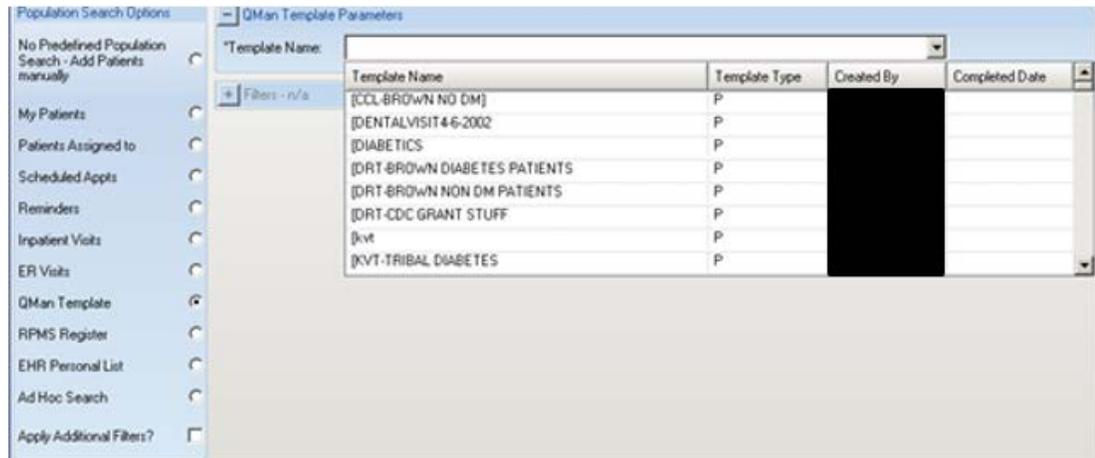
Figure 3-30: Sample QMan Template list

Search for a template by doing one of the following:

- Search for a template by typing a few characters in the Template Name field; the list will scroll to the first instance of the name containing those characters.

- Use the scroll bar to browse through the list.

Highlight the template name. Please note the following about the Template Type:

- The 'P' in the Template Type column means it is a patient centric QMan search.

- The 'V' in the Template Type column means it is a visit centric QMan search.

Select the **Apply Additional Filters?** check box to display additional data that can be used to refine the search. These are the same fields that display when the Ad Hoc Search radio button is selected.

Tip:	Only one QMan template can be selected for each panel. To create a panel containing multiple templates, create one panel for each template, and then copy all patients out of each panel into one combined panel. Duplicate patients will not be included.

Please note that if the QMan template is removed from the database and attempt to modify that panel (using the template), the Template Name field will BE empty. In this case, close the Panel Definition window and create a new panel and copy the patients to the new panel.

3.8   RPMS Register

Use the RPMS Register option to populate a panel with patients who are already on a Register for any existing RPMS case management system. Examples of case management systems are Diabetes Management System (BDM), Case Management (ACM), the Asthma Register System (BAT), the HIV Management System (BKM), Women's Health (BW) and Immunizations (BI) Currently, only the Case Management System has multiple Registers.

> **Note**:   Any Register created within the Diabetes Management System that is NOT the "official" IHS Diabetes Register but can be located by selecting the **Case Management System** option, and then scrolling to the named diabetes sub registers.
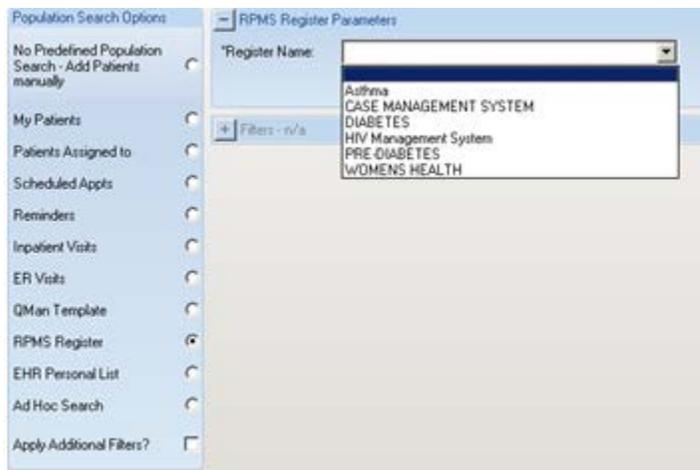
Figure 3-31: Sample RPMS Register list

Type the name of the Register in the Register Name field and the list will scroll to the first occurrence of the typed letters. Highlight the selection.

The Case Management System selection requires secondary data about a specific register

Figure 3-32: Case Management Selection options

A sub-register must be selected from the drop-down list.

The default Status is ACTIVE (for any of the Register options). To change the Status, click **Edit** to access the **Add/Remove Register Statuses** dialog.
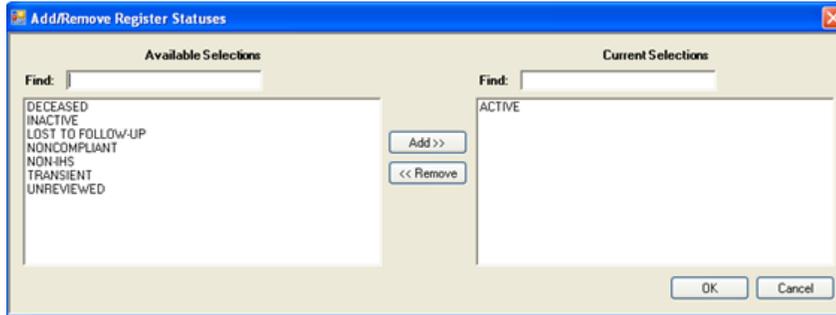
Figure 3-33: **Add/Remove Register Statuses** dialog

The Status field appears for all Register Names except for Women's Health.

When the Add/Remove dialog is complete, click **OK** and the options in the Current Selections group box populate the Status field on the RPMS Register Parameters area. (Otherwise, click **Cancel**.) If there is more than one status, the Status field on the RPMS Register Parameters group box will have a scroll bar.

Select the **Apply Additional Filters?** check box to display additional data that can be used to refine the search. These are the same fields that display when the Ad Hoc Search radio button is selected.

3.9   EHR Personal List

Use the EHR Personal List option to use an existing defined personal list from the RPMS-EHR application.

If this option is selected and there is no existing personal list, the application displays the a message that reads: "There are no EHR Personal Lists for selection." Click **OK** to dismiss the message.
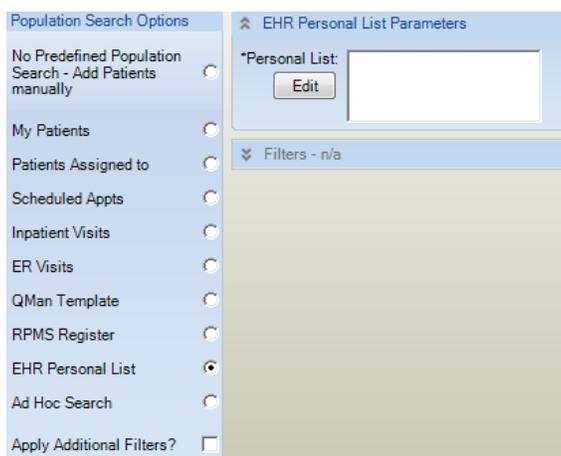

Figure 3-34: Sample **EHR Personal List parameters**

Click the **Edit** button associated with the Personal List field to access the Add/Remove EHR Personal Lists dialog. One or more EHR Personal List can be selected. When the Add/Remove dialog is complete, click **OK** and the personal list names in the Current Selections group box populate the Personal List field. (Otherwise, click **Cancel**.)

Select the **Apply Additional Filters?** check box to display additional data that can be used to refine the search. These are the same fields that display when the Ad Hoc Search radio button is selected.

3.10   Ad Hoc Search

Use the Ad Hoc Search option to combine one or more common search criteria, such as age, gender, community, or visit date range, to define the patient population that wanted.
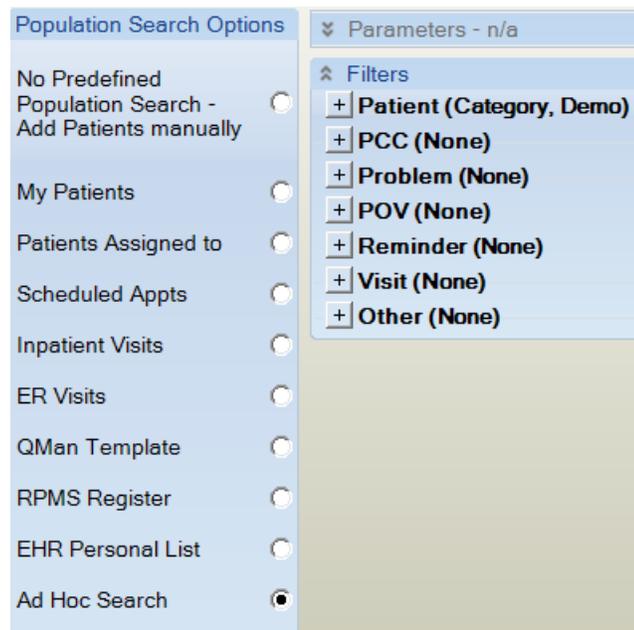

Figure 3-35: Sample Ad Hoc filters

After completing the filter options, click **OK** to use the filter options in creating a new patient panel. (Otherwise, click **Cancel**).

3.10.1   Patient (Category, Demo) Filter

Expand the Patient (Category, Demo) filter to display the criteria that you can select. Likewise, expand any of the filters by clicking on the plus (+) under the Patient filter to use them in the search.
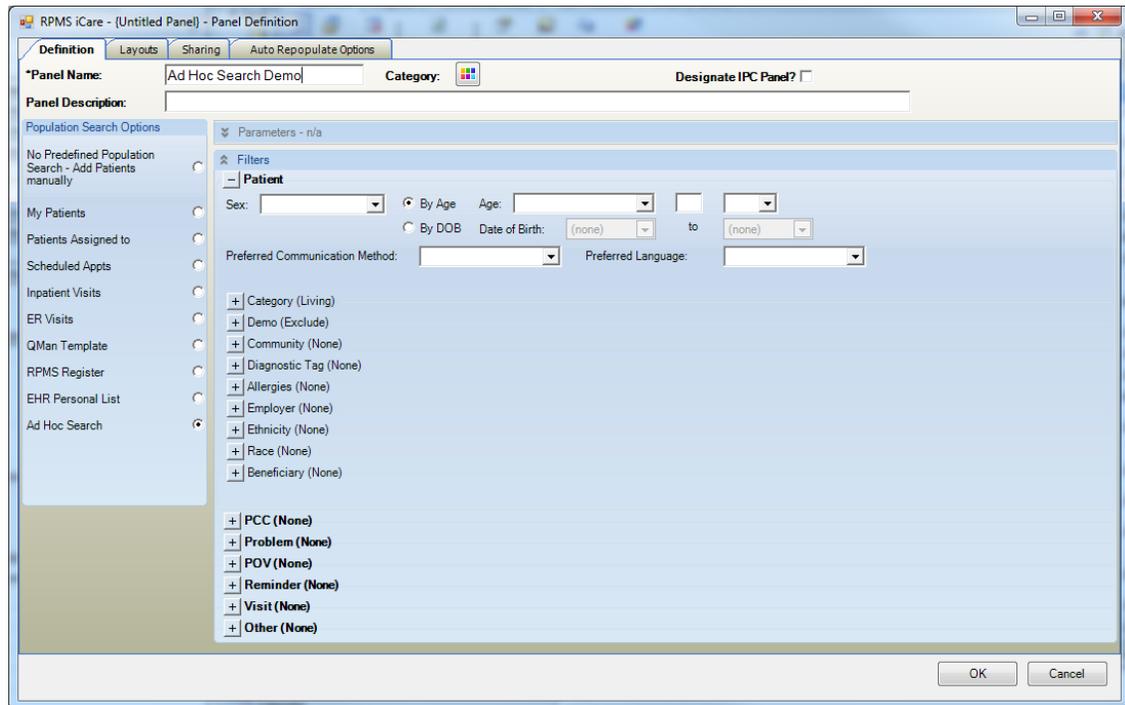
Figure 3-36 Ad Hoc Search selections

Patient Group Box

Filter the patients in the panel by using the fields in the Patient group box.
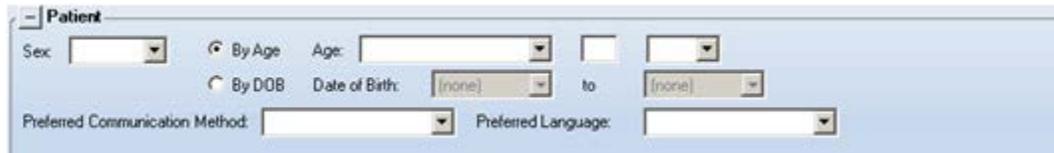
Figure 3-37: **Patient** group box options

Sex

Select the sex filter (male or female) from the drop-down list.

By Age

Enter a filter by age by using a criteria statement and age.

Click the drop-down for the first field to select the criteria statement.

- Less than, e.g., a panel of children could be defined as ages less than 19.
- Less than or equal to, e.g., the same panel of children in the previous example could be defined as ages less than or equal to 18.

- Equal to, e.g., create a panel of patients aged 50 to identify those who should have a colorectal exam.

- Greater than or equal to, e.g., a panel of adults could be defined as ages greater than or equal to age 19.

- Greater than, e.g., the same panel of adults in the previous example could be defined as ages greater than age 18.

- In range (inclusive), e.g., create a panel of women ages 45 through 60 with this option.

- Out of range (exclusive), e.g., 20-25, exclusive means ages 21, 22, 23, 24.

There will be an age range for Age if the following criteria statements were selected: (1) in range (inclusive) or (2) out of range (exclusive). For example: 20-25, inclusive means 20, 21, 22, 23, 24, 25 whereas 20-25, exclusive means 21, 22, 23, 24.

Type the age to be used in the search in the middle field (limited to 3 characters).

The drop-down list for the last field for the Age criteria defined the units of measure for the age: YRS (for years), MOS (for months), or DYS (for days).

By DOB

Filter by DOB by specifying a date range using the "Date of Birth" and "to" fields.

Preferred Communication Method

Select a filter for the Preferred Communication Method field by selecting an option from the drop-down list.

Preferred Language

Select a filter for the Preferred Language field by selecting an option from the drop-down list.

3.10.1.1 Category Filter

Figure 3-38: Sample **Category** Filter

Use the Category group box to restrict the search to any of the following:

Living

Living patients are patients for whom at least one HRN (health record number) is active through registration.

Inactive

Inactive patients are patients for whom all HRNs (health record numbers) have been inactivated through registration. If any one HRN is still active, the patient is not considered to be Inactive.

Deceased

Select Deceased to specify a Date of Death date range. If no date of death date range is entered, the application will search for all deceased patients the database

Causes of Death

Use the Cause of Death to search for reasons (only active when Deceased is selected).

Click **Edit** to access the **Add/Remove Causes of Death** dialog.
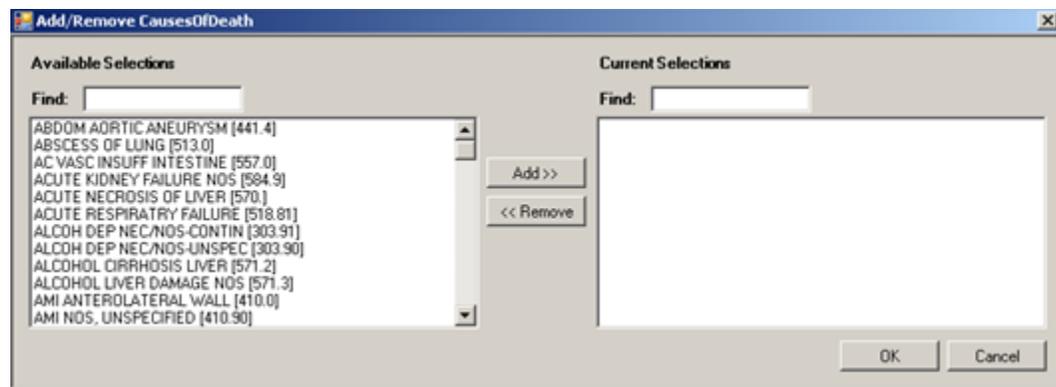
Figure 3-39: **Add/Remove Causes of Death** dialog

When the Add/Remove dialog is complete, click **OK** and the options in the Current Selections group box will populate the **Causes of Death** field. (Otherwise, click **Cancel**.)

3.10.1.2 Demo Filter
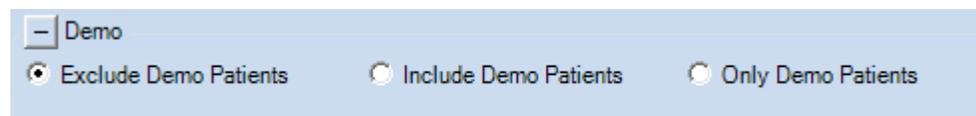
Figure 3-40: Sample **Demo** Filter

Demo patients can be found in a specific search template that can only be found and used if the user holds the APCLZ UPDATE DEMO TEMPLATE security key. The menu option can be reached from PCC Management Reports-> Other PCC Management Reports/Options->Update the Demo/Test Patient Search Template.

```
CREATE/UPDATE "DEMO" PATIENT LIST

This option is used to update a patient search template (list) that
contains the names of all of the "demo" or "test" patients in your
database.  This template will be used to exclude these patients from
all PCC Management reports.


Do you wish to continue? Y//


PCC DEMO PAT TEMPLATE         Jul 13, 2016 06:35:27        Page:   1 of
5
DEMO/TEST PATIENTS TO EXCLUDE FROM PCC MANAGEMENT REPORTS
* Patients currently included in the RPMS DEMO PATIENT NAMES list
      Patient Name                     HRN

1)   DEMO,SAM                          103250
2)   DEMO,FLOYD SR                     103940
3)   DEMO,SABINA L                     104348
4)   DEMO,FAIRIETTA DANNETTE           106596
5)   DEMO,PERRY RAY                    108897
6)   DEMO,AMENDMENT TWO                112025
7)   DEMO,ASHLEY                       114649
8)   DEMO,DEJON                        115569
9)   DEMO,SEATTLE ANN                  118176
10)   DEMO,AMENDMENT ONE               124221
+          Enter ?? for more actions
AP   Add Patient to Template          Q    Quit
RP   Remove Patient from Template
Select Action:+//
```

Figure 3-41: Sample **Demo** patients from RPMS PCC

Additionally, any patient name or alias which contains the text, "DEMO,PATIENT"
will also be included as a demo patient.

Use the Demo group box to restrict the panel search to any of the following:

Exclude Demo Patients

Exclude any patients in the panel that are identified as a DEMO patient in PCC.
Please note that this is the default value for this filter for all Ad Hoc Search panels or
when applying additional filters to existing Panel Populations such as Scheduled
Appointments.

Include Demo Patients

Include patients in the panel that are are identified as a DEMO patient in PCC.

Only Demo Patients

Include only patients in the panel that are are identified as a DEMO patient in PCC.

3.10.1.3 Community Filter

Use the Community group box to restrict the search to patients defined in a community either by taxonomy or by name. This option uses the Active patients in the database for each associated Community of Residence.

Figure 3-42: **Community** group box

By Taxonomy

To define the community by taxonomy, select the **By Taxonomy** radio button.

Click **Edit** to access the **Add/Remove Community Taxonomies** dialog.

Figure 3-43: Sample **Add/Remove Community Taxonomies**

When the Add/Remove dialog is complete, click **OK** and the items in the Current Selection group box will populate the field by the Edit button as well as the "Selected Taxonomy Includes" field. (Otherwise, click **Cancel**.)

By Name

To define the community by name, select the **By Name** radio button. Select an option from the drop-down list for the By Name field; the selection determines the number of patients in the community (least one or all); the "With At Least One Patient" is the default.

Use the **Edit** button to determine which communities to use in the search. Click **Edit** to access the **Add/Remove Communities** dialog.
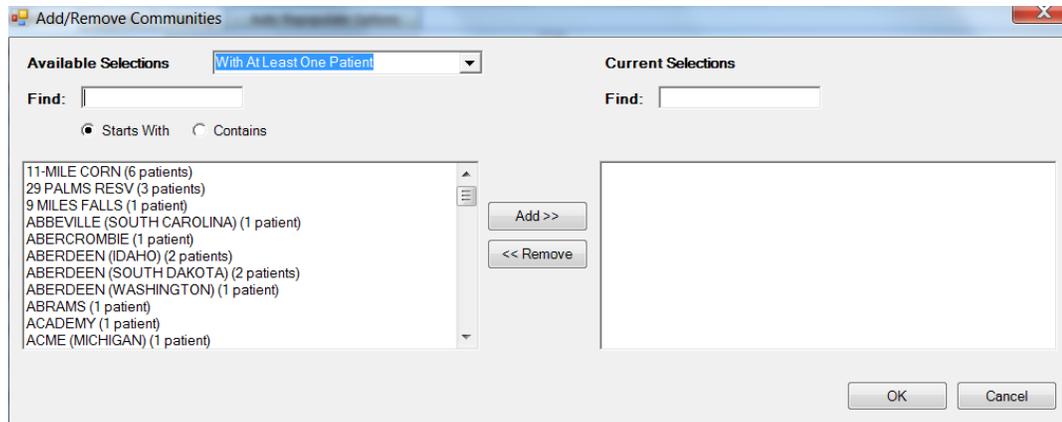
Figure 3-44: Sample **Add/Remove Communities** dialog

The list of available communities is controlled by selecting an option from the Available Selections field, either With At Least One Patient or All. The number of patients found with that community is in the parentheses at the end of the community name. For example, 11-MILE CORN has 6 patients.

When the Add/Remove dialog is complete, click **OK** and the options in the Current Selections group box will populate the field by the Edit button. (Otherwise, click **Cancel**.)

If more than one communityis selected, this activates the **Create Taxonomy** button.

Figure 3-45: Sample more than one community selected

The user must have either the iCare Editor (BQIZCMED) or iCare Package Manager (BQIZMGR) security key in order to use the Create Taxonomy button.

Clicking the **Create Taxonomy** button saves the selected communities as a Community taxonomy. This action will change the panel definition from a list of communities to the new Community taxonomy name. Section 7.2 provides information about creating a Community taxonomy. Users are allowed to edit the Community Taxonomies that they created.

3.10.1.4 Diagnostic Tag Filter

Use this option to restrict the search to patients with one or more of the predefined diagnostic tags.

Figure 3-46: **Diagnostic Tag** group box

Click **Edit** to select the diagnostic tags.

The **Add/Remove Diagnostic Tags** dialog displays. Be sure to slide the bar down to see all Diagnostic Tags available for selection. The four CVD tags have been inactivated (they have star *) but can still be use to search for patients who had that tag in the past using 'No Longer Valid'
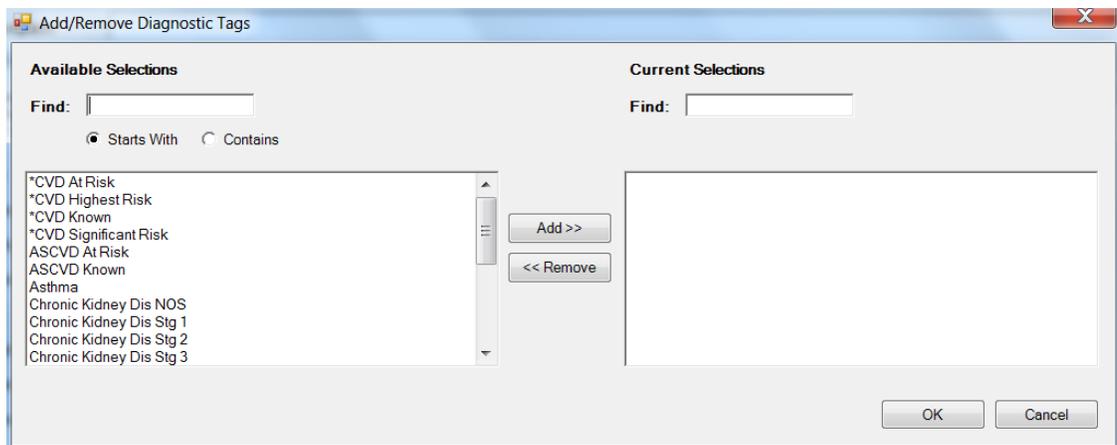

Figure 3-47: **Add/Remove Diagnostic Tags** dialog

When the Add/Remove dialog is complete, click **OK** and the options in the Current Selections group box will populate the **Diagnostic Tag** group box. (Otherwise, click **Cancel**.)
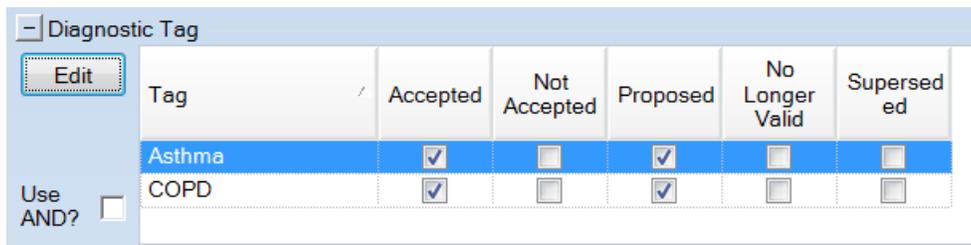
Figure 3-48: **Diagnostic Tag** group box populated

The default tag status selection will be Proposed and Accepted. The tag status selection can be changed for any record by selecting or de-selecting any checkbox.

Select the **Use AND?** check box when there are multiple tags selected. The "And" option searches for patients who have ALL of the user-defined tags. For example, not selecting the **Use AND?** returns a result of all patients with Asthma OR COPD. Checking **Use AND?** returns a result of all patients with both Asthma AND COPD.

3.10.1.5 Allergies Filter

No Allergy Assessment

Select the "No Allergy Assessment" check box to restrict the search to patients without an allergy assessment. This action causes the "No Known Allergies" check box and the Edit button to become inactive.

No Known Allergies

Select the "No Known Allergies" check box to restrict the search to patients without an allergy assessment. This action causes the "No Allergy Assessment" check box and the Edit button to become inactive.

Use the Allergies group box to filter patients by one or more allergies.
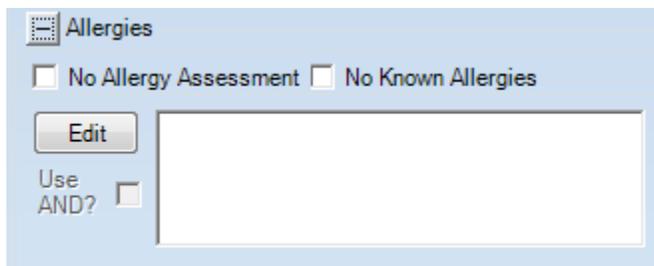
Figure 3-49: **Allergies** group box

Select the **Use AND?** check box when there are multiple allergies selected. The "And" option searches for patients who have ALL of the allergies.

Click **Edit** to access the **Add/Remove Allergies** dialog.
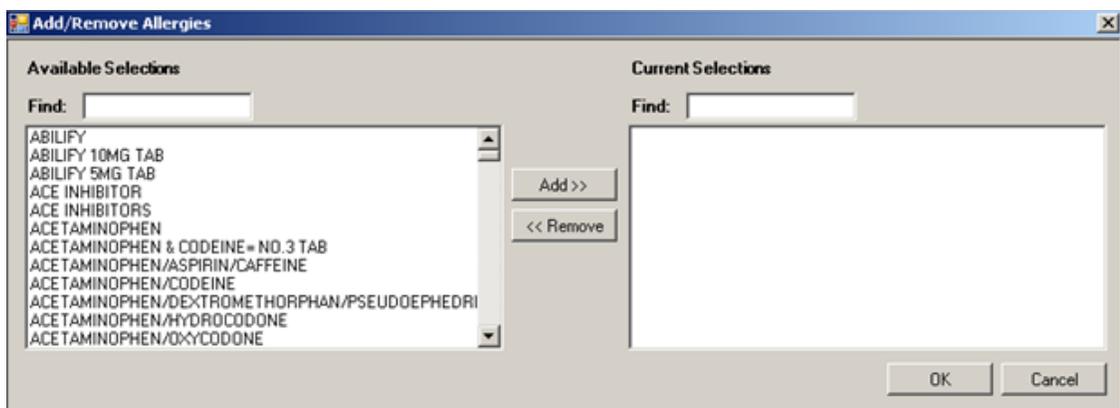
Figure 3-50: **Add/Remove Allergies** dialog

When the [Add/Remove dialog](#) is complete, click **OK** and the items in the Current Selections group box will populate the field by the Edit button on the Allergies group box. (Otherwise, click **Cancel**.)

3.10.1.6 Employer Filter

Users assigned the proper Employer Group security key, will see an Employer selection in the Optional Filters portion of Panel Definition. Use the Employer selection to filter the patients by the list of employers defined in the iCare Site Parameters.
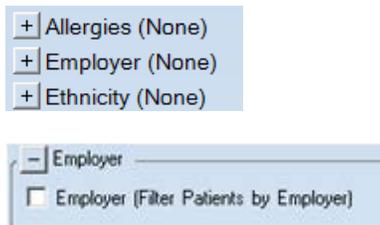

Figure 3-51: **Employer** group box

Select the **Employer** check box to filter the patients by employer.

If you are changing a shared panel and this check box is selected, the application displays an error message that states: Panel is already shared. Checking the employer filter is not permitted.

3.10.1.7 Ethnicity Filter

Use the Ethnicity group box to filter the patients by ethnicity.
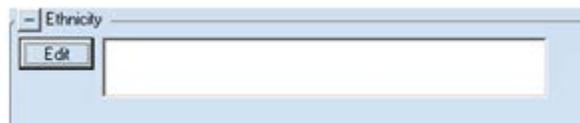
Figure 3-52: **Ethnicity** group box

Click **Edit** to access the **Add/Remove Ethnicities** dialog.
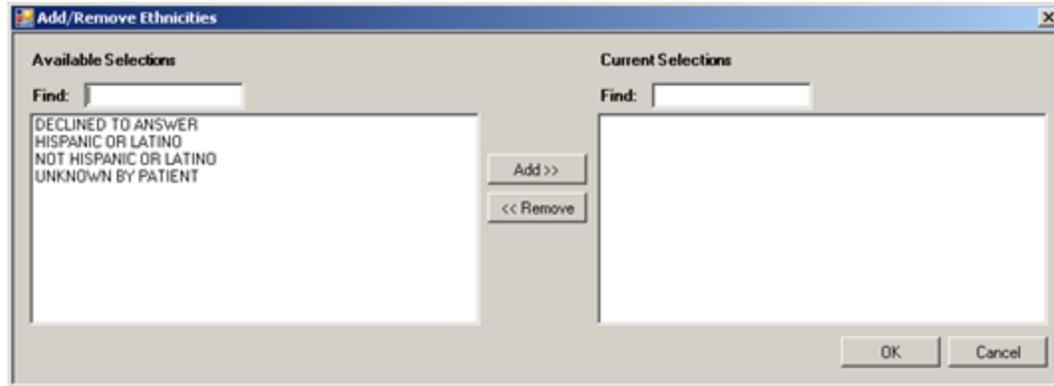
Figure 3-53: Sample Add/Remove Ethnicities dialog

When the Add/Remove dialog is complete, click **OK** and the items in the Current Selections group box will populate the field by the Edit button on the Ethnicity group box. (Otherwise, click **Cancel**.)

3.10.1.8 Race Filter

Use the Race group box to filter the patients by races.

Figure 3-54: **Race** group box

Click **Edit** to access the **Add/Remove Race** dialog.
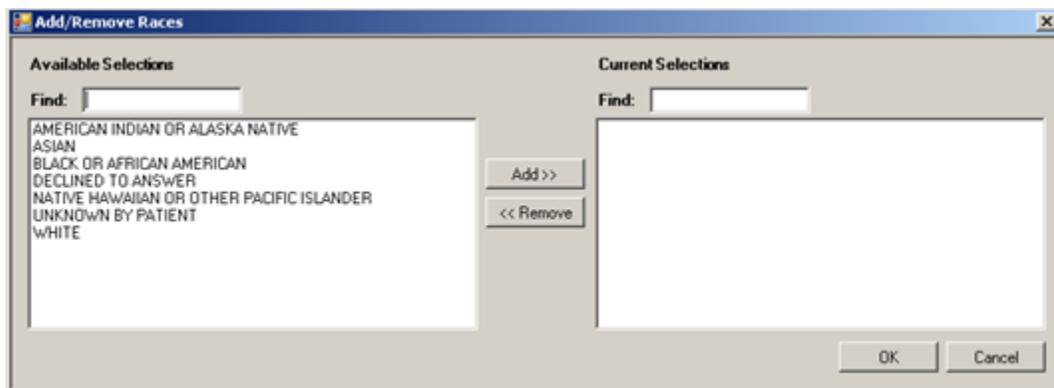
Figure 3-55: Sample **Add/Remove Races** dialog

When the Add/Remove dialog is complete, click **OK** and the items in the Current Selections group box will populate the field by the Edit button on the Race group box. (Otherwise, click **Cancel**.)

3.10.1.9 Beneficiary Filter
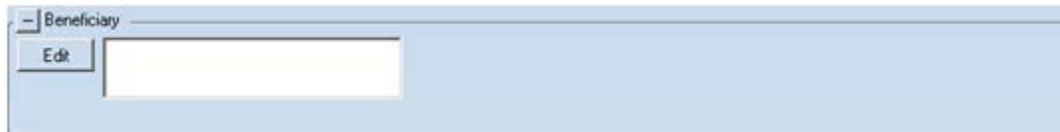
Figure 3-56: **Beneficiary** Filter

Use the Beneficiary to search for either AI/AN or non-AI/AN
Classification/Beneficiary patient categories. This is similar to the CRS reports where
users can select a patient population based on the Classification/Beneficiary
categories in Patient Reg.

Click **Edit** to access the **Add/Remove Beneficiaries** dialog.
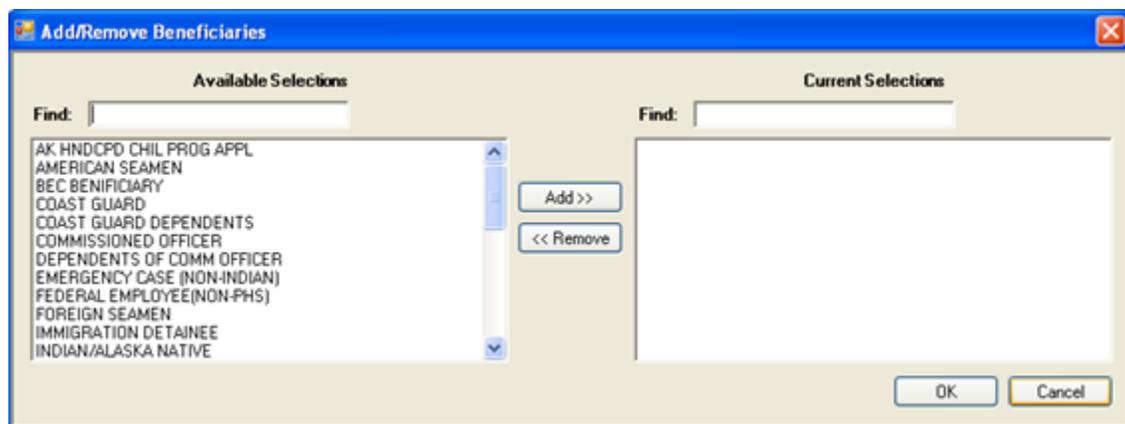
Figure 3-57: **Add/Remove Beneficiaries** dialog

When the **Add/Remove** dialog is complete, click **OK** and the options in the Current
Selections group box will populate the Beneficiary field in the Patient group box.
(Otherwise, click **Cancel**.)

3.10.2   PCC

Use the PCC filter to filter the patients by CPTs, Lab Tests, Measurements,
Medications and Patient Education.
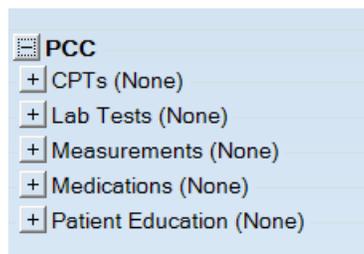
Figure 3-58: PCC Filter

3.10.2.1 CPTs Filter

Use the CPTs group box to filter the population by CPTs. This can be done by date range or for patients who did not have CPTs during the selected range.

Figure 3-59: **CPTs** filter

The Range group box operates like the Range group box on Lab Tests. Section 3.8.2.2 provides information about that group box.

After populating the date range or the timeframe fields, the bottom part of the group box becomes active.

If the patients did not have certain CPTs during the selected range, select the **Patient(s) did NOT have the following CPT(s) during the selected range** check box.

Use either of the radio buttons to define the CPTs by taxonomy or by name. These operate like those in Lab Tests. Section 3.8.2.2 provides information about these radio buttons.

3.10.2.2 Lab Tests Filter

Use the Lab Test group box to filter the population by lab tests. This can be by date range or for patients who did not have lab tests during the selected range to filter by Taxonomy or by Name. For example, patients with the pregnancy tag who have not had an HIV screening.
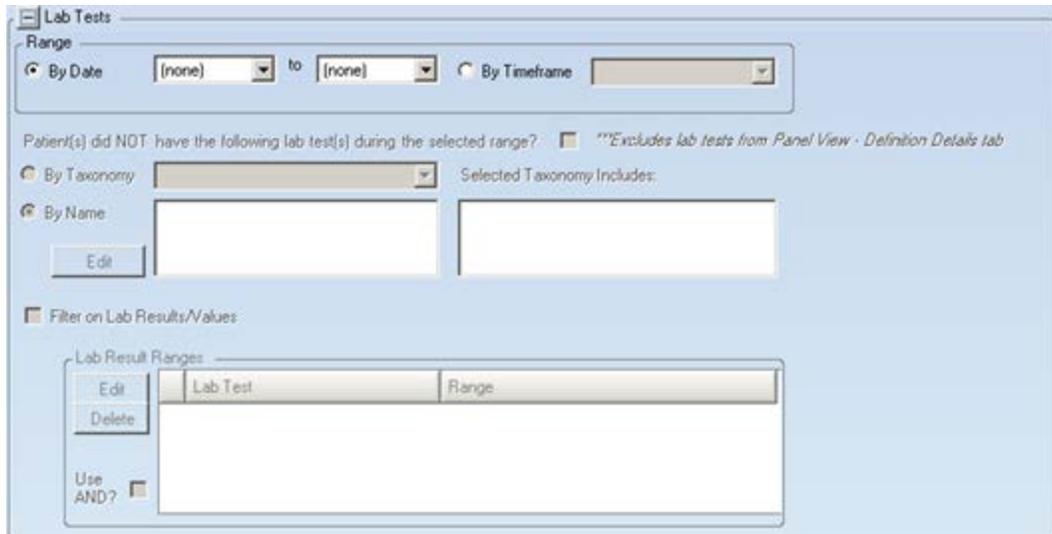
Figure 3-60: **Lab Tests** group box

Range – By Date

Click the **By Date** radio button to enter the date range for the lab tests. For one day only, both the beginning and end dates must be the same.

Range – By Timeframe

If **By Timeframe** is selected, the panel could be set to automatically Auto Repopulate. Section 6.0 provides information about this function.

Select the Timeframe radio button to select the time frame associated with the date range (cannot be blank). Valid choices are on the drop-down list.

After populating the date range or the timeframe, the bottom part of the group box becomes active.
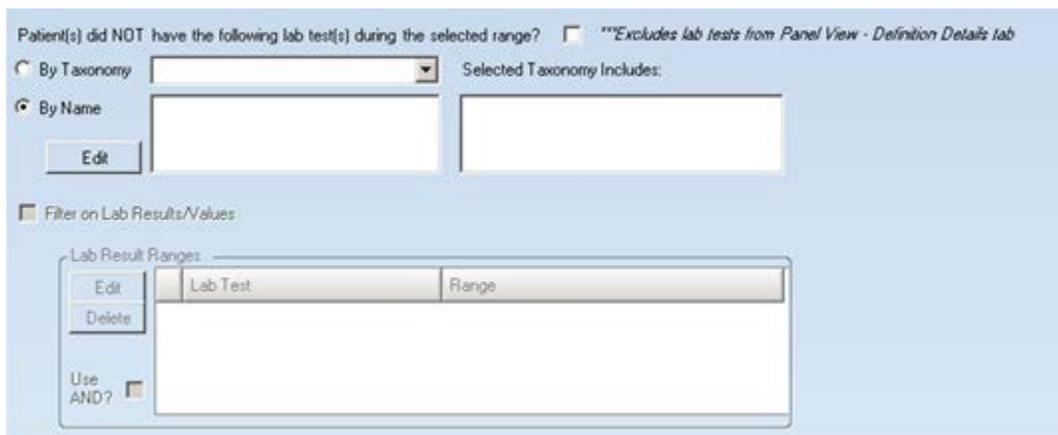
Figure 3-61: Bottom part of Lab Tests group box

If the patients did not have the following lab tests during the selected range, select the "Patient(s) did NOT have the following lab test(s) during the selected range" check box. Use either of the radio buttons to define by taxonomy or by name. For example, patients with an asthma tag who do not have a controller medication.

By Taxonomy

To define patient without lab test by taxonomy, select the "By Taxonomy" radio button and then select an option from the By Taxonomy drop-down list. If the selected Taxonomy includes certain items, those items display in the field below the "Selected Taxonomy Includes" label.

Selecting a taxonomy activates the "Filter on Lab Results/Values area.

By Name

To define the patients without lab tests by name, select the **By Name** radio button and then click the **Edit** button to access the **Add/Remove Lab Tests** dialog.
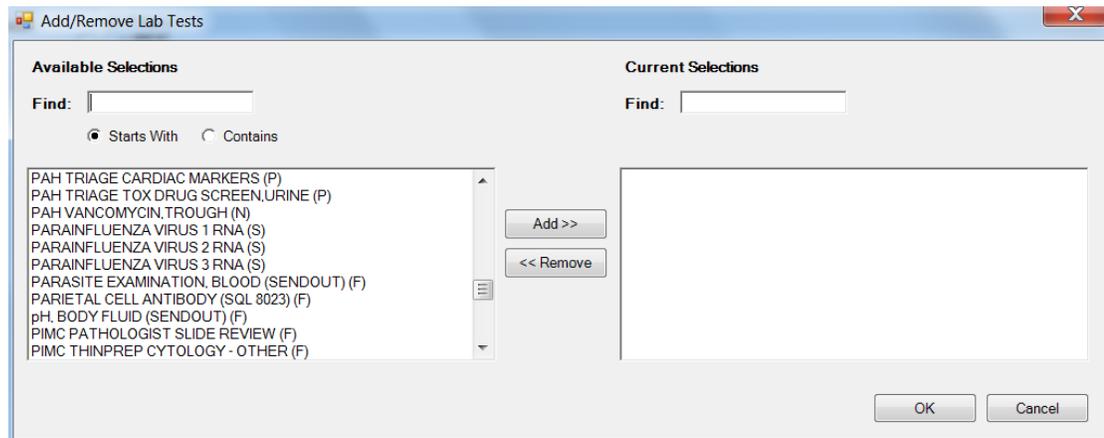

Figure 3-62: Sample **Add/Remove Lab Tests** dialog

When the Add/Remove dialog is complete, click **OK** and the items in the **Current Selection** field will populate the **By Name** field. (Otherwise, click **Cancel**.) At the end of each lab test name is the definition of the result for that lab test in parentheses. P means it is a defined as a Panel of lab tests and panels do not have typically have results. N means Numeric and numeric results can be further filtered. S means Set of Codes and those type of results can also be further filtered. F means Free Text and free text cannot be searched.

After selecting the **By Name** lab tests with a lab test of (N) or (S), the Filter on Lab Results/Values becomes active.

Filter on Lab Results/Values

Select the Filter on Results/Value check box to identify the lab result ranges to be used in the filter. The application populates the appropriate taxonomy name(s).
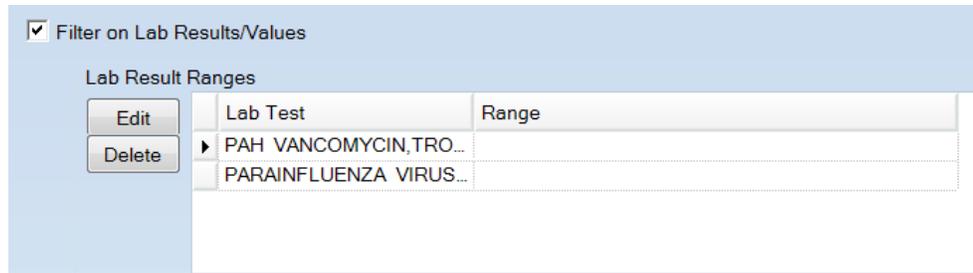
Figure 3-63: Sample Filter on Lab Results/Values group box

Select the **Use AND?** check box when there are multiple Lab Tests. The "And" option searches for patients who have ALL of the lab tests.

Any taxonomy listed can be edited or deleted.

Edit

Select a name under the Lab Test column to edit and then click **Edit**. The application displays the **Lab Result Detail** dialog.
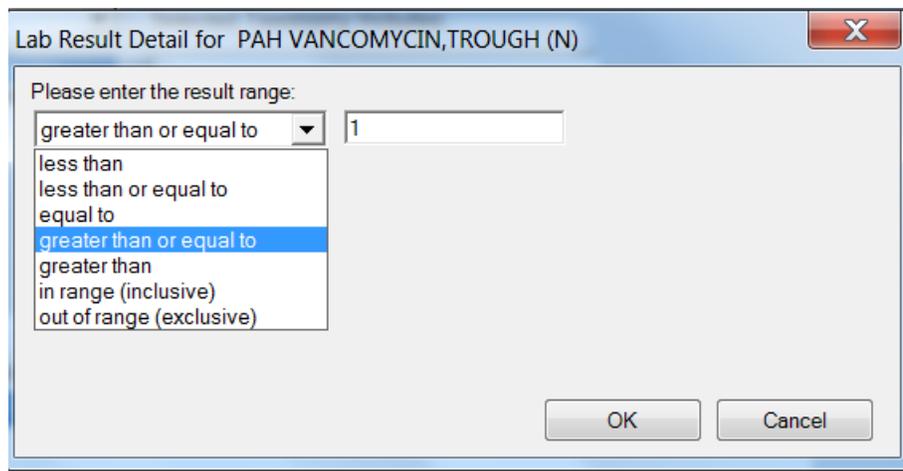

Figure 3-64: Sample Numeric **Lab Results Detail** dialog

Select an option from the drop-down list and then populate the second field with the result number. After the dialog is complete, click **OK** and the Range value is populated on the Lab Result Ranges group box. (Otherwise, click **Cancel**.)
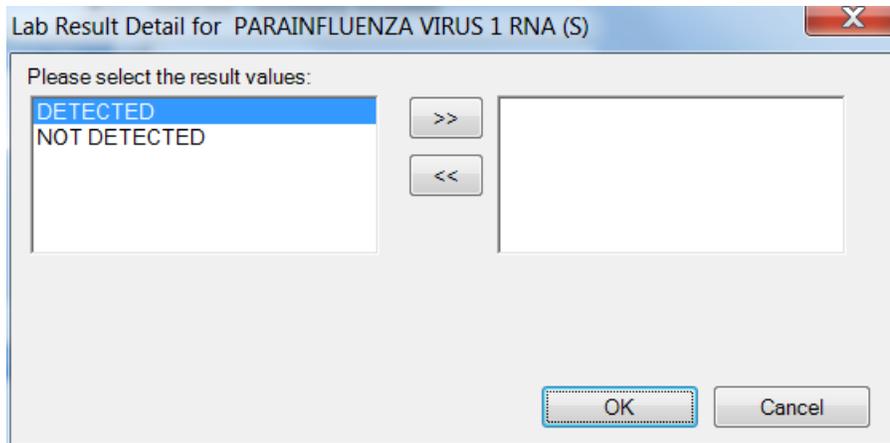
Figure 3-65: Sample Set of Codes **Lab Results Detail** dialog

Delete

Use the Delete function to delete a selected row in the grid. Select the row to delete and then click **Delete** to access the Delete Row information message that states: Choose Yes to delete the row or No to exit. Click **Yes** to delete the row (otherwise, click **No**.)

3.10.2.3 Measurements Filter

Use the Measurements group box to filter by measurement (vital signs).
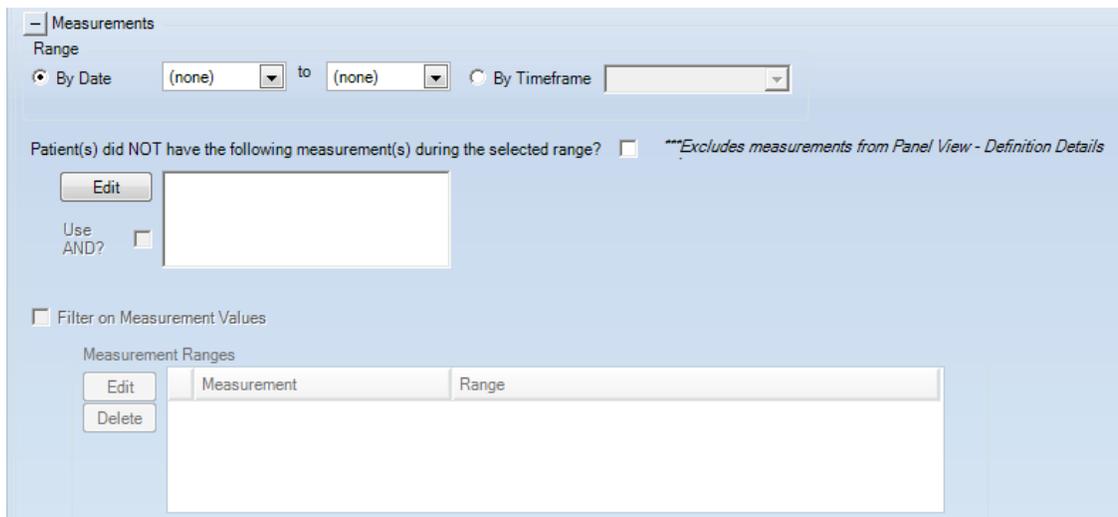
Figure 3-66: Sample **Measurements** group box

Range – By Date

Click the **By Date** radio button where the date range for the measurements is entered. If you want one day only, both the beginning and end dates must be the same.

Range – By Timeframe

If this option is selected, the panel should be set to automatically Auto Repopulate at first login. Section 6.0 provides information about this function.

Select the Timeframe radio button to select the time frame associated with the date range (cannot be blank). Valid choices are on the drop-down list.

After populating the date range or the timeframe, the bottom part of the group box becomes active.

Figure 3-67: Bottom part of the **Measurements** group box

If the patients did not have the following measurements during the selected range, select the **Patient(s) did NOT have the following measurement(s) during the selected range** check box.

There are no taxonomies for Measurements so the only selection is by individual measurement types. Click the **Edit** button to get the list of measurements.

Figure 3-68: Measurement list

At the end of each measurement name is the definition of the result for that measurement in parentheses. N means Numeric and numeric results can be further filtered. S means Set of Codes and those type of results can also be further filtered. F means Free Text and free text cannot be searched.

After selecting any measurement with (N) or (S), the Filter on Measurement Values section becomes active.

Filter on MeasurementValues

Select the Filter on Measurements Value check box to identify the measurements to be used in the filter.

Figure 3-69: Filter on Measurement Values

Select the **Use AND?** check box when there are multiple measurements. The "And" option searches for patients who have ALL of the measurements. For example, not selecting the **Use AND?** returns a result of all patients with Presentation OR Station (Pregnancy). Checking **Use AND?** returns a result of all patients with both a Presentation measurement AND a Station (Pregnancy) measurement.

Edit

Select a name under the Measurement column to edit and then click **Edit**. The application displays the **Lab Result Detail** dialog.
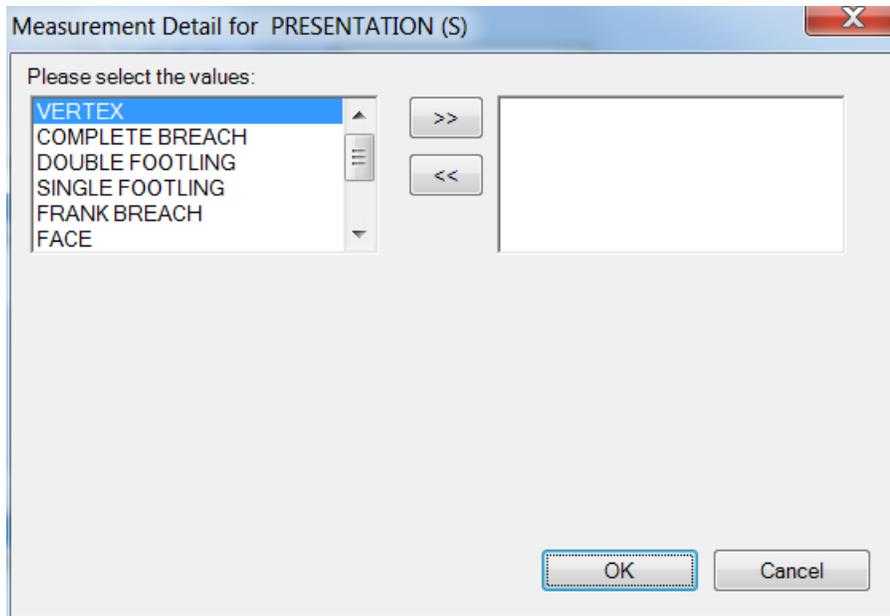
Figure 3-70: Detail on a Set of Codes Measurement
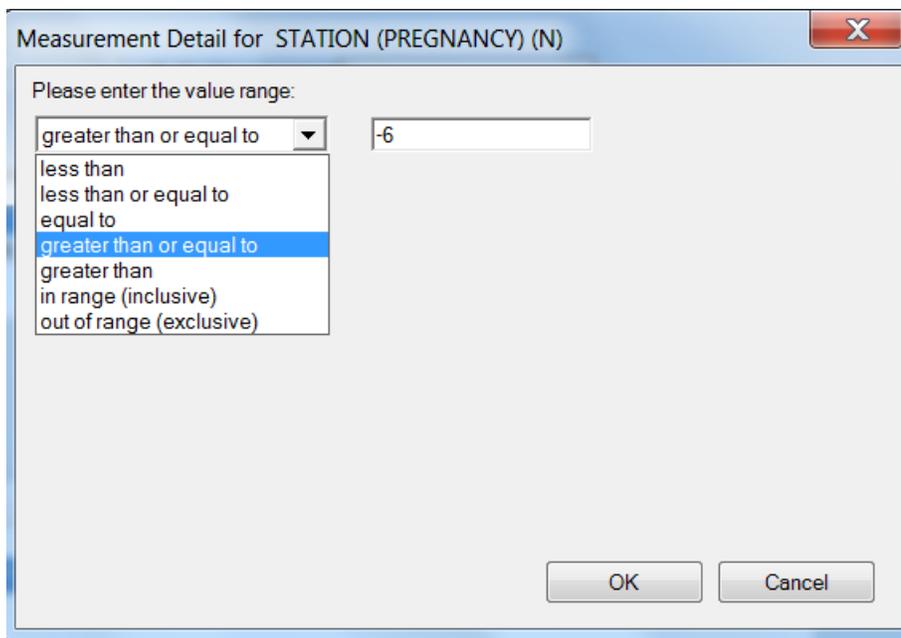
Figure 3-71: Detail on a Numeric Measurement

Delete

Use the Delete function to delete a selected row in the grid. Select the row to delete and then click **Delete** to access the Delete Row information message that states: Choose Yes to delete the row or No to exit. Click **Yes** to delete the row (otherwise, click **No**.)

3.10.2.4 Medications Filter

Use the Medications group box to filter by medications.

Figure 3-472: Sample **Medications** group box

Select any of the check boxes at the top and this will cause all the remaining fields to become in active.

No Documented Medications

Select this check box if the patient's medications were not documented. This action causes the "No Active Medications" check box to become inactive but the Medication List Not Reviewed stays active.

No Active Medications

Select this check box if the patient has no active medications. This action causes the "No Documented Medications" check box to become inactive but the Medication List Not Reviewed stays active.

Medication List Not Reviewed

Select this check box if the patient's medication list has not been reviewed.

The Range group box operates like the Lab Test group box. Section 3.10.2.2 provides information about the Lab Test group box.

After populating the date range or the timeframe, the bottom part of the group box becomes active.

If the patient did not have the particular medications during the selected range, select the "Patient(s) did NOT have the following medications during the selected range" check box.

Use either of the radio buttons to define the medications by taxonomy or by name. These operate like those in Lab Tests. Section 3.8.2.2 provides information about these radio buttons.

3.10.2.5 Patient Education Filter

Use the Patient Education group box to filter by patient education given to the patients.

Figure 3-73: Sample **Patient Education** group box

The Range group box operates the Range group box for Lab Tests. Section 3.10.2.2 provides information about this group box.

After populating the date range or the timeframe, the bottom part of the group box becomes active.

If the patients did not attend patient education classes during the selected range, select the "Patient(s) did NOT attend the following education classes during the selected range" check box.

Figure 3-74: Lower group box for Patient Education filter

By Name

To define patients not attending patient education classes by name, select the **By Name** radio button.

Figure 3-75: By Name group box

Click **Edit** to access the **Add/Remove Pat Ed** dialog.
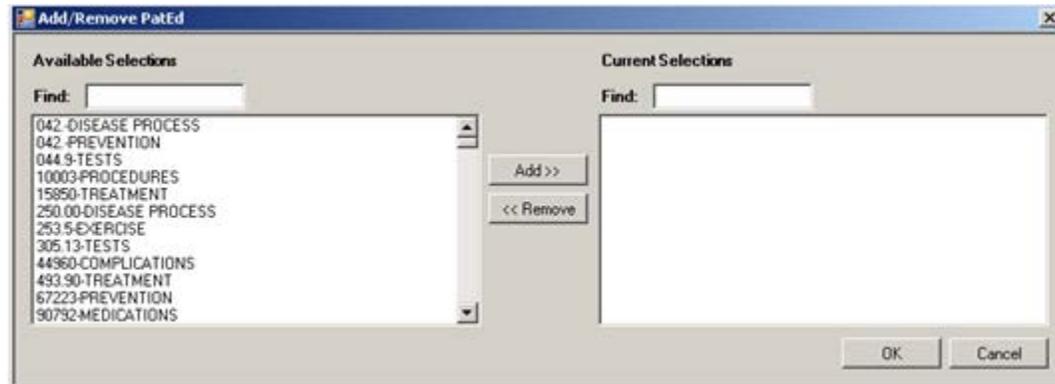
Figure 3-76: Sample **Add/Remove Pat Ed** dialog

When the Add/Remove dialog is complete, click **OK** and the items in the Current Selections group box will populate the field by the Edit button for By Name. (Otherwise, click **Cancel**.)

Select the **Use AND?** check box when there are multiple patient education classes. The "And" option searches for patients who have ALL of the classes.

The 'By EHR Pick List', 'By Topic', and 'By Taxonomy' radio buttons all operate in the same manner. Below is an example using the EHR pick list.

By EHR Pick List

To define patients not attending patient education classes by EHR Pick List, select the **By EHR Pick List** radio button.

Figure 3-77: **By EHR Pick List** radio button

Select an option from the drop-down list. The particular selection also populates the "Selection Includes" field.
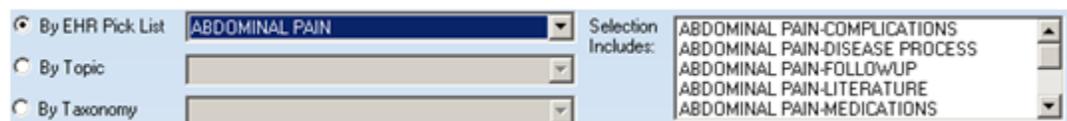
Figure 3-78: Populated By EHR Pick List

3.10.3   Problems Filter

Use the Problem group box to filter the population by patient problems.

Figure 3-79: Sample **Problem** group box

No Documented Problems

Select this check box if the patient's problem list is not documented. This action causes the **No Active Problems** check box to become inactive but the Problem List Not Reviewed stays active.

No Active Problems

Select this check box if the patient has no active problems. This action causes the "No Documented Problems" check box to become inactive but the Problem List Not Reviewed stays active.

Problem List Not Reviewed in Last 365 Days

Select this check box if the patient's problem list has not been reviewed in the last 365 days.

Range

The Range group box operates like the Lab Test group box. Section 3.10.2.2 provides information about the Lab Test group box.

After populating the By Date or By Timeframe option, the bottom part of the group box becomes active.

Figure 3-80: Lower part of the group box

Use either of the radio buttons to define the problems by taxonomy or by name. These operate like those in Lab Tests group box. Section 3.8.2.2 provides information about these radio buttons.

Status

After using either the By Taxonomy or By Name radio button the Status field becomes active. This allows the user to filter the patient problems by statuses. Click **Edit** to access the **Add/Remove Problem Statuses** dialog.
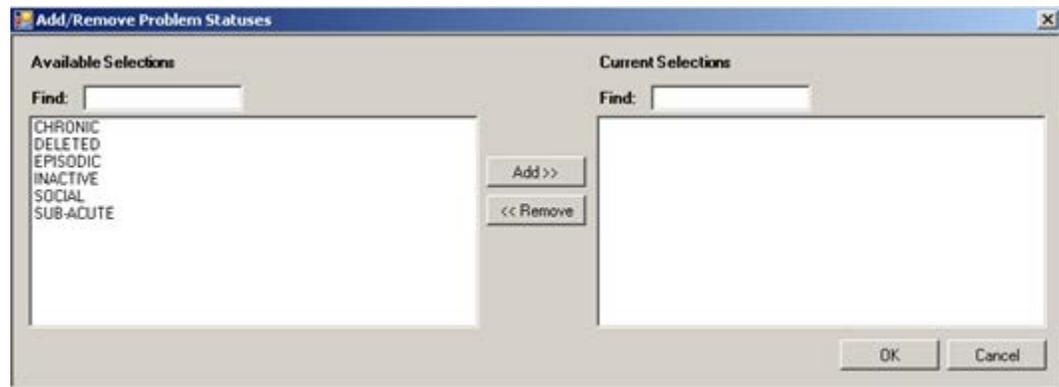

Figure 3-81: Add/Remove Problem Statuses dialog

When the Add/Remove dialog is complete, click **OK** and the items in the Current Selections group box populate the field by the Edit button for Status.

3.10.4   POV Filter

Use the POV group box to filter the population by patient POV (purpose of visit).
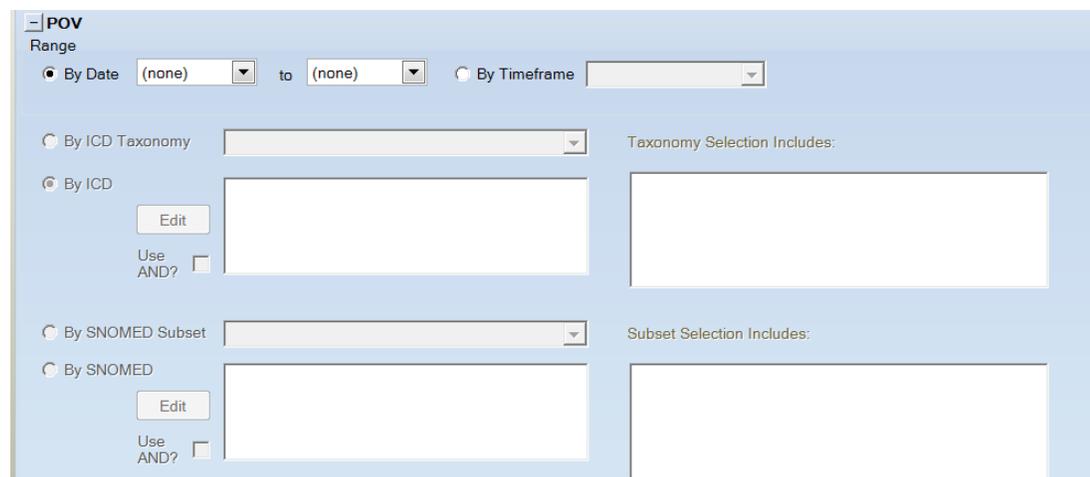
Figure 3-82: Sample **POV** group box

Range

The Range group box operates like the Lab Test group box. Section 3.10.2.2 provides information about the Lab Test group box.

After populating the By Date or By Timeframe option, the bottom part of the group box becomes active.

Figure 3-83: Lower part of the group box

By ICD Taxonomy

To define patients by taxonomy, select the **By Taxonomy** radio button and then select an option from the By Taxonomy drop-down list. If the selected Taxonomy includes certain items, those items display in the field below the "Selected Taxonomy Includes" label. With a taxonomy selection, it is more difficult to determine how many patients might be found.

Figure 3-84: ICD Taxonomy selection

By ICD

To find the patients with a specific POV, select the **By ICD** radio button and then click the **Edit** button to access the **Add/Remove POV ICDs** dialog.
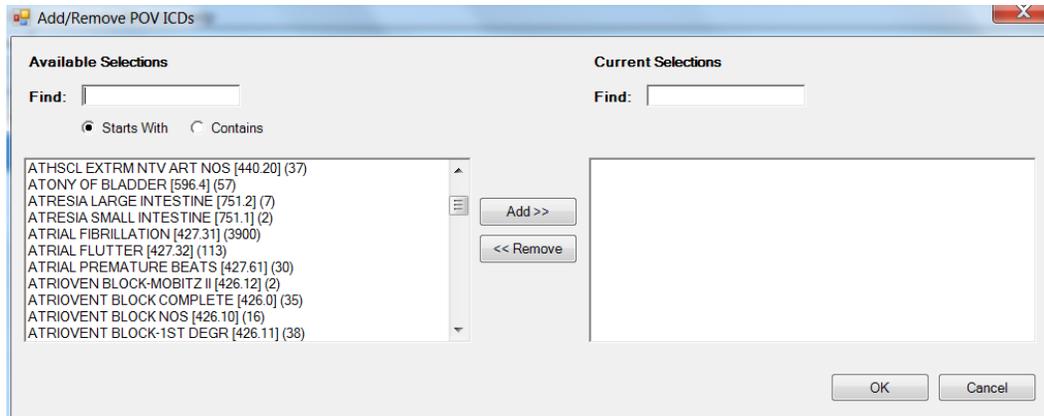
Figure 3-85: By ICD selection

The POV ICDs selection gives the actual ICD code in brackets, e.g. [427.31] and a count of patients with that ICD in parentheses, e.g. (3900)

By SNOMED Subset

Since the implementation of the Integrated Problem List (IPL), SNOMED codes have become a part of RPMS. New functionality to select "By SNOMED Subset" and by SNOMED has been added to the POV search.

SNOMED subsets are very similar to taxonomies. Subsets contain a list of SNOMED IDs associated with a particular topic and can be used for searches in the same manner as taxonomies.
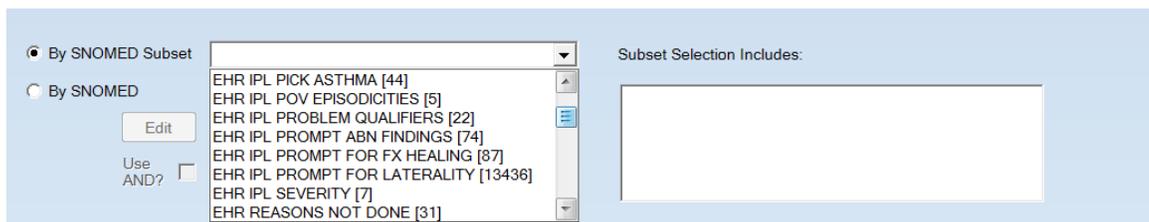
Figure 3-86: By SNOMED subset

Some subsets are very large and should be used sparingly. The number of SNOMED IDs contained in a subset can be found in the brackets after the subset name.

By SNOMED

To find the patients with a specific POV SNOMED, select the **By SNOMED** radio button and then click the **Edit** button to access the **Add/Remove POV SNOMEDs** dialog.
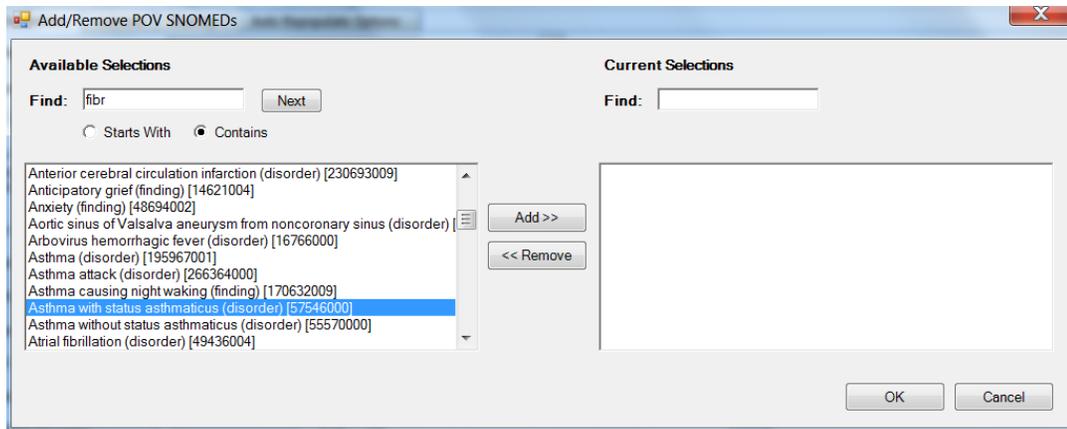
Figure 3-87: By SNOMED selection

3.10.5   Reminders Filter

Use the Reminder group box to filter the population by patient reminders.
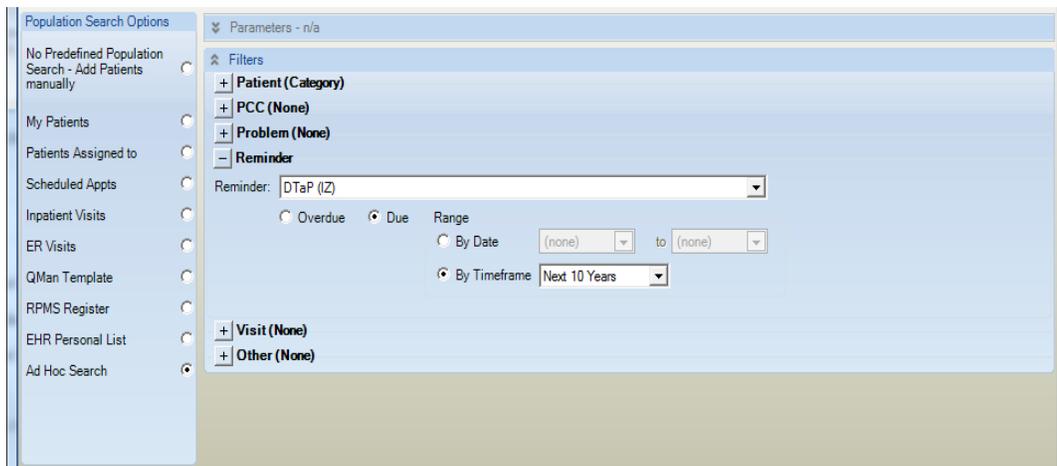
Figure 3-88: Sample Reminders filters

Reminder

Select a reminder from the drop-down list to restrict the search to a particular reminder.
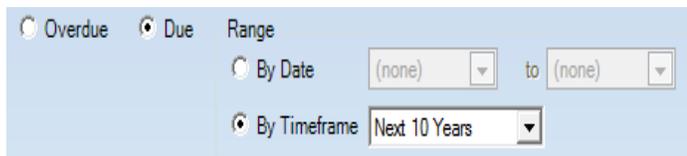
Figure 3-89: **Overdue/Due** radio buttons and **Range** group box

Overdue/Due

Determine the status of the reminder by selecting either the Due or Overdue radio button. Selecting Due will activate the Range group box controls

Range

By Date

Select the By Date radio button to enter the date range for the minimum number of visits with the provider. If you want one day only, both the beginning and ending dates must be the same.

By Timeframe

If this option is selected, the panel should be set to automatically Auto Repopulate at first login (refer to Auto Repopulate Options Tab for more information).

Select the By Timeframe radio button to select the time frame associated with the date range (cannot be blank). Valid choices are on the drop-down list.

3.10.6   Visit Filter

The Visit group box consists of defining the visit filter by Visit Range and by Visit Detail.

Figure 3-90: **Visit** filter

Visit Range

Use the Visit range option to filter the patients to particular visits by date range or by timeframe.

Figure 3-91: Sample **Visit Range** group box

Enter a filter by using the fields in the Visit group box for either BY DATE or BY TIMEFRAME (not both).

By Date

Select the By Date radio button where you enter the date range for the visit filter. If you want one day only, both the beginning and end dates must be the same. The intent of this feature is to define a panel once and have it auto populate every day without having to manually change the date range.

By Timeframe

Use this feature to define a panel once and have it auto populate every day without having to manually change the date range. After clicking the **By Timeframe** radio button, select an option from the drop-down list.

Visit Detail Group Box

After populating either radio button in the Visit Range group box, the bottom part of the Visit filter becomes active.
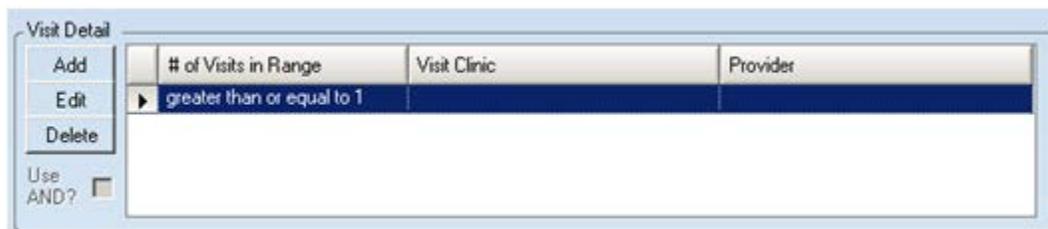
Figure 3-92: Sample **Visit Detail** group box

Use this group box to create a panel based on the number of visits and/or to a specific provider or clinic.

Use AND?

Check this checkbox to have ALL of the visit details used in the search.

Add

Click the **Add** button to add a row to the Visit Detail grid. This creates a panel based on a specific provider. After clicking **Add**, access to the **Visit Detail** dialog will be dispalyed.
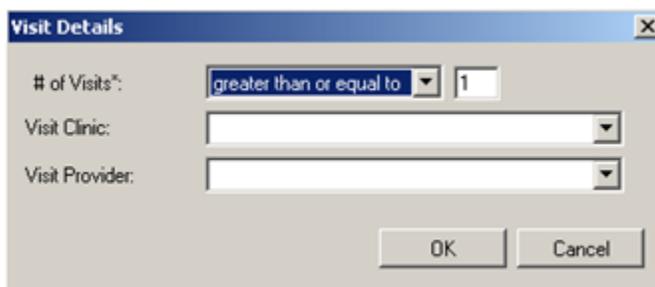
Figure 3-93: **Visit Details** dialog

# of Visits

Specify the additional filter for the number of visits within the date range. Populate this field by selecting an option from the drop-down list (required). The modifier options (in the first field) are the same as those of age (less than, less than or equal to, equal to, greater than, greater than or equal to, in range, out of range). The purpose of the second field is to allow the user to create panels of patients who have had so many visits within a user-defined timeframe. The default value is 1. Use any value 1 - 99.

Visit Clinic

Select an option from the drop-down list to restrict the visit to a particular visit clinic.

Visit Provider

Select an option from the drop-down list to restrict the visit to a particular provider.

When the **Visit Details** dialog is complete, click **OK** and the application updates the **Visit Detail** group box. (Otherwise, click **Cancel**.)

Edit

Select a row in the grid and click **Edit** to access the **Visit Details** dialog to change any data on the dialog.

Delete

Select a row in the grid and click **Delete** to access the Delete Row information message that states: Choose Yes to delete the row or No to exit. Click **Yes** to delete the row from the grid (otherwise, click **No**).

3.10.7   Other Filter

A panel can be created based on other panel definitions. This restricts the search to those patients who are members of a panel (one or more panels can be selected).
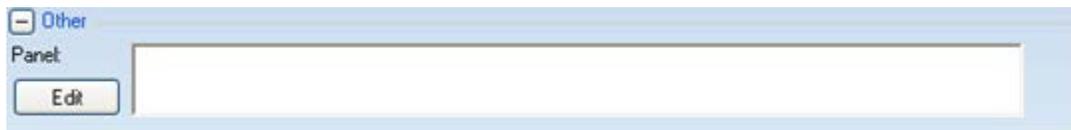
Figure 3-94: Sample **Other** group box

To search by Panels, click **Edit** to access the **Add/Remove Panels** dialog.
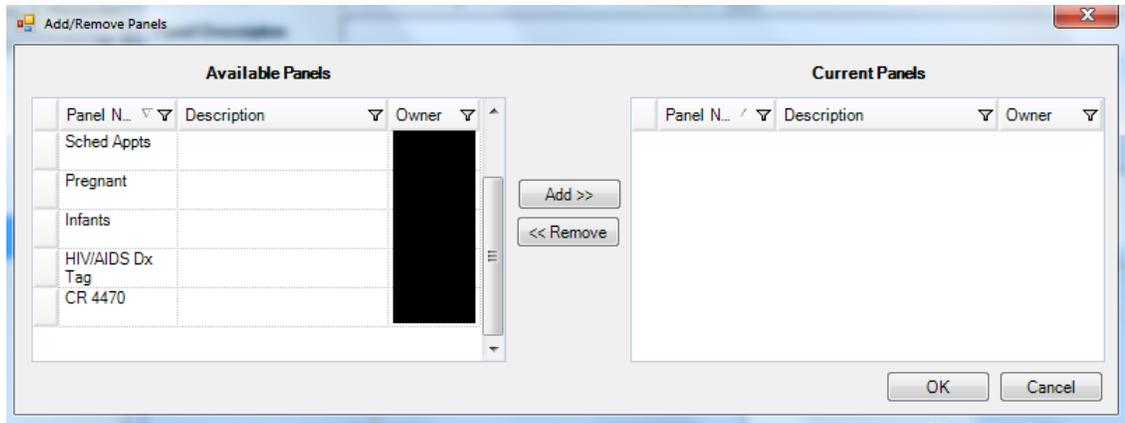
Figure 3-95: **Add/Remove Panels** dialog

When the Add/Remove dialog is complete, click **OK** and the panels in the Current Panels area populate the Panel field in the Other group box. (Otherwise, click **Cancel**.)

4.0   Layouts Tab

Use the Layouts tab to customize a template for defining the Patient List, Reminders, Natl Measures, Asthma, HIV/AIDS, Events, Tracked Events, and Follow-up Events layouts for patient panels. In addition, they can all be reverted back to use the system default layout for any of them.
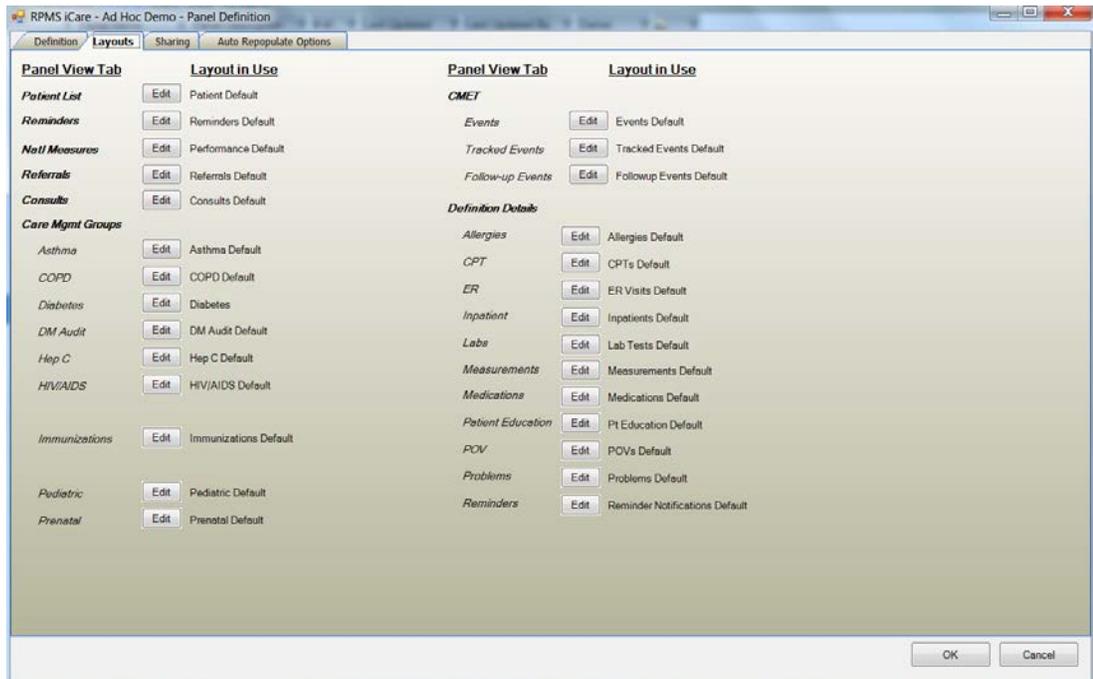
Figure 4-1: **Layouts** tab

Each button functions similarly. The Edit Patient List Layout will be used as an example.

Each layout determines the columns for the particular topic. These layouts will have the following areas: Available Columns (all column names will be listed), Display Columns (these are the columns to display), Available Sorts (the sorts that are available for the column), and the Sort Columns (the columns to sort by).

4.1   Panel Definition Layouts Functionality

Click the **Edit** button by the Patient List on the Layouts tab, for the **Patient List Layout** dialog. (This will be the example used in this section.)
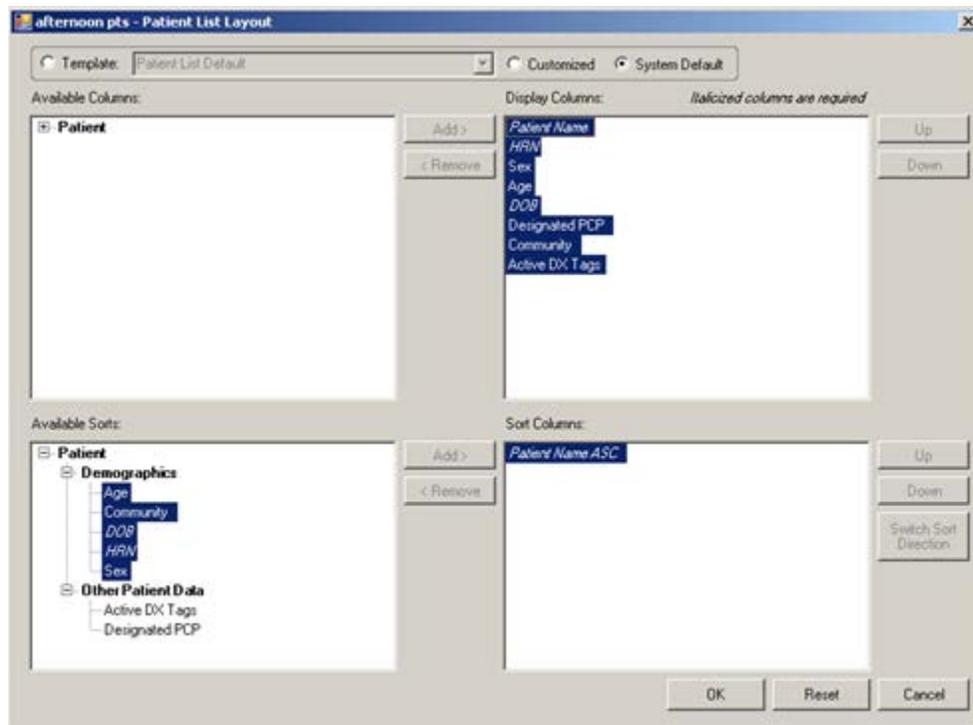
Figure 4-2: Sample **Patient List Layout**

4.2   Template Group Box

The application displays the template for this particular panel.
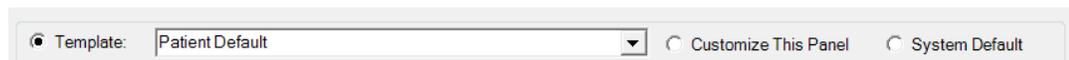
Figure 4-3: Template group box for Panel Definition

- If the System Default radio button is selected, then the application reverts back to the system default columns released with iCare. In this case, the Add and Remove buttons are not active (and you cannot change anything) on the Patient List Layout dialog. Change the column layout for the default template by using the Layouts tab on the User Preferences dialog.

- If the Customized radio button is selected, the application allows the changing of the columns (the Add and Remove buttons become active, for example). Anything customized in the layout dialog can only be used for this panel.

- Additional Templates can be updated in Manage Templates. Select the appropriate Template from the name drop-down list.

4.3   Display and Available Columns

Use the Display Columns to determine what columns to display for the particular window or tab.
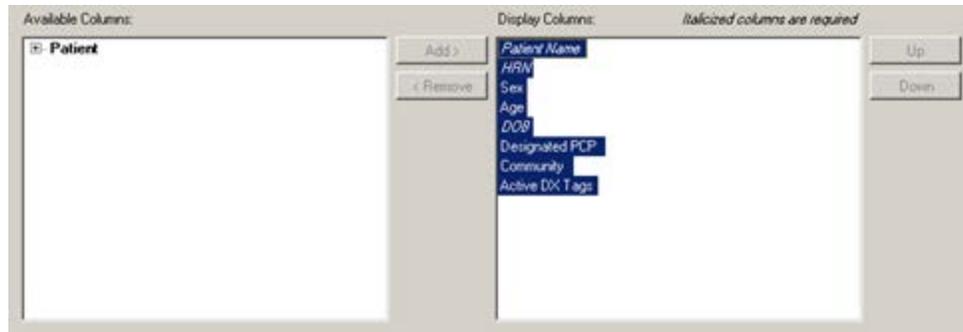
Figure 4-4: Sample **Display** and **Available** columns

The listing in the Display Columns area shows the columns that will be displayed for the panel population. The column names in italics are required and cannot be removed.

To move a Column name in the Available Columns area to the list in the Display Columns area, highlight the column name in the Available Columns area and click **Add**. This moves the column name from the left panel to right panel.

Likewise, a column name can be removed by highlighting the column name (in the Display Columns area) and clicking **Remove**. This moves the column name from the right panel to the left panel.

> **Note**:   Column names in italics cannot be removeed.

Determine the order the columns display in the Display Columns area by using the Up and Down buttons. Highlight a column name and click the appropriate button. The button may need to be clicked more than once to move it to the desired location.

4.4   Columns to Sort

Sorting a column means the items are arranged in the column in alpha-numeric order.
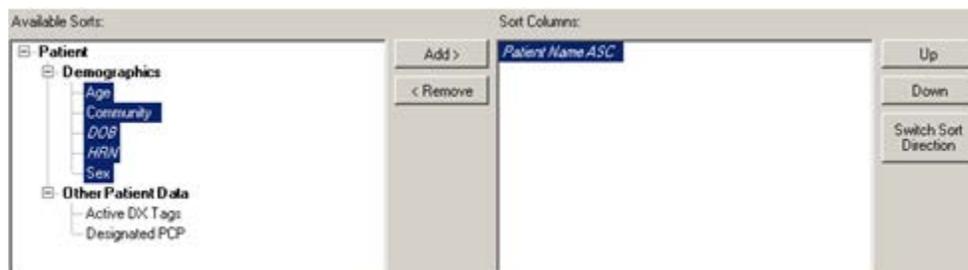

Figure 4-5: Sample **Available Sorts** and **Sort Columns** area

To move a highlighted Column name in the Available Sorts area to the list in the Sort Columns area, click **Add**. This moves the column name from the left panel to right panel.

Likewise, a highlighted column can be removed in the Sort Columns area and move it to the Available Sorts area and clicking **Remove**. This moves the column name from the right panel to the left panel.

> **Note**:   Column names in italics cannot be removed.

4.4.1   Column Sort Order

Use the Sort Columns area to determine what columns are to be sorted for the particular window or tab.

Determine which order the columns are sorted in the Sort Columns area by using the Up and Down buttons. Highlight a column name and click the appropriate button. The button may need to be clicked more than once to move it to the desired location.For example, if columns Gender, Patient Name, and Diagnosis Tags are in the right column, the Gender sort is applied first then the Patient Name and then the Diagnosis Tags.

4.4.2   Switch Sort Direction

The names of columns in the Sort Columns area show "ASC" appended to the name, for example Patient Name ASC. The sort order for a selected column can be switched by clicking the **Switch Sort Direction** button. In the example, the name changes to Patient Name DESC. The "switch sort direction" action can be performed on more than one column.

5.0   Sharing Tab

A panel can be shared with other RPMS users. Select the Sharing tab on the Panel Definition window to perform this action. One or more users can be selected to share a panel. Different access rights can be assigned to each user.

When a panel is shared, the shared user will receive a notification about the shared panel.

The Sharing tab will not be available if the Share button is inactive on the Panel List view for the patient list.
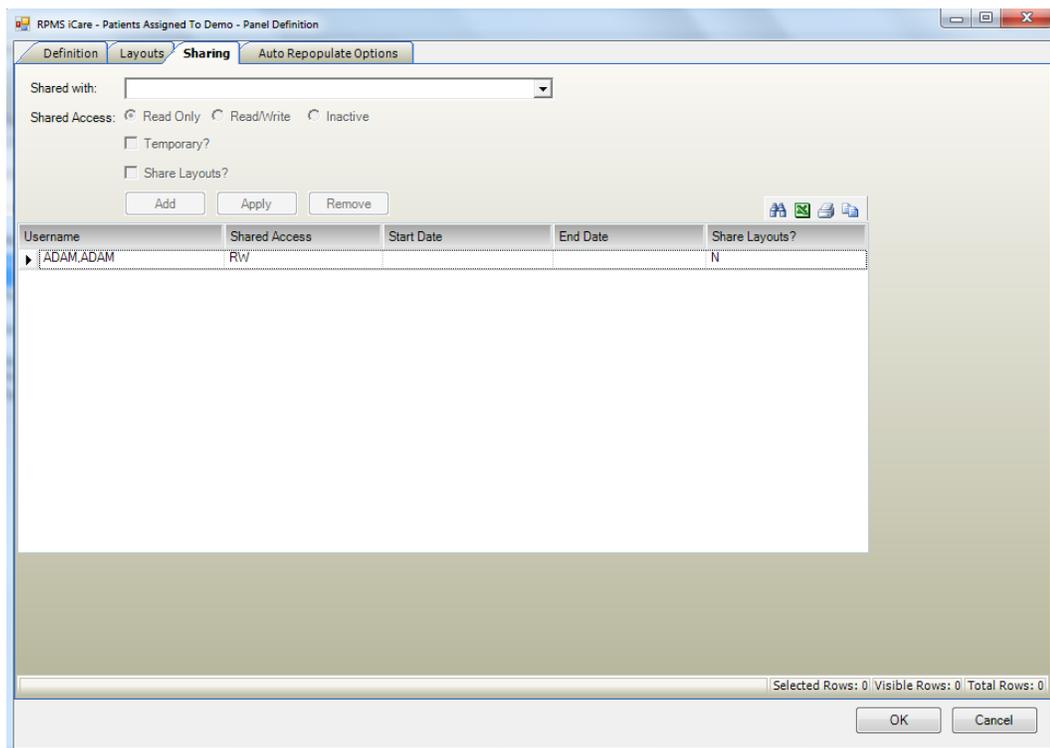

Figure 5-1: Sample **Sharing** tab

5.1   Fields on Sharing Tab

The following information describes the fields on the Sharing tab.

Shared with: The selection from the drop-down list is the person to whom this panel will be shared with.

Shared Access: The radio buttons become active after the "Shared with" field has been populated.

Figure 5-2: Sample Shared With and Access Rights

- **Read Only**: use this radio button to allow the person sharing this panel to only view this panel. The shared user can change the layout of a panel but nothing else.

- **Read/Write**: use this radio button to allow the person sharing this panel to view and change the panel (for example, add or delete patients).

- **Inactive**: use this radio button to assign the person sharing the panel inactive access rights.

Temporary: Select the Temporary check box to display a date range for the temporary status of the shared user. The access rights will only apply during the specified data range and will automatically expire once the specified date range has passed.

Figure 5-3: Sample Temporary status

A date range must be selected when using the Temporary status.

Shared Layouts?: Select the **Shared Layouts?** checkbox if the layouts of this panel will be moved to the shared user. The shared user will see the same layout modifications made by the creator as customized views

- This causes the Shared Layouts cell (in the grid) to contain Y (for yes).

- The shared user will continue to be able to make modifications to the layouts of that shared panel. These modifications will not affect the creator's layouts since they are the shared user's customized view

5.2   Grid on Sharing Tab

The grid shows a history of the users (that have not been removed/deleted) with whom this panel has been shared with.
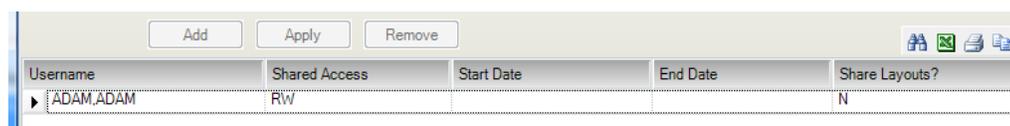

Figure 5-4: Shared user information in lower grid

Add: Click this button to add the information in the Shared with, Shared Access, Temporary, and Shared Layouts fields to the grid.

Apply: Click this button to change the Shared Access and/or Temporary status of a selected user in the grid. The shared access rights can be changed; for example, from Read Only to Read/Write.

Example: Highlight a user in the grid. The current access right (Read Only, Red/Write, Inactive) shows in the Shared Access area. Change the selected user's Read Only access right to Read/Write. Select the Read/Write radio button. Then click the **Apply** button to reflect the changes in the grid.

Remove: Highlight one or more names in the grid and click this button to remove the name(s) from the grid. It might be more useful to inactivate the user instead of removing the user. After clicking the **Remove** button, the "Delete Row" information message displays, asking if you want to delete the selected names. Click **Yes** to delete (otherwise, click **No**).

6.0   Auto Repopulate Options Tab

Use the Auto Repopulate Options if you want the contents of your panel to be dynamic, i.e., *automatically* refreshed. This is a good option to use if you have defined panels by ages or by visit dates; patients will be automatically added or deleted based on the search logic.

> **Note**:   Manually repopulate a panel at any time by selecting the panel from the Panel List and clicking the **Repopulate** button.
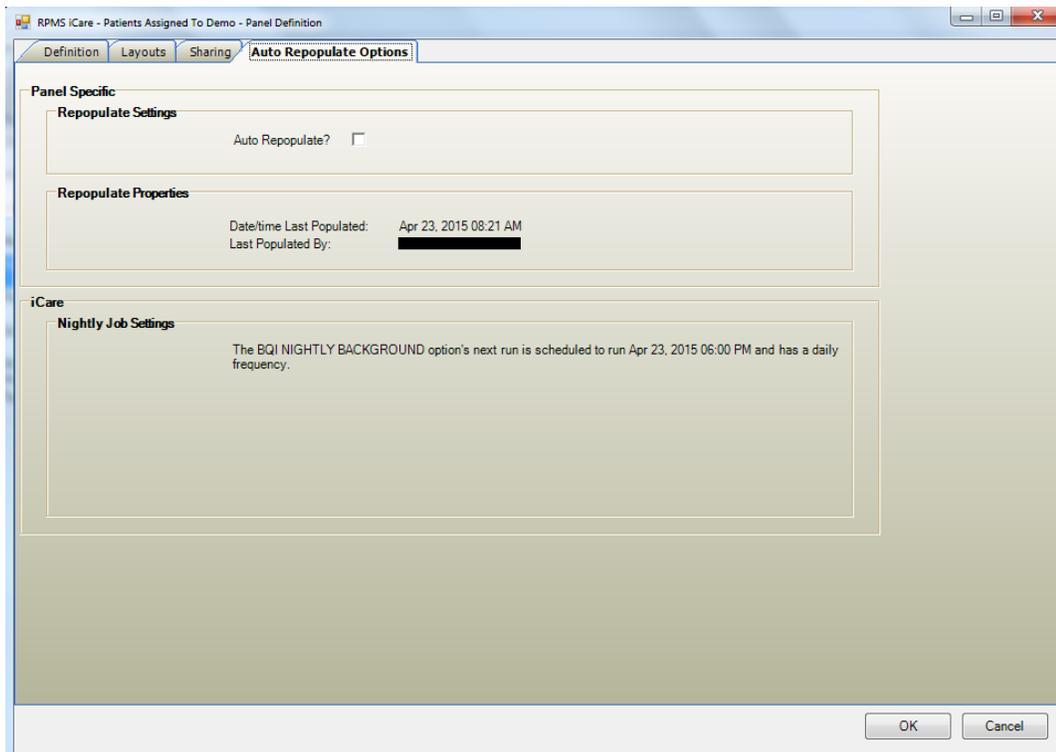

Figure 6-1: **Auto Repopulate Options** tab

The only group box that is active on this tab is the Repopulate Settings. (This option is not active if the panel definition was based on No Predefined Population Search.)
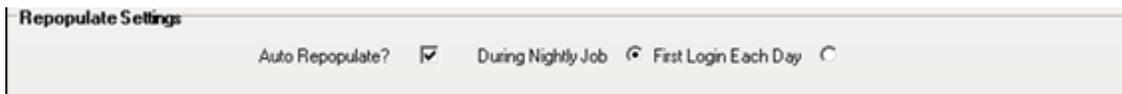

Figure 6-2: **Repopulate Settings** group box

Check the **Auto Repopulate** check box to specify that you want the panel to automatically refresh the patient list based on the panel's defined search criteria.

Select when the panel should be re-populated, either During Nightly Job or First Login Each Day.

> **Note**:   A large panel (over 1,000 records) might take a lot of time
> to repopulate. It is recommended that you use the During
> Nightly Job option for the larger panels.

Also check the Background jobs to make sure that the nightly Panel Autopopulate is
not going over into the work day.

Figure 6-3: **Background Jobs** box

7.0   iCare Features Used by Panel Definition

This section focuses on the iCare features that are used by the Panel Definition. This focus is on those things that influence the functionality of the Panel Definition window.

7.1   User Preferences

The following provides information about the User Preference settings that affect the Panel Definition window.
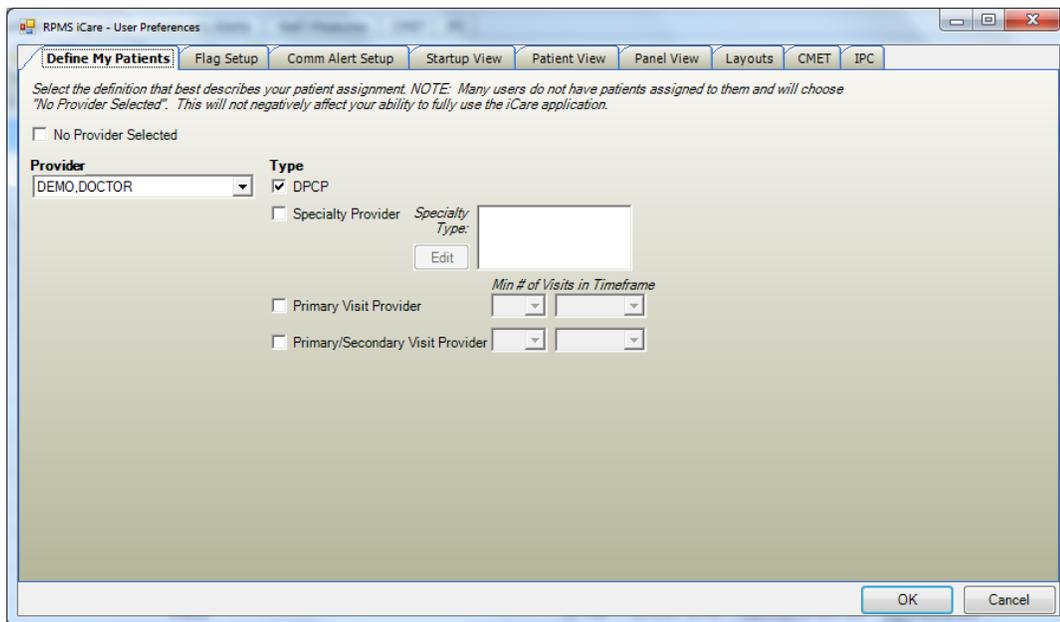
Figure 7-1: Sample **User Preferences** window

After the User Preferences window is complete, click **OK** and the user preferences will be in effect for the operation of the iCare application. (Otherwise, click **Cancel**.)

7.1.1   Define My Patients Tab

"My Patients" is a way to easily identify a group of patients assigned to a person as a provider. Selecting a "My Patients" definition during panel definition will cause iCare to create a default My Patients panel.

Figure 7-2: **Define My Patients** tab

Select the definition that best describes your patient assignment.

> **Note**: Many users do not have patients assigned to them and will choose "No Provider Selected." This will not negatively affect your ability to fully use the iCare application.

You can select your own name (the default) or set up a definition for another provider (surrogate) by selecting the other name.

For example, if your site empanels patients (assigns each patient to a specific primary care provider), you would use the DPCP (Designated Primary Care Provider) provider type to create a core list of patients assigned to you.

If your site does not use the DPCP designation, you might consider "your" patients to be anyone you saw at least twice in the past year as a primary provider.

No Provider Selected

Select the "No Provider Selected" checkbox if you do NOT want to define patients by selecting any provider. If this is the option you use, then the default "My Patients" panel will NOT be created. In this case, the remaining fields will then be inactive. This means iCare will NOT create the default "My Patient" panel. You can later change the User Preferences to a provider and create panels based on "My Patients" definition.

If you plan to defined "My Patient" panel, do the following:

Provider

Select a provider name from the Provider drop-down list. The default name displayed will be the user's name. All RPMS providers are available on the drop-down list.

Type

Click the appropriate checkboxes to select one or more Provider Types from the list.

DPCP (Designated Primary Care Provider): Sites can assign a primary care provider to an individual patient through the Patient file or by using the RPMS Designated Specialty Provider Management (DSPM) application. Selecting the DPCP option will provide a list of patients assigned to you, regardless of when their last visits were.

Specialty Provider: Users are assigned as Specialty Providers to patients as defined in the Designated Specialty Provider Management (BDP) application. Selecting the Specialty Provider option activates the Specialty Type field. Click **Edit** to access the Add/Remove Specialty Provider Types dialog.
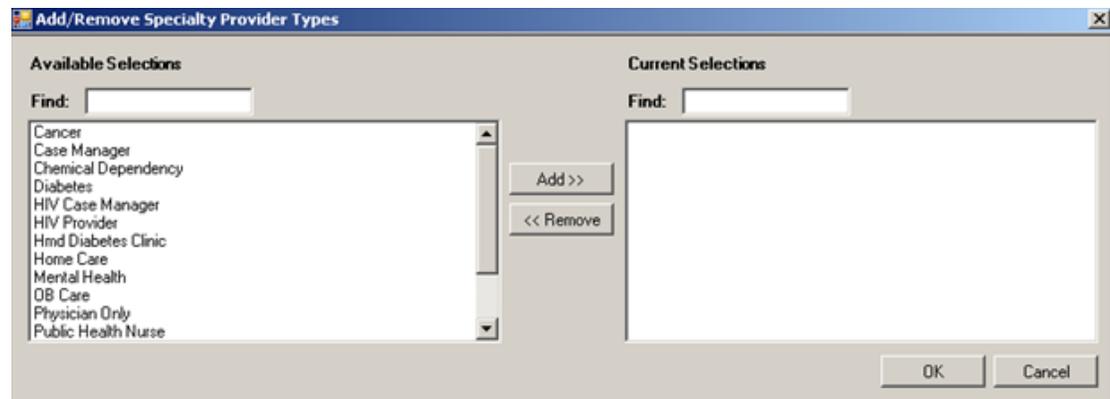
Figure 7-3: Sample **Add/Remove Specialty Provider Types** dialog

When the Add/Remove dialog is complete, click **OK** and the provider types shown in the Current Selections area will populate the Specialty Type field. (Otherwise, click **Cancel**.)

Primary Visit Provider: The provider name documented as the primary provider for a specific patient visit. Selecting this Provider Type also requires you to indicate the number of visits and a timeframe. For example, you might consider "your" patients to be anyone you have seen as a primary provider at least three times in the past two years; you would select 3 visits and 2 years. The default value is twice in the past year.

Primary/Secondary Visit Provider: The provider name documented as either the primary or secondary provider for a specific patient visit. Selecting this Provider Type also requires you to indicate the number of visits and a timeframe. For example, you might consider "your" patients to be anyone you have seen at least three times in the past two years; you would select 3 visits and 2 years. The default value is twice in the past year.

Below are descriptions of Minimum Visits and Timeframes.

Minimum Visits: You can select the minimum number of visits can be selected used in combination with a time frame to define whether a patient "belongs" to a provider, e.g., two (2) visits in the past year. Values are 1 through 9; the default value is 2. The Minimum Visits option is used with Provider Types "Primary Visit" and "Primary/Secondary Visit" only.

Minimum Visit Timeframe: A timeframe can be selected to be used in combination with the minimum number of visits to define whether a patient "belongs" to a provider, e.g., Last 3 months as the timeframe. The Minimum Visit Timeframe option is used with Provider Types "Primary Visit Provider" and "Primary/Secondary Visit Provider" only. Values are: Last 3 months; Last 6 months; Last year; Last 2 years.

7.2   Creating a Community Taxonomy

The Community Taxonomy function can be accessed in the panel definition process, under the Ad Hoc search.
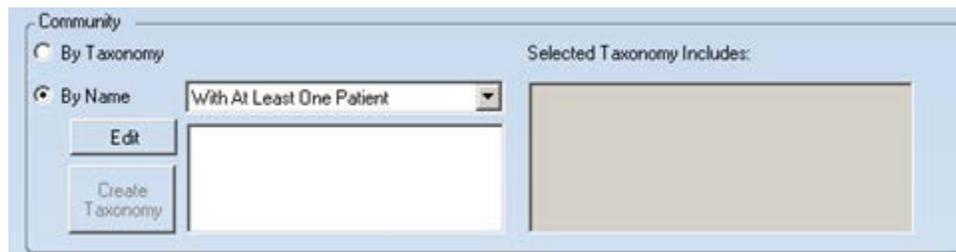
Figure 7-4: Sample **Community** group box using By Name

A taxonomy can be created by selecting the By Name radio button.

Click the **Edit** button to access the **Add/Remove Communities** dialog.
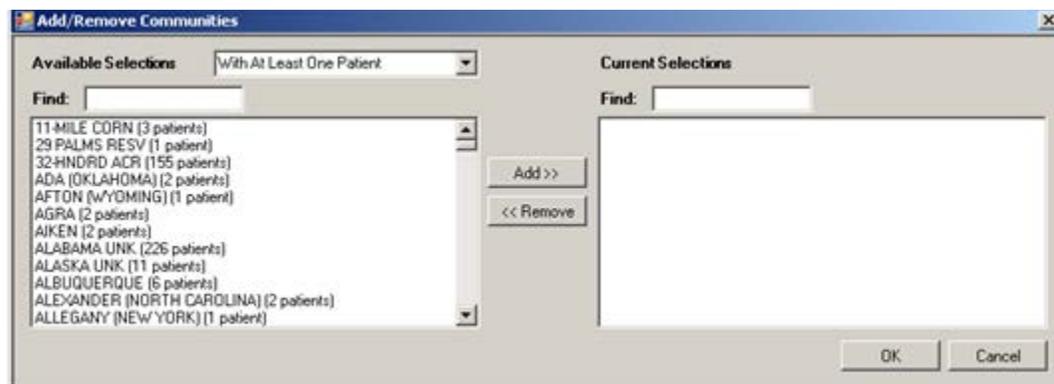
Figure 7-5: Sample **Add/Remove Communities** dialog

Available Selections

Hightlight a community or multiple communities and click **ADD.**

After all the communities are selected, click **OK** (Otherwise, click **Cancel**.)**.** The selected communities will be in the Community box.
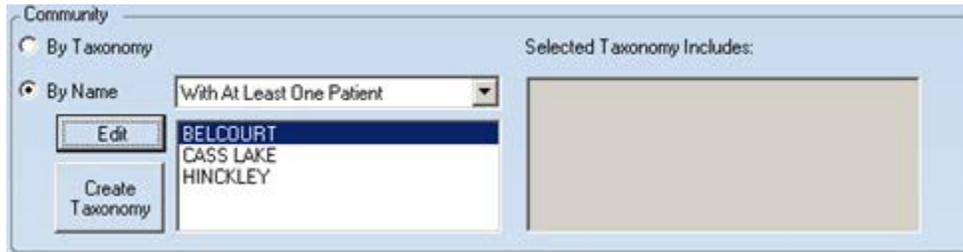
Figure 7-6: Sample **Community** group box with By Name field populated

If the By Names area contains 2 or more names, the Create Taxonomy button become active.

Click the **Create Taxonomy** button to access the **Create/Update Community Taxonomy** dialog.
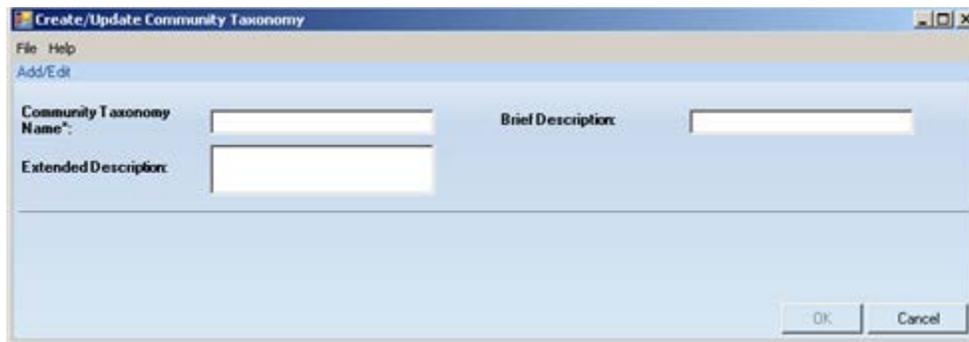
Figure 7-7: Sample **Create/Update Community Taxonomy** dialog

Populate the fields on the dialog. The Community Taxonomy Name field is required. After the dialog is complete, click **OK** (otherwise, click **Cancel**).

After clicking **OK** and if the taxonomy name is a duplicate taxonomy name to a previous taxonomy created by you, iCare will provide a warning that the user might be overwriting the user's taxonomy. The user can overwrite (Yes), save as another name (No), or cancel (to return to the **Create/Update Community Taxonomy** dialog).

After clicking **OK** and if the name is a unique name, the application confirms saving the data to the RPMS server.

Figure 7-8: **Confirm save to RPMS** information message

Click **Yes** to save the data. (Otherwise, click **No**.)

If Yes is selected, the application displays the following message:

Figure 7-9: **Community Taxonomy Created** message

After clicking **OK**, the Community group box will change, showing the taxonomy name and what the taxonomy includes.
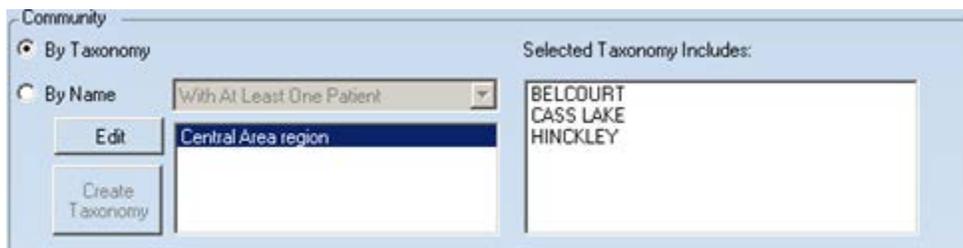
Figure 7-10: Sample **Community** group box with taxonomy

The taxonomy creating function is independent of the panel save function, that is, the taxonomy will be saved to the server once the user selects the Taxonomy Save function. The user has the potential for creating multiple community taxonomies within the Panel Definition function and can create a community taxonomy without actually creating a panel.

The iCare application will observe the underlying business rules for taxonomy creation: a user can only edit the user's created taxonomy. iCare will not allow a duplicate taxonomy name if the user is not the owner of the original taxonomy.

7.3   Add/Remove Functionality

There are several Add/Remove dialogs used in iCare.
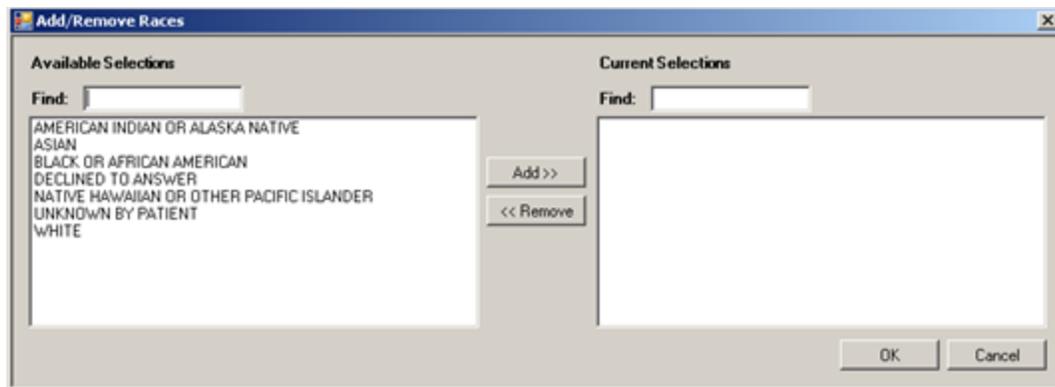
Figure 7-11: Sample **Add/Remove Panels** dialog

Use the "Add/Remove" dialog in the following manner:

- Type a few characters in the Find field to filter the list to those options containing those characters.

- Click **Add** to move a highlighted selection from the Available Selections area to the Current Selections area.

- Click **Remove** to move a highlighted selection from the Current Selections area to the Available Selections area.

When the dialog is complete, click **OK** to populate the appropriate field with the data in the Current Selections area. (Otherwise, click **Cancel**).

Appendix A: Definition Details Layouts

Table A-1: Allergies

Column Name	Type
Causative Agent	Default
Severity	Default
Signs/Symptoms	Default
Origination Date	Default

Table A-2: CPT

Column Name	Type
Date	Default
CPT	Default
Modifier 1	Default
Modifier 2	Default
Quantity	Default
Provider	Optional
Provider Narrative	Optional

Table A-3: ER

Column Name	Type
Admit Date	Default
Discharge Date	Default
Discharge Acuity	Default
Discharge Type	Default
Primary Diagnosis	Default
DX Narrative	Default
Admitting Provider	Optional
Discharge Nurse	Optional
Discharge Provider	Optional
Presenting Complaint	Optional
Transferred To	Optional
Transport Mode	Optional
Triage Nurse	Optional
Visit Type	Optional

Table A-4: Inpatient

Column Name	Type
Admission Date	Default
Admit Type	Default
Attending Provider	Default
Ward	Default
Specialty	Default
Discharge Date	Default
Discharge Type	Default
Diagnosis	Optional
Nurse	Optional
Transfer Facility	Optional

Table A-5: Labs

Column Name	Type
Date	Default
Lab Test	Default
Lab Result	Default
Normal/Abnormal	Default
Ordering Physician	Default
Comment	Optional

Table A-6: Measurements

Column Name	Type
Date	Default
Measurement	Default
Result	Default
Date/Time Last Modified	Optional
Encounter Provider	Optional
Entered By	Optional
Modified By	Optional
Percentile	Optional
Supplemental O2	Optional
VC/VU Numerator	Optional

Table A-7: Medications

Column Name	Type
Date	Default
Medication	Default
Instructions	Default
Days	Default
Quantity	Default
Ordering Physician	Default
# of Refills	Optional
Last Dispensed Date	Optional
Prescription Status	Optional

Table A-8: Patient Education

Column Name	Type
Date	Default
Topic	Default
Time Spent	Default
Level of Understanding	Default
Provider	Default
Comments	Default
Learning Readiness	Optional
Setting	Optional

Table A-9: POV

Column Name	Type
Date	Default
Purpose of Visit	Default
Primary/Secondary	Default
First/Revisit	Default
Encounter Provider	Default
Provider Narrative	Default
Cause of DX	Optional
Date Entered	Optional
Entered By	Optional
External Cause	Optional
Last Modified	Optional
Laterality Qualifier	Optional

Column Name	Type
Modified By	Optional
Modifier	Optional
Place of Accident	Optional
Place of Occurrence	Optional
Present on Admission	Optional
SNOMED Concept ID	Optional
SNOMED Description	Optional

Table A-10: Problems

Column Name	Type
Problem	Default
Date of Onset	Default
Status	Default
Provider Narrative	Default
Facility	Default
Date Last Modified	Optional
Problem ID	Optional
Problem Notes	Optional
User Last Modified	Optional

Table A-11: Reminder Notifications

Column Name	Type
Reminder Due	Required
Notification Date	Default
Notification Method	Default
Completion Date	Optional
Creator	Optional
Eligible Provider	Optional

Glossary

Context Menu

The menu of options when you right-click on an entity.

Designated Primary Care Provider (DPCP)

In RPMS, the provider name that is assigned as the primary care physician for a patient or group of patients at a specific facility. This is not a required function.

Free Text Field

A field where the user can type text, just like typing a note to someone.

iCare Package Manager

The designated person with authority to manage all information settings for iCare.

Panel Definition

The membership criteria used to create a panel of patients.

Patient Panel

A list of patients defined in iCare by the user.

Providers

Any staff member in an I/T/U facility who provides direct healthcare to patients, e.g. general practice or specialty physicians, registered nurses, social workers, physician assistants, etc.

Within RPMS, the term "provider" has different specific meanings. See definitions for Designated Primary Care Provider (DPCP); Primary Provider; Visit Providers.

Taxonomy

In RPMS, a grouping of functionally related data elements, such as ICD codes, that are created and maintained within the RPMS Taxonomy Setup application. Taxonomies will be used as definitions for diagnoses, procedures, lab tests, medications, and other clinical data types.

If you need a change or addition to an existing taxonomy, please see your CRS coordinator.

Tooltip

A common GUI element used to provide additional information to users. To display a Tooltip, hover the mouse pointer, without clicking, over a column heading or field.

Acronym List

Acronym	Term Definitions
BQI	Namespace for iCare
CRS	Clinical Reporting System
DPCP	Designated Primary Care Provider
EHR	Electronic Health Record
GPRA	Government Performance and Results Act
GUI	Graphical User Interface
HHS	Health and Human Services
ICD	International Classification of Diseases
IHS	Indian Health Service
IPC	Improving Patient Care
I/T/U	Indian Health Service, or Tribal or Urban Indian health programs
OIT	Office of Information Technology
RPMS	Resource and Patient Management System

Contact Information

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

Phone: (888) 830-7280 (toll free)

Web: http://www.ihs.gov/helpdesk/

Email: support@ihs.gov