RESOURCE AND PATIENT MANAGEMENT SYSTEM

Electronic Health Record

(EHR)

Patch 11 Guide

Version 1.1 Patch 11
June 2013

Office of Information Technology (OIT)
Division of Information Resource Management
Albuquerque, New Mexico

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Preface

This document provides an overview of RPMS-EHR 1.1 Patch 11 and assumes that the site has already completed the setup for RPMS-EHR 1.1 and has loaded patches up through Patch 10. Read the installations notes and all accompanying documentation referring to RPMS-EHRv1.1 Patch 11.

This manual highlights the changes that have occurred with the upgrade of three VA CPRS (Computerized Patient Record System) patches, CPRS 25, CPRS 26 and CPRS 27. Because IHS-RPMS only uses some of the CPRS pieces, these changes are mainly noted in the Orders, Consults, Labs, Notes and Reports functionality. In addition, several fixes were made to existing IHS components and three new components were added.

Note: Thoroughly review this manual, patch notes, and requirements.

1. Contents of Distribution
    a. ehr_0110.11.exe - self-extracting zip file
    b. ehr_0110.11n - installation notes
    c. ehr_0110.11k - KIDS build
    d. ehr_0110.11o.pdf (this Notes file)
2. This patch has several dependencies
    a. VA Kernel v8.0 or later
    b. VA Fileman v22.0 or later
    c. Ensemble v2010 or later
    d. EHR*1.1*10
    e. APSP v7.0 patch 1014
    f. BJPC patch 9
    g. PXRM 1.5 patch 1009
    h. PIMS v5.2 patch 1015

Note: Review the documentation for concurrent releases.

For details on the VA CPRS changes, you may go to the VA Software Document library http://www.va.gov/vdl. In the Clinical software folder you will find manuals for CPRS. However, the RPMS-EHR adopts some but not all of the changes and adds many IHS specific modifications. The changes that affect the clinical applications coordinators and clinical users are described in this manual.

1.0 Introduction

This manual is designed to acquaint the Clinical Application Coordinators (CACs) with the changes that have been implemented in the upgrade to VA CPRS version 27, as well as new items that have been added for IHS.

Not all the bug fixes in over 300 patches required for this upgrade are included. This manual highlights the changes that users will see while using the RPMS-EHR.

Major changes are listed below. There are separate chapters on each RPMS-EHR component.

- Vitals Qualifiers have been added. They display with vitals and they can be entered. Patches to health summary and TIU make them visible there as well.
- Patient Record Flags has been incorporated into progress notes with linking capability.
- Refusals now allow CPT codes so that colonoscopy refusals can be documented.
- Notes can have their text searched for a term.
- The IV (infusion) dialog box has been dramatically changed.
- Inpatient Meds can be ordered for Outpatient Locations such as the ER.
- Graphing has been greatly enhanced.
- Three new components have been added:
  - Anti-coagulation component.
  - Level of Intervention component.
  - Eyeglass RX component.

2.0 Allergies/ADR

2.1 Active Signs/Symptoms

This applies to editing or adding an adverse reaction. The sign/symptom list will now only contain active signs/symptoms. The user can enter the first three characters of a sign/symptom which will prompt a search on synonyms that might match the character string.

Note: If the user sees a word or phrase in brackets behind the term shown, that means the term searched for is a synonym, and the word or phrase in brackets is what is stored.

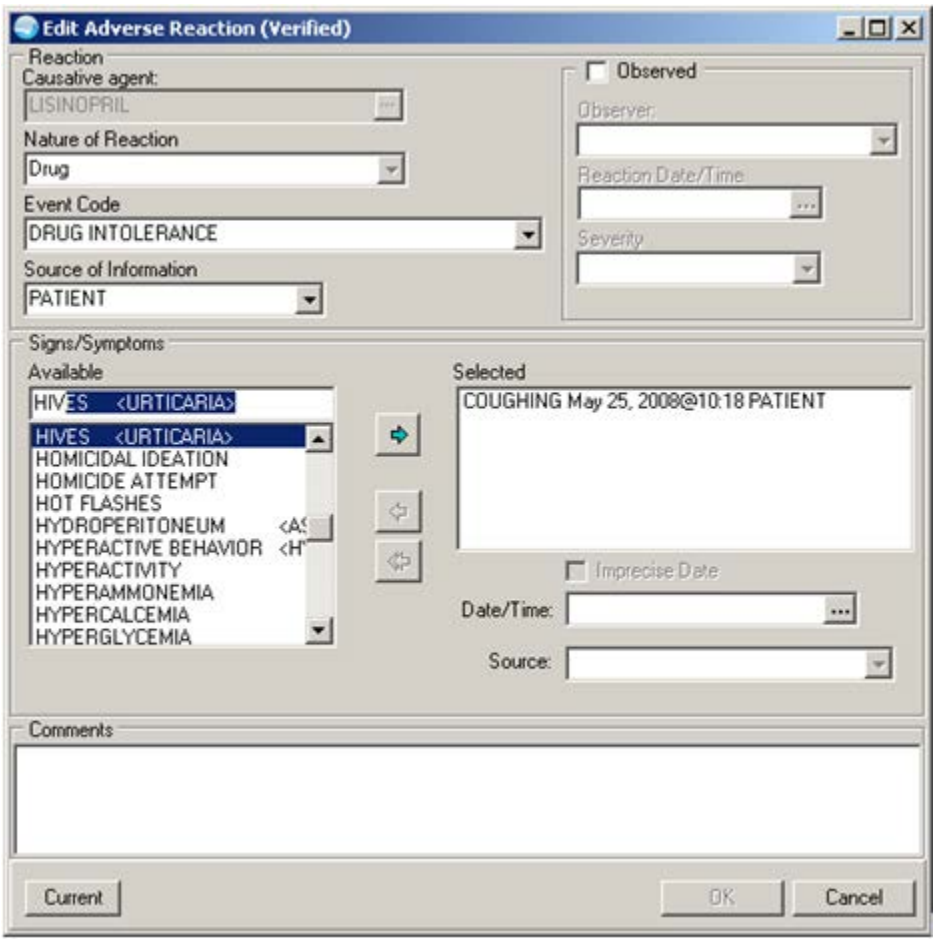


Figure 2-1: Signs/Symptoms lookup

Use the **Signs/Symptoms** group box to select one or more signs/symptoms and move them to the **Selected** field. At least one sign/symptom (in the **Selected** field) is required.

2.2 Top 10 Signs/Symptoms

The Top 10 signs/symptoms will now appear first in Sign/Symptom Available List followed by the entire list in alphabetical order. A space and a line display after the top 10 list. The blank space is not selectable.

The top 10 Signs/Symptoms list is modified locally at each site through the RPMS Adverse Reaction Tracking (GMRA) package.

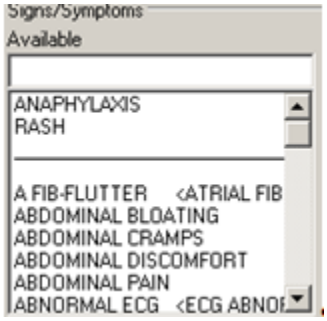


Figure 2-2: Sign/Symptoms list showing the end of Top 10 listing

2.3 Reactivated Allergies

Reactivated allergies no longer need a signature. If the user is a verifier, the reactivated allergy goes directly to Verified status.

2.4 Imprecise Date

An imprecise date field has been added. This feature may be used if the patient does not remember the precise date of the reaction.

Check the **Imprecise Date** check box and the **Date/Time** changes to allow only the month and year or just the year to be selected.

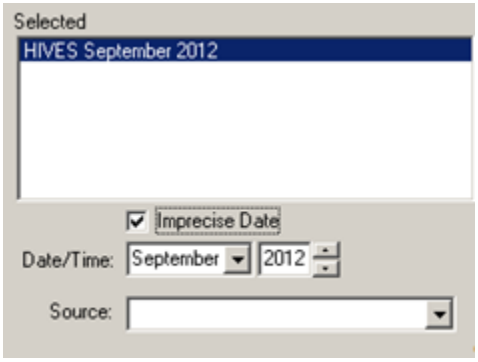


Figure 2-3: Sample imprecise date

3.0 Anticoagulation Goals

The Anticoagulation module allows clinicians to document anticoagulation goals for patients. This will set and track the goals allowing clinicians to modify as needed based on anticoagulation requirements and current medication therapy. This module is encounter centric.

3.1 Adding an Anticoagulation Entry

After selecting the Anticoagulation component select the **Add** button to add a new anticoagulation goal. The **Add Anticoagulation Goal** screen displays. Select the **Yes** or **No** option button to enter if warfarin is indicated.

From the **INR Goal** drop down field, select the desired INR goal.

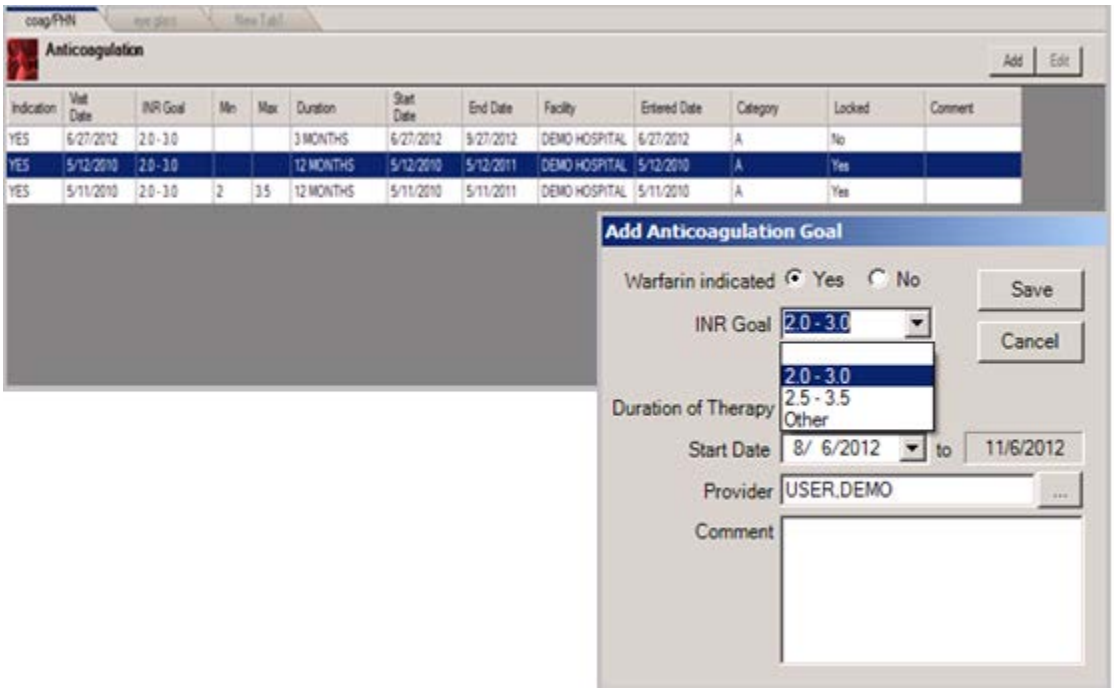


Figure 3-1: INR Goal choices

If the user enters **Other** as the goal, fields display for the user to enter the minimum and maximum. The drop-down list options increase by 0.5 or the user can type in the minimum and maximum.

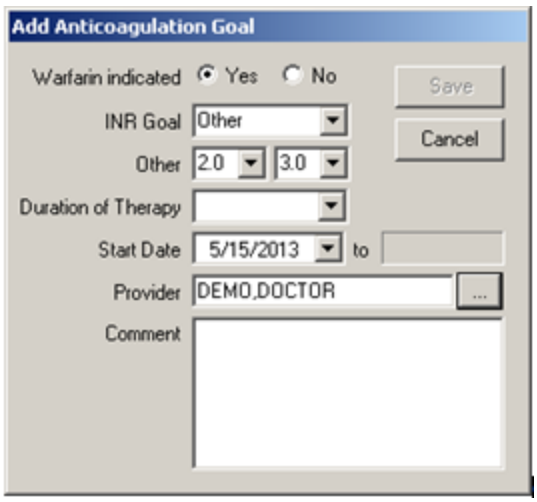


Figure 3-2: Goal Set to Other

The user can then select the duration of therapy and set a start date (default start date is today's date). The end date is automatically set after the **Duration of Therapy** field is populated.

If the provider is different from what is displayed in the **Provider** field, click the ellipsis (...) button next to display the Lookup Utility, where the user can select another provider. A comment field is provided.

Once the user has finished, click **Save** and a new anticoagulation goal has been added. Only one anticoagulation goal per visit can be added.

3.2 Editing an Anticoagulation Goal

To modify an anticoagulation goal, select the patient and visit. Highlight the goal desired and click **Edit**. The visit must be an unlocked visit. The edit screen has the same fields as the add screen.

4.0 Consults

4.1 New Parameter

The ORWOR SHOW CONSULTS parameter and the Info Unresolved Consult Alert screen have been added.

Parameter settings:

- Parameter set to NO.

  The list of consults is not initially displayed on the note title screen, regardless of whether there are pending consults the user is able to resolve. Clicking a Consults-class title will still display the list of unresolved consults, if any.

- Parameter set to YES.
  - If there are unresolved consults for the user, the user is presented directly with the note title screen that also displays the unresolved consults.
  - If there are no unresolved consults for the user, the list of consults is not displayed on the note title screen. Clicking a Consults-class title will still display the list of consults. Once on the note title screen, if the user selects a consult, and then clicks a non-Consults title, a new warning is displayed, indicating that the selected title will not complete the selected consult.
  - If the user answers YES/CONTINUE with this title, the list of consults is hidden, and the user clicks **OK** as usual to start the note without completing a consult.
  - If the user answers NO, the selected title is deselected, the consults list remains visible, and the user is allowed to choose another title, and then click **OK** to continue with the completion of the consult

EHR view:

- User selects a patient with uncompleted consults and the user is a provider who can complete the consult with a progress note.

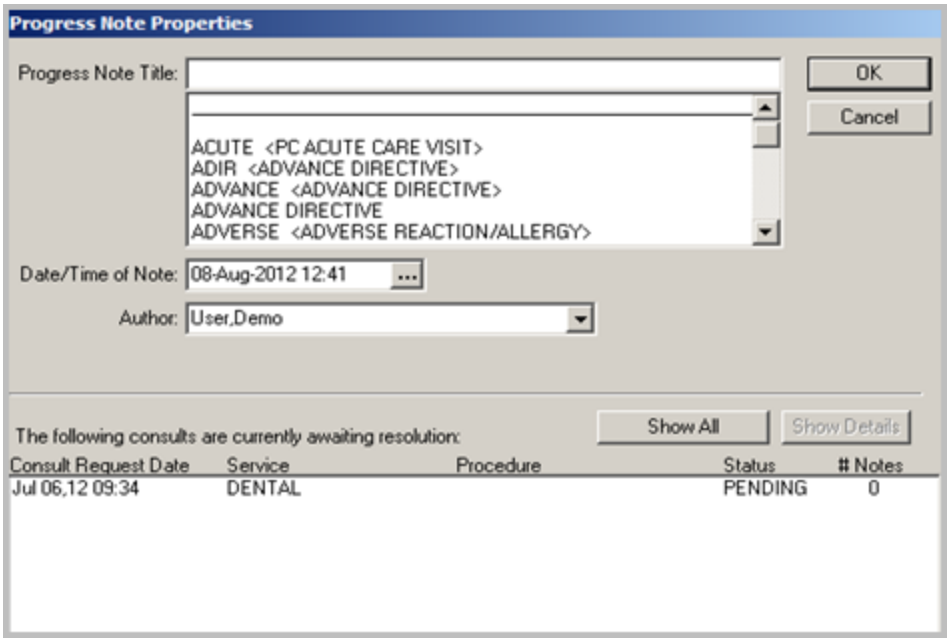


Figure 4-1: New Note if parameter is set to YES

- If the user selects a non-consult title, the application will display the following alert. The user is required to answer the request before writing the note.

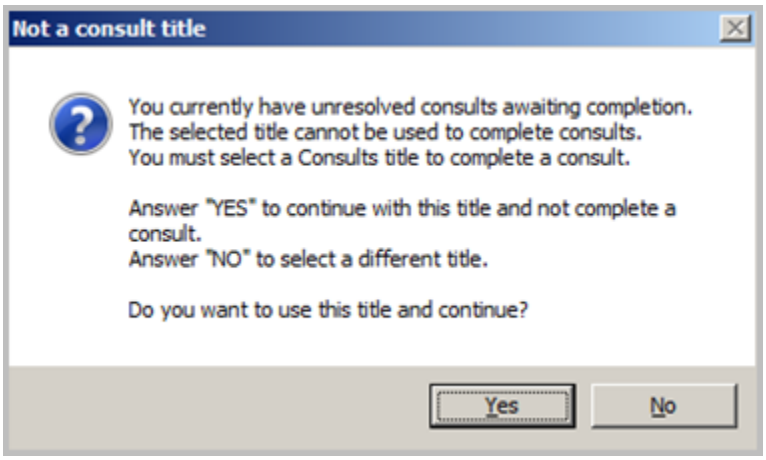


Figure 4-2: Info Unresolved Consult Alert screen

- Selecting the consult links the note to the consult and completes the consult.

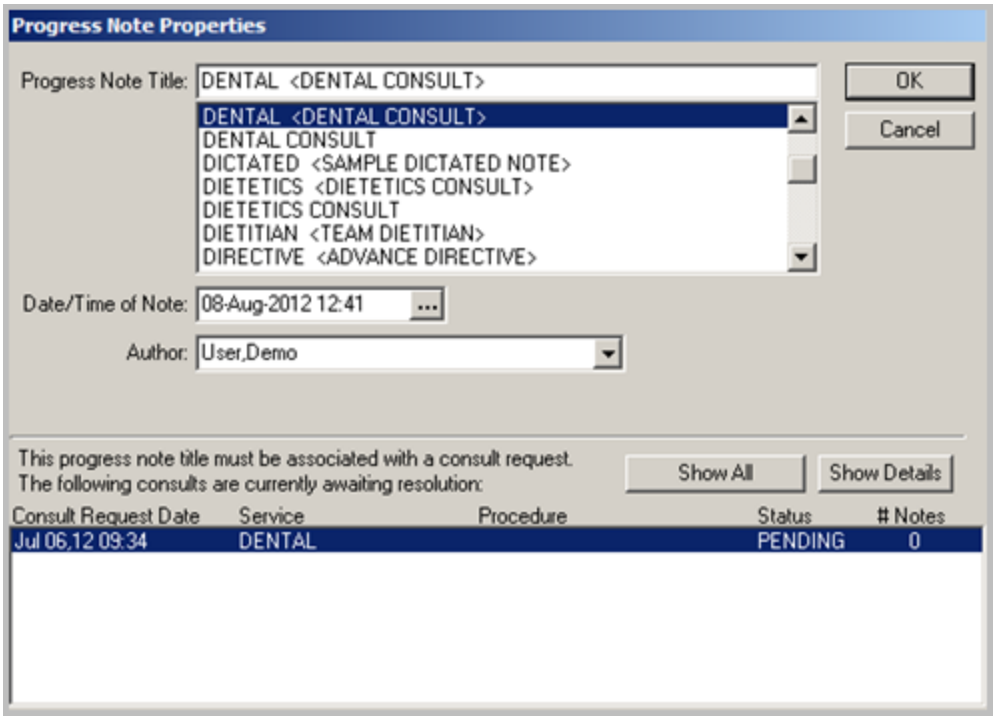


Figure 4-3: Connecting a Note to a Consult

- There is also a **Show Details** button to see the consult details without navigating to the consult tab.

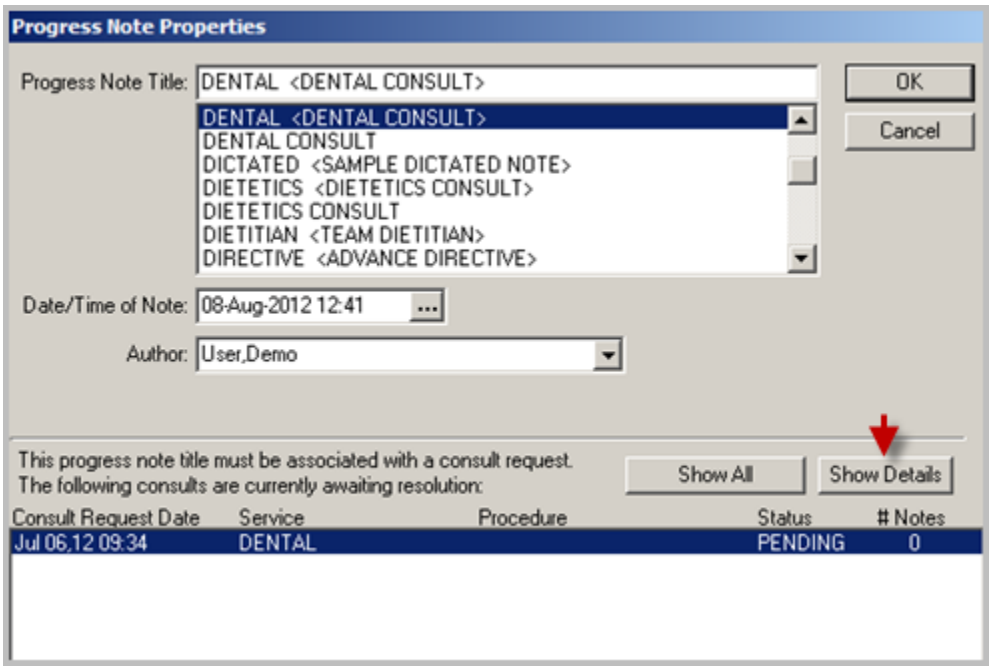


Figure 4-4: Details button

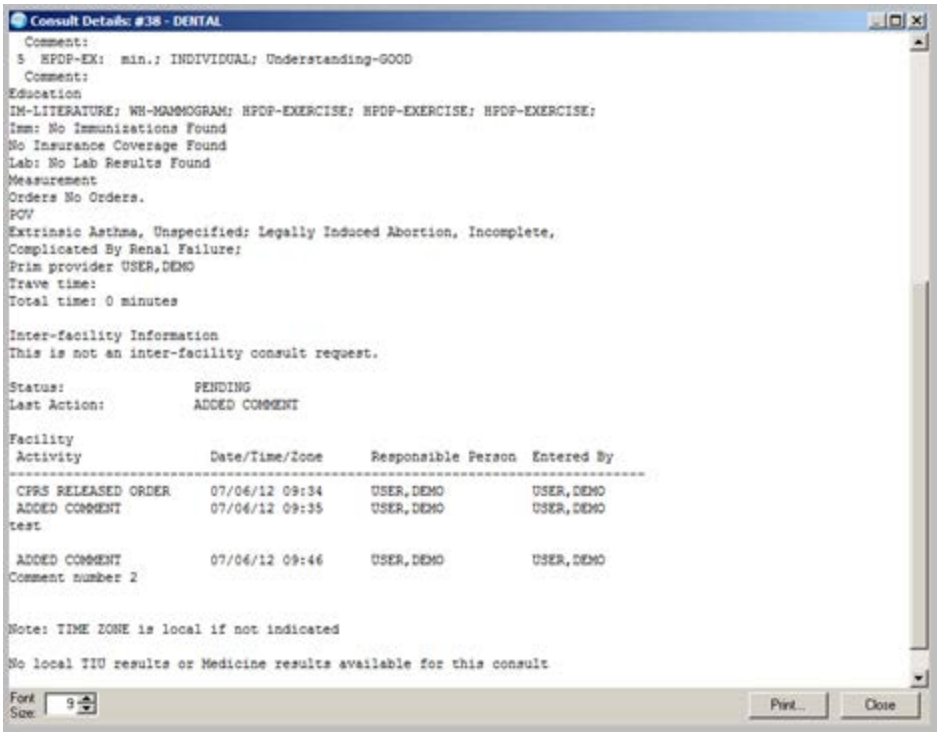


Figure 4-5: Consult details

4.2 Sub-Services

The problem was an endless loop caused by creating a consult service sub-service which was already a parent service within the consult service hierarchy. A service is already prevented from being a direct sub-service to itself, but is allowed to be a sub-service to one of its sub-services. An example of a bad hierarchy listing would be:

```
ALL SERVICES  (Grouper Only)
  INPATIENT SERVICES  (Grouper Only)
    ANESTHESIA
      ALL SERVICES  (Grouper Only)   <<< ALL SERVICES is within a
                                         hierarchy which eventually
                                         leads back to itself as a
                                         parent service
```

Resolution:

Consults will prevent a service from becoming a sub-service anywhere within its own service hierarchy. This will prevent the endless looping that this situation creates.

4.3 Reports

New reports have been added to the consult report menu. Select Consult management, then Consult Tracking Reports. New options are bolded.

```
   ST     Completion Time Statistics
   PC     Service Consults Pending Resolution
   SH     Service Consults Schedule-Management Report
   CC     Service Consults Completed
   CP     Service Consults Completed or Pending Resolution
   IFC    IFC Requests
   IP     IFC Requests By Patient
   IR     IFC Requests by Remote Ordering Provider
   LCR    Consults Local Completion Rate
   NU     Service Consults with Consults Numbers
   PI     Print IFC Requests
   PL     Print Consults by Provider, Location, or Procedure
   PM     Consult Performance Monitor Report
   PR     Print Service Consults by Status
   SC     Service Consults By Status
   TS     Print Completion Time Statistics Report
```

4.3.1 Service Consults Schedule-Management Report

A new routine called SERVICE CONSULTS SCHEDULE-MANAGEMENT REPORT was created and placed on the CONSULT TRACKING REPORTS menu of the Consult/Request Tracking (GMRC) package. This report functions in a similar way as the SERVICE PENDING CONSULT RESOLUTION REPORT. It will provide individual listings of all consults within a time frame and/or a summary listing.

```
Select Service/Specialty: ALL SERVICES//        GROUPER ONLY
List From Starting Date: ALL DATES// T-180  (FEB 10, 2012)
List To This Ending Date: T  (AUG 08, 2012)

     Select one of the following:

          E         Exclude DEMO Pts
          D         Include ONLY DEMO Pts
          A         Include ALL pts

Demo Pts, Real pts, or both?: E// xclude DEMO Pts
```

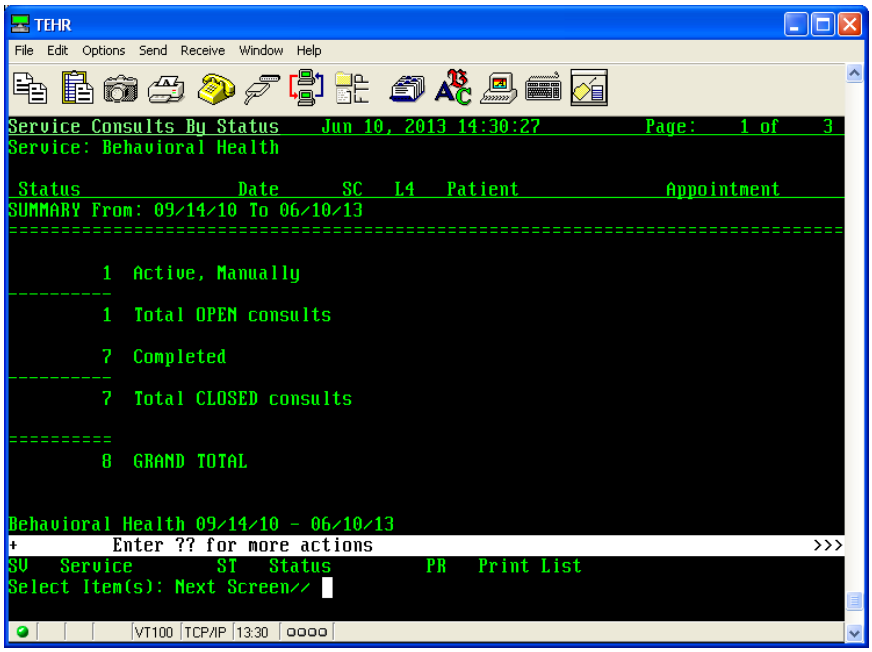


Figure 4-6: Output from Services Consults Schedule – Management Report

4.3.2 Consults Local Completion Rate

This report is essentially a mirror of the report functionality found in the original Consults Performance Monitor report (GMRC*3.0*41) with one minor enhancement. The patch provides the local sites with an option to generate a report listing consults requested, consults completed, consult completion rates, completed consults with results attached and rate of completed consults with results attached for a user determined date range.

Similar to other GMRC reports, the original DATE OF REQUEST field from the REQUEST/CONSULTATION file is the date value used to filter report data. The output is either an easy to read summary format, or a comma delimited format for importing into spreadsheet or database software. If a disabled service is included in the report, it will be marked as such for easy identification. For example, SERVICE: ARTHRITIS <disabled>.

The following consults will be excluded from the report:

- Prosthetics consults where the service is identified as linked between the Consult/Request Tracking and Prosthetics packages (not used by IHS)
- Consults with a status of Cancelled or Discontinued
- Inter-facility Consults (IFC) requests where the reporting site is the sending site for the IFC (not used by IHS)
- Consults created for test patients

```
Select Consult Tracking Reports Option: LCR  Consults Local Completion Rate
Select Service/Specialty: DENTAL
List From Starting Date: ALL DATES// T-180  (FEB 10, 2012)
List To This Ending Date: T (AUG 08, 2012)

     Select one of the following:
          E         Exclude DEMO Pts
          D         Include ONLY DEMO Pts
          A         Include ALL pts

Demo Pts, Real pts, or both?: E// xclude DEMO Pts
     Select one of the following:

          S         Summary
          D         Delimited
What type of report: D

Local Consult Completion Rates       Aug 08, 2012@13:18:15          Page: 1
------------------------------------------------------------------------------

                       Local Consult Completion Rates
                      FROM: Feb 10, 2012  TO: Aug 08, 2012

SERVICE: DENTAL
Total Requests To Service:                                    4
Total Requests Pending Resolution:                            3
Total Requests Completed:                                     1
Total Requests Completed with Results:                        1
Percentage of Total Requests Completed:                  25.00%
Percentage of Total Completed Requests with Results: 100.00%
```

4.3.3 Consult Performance Monitor Report

Consult monitor is a report that may be run at a local site to gather data for VA national performance monitor.

Note: This is a new menu option from the VA. It displays under Consult Management, Reports menu. It may or may not contain data that will be valuable to I/T/U workflow and business processes.

The following are excluded from this report:

- Requests sent to test (“demo”) patients.
- Requests not marked as Outpatient in the REQUEST/CONSULTATION file.
- Services flagged as part of the interface between Consults/Request Tracking and Prosthetics (not used by IHS).
- Administrative requests flagged via the Administrative fields in the REQUEST SERVICES and REQUEST/CONSULTATION files.

```
Select Service/Specialty: DIABETES

Ensure you are providing fiscal year, NOT calendar year.
```

```
Current Fiscal Year (i.e. 2008): 2011

Enter a number 1 - 4:  (1-4): 4

     Select one of the following:

          S         Summary
          D         Delimited

What type of report: S

Run Date: Aug 08, 2012@13:39:06
Page: 1
------------------------------------------------------------------------------

                 Consult/Request Performance Monitor - 4QFY11
               Fiscal Quarter Dates: Jul 01, 2011 - Sep 30, 2011
              30 Days Before Start/End: Jun 01, 2011 - Aug 31, 2011
              60 Days Before Start/End: May 02, 2011 - Aug 01, 2011

...EXCUSE ME, HOLD ON...


SERVICE: DIABETES
                                                    WITHIN     IFC
IFC
                                                    FACILITY   SENT
REC'D
All Requests in 30 Days Before Start/End of Qtr:       0         0        0
All Requests in 60 Days Before Start/End of Qtr:       0         0        0
Complete with Results in 30 Days of Request:           0         0        0
Complete with Results 31-60 Days of Request:           0         0        0
All Requests Created 60 Days Before Qtr Start:         3         0        0
All Requests Pending 60 Days Before Qtr Start:         2         0        0
Percent Complete w/Results in 30 Days of Request:     N/A       N/A      N/4
```

4.4 Comments

When adding a comment to a consult, the action has been changed that an alert will automatically be sent to the ordering provider as well as notification recipients. The ordering provider must be someone other than the person entering the comment or someone who can finish the consult and must have the consult update notification turned on.

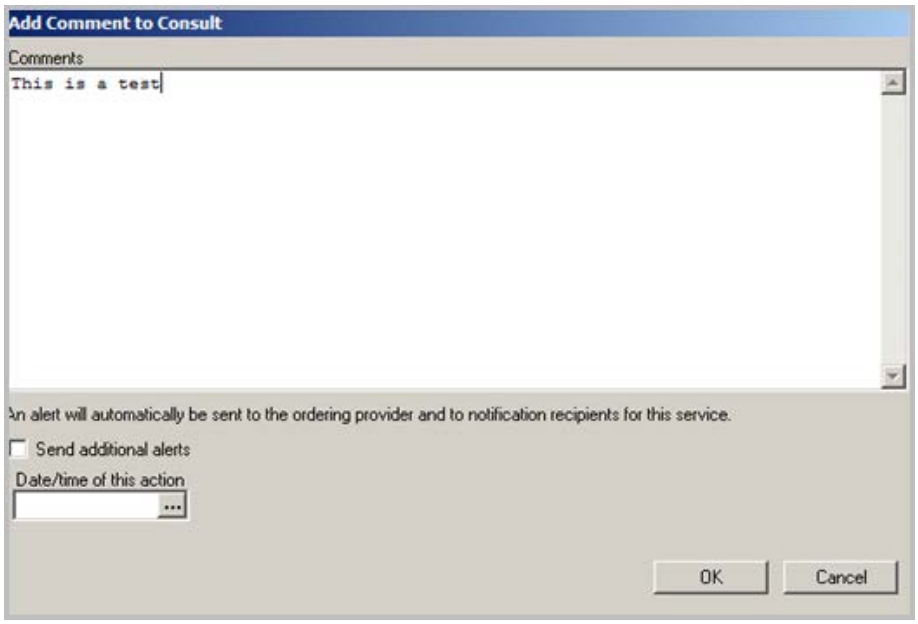


Figure 4-7: Consult comment

4.5 View Details

Providers were able to write a note and not view the consult details if done from the Notes tab. Users can now view the details from the right-click menu while writing the note.

1. Attach the note title to the consult.

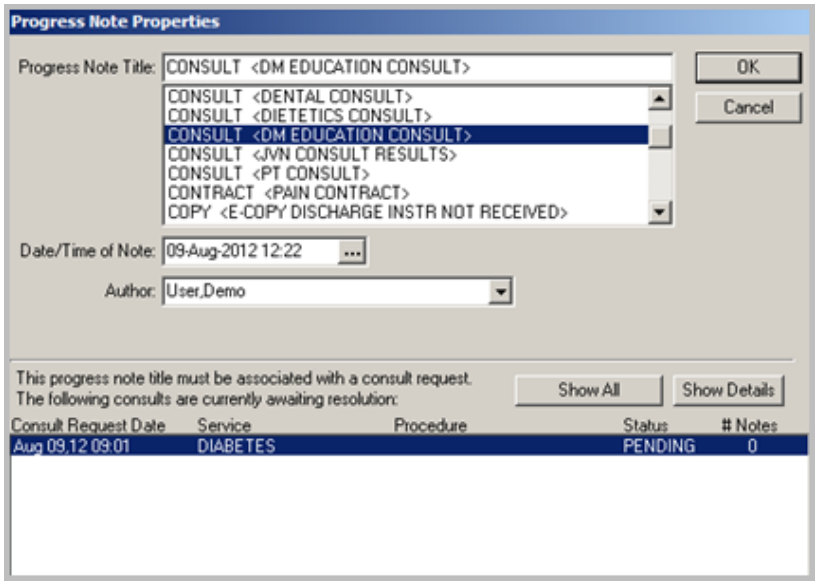


Figure 4-8: Attaching a Note to a Consult

2. Right-click in the Notes and select **View Consult Details** to see the consult request.

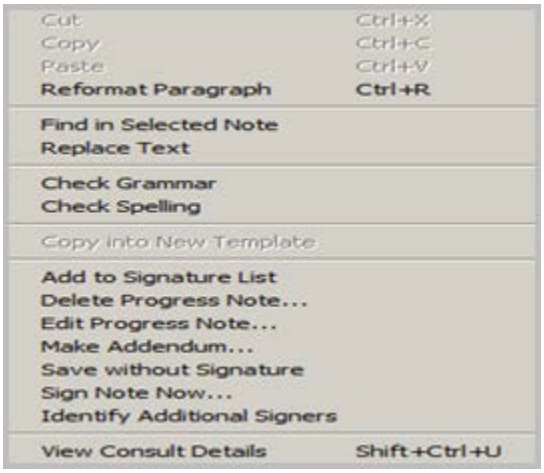


Figure 4-9: View Consult Details option in Notes

5.0 Eyeglass RX

The eyeglass prescription component is designed for optometrists to enter prescriptions for eyeglasses. The prescription can be printed and filled at another establishment or filled locally.

A patient and an encounter must be selected. If the patient has an eyeglass prescription, the latest one appears in the component.

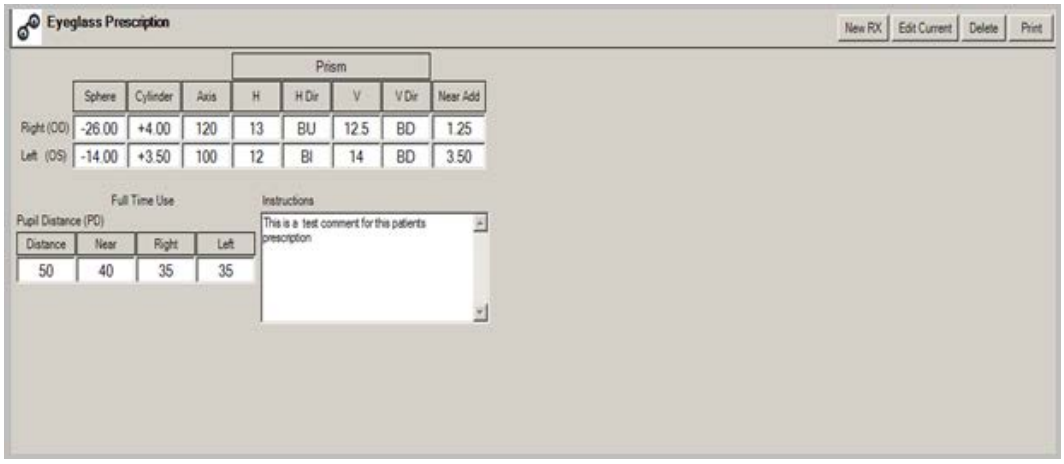


Figure 5-1: Eyeglass Prescription component

5.1 Adding a New Prescription

After selecting the **Eyeglass Prescription** tab, the user can select **New RX** to add a new prescription. The user then enters the Prescription Data.

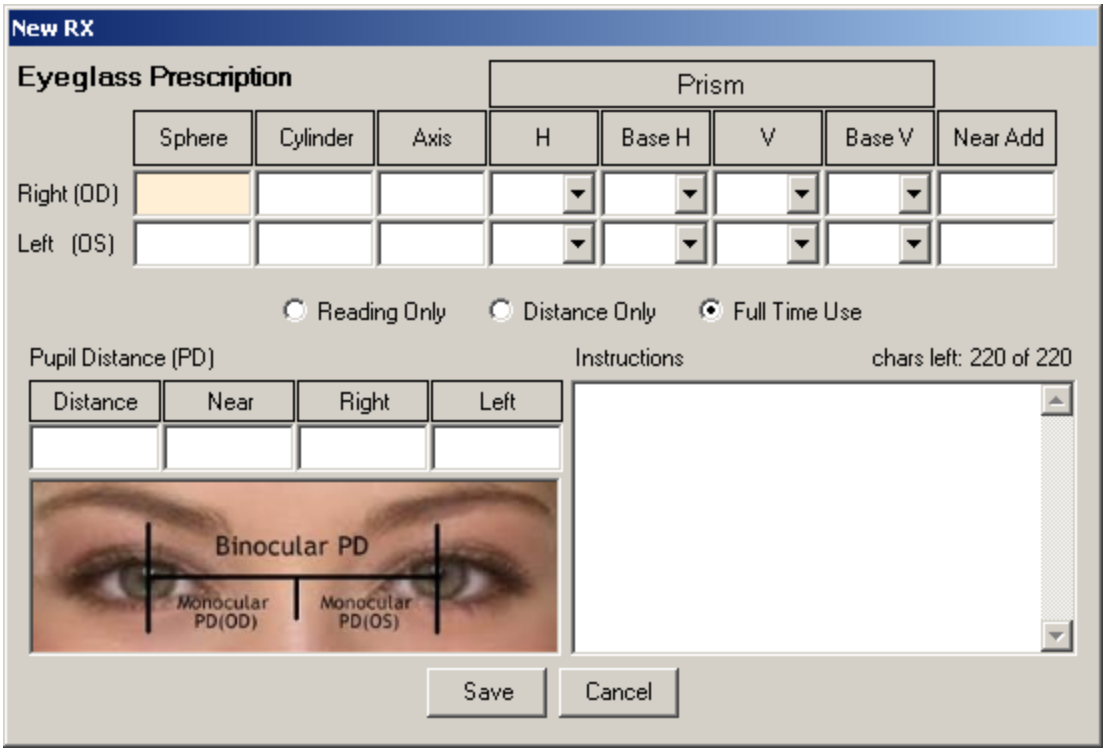


Figure 5-2: New Prescription dialog box

Enter the diagnostic data into each of the fields.

Sphere and **Cylinder** data requires the user to enter a **+** or **–** before the actual number or the text PLANO.

Consider the following during data entry:

- If the signs are missing the application displays the Sign Error warning message that states: **Missing + or -.** Click **OK** and correct the data.
- Each field has its own validation check. The application displays an alert about the invalid data.

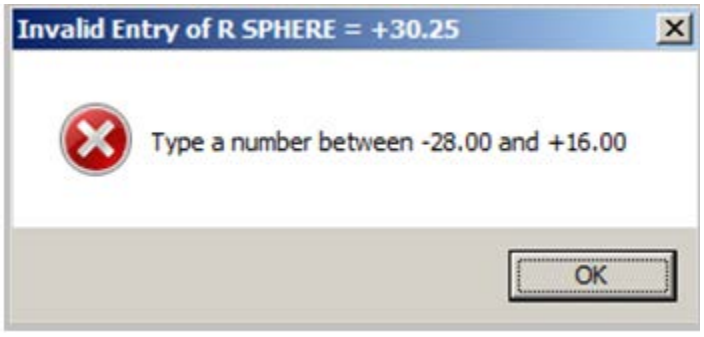


Figure 5-3: Sample invalid data entry alert

- If the wrong increment is used during data entry, the application displays a warning message.

Figure 5-4: Sample Increment Error warning message

- It is rare that a + and a – occur in different eyes of the same patient. After entering a + and a -, the application displays the **Confirm** information message.

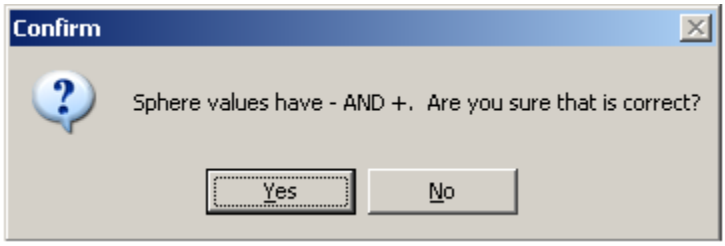


Figure 5-5: Confirm information message

Click **Yes** to retain the values. Click **No** and focus returns to the last value entered so it can be corrected.

The Prism data has drop-downs to select from or the user can enter them manually. Prism values are in 0.5 increments.

The Base data can be selected from the drop-down. If the user types in the second letter, the computer will jump to that entry.

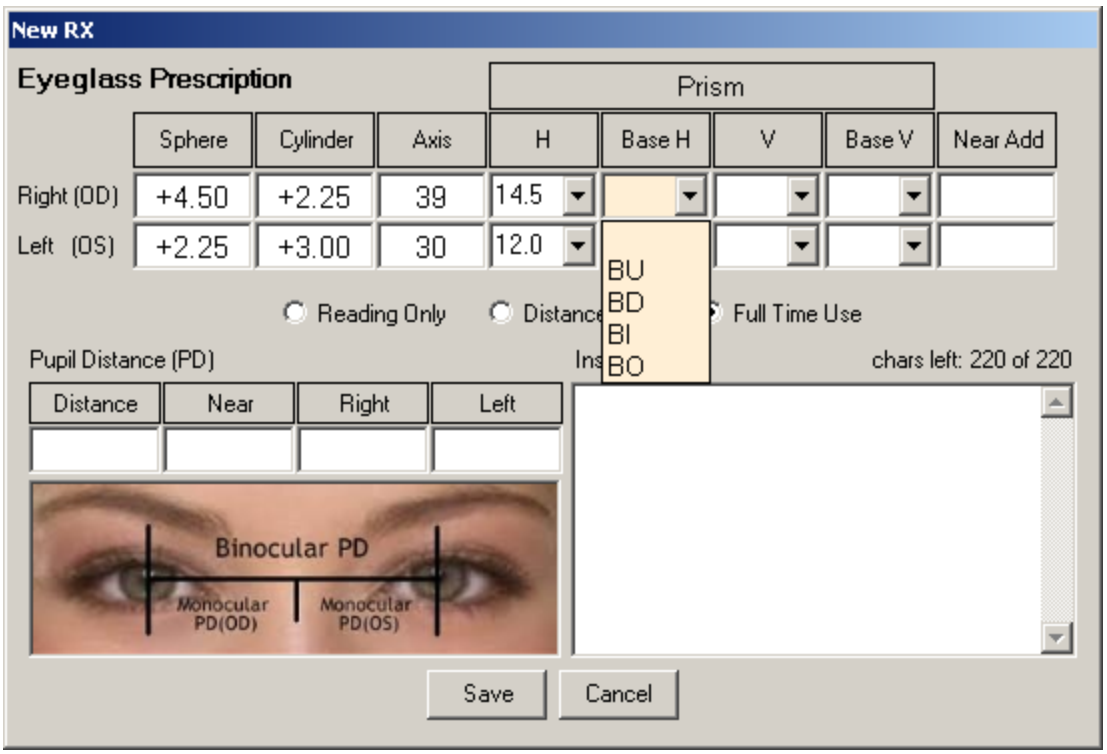


Figure 5-6: Base Values

The user can document the use of reading, distance, or full-time use using the radio buttons. That data will be added to the instructions when printed.

Pupil distance can be entered as numbers. Validation checks will occur on all data. The instructions field can contain any data the user needs to enter such as type of lenses, bi-focal data, surface type, etc. The limit is 220 characters. Save the Prescription when finished.

Note:	A Health Summary object and a TIU object currently exist for this component.

5.2 Editing an Eyeglass RX

To edit the eyeglasses prescription data, click **Edit Current** to access the prescription form. Select the data to modify and change the information. Once completed, click **Save** and the data is saved to the patient's chart. Only the most recent prescription is visible and editable. All Eye Exam entries for a visit display in the TIU and BHS objects.

5.3 Deleting an Eyeglass RX

To delete the Eyeglass Prescription, click **Delete** to access the **Confirm** information message.

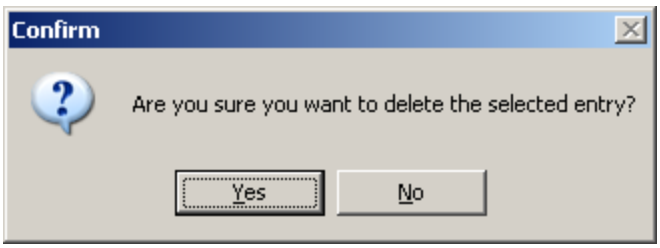


Figure 5-7: Confirm information message

If the user confirms the deletion, the Eyeglass Prescription data is deleted.

5.4 Print an Eyeglass RX

If the patient is taking the eyeglass prescription to another facility to get the glasses, the user must print out the prescription. To print the prescription the user clicks the Print button. A preview of the prescription appears on the screen.

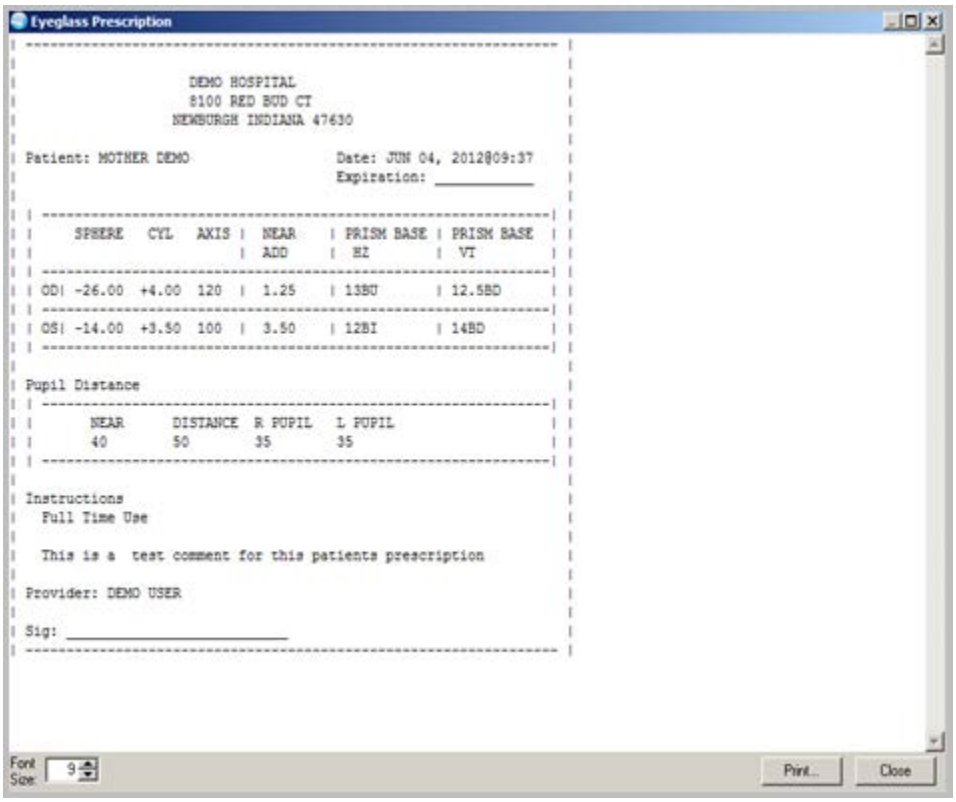


Figure 5-8: Print Preview

Select **Print** from the preview dialog box. The Printer Selection dialog box appears. In most cases, this is printed to a Windows printer, but an RPMS printer can also be selected.

5.5 Adding Eyeglass RX to the Report List

To ADD the eyeglass RX to the Report list, the ORWRP REPORT LIST parameter will need to be edited to include the BGO EYERX report. At the system or division level, add this report to the sites list:

```
ORWRP REPORT LIST may be set for the following:

     2   User          USR    [choose from NEW PERSON]
     3   Division      DIV    [choose from INSTITUTION]
     4   System        SYS    [DEMO.MEDSPHERE.COM]
     6   Package       PKG    [ORDER ENTRY/RESULTS REPORTING]

Enter selection: 4  System   DEMO.MEDSPHERE.COM

--------- Setting ORWRP REPORT LIST  for System: DEMO.MEDSPHERE.COM –
```

Select an unused sequence number and add the report.

```
Sequence: 95//    95
Report: BGO EYERX//   BGO EYERX     Eyeglass Prescription     Latest
eyeglass RX
```

The user must restart the RPMS-EHR to view the changes.

6.0 Graphing

Enhanced graphing has been incorporated in the Lab and Reports components. Enhanced graphing requires the clinical indexes which are part of PXRM Reminders Patch 1009. Once RPMS-EHR Patch 11 is installed, the site will need to build all the clinical indexes for graphing to work appropriately.

> **Note**: Graphing will not be enabled until Lab Patch 1031 is installed and the Lab indexes have been created. (See PXRM patch 1009 about index creation.) Prior to that, the Lab Graph will continue to display as it has previously.

Not all of the data sources that the VA graphs will be available at this time. This is mainly due to differences between the two systems with different files and fields being utilized. Available graph types are shown in the following table.

Graph Type	Available
LAB TESTS	YES
MEASUREMENTS	YES
MEDICATION, INPATIENT	YES
MEDICATION, OUTPATIENT	YES
MEDICATION, BCMA	NOT YET
RADIOLOGY EXAMS	YES
IMMUNIZATIONS	YES
SKIN TESTS	YES
EXAMS	YES
PROCEDURES	YES
PROBLEMS	YES
HEALTH FACTORS	YES
PURPOSE OF VISIT	YES
PATIENT EDUCATION	YES
MENTAL HEALTH	NO
ORDERS	YES
REGISTRATION OP/PROC	NO
REGISTRATION DX	NO
ANATOMIC PATHOLOGY	YES
MICROBIOLOGY	YES
VISITS	NO
ADMISSIONS	NO
SURGERY	NO

Graph Type	Available
NOTES	YES
ALLERGIES	YES
BLOOD BANK	NO
MEDICATION, OUTSIDE	YES

To graph the available data sources, select the **Available Reports Graphing** section in the Reports functionality.

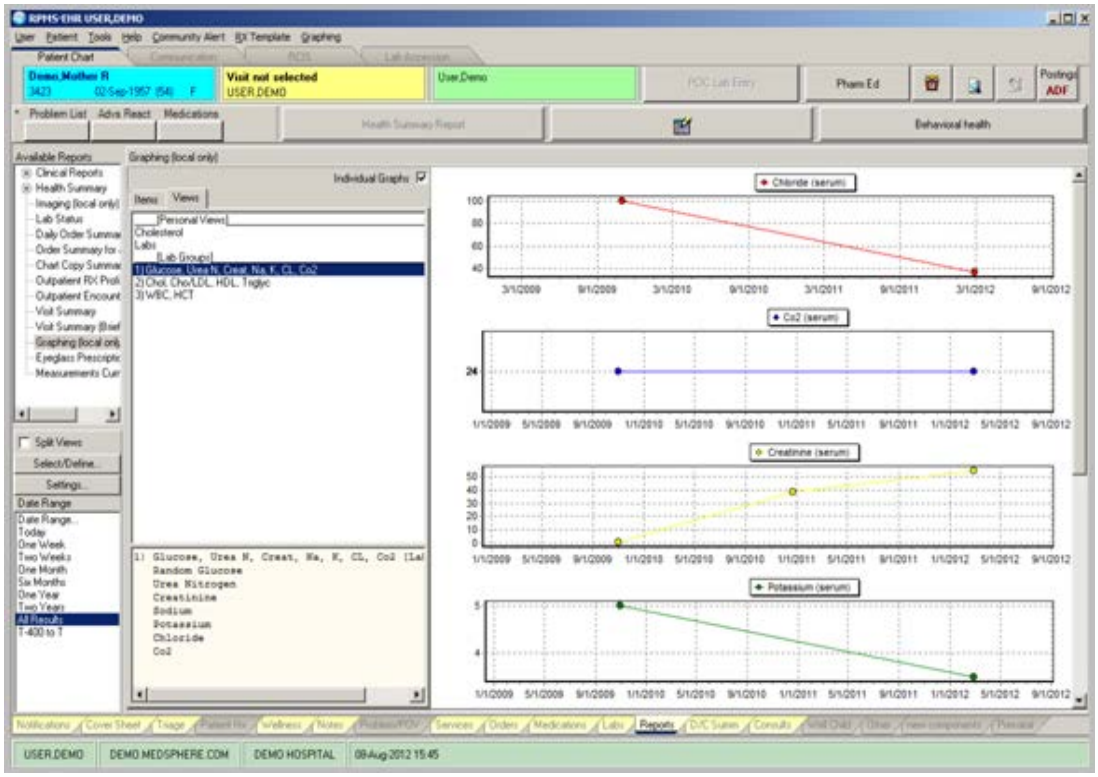


Figure 6-1: New Graphing Tool

6.1 Types of Graphs

- EHR Graphing

  All items that are not laboratory tests, vitals measurements, or medications (inpatient, non-VA, or outpatient) display as single events. Representations for single events use only the horizontal axis. EHR graphing uses triangle-shaped representations to mark these items.

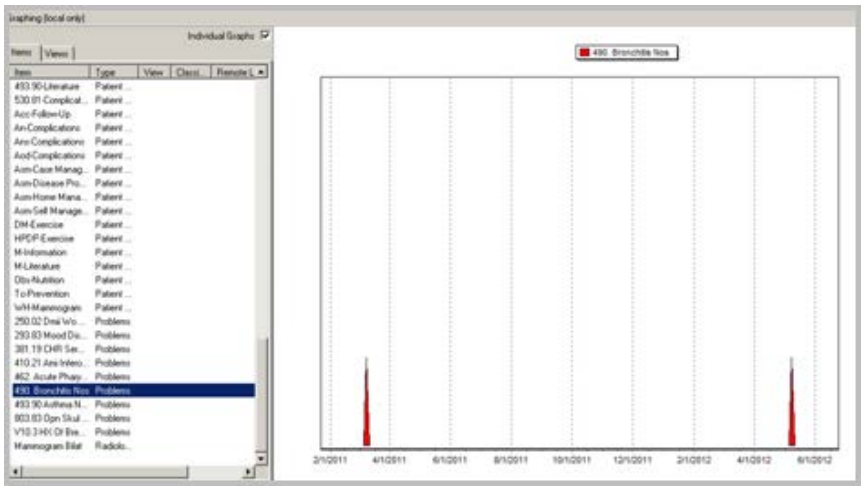


Figure 6-2: POV Graphing

- Medication Graphing

EHR graphing displays medications as bars that indicate a period of time. In the case of outpatient medications, bars begin on the horizontal axis at the release date of the medications. End dates are based on the following calculation: medication release date + total number of days supply = end date. For inpatient and non-VA medications, bars begin at medication start times and dates and end at medication stop times and dates. In the case of non-VA medications, if no stop date exists, CPRS graphing uses the current date as the stop date.

EHR graphing differentiates multiple medications by color and vertically offsets them to ensure the visibility of overlapping bars.

Note:	Healthcare professionals have no reliable way to determine whether patients do or do not take their outpatient medications. Use caution when graphing relationships between outpatient medications and other items.

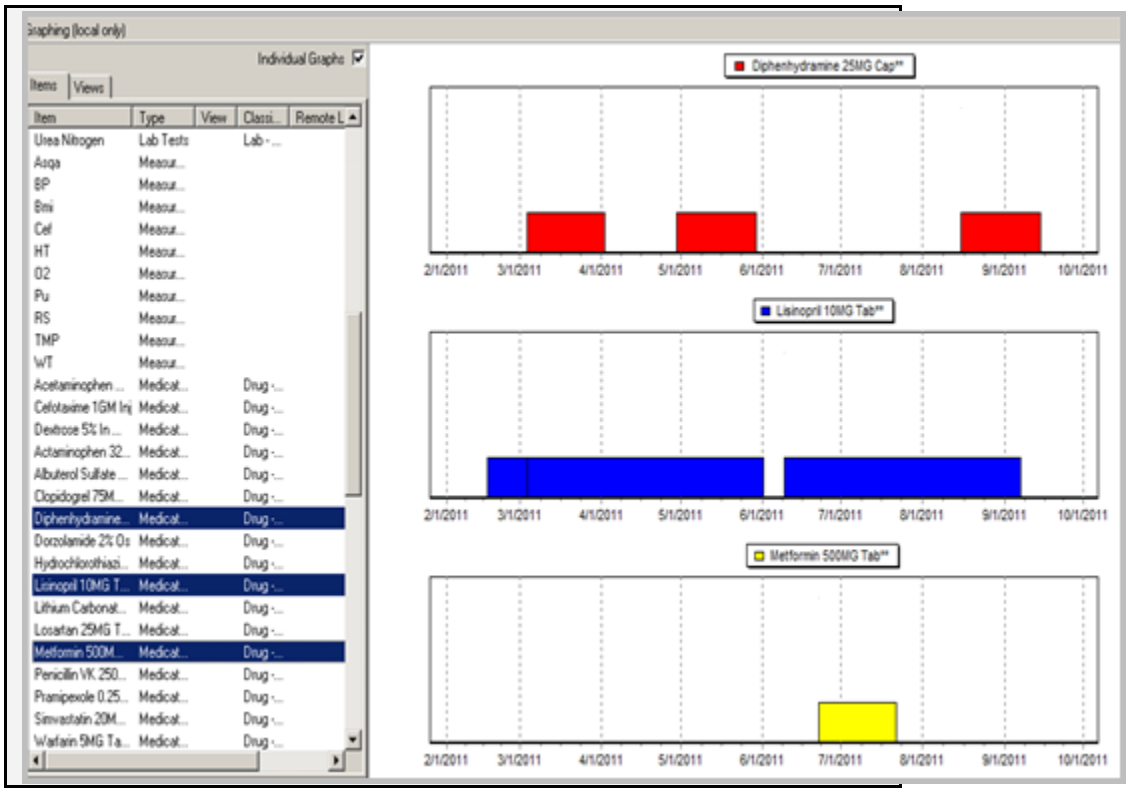


Figure 6-3: Graphing multiple medications

- EHR graphing displays vitals measurements as points on two axes. If multiple like measurements exist for the selected date range, EHR graphing connects like vital-type measurements with a line.

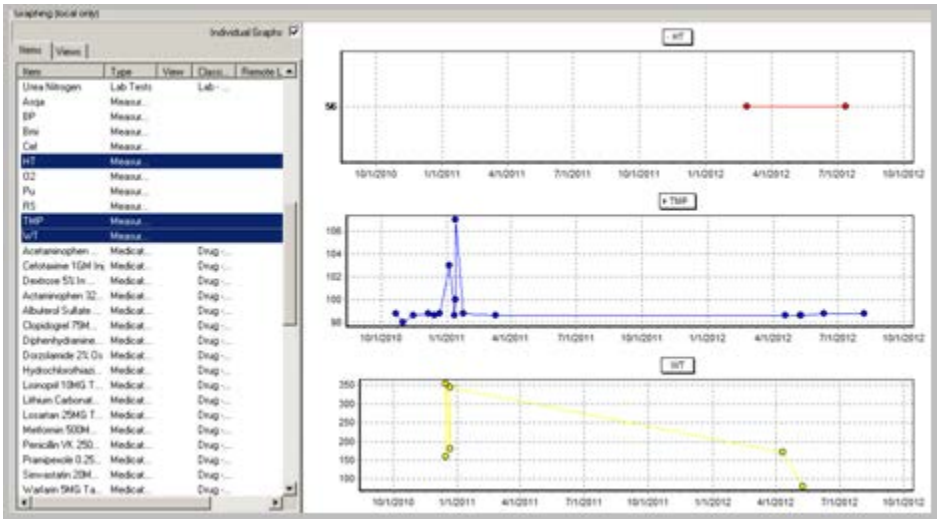


Figure 6-4: Vitals graphing

- EHR graphing also displays laboratory tests that have results with numerical values on two axes. Similar Laboratory tests are connected with a line.

EHR graphing displays lab tests with non-numerical results (positive and negative results, for example) as points on the horizontal axis. It does not connect like items that have non-numerical results. To keep them out of the way of numerical data, EHR graphing displays non-numerical results above or below the numerical values and line. Values beginning with > are located at the top margin; others are graphed at the bottom margin. Free-text values display by default as do comments. To hide or show free-text values, click on the **Free-Text Values:** label. Comments are displayed in yellow boxes on the date axis, while the ****comments** label shows that there are comments. Clicking this label will show details of all items on the graph.

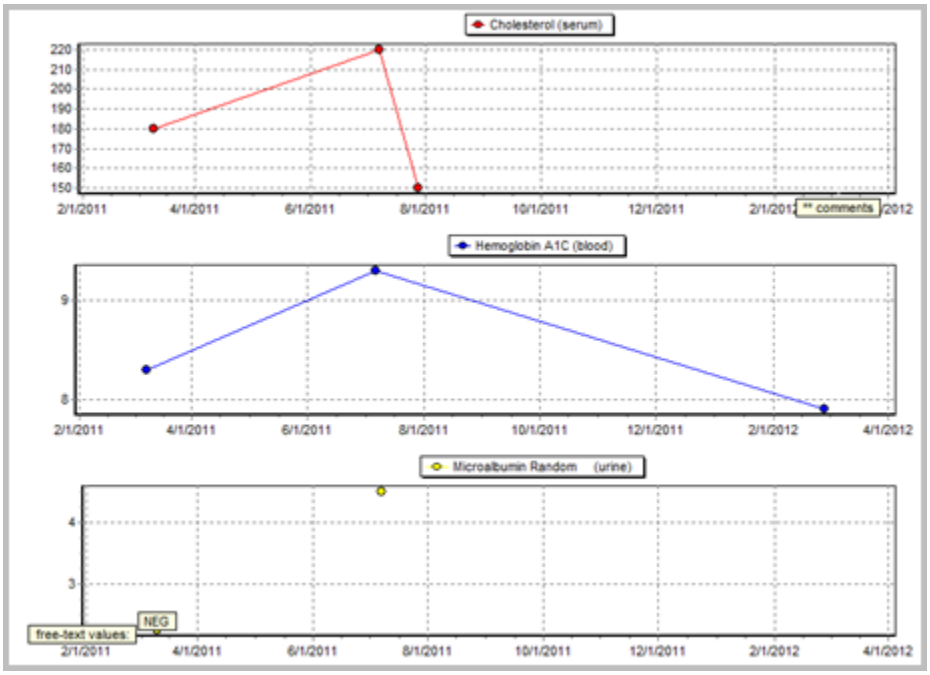


Figure 6-5: Lab values

6.1.1 Viewing Graphs

The patient's data is listed on the left side of the graph. You can change the time search at the bottom left.

Graphs can be viewed singly by selecting an item to view. Below is the TMP over the last year.

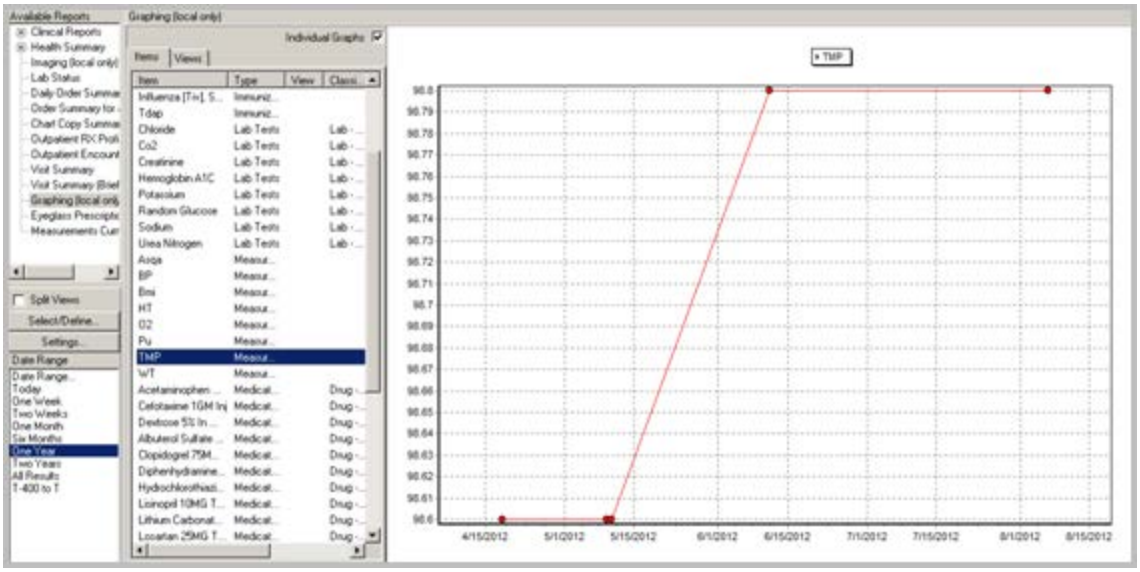


Figure 6-6: One item

Select multiple items to view by selecting the items in the selection box, holding the <Ctrl> key, and selecting other options. Next are the TMP, WT and Pulse over one year.

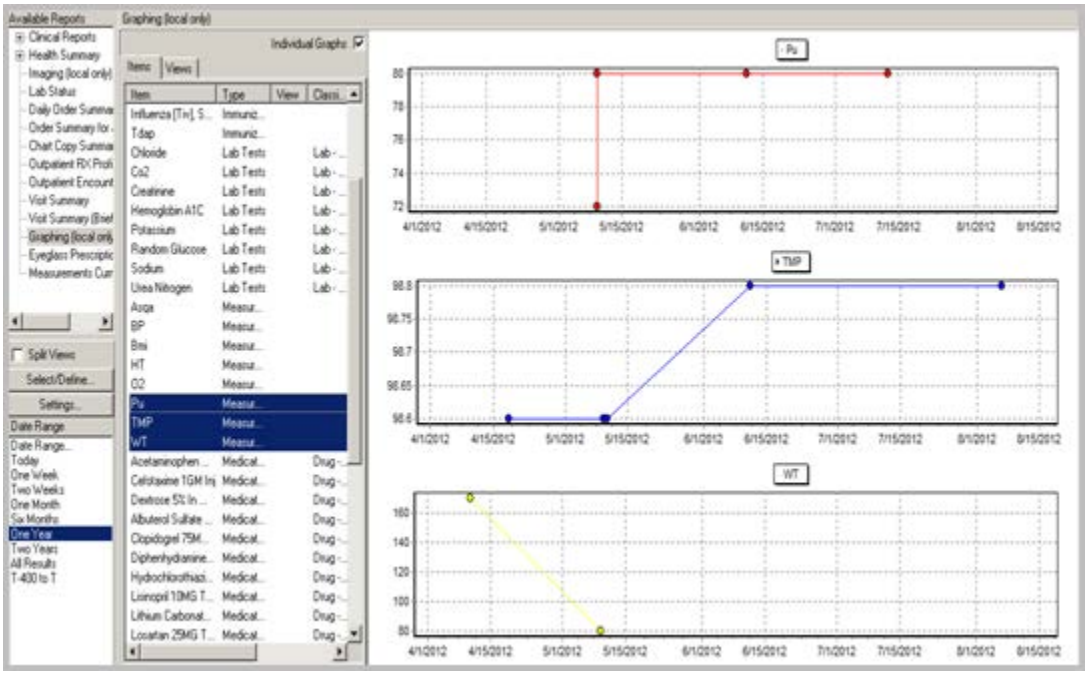


Figure 6-7: Multiple items to graph

View them on the same graph by de-selecting the **Individual graphs** check box at the top of the graph.

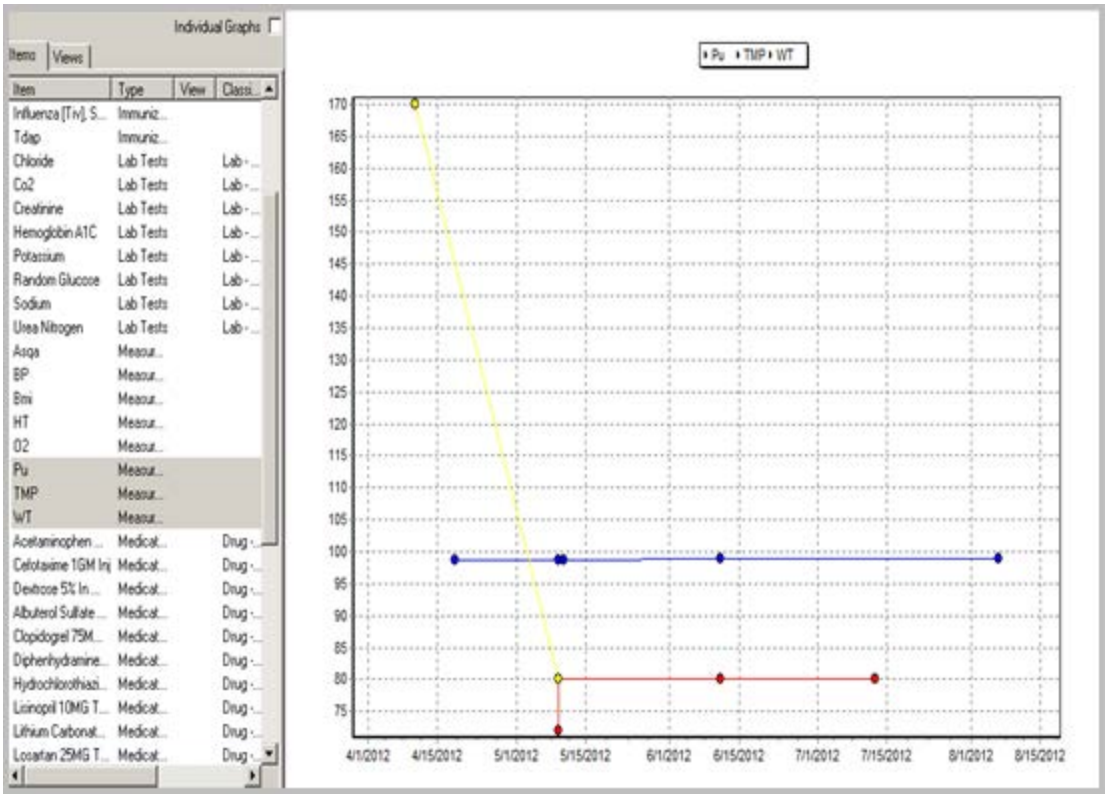


Figure 6-8: Multiple items on same graph

6.1.2 Setting Up Graphing

Graphing is set up on the **Lab** tab or the **Reports** tab.

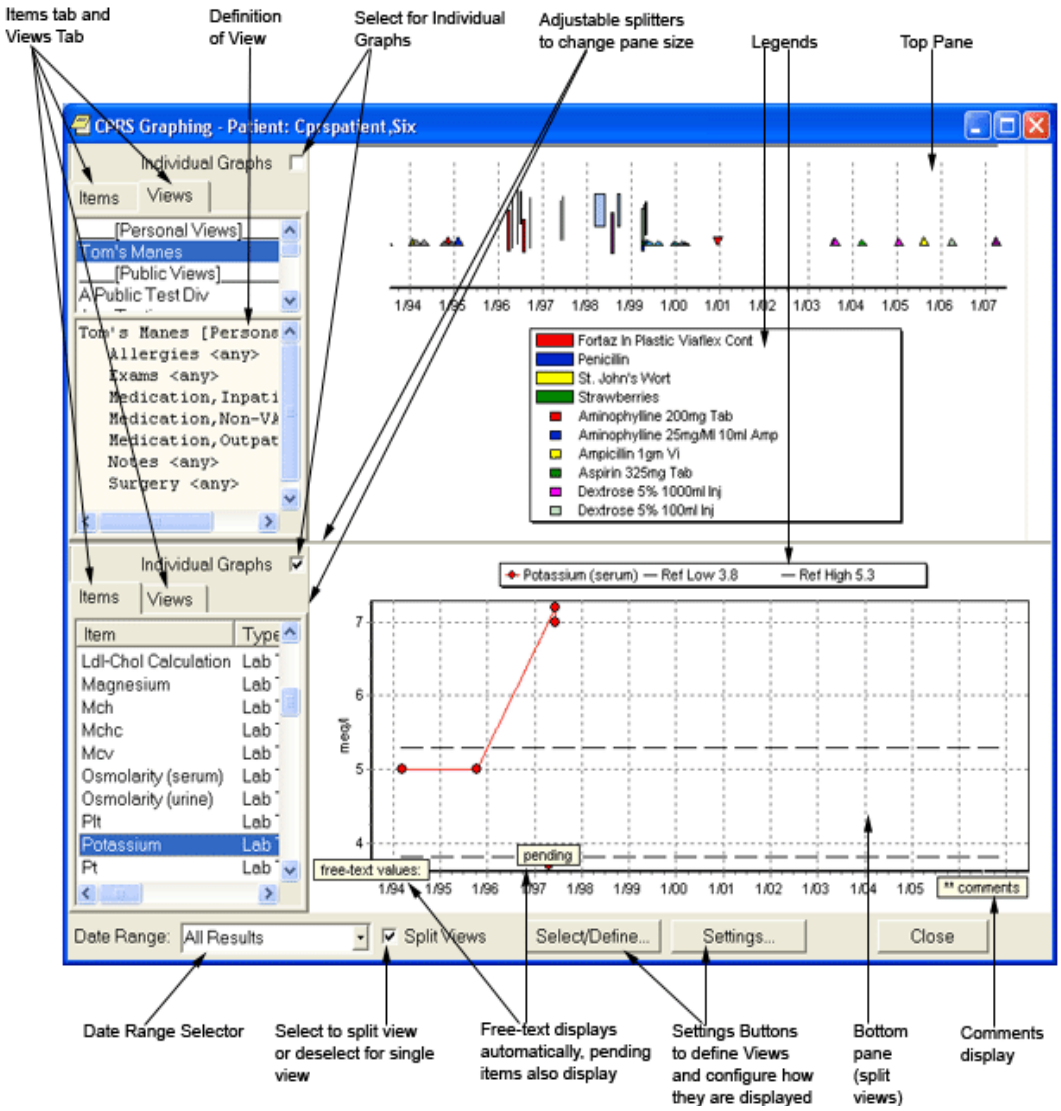


Figure 6-9: Setting up graphing

6.2 Settings

Use the Settings button to view and change the different items you want to graph.

Figure 6-10: Settings Button

Click the **Settings** button to access the **Graph Settings** dialog box.

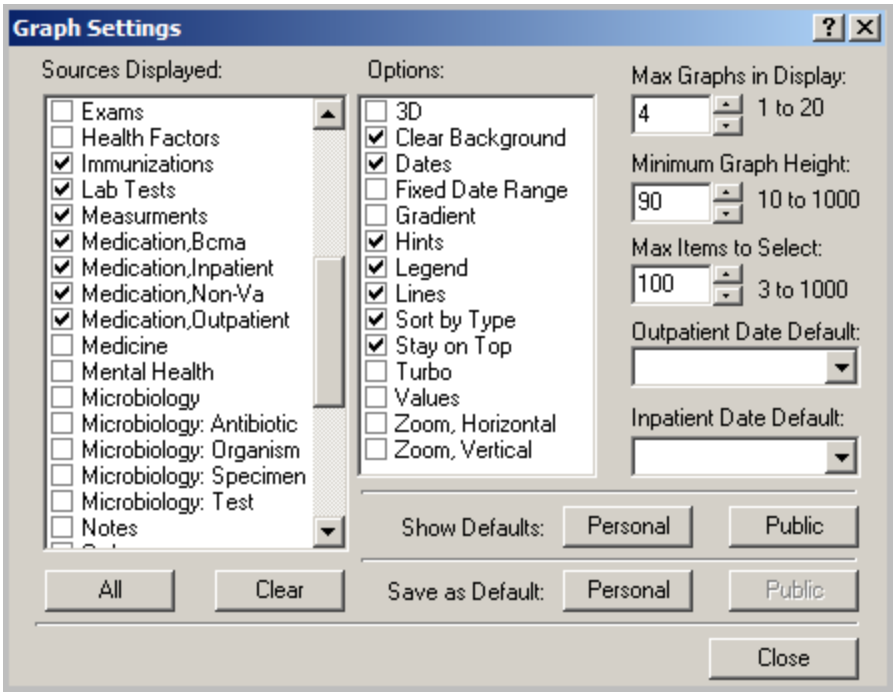


Figure 6-11: Settings dialog box

- Choose the sources, remembering that not all of them are available in IHS or at your site. For example, your facility may not do Anatomic Pathology reports.
- Select options to change the appearance of the graphs by selecting or de-selecting the items in the options list. Users will have to determine which options they prefer.
- Select the maximum number of graphs and the height.
- Select default dates, if desired.
- Users can save this as their default view if desire. The Show defaults display both the personal and public default. Only users assigned to the ORWG PUBLIC EDIT CLASS parameter are allowed to edit public views and settings for graphing.

> **Note:** The site should set this parameter for the Clinical Application Coordinator user class.

6.3 Views

There are two tabs on the graphing tool:

- **Items**
- **Views**

6.3.1 Items Tab

The Items list is data that the patient has in the time frame selected. The right panel displays all of the items for that selected time frame.

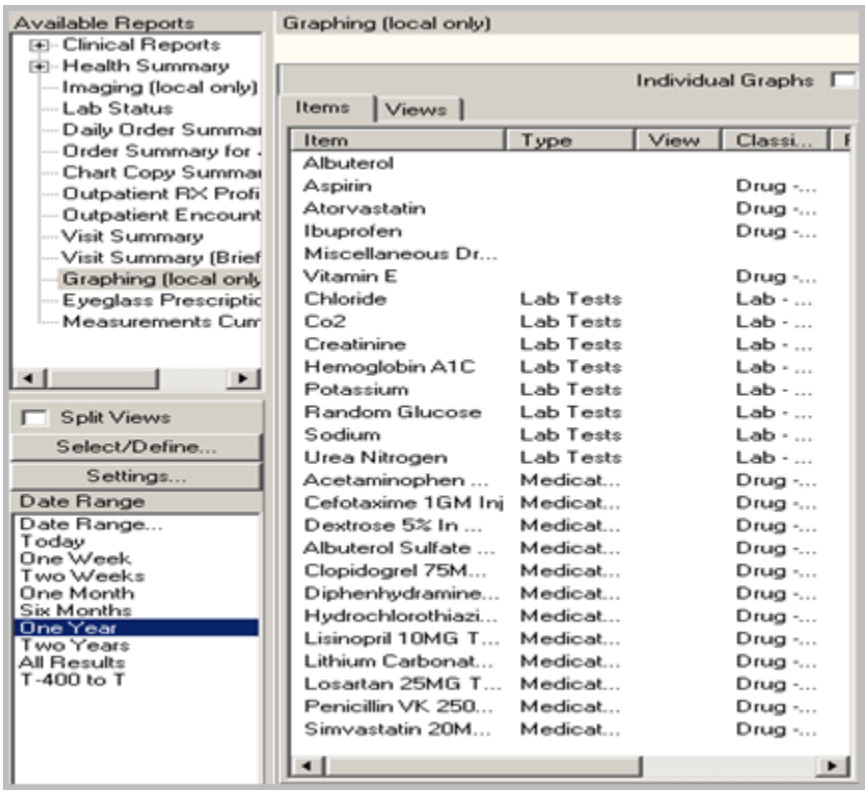


Figure 6-12: Item list

The other tab is Views, which includes your personal views and any Lab worksheets that you have created and saved. Below, there are two personal views and three Lab groups for the user logged on.

6.3.2 Views Tab

The Views screen display the personal and group views available.

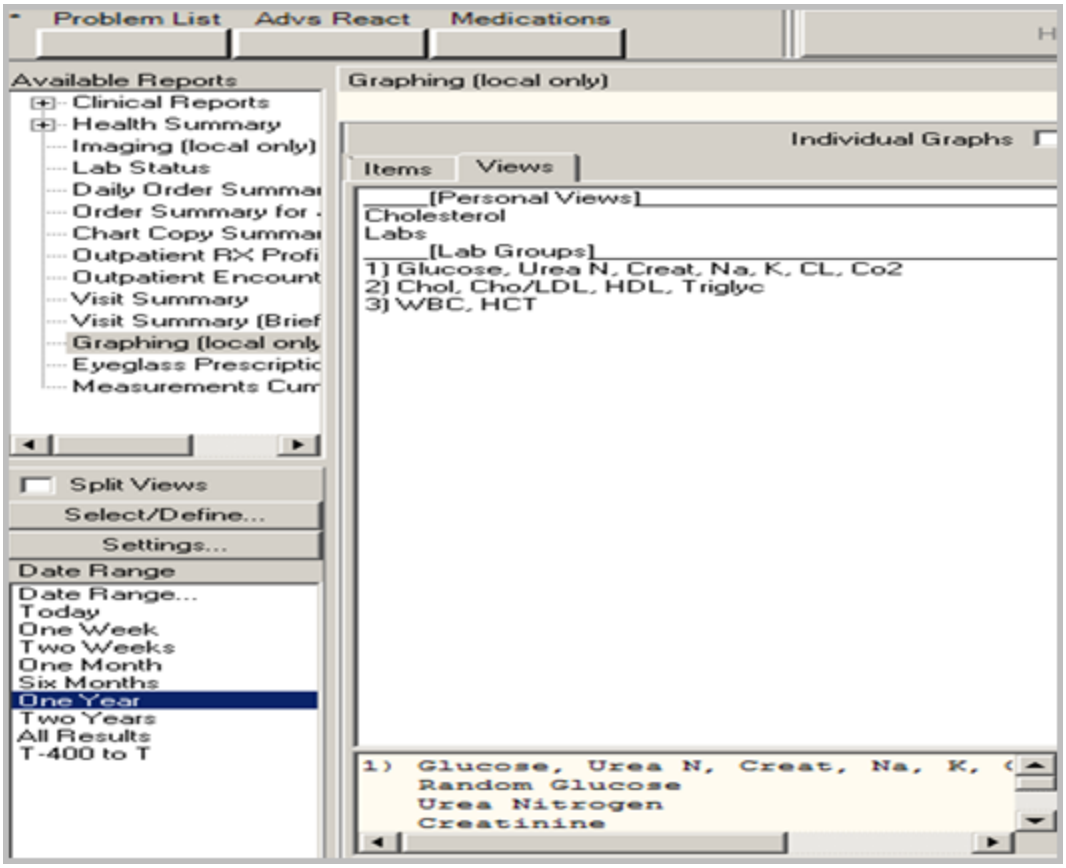


Figure 6-13: Views

6.3.2.1 New View

Users can create new views though Lab groups, but the user must log off and then back on before it appears in the graph view.

1. To create a new View, click the **Select/Define** button.

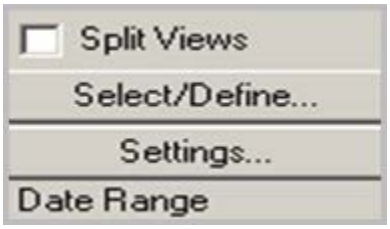


Figure 6-14: Select/Define button

The application displays the dialog box that enables the user to create a new view and save it.

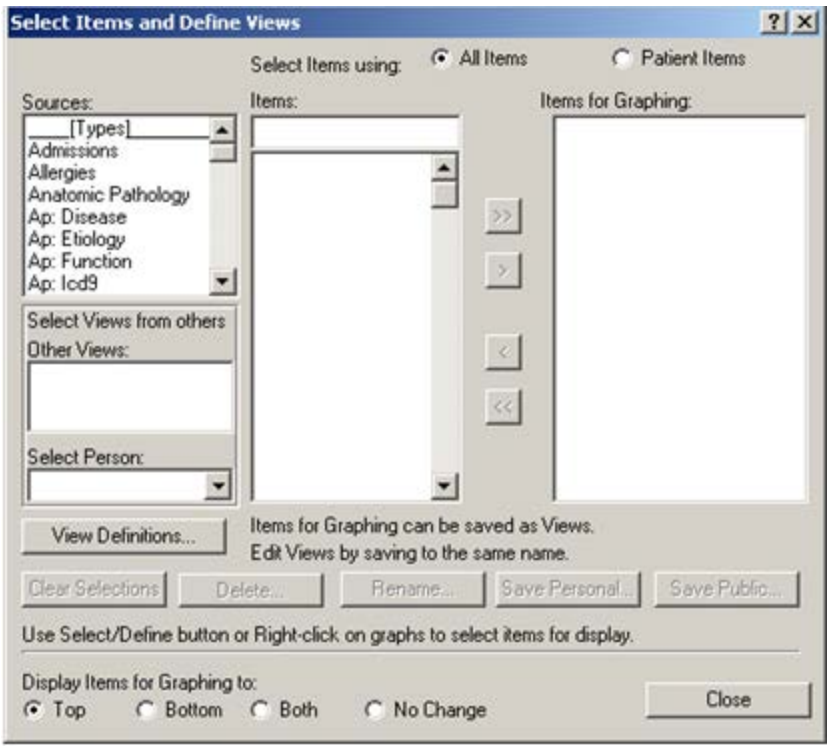


Figure 6-15: View Creation dialog box

2. Select the sources for your view (for example, Measurements).
3. Select which items in that source to be viewed.
4. Add them to the **Items for Graphing** by clicking the arrows.
5. Items can be selected from multiple sources.

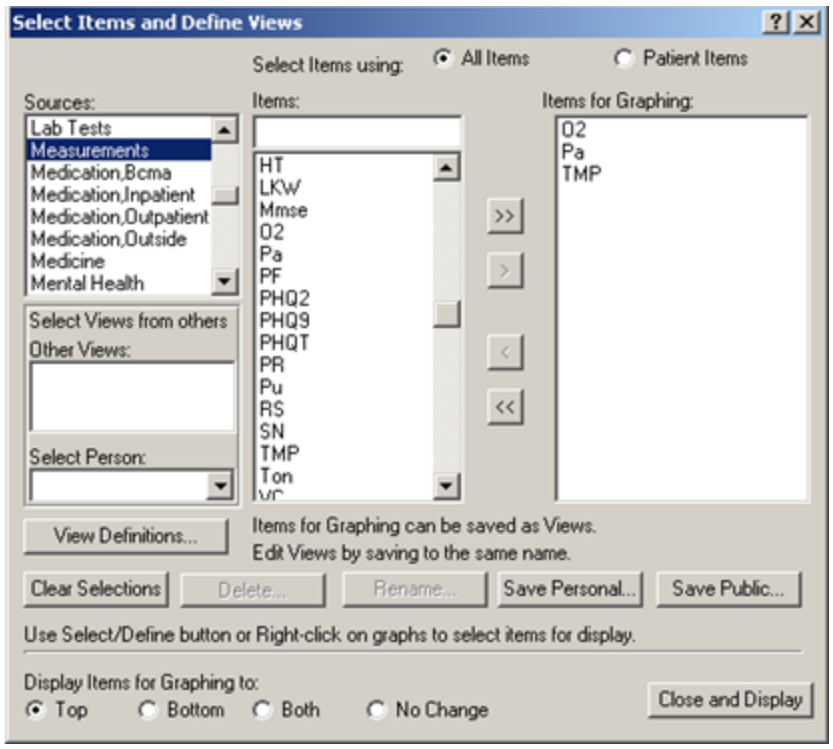


Figure 6-16: Personal View defined

6. When finished, save it as a personal view. Only users assigned to the ORWG PUBLIC EDIT CLASS parameter are allowed to edit public views and settings for graphing.

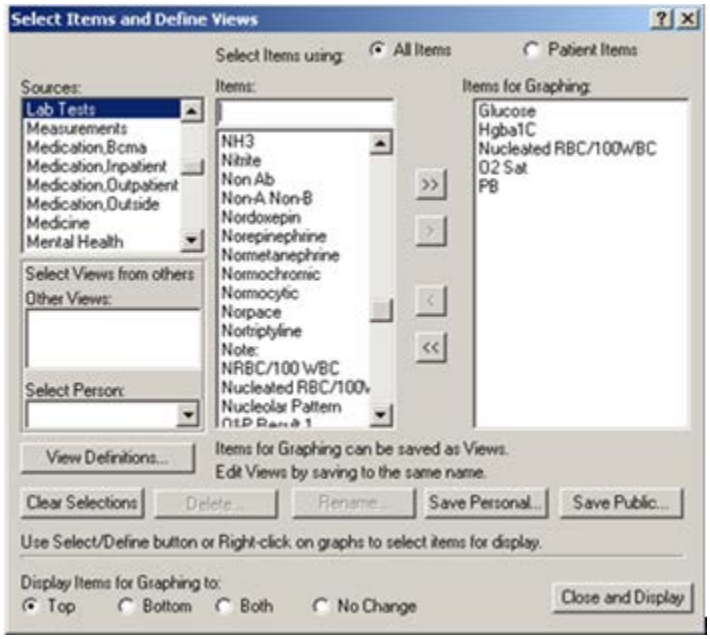


Figure 6-17: Ready to Save

7. Click **Save Personal** to access the **Save your Personal View** dialog box.

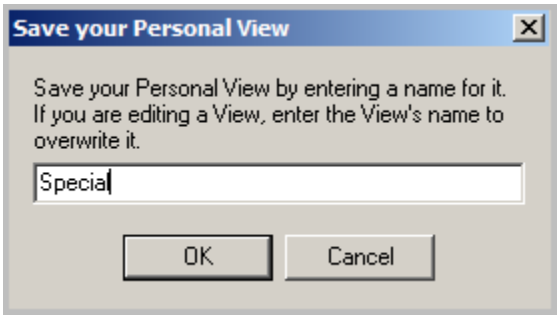


Figure 6-18: Personal View name

Give it a name to save it as a personal view.

8. Click the View Definitions button to get a listing of what is in all the views that are available.

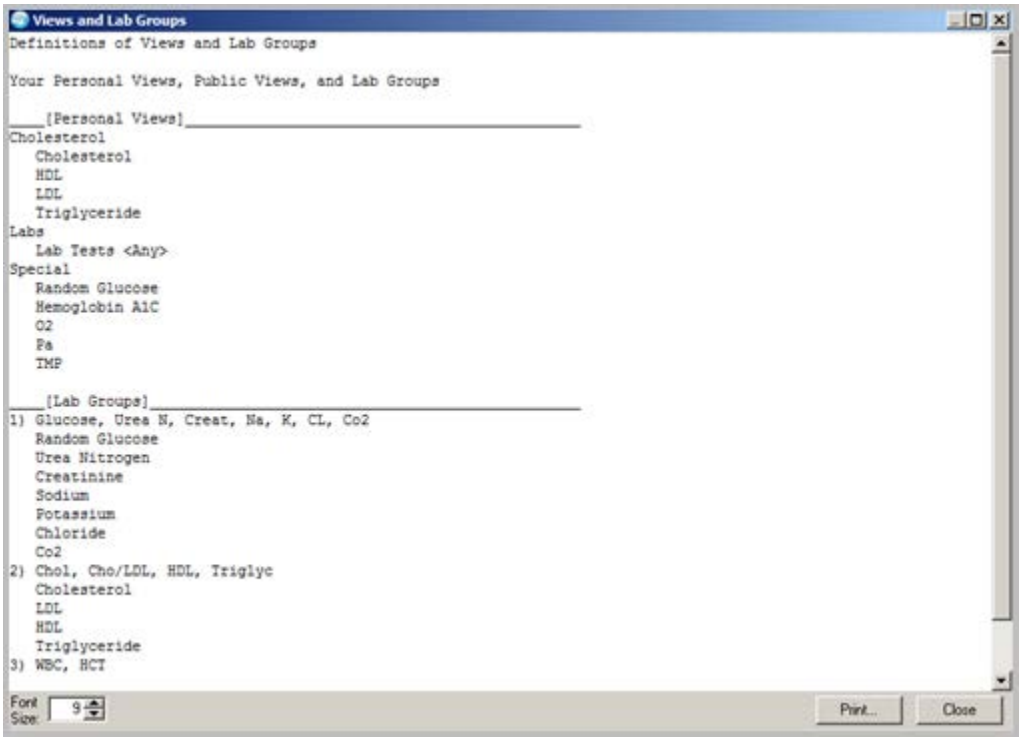


Figure 6-19: View Definitions

This view is then available to be selected.

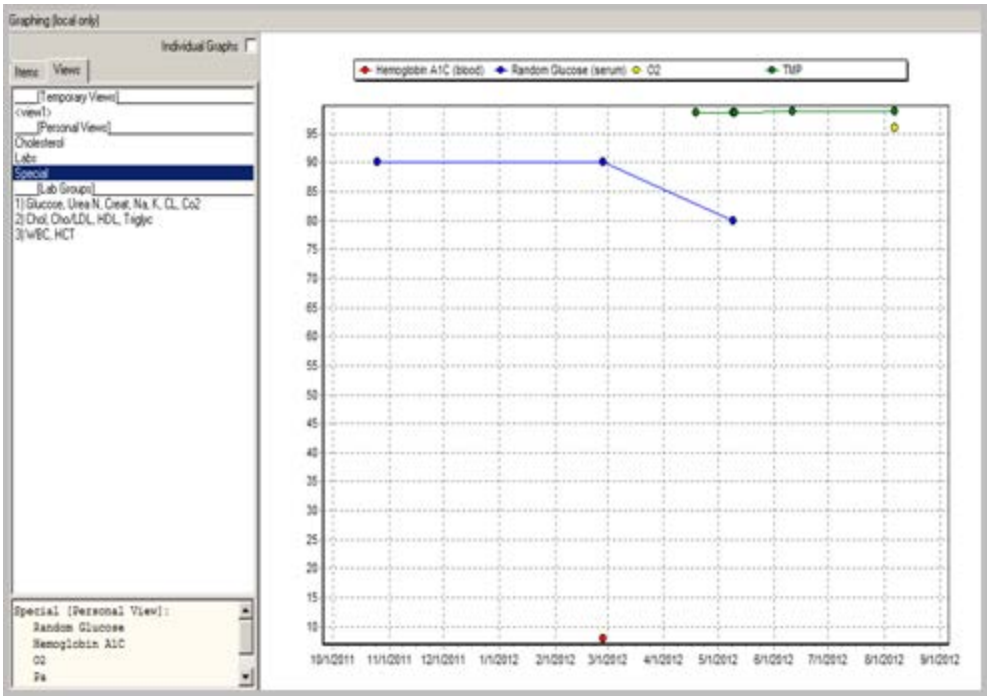


Figure 6-20: New View

6.3.2.2 Split Views

Select the **Split Views** checkbox to view two different views at the same time.

Figure 6-21: Click Split Views

In the case below, the first view is a cholesterol panel and the second view is the new one that contained labs and vitals. In one case it is one graph and in the other individual graphs.

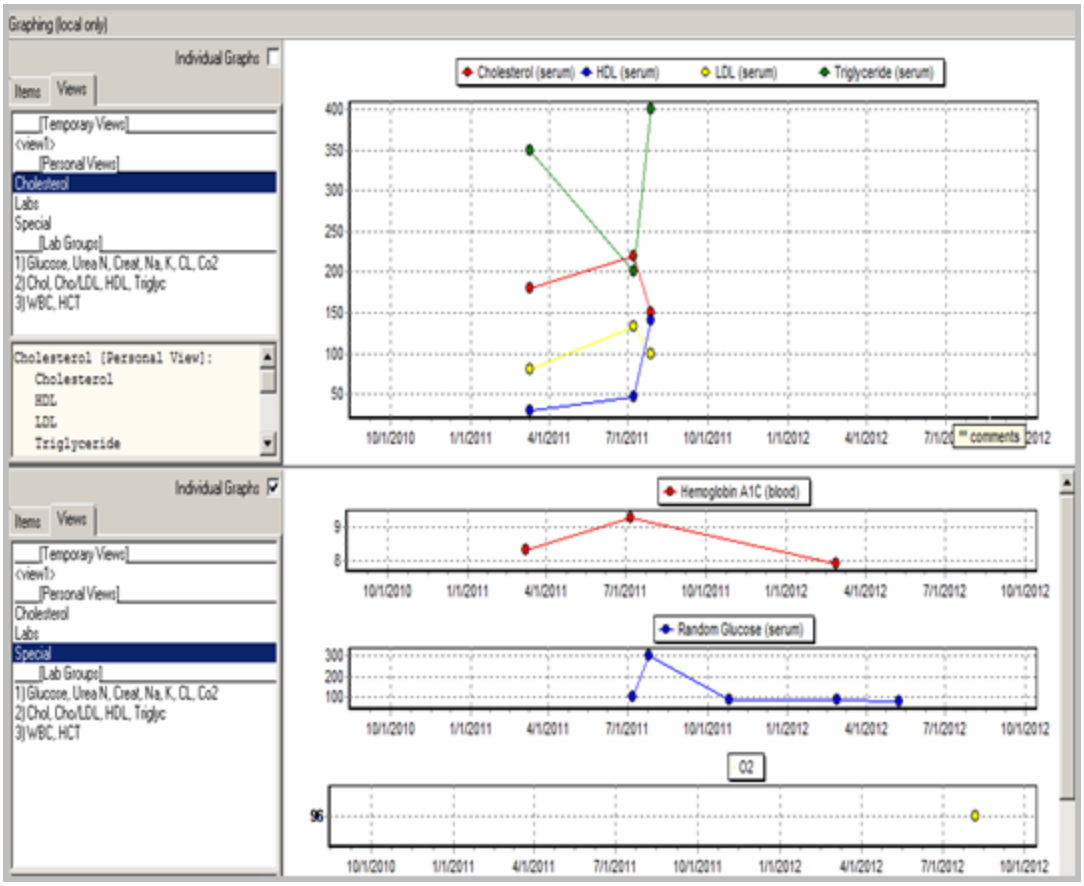


Figure 6-22: Split Views

6.4 Parameters

There are several ORGW parameters, but most of them are set up using the settings and views in the GUI. These parameters should **not** be edited in RPMS, other than the ones below.

6.4.1 ORWG Graph Public Editor Class

The CPRS Graph Public Editor Classes is the parameter that enables a class (usually the CLINICAL COORDINATOR class) to define Public views. Once this has been set up, the CAC should create a default public setting and perhaps several views for the users. The Package Setting is defined to use the VA Vitals application so a System Setting using Measurements should be defined as the default. Measurements represent the IHS Measurement file entries.

```
-- Setting ORWG GRAPH PUBLIC EDITOR CLASS for System: DEMO.MEDSPHERE.COM --
Select Sequence Number: 1

Sequence Number: 1//    1
User Class: CLINICAL COORDINATOR//
```

Make sure **Measurements**, as well as labs, meds, and whatever else the site desired, is checked and then save as Public Default.

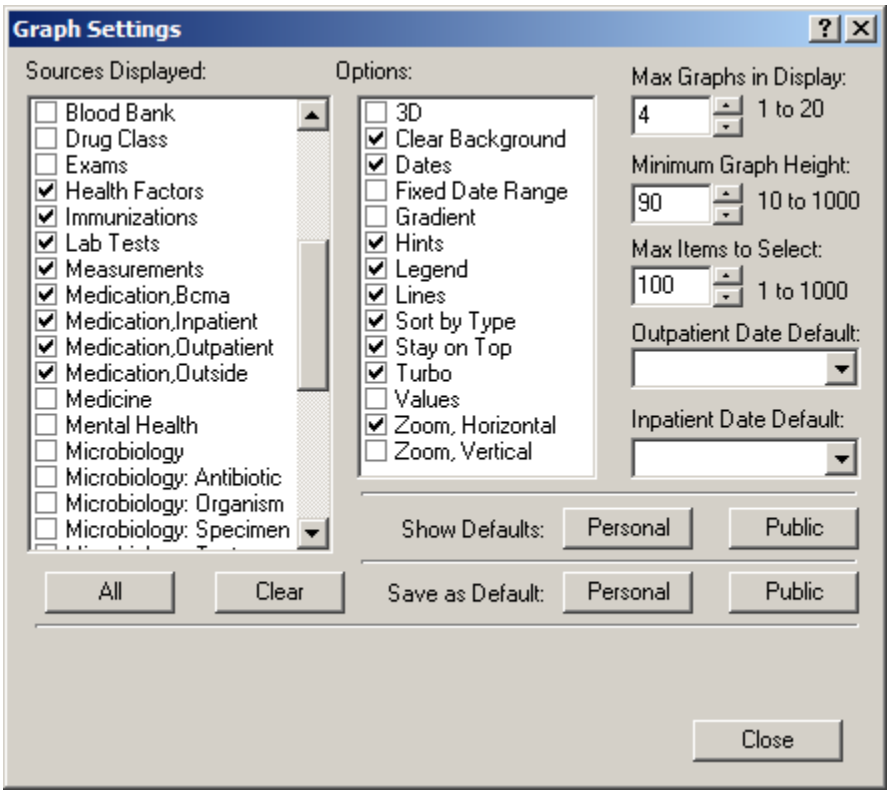


Figure 6-23: Public Default

6.4.2 ORWRP REPORT LIST

1. To ADD the graphing to the Report list, the ORWRP REPORT LIST parameter must be edited.

2. At the system or division level, add this report to the sites list.

```
ORWRP REPORT LIST may be set for the following:

     2   User          USR    [choose from NEW PERSON]
     3   Division      DIV    [choose from INSTITUTION]
     4   System        SYS    [DEMO.MEDSPHERE.COM]
     6   Package       PKG    [ORDER ENTRY/RESULTS REPORTING]

Enter selection: 4  System   DEMO.MEDSPHERE.COM

--------- Setting ORWRP REPORT LIST  for System: DEMO.MEDSPHERE.COM –
```

3. Select an unused sequence number and add the report.

```
Sequence: 90//    90
Report: ORWG GRAPHING//
```

7.0 Inpatient Meds for Outpatients (IMO)

7.1 Clinic Set Up

Each clinic location needs to be defined as a site for IMO. Set up this field in FileMan.

```
Select OPTION: 1  ENTER OR EDIT FILE ENTRIES
Select HOSPITAL LOCATION NAME:    EMERGENCY ROOM
ADMINISTER INPATIENT MEDS?: YES//
```

7.2 Clinic Definition

The clinic definition file 53.46 must be populated with the clinic name, as well as if IMO orders should be AUTO-DC'd and/or sent to BCMA. This does not override other auto-d/c settings.

```
INPUT TO WHAT FILE: PHARMACY SYSTEM// 53.46  CLINIC DEFINITION
                                          (1 entry)
EDIT WHICH FIELD: ALL//

Select CLINIC DEFINITION:    EMERGENCY ROOM
CLINIC: EMERGENCY ROOM//
NUMBER OF DAYS UNTIL STOP:
AUTO-DC IMO ORDERS: YES
SEND TO BCMA?:
```

7.3 Display Group

A new CLINIC ORDERS display group in IMO (Inpatient Medication orders for Outpatients) has been created for grouping IMO orders. On the Orders tab, IMO orders will be displayed under the Clinic Orders group. This includes oral medications, injections and nursing orders. Infusions will display as "Infusions." Users can select Custom Views | Clinic Orders or Custom Views | Pharmacy | Clinic Orders to view all IMO orders. On the Meds tab, IMO orders are displayed under Inpatient Medications. Transfer actions from the Meds tab are not allowed for IMO orders.

For EHR to display the Clinic Orders display group on the Orders tab, sites must make an entry in the ORWOR CATEGORY SEQUENCE parameter at the package or system level depending on which level the site uses.

```
ORWOR CATEGORY SEQUENCE may be set for the following:
     8   System        SYS    [DEMO.MEDSPHERE.COM]
     10  Package       PKG    [ORDER ENTRY/RESULTS REPORTING]
Enter selection: 8  System   DEMO.MEDSPHERE.COM
```

```
Enter selection: 8  System

 Setting ORWOR CATEGORY SEQUENCE  for Package: ORDER ENTRY/RESULTS
REPORTING
Select Sequence: ?

Sequence  Value
--------  -----
10        M.A.S.
30        VITALS/MEASUREMENTS
35        ACTIVITY
40        NURSING
50        DIETETICS
60        IV MEDICATIONS
65        OUTPATIENT MEDICATIONS
69        CLINIC ORDERS
70        INPATIENT MEDICATIONS
72        NON-VA MEDICATIONS
75        LABORATORY
80        IMAGING
90        CONSULTS
100       PROCEDURES
110       SURGERY
120       OTHER HOSPITAL SERVICES
 Select Sequence: 71
Are you adding 71 as a new Sequence? Yes//   YES
Sequence: 71//    71
Display Group: CLINIC ORDERS
```

When selecting inpatient med orders, the same list that you see for inpatients should be selectable, including all tablets. Sites may also choose to create a specific order menu for Clinic Orders, which may include medications, nursing/patient care orders, etc.

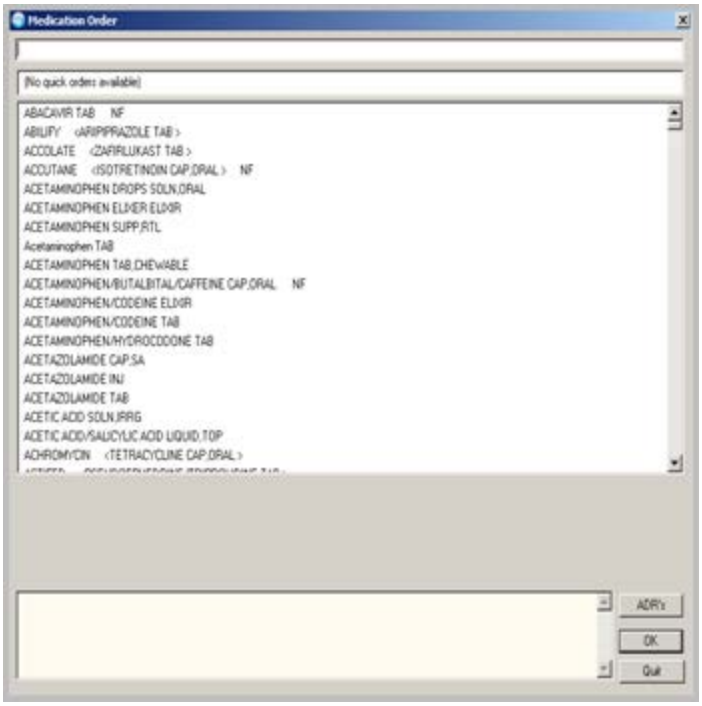


Figure 7-1: IMO Selection in Clinic

IMO medications appear in the list as **Clinic Orders**.

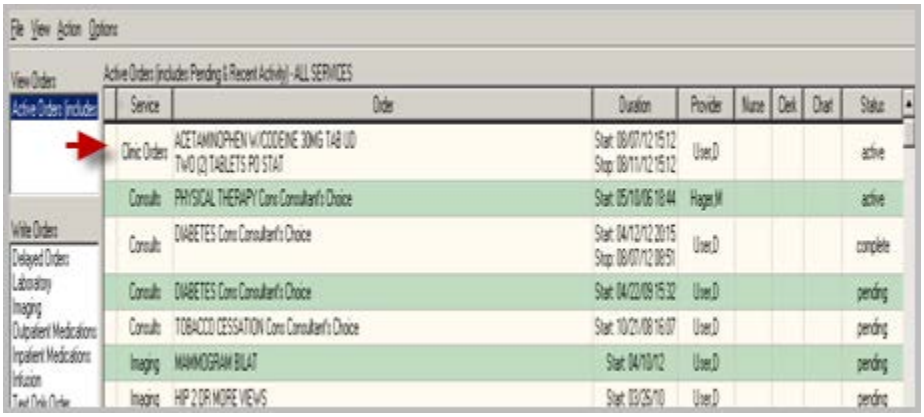


Figure 7-2: Processed IMO Order

8.0 Level of Intervention

The level of Intervention is designed for public health nurses to document their interventions in the RPMS-EHR. This is a visit-related component and there is only one level of intervention allowed per visit.

Note:	CACs may want to display this near or adjacent to the activity time for use by PHN staff.

After navigating to the PHN component, the main **PHN** window displays all Level of Interventions for the patient by date.

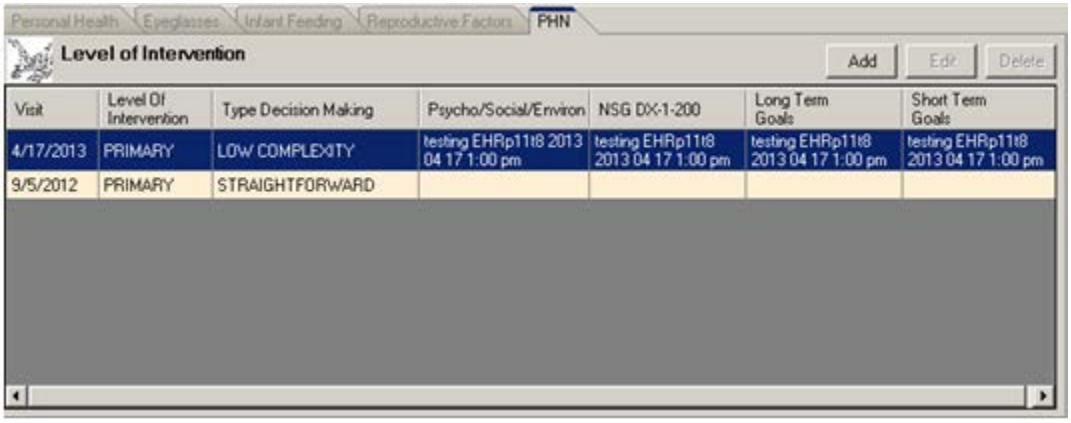


Figure 8-1: Sample PHN Component

The default sort for the window is by **Visit** date although users can sort by any of the columns in the grid.

8.1 Adding a New Entry

To add a new entry, make sure a visit is selected and then click the **Add** button (or select **Add** from the context menu). The **Add Intervention** dialog box appears.

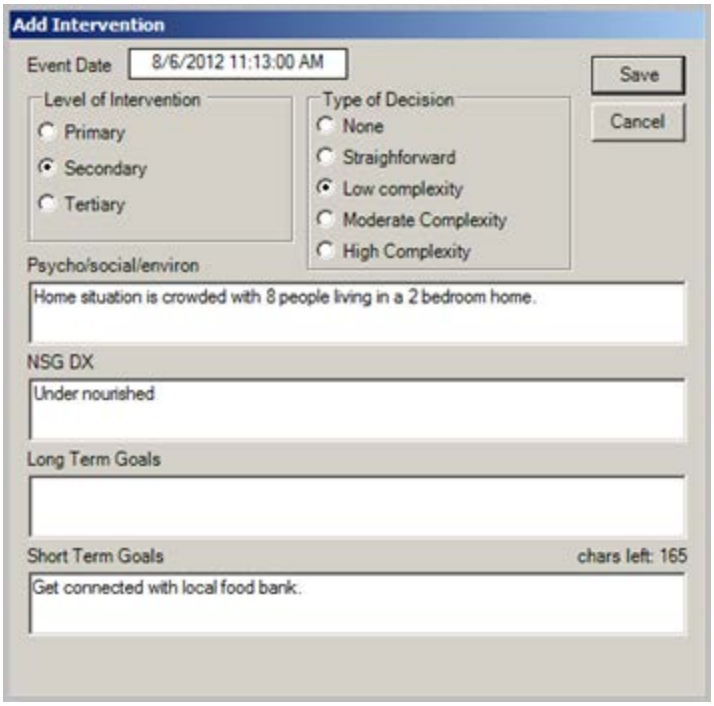


Figure 8-2: Ready to Save

The Event Date/Time is defaulted to Date/Time of current visit. However, the user may change the date/time.

Users can select one option button for Level of Intervention (Mandatory selection of Primary, Secondary, or Tertiary) and the Type of Decision (Optional selection of None, Straightforward, Low Complexity, or High Complexity).

With the service category of Chart Review and Telephonic, only Primary is available with Secondary and Tertiary inactive. With the service category of Ambulatory, all three Levels of Intervention are available.

Optional text fields are available, with up to 200 characters each, to add Psycho/Social/Environment comments, Nursing Diagnoses comments (NSG DX), Long Term Goals, and Short Term Goals.

Figure 8-3: Saved New Entry

8.2 Editing a Level of Intervention

Level of Intervention is editable after highlighting the row and clicking **Edit** (or selecting **Edit** on the context menu) to display the Edit Intervention dialog. (Alternatively, double click the record). Level of Intervention is editable for unlocked visits.

8.3 Deleting a Level of Intervention

The Delete button deletes the selected entry from the PHN component; however it is still stored in the V PHN file as a deleted entry. Select the item that needs to be deleted. Then click **Delete**.

The user will be asked to confirm the deletion.

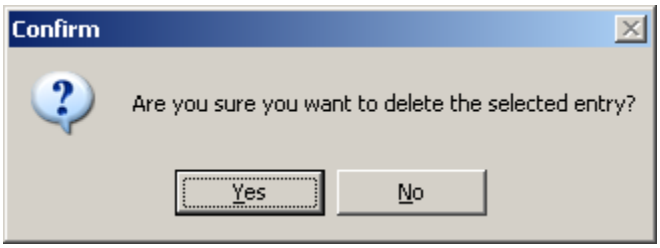


Figure 8-4: Confirm Deletion

Click **Yes** to remove the selected entry from the PHN component.

9.0 Notes

9.1 Bug Fixes

9.1.1 AutoSave

In previous RPMS-EHR versions, the application gave no indication to the user if an AutoSave experienced an error. This situation usually occurred on a long note because of unknown connectivity issues. On occasion, a cryptic developer debugging message would be displayed, but the message did not help the user, and also caused the EHR to shutdown.

Developers made changes to this version so that if an error occurs, the system advises the user to retry via Ctrl-Shift-S (save and continue) or Save Without Signature to improve chances to recover any text that was not correctly saved due to the error. If this process continues to fail, the RPMS-EHR instructs the user to copy and paste the text of the note to MS-Word before continuing or exiting the RPMS-EHR.

9.1.2 Blank Notes

If a user is disconnected from the server after creating a new document, but before any text has been either saved or AutoSaved, the result is a blank unsigned document in TIU. On a hard disconnect, there is no way for the RPMS-EHR or TIU to prevent this from happening.

In previous versions, if the user then logged on again and attempted to sign that blank document, ignoring the warning about possible missing text, a signed, blank document would result. In this version, if the document is empty, as determined via a TIU API also used in LM, the RPMS-EHR does not allow the user to sign the document.

9.1.3 Additional Signers

If a user is adding additional signers for a document and then removed some of the names from the list before clicking OK, those erroneous entries were sometimes still appearing with the document as additional signers. This occurred for any name in the list that also had a title (for example, M.D., Pharmacist, HIM, and so on) appended to the name in the left-hand lookup box. This has been corrected.

9.1.4 Spell Check

When clicking the spelling or grammar check menus, the first thing that happens is a forced silent AutoSave of the note's current text prior to passing that text to the MS-Word spell-checker. Developers added an additional automatic AutoSave of the note text immediately upon return from the spelling and grammar checks on the Notes, Consults, and Discharge Summary components. This now occurs with no user action. Those AutoSaves have been enhanced so that the note text will be placed in the TEXT nodes of the document in the TIU DOCUMENT file (# 8925), instead of in the edit buffer's TEMP nodes.

The effect of this change is that if a spell-check error occurs and the user gets kicked out of CPRS, when the user goes back in and selects that note, the text will be visible and editable automatically, allowing a complete recovery. Depending on the exact code location/timing of the still-unknown spell-check error, the note might or might not include any changes made during the spell-check.

9.2 CPRS 25 Changes incorporated by RPMS-EHR

RPC TIU ONE VISIT NOTE? Problem Resolved – When determining if more than one note of a particular Document Type is allowed to be added to a particular visit, the RPC was not using a guaranteed method of choosing the correct visit. This change eliminates the possibility of the RPC choosing an incorrect visit to check.

Actions Prevented on Note When Viewed from Consults Tab – If a user was viewing a note on the Consults component, CPRS did not allow any action to be taken on it from the Notes component. Now, actions on the Progress Notes component will be prevented only if the note is actually being edited on the Consults component. The reverse scenario was already working correctly.

TIU Parameter For More than One Discharge Summary Now Respected – The TIU document parameter allowing or disallowing more than one note per visit was not being respected for documents in the Discharge Summary class. Until this version, only one document of the DISCHARGE SUMMARY class was allowed per admission, regardless of the value of the document parameter.

9.3 CPRS 26 Changes incorporated by RPMS-EHR

9.3.1 Progress Notes Text Search

Developers added a new text search feature. This feature searches the current list of notes to find all notes that contain the exact text that a user enters and then displays those notes in the tree view of the Notes tab.

The search will only look at the notes in the list so if the patient has more notes than the number being displayed, those will not be searched.

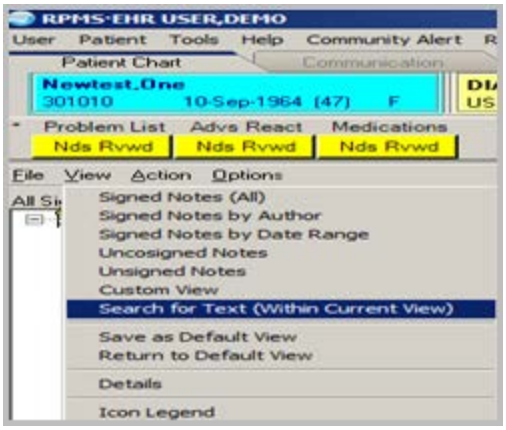


Figure 9-1: Search for Text

1. Select **Search for Text** from the context menu in the left pane of the Progress Notes component (or select **View | Search for Text**). The List Signed Notes by Author dialog displays.

2. Type the text string to search on.

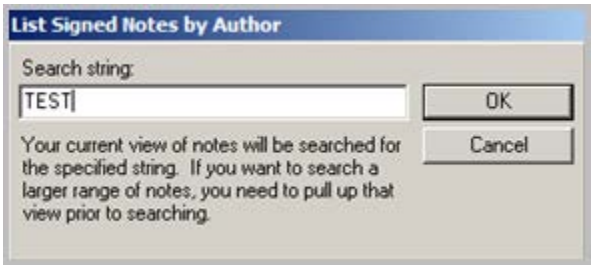


Figure 9-2: Search String

3. View the results.

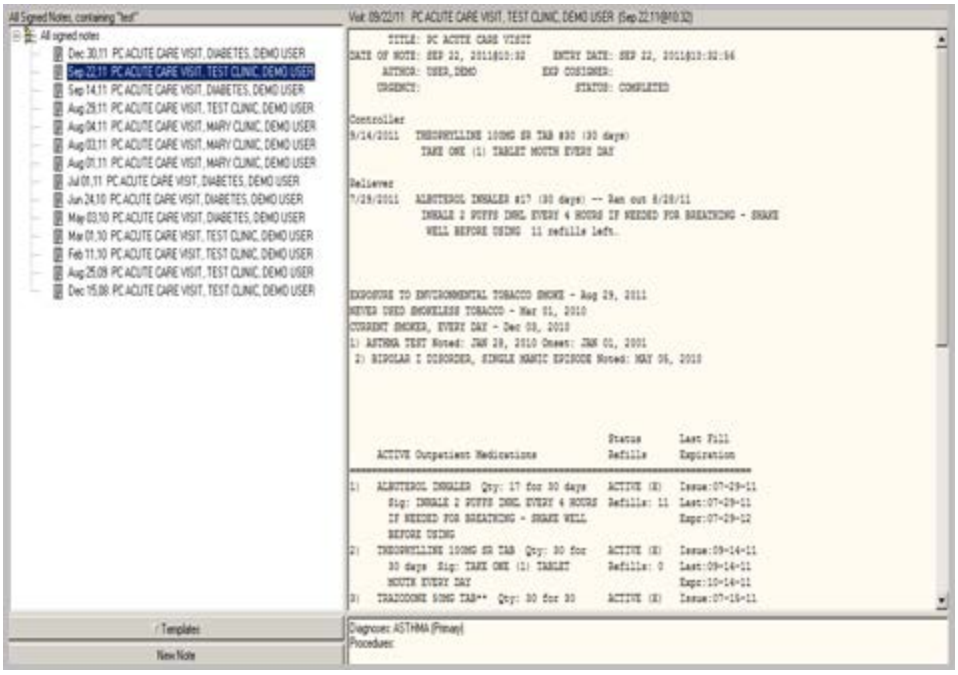


Figure 9-3: Notes with the word *Test* in them

9.4 Add Data Objects in Template Editor

In the past, if a user needed to add an object while making a template, they had to log out of the RPMS-EHR and log back in to view the newly created object. Now, there is a data object refresh that brings in newly created objects.

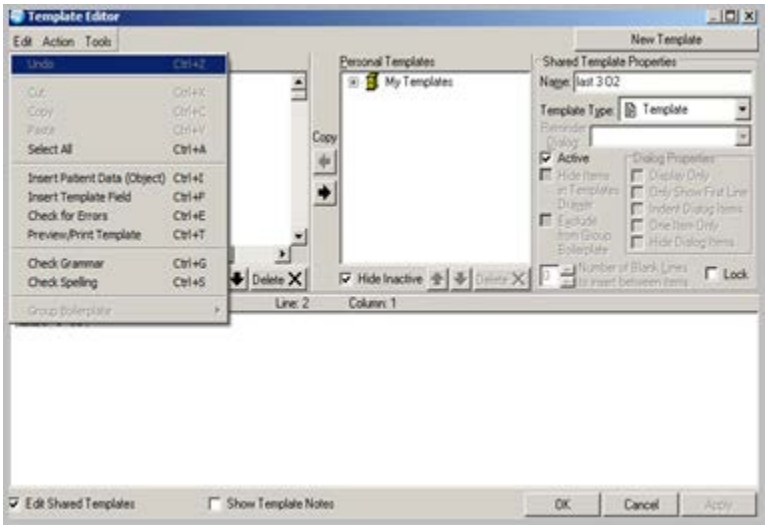


Figure 9-4: Template Editor

Select **Insert Patient Data Object** from the **Edit** drop-down in the template editor. A refresh button has been added to the component.

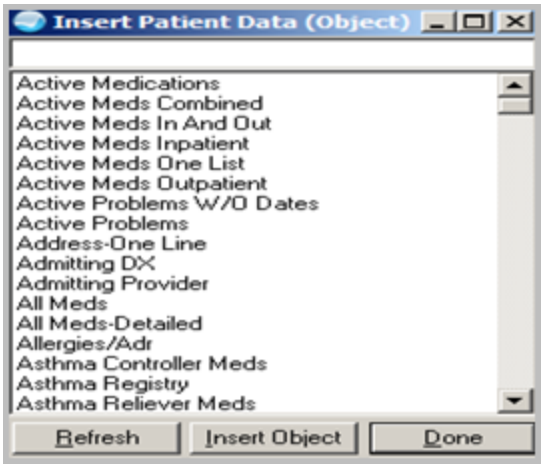


Figure 9-5: Data Object Insertion

9.5 CPRS 27 Changes incorporated by RPMS-EHR

9.5.1 Template Searches

Previously, when users searched for a template with the Find Template feature, either in the template editor or in the templates drawer, the search could take an inordinate amount of time and make it appear that CPRS was frozen.

Resolution:

CPRS developers added a dialog box that displays when a search takes longer than a second or two.

1. Right-click inside the template drawer.

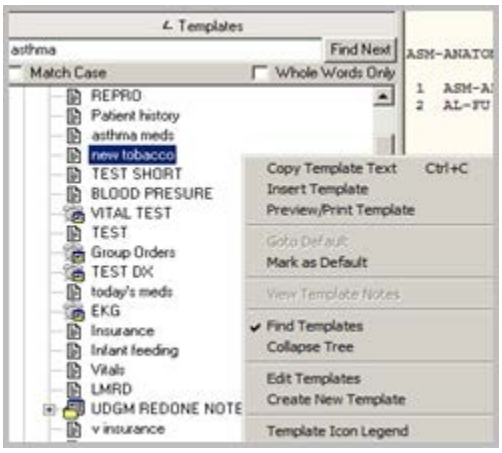


Figure 9-6: Template Search Choice

2. Choose **Find Templates**.

3. Type the text to search on.

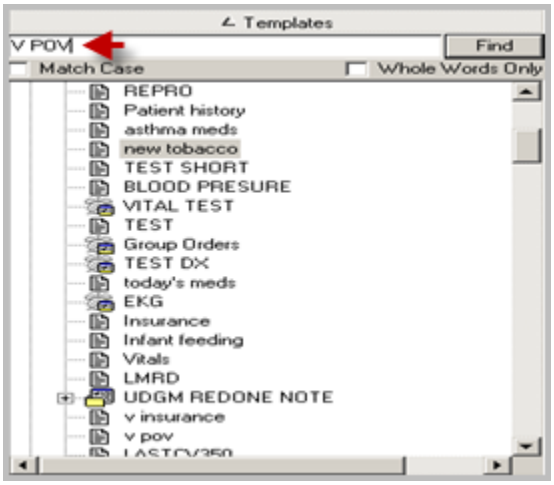


Figure 9-7: Template Search

4. Click **Find**.

If the search takes longer than two seconds, the following message appears:

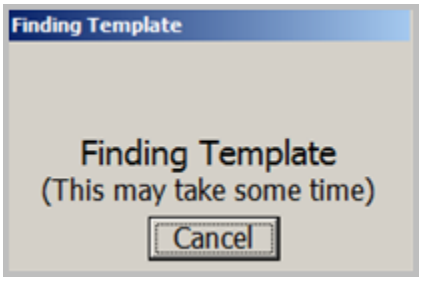


Figure 9-8: Template Search Text

10.0 Notifications

10.1 New Notifications

New notification/alerts were added with RPMS-EHR Patch 11

New Notifications	Notification Information
Mammogram Results (69)	VA only, not for use in IHS
Pap Smear Results (70)	VA only, not for use in IHS.
Anatomic Pathology Results (71)	Triggered within the Lab package. They are for informational purposes only. Sent to the practitioner requesting the AP procedure if that user has the notification/alert enabled (turned on).
Outpatient Medications Expiring (72)	This alert is for Separation of Notifications for Inpatient and Outpatient Expiring Orders.

In addition, before each new notification will function, it must be enabled via the Enable/Disable Notifications option under the Notification Mgmt Menu in the CPRS List Manager Clinical Coordinator menu.

Anatomic Pathology Results notification/alerts are exported with a deletion parameter value of Individual Recipient. This means the alert will be deleted for each recipient individually.

> **Note**: It must be noted that the Mammogram and Pap Smear results notifications refer to the VA Women's Health package and will not trigger notifications in RPMS. Sites must be aware that they exist, but MUST NOT activate them.

10.2 Notification Changes

The MEDICATIONS EXPIRING Notification was separated for Inpatient and Outpatient Expiring Orders.

Old Notification	Changed to
MEDICATIONS EXPIRING	MEDICATIONS EXPIRING – INPT | affects orders entered on an inpatient.
MEDICATIONS EXPIRING	MEDICATIONS EXPIRING – OUTPT | affects orders entered on an outpatient

> **Note**: Be aware that if the MEDICATIONS EXPIRING – OUTPT notification is turned on, there is the potential for a significant increase in the number of alerts generated.
>
> Thoroughly examine the parameters that control the generation of this notification using the NOTIFICATION MGMT MENU options **Enable/Disable Notifications, Set Default Recipient(s) for Notifications, and Set Provider Recipients for Notifications**

10.3 Divisional Change

A change was added to get division for use in notification parameters based on the patient's location. For this use it is the patient's location when the order related to the alert was placed. If the patient's location does not exist for the order then the user's division values will be used for the notification parameters. In general, orders entered in the RPMS-EHR will have the patient's location.

10.4 Flagged Orderable Items

Developers expanded flagged orderable item functionality to send alerts to provider recipients. To accomplish this, the following new parameters have been added:

- ORB OI EXPIRING – INPT PR – Flag Items for INPT EXPIRING Prov Recip
- ORB OI EXPIRING – OUTPT PR – Flag Items for OUTPT EXPIRING Prov Recip
- ORB OI ORDERED – INPT PR – Flag Items for INPT ORDER Providr Recip
- ORB OI ORDERED – OUTPT PR – Flag Items for OUTPT ORDER Providr Recip
- ORB OI RESULTS – INPT PR – Flag Items for INPT RESULT Provid Recip
- ORB OI RESULTS – OUTPT PR – Flag Items for OUTPT RESULT Provid Recip

These parameters can be set at the Division and System levels, are not available using the XPAR General Parameters menus and are accessed through the following option paths. (Flagging orderable items for inpatients is shown as an example.)

1. Select OPTION NAME: ORMGR | CPRS Manager Menu | menu
2. Select CPRS Manager Menu Option: PE | CPRS Configuration (Clin Coord)
3. Select CPRS Configuration (Clin Coord) Option: NO | Notification Mgmt Menu
4. Select Notification Mgmt Menu Option: 8 | Flag Orderable Item(s) to Send | Notifications

5. Flag ORDERABLE ITEMS to Send Notifications.
   - Flag INPATIENT orders/results/expiring orders.
   - Flag OUTPATIENT orders/results/expiring orders.
   - Flag Lab tests for Threshold Exceeded alerts.
6. Select one of the following:
   - 1 to flag INPT orders/results.
   - 2 to flag OUTPT orders/results.
   - 3 to set Lab Thresholds: 1
7. Flag INPATIENT orderable items to send Notifications/Alerts.
   - Flag Inpatient ORDERS.
   - Flag Inpatient ORDERS for PROVIDER RECIPIENTS.
   - Flag Inpatient RESULTS.
   - Flag Inpatient RESULTS for PROVIDER RECIPIENTS.
   - Flag Inpatient EXPIRING orders.
   - Flag Inpatient EXPIRING orders for PROVIDER RECIPIENTS.
8. Select one of the following:
   - Select 1 or 2 to flag inpt ORDERS.
   - 3 or 4 to flag inpt RESULTS.
   - 5 or 6 to flag inpt EXPIRING orders: 2.
9. Flag Items for INPT ORDER Providr Recip may be set for the following:

```
1 Division  DIV    [choose from INSTITUTION]
2 System SYS    [DEVCUR.FO-SLC.MED.VA.GOV]
```

10. Enter selection: 2 SystemDEVCUR.FO-SLC.MED.VA.GOV.
11. At Setting Flag Items for INPT ORDER Providr Recip for System:
    - At Select Orderable Item:, select GLUCOSE.
    - At Are you adding GLUCOSE as a new Orderable Item? Yes//, type **YES**.
    - At Orderable Item: GLUCOSE// GLUCOSE
    - At Provider Recipients:, type "**?**."
    - At Any one or combination of 'D', 'I', 'G', 'P', 'A', 'T' 'O', 'M', 'E', 'R', 'S'.
      – D=IHS Primary Care Provider

- I=IHS Primary Team
- G=IHS Designated Providers
- P=Primary inpt provider
- A=Attending inpt provider
- T=OE/RR Team
- O=Ordering Provider
- M=PCMM Team (VA)
- E=Entering Person
- R=PCMM Primary Care Practitioner (VA)
- S=PCMM Associate (VA)

11.0 Orders

11.1 General Items

11.1.1 Discontinued Drug Order

The RPMS-EHR now generates a bulletin when a user discontinues a drug order and the reason is Entered in Error. The new bulletin name is OR DRUG ORDER CANCELLED and it is sent to the new mail group named OR DRUG ORDER CANCELLED.

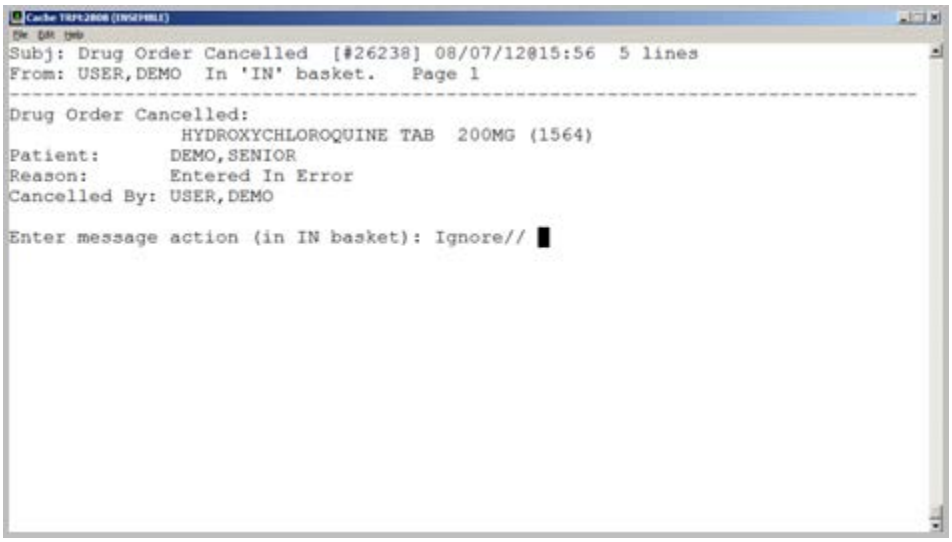


Figure 11-1: Entered in Error Message

11.1.2 Flagged Orders

Flagging an Order Can Cause CPRS to Send Notifications to Incorrect Providers. FLAGGED ORDER FOR CLARIFICATION alerts were sent to providers other than those specified by the notification's Provider Recipient parameter. In the reported instance, the site pharmacist flagged the order to notify the ordering provider of the need to renew the expiring medications.

The site had the notification set to go to the ordering provider only. However, additional providers also received the notification. This was caused in the GUI by flagging an order and naming an alert recipient. If the user then flagged another order in the same RPMS-EHR session, the application did not clear the additional recipient and they received the notification also. This has now been corrected.

11.1.3 One-Time Orders

One-Time Schedule Still Appearing when Creating a Complex Inpatient Order

Developers made some changes and the RPMS-EHR now behaves as follows:

- One-time schedules will not display in the schedule selection drop-down box for inpatient complex orders.
- If the user selects a one-time schedule on the dosage tab and then switches to the complex tab, the schedule field will be blank.
- If the user selects a schedule on the Dosage tab that is not a one-time schedule and then switches to the complex tab, the selected schedule should appear in the Schedule field.

11.1.4 Date Range

Fixed issue with Date Range for Orders Not Current.

If users set the orders view to a date range that goes back three months through NOW, showing all orders and all services, the RPMS-EHR did not always display the most recent orders, regardless of order status.

11.1.5 Incorrect Orderable Item

Fixed issue with Incorrect Orderable Item Selected.

If a user edited an unreleased order and selected a different orderable item, the RPMS-EHR had incorrectly entered a different orderable item from the one that was selected.

11.1.6 Unreleased Orders

Fixed issue with Unreleased Orders Will Not Require a DC Reason.

Previously these orders required a Discontinue reason.

11.1.7 TIU Objects

Fixed issue with TIU Objects May be Used in Generic Text Orders.

The text should wrap correctly in the ORDER TEXT field in the detailed display of these text orders.

11.1.8 Custom Orders

Orders Custom View Settings Not Being Retained

- The Orders Custom View selection screen has always opened with all values set to the most generic defaults, instead of to the user's current view settings. A small change to the settings then requires starting from scratch.
- The Status and Service tree-views only highlighted the selected item when the tree-view had focus.
- There was also an obvious copy/paste error in the code that may have also caused incorrect behavior.

Resolution:

Developers changed the RPMS-EHR so that the Custom Order View dialog box now opens with the current view settings shown.

11.1.9 Sort DC Reasons

Provide a Way to Sort the DC List Sequence

Resolution:

The new parameter OR DC REASON LIST enables someone at a site to define the sequence in which the list of reasons for DC appears in the RPMS-EHR. The user configuring this list can define the entire list, but does not need to set the entire sequence for every DC reason. For example, if the user wants to have one item listed first, the user can define that item as the first sequence, causing the application to load the specified reason first and then load the rest of the DC reasons in alphabetical order.

11.1.10 Flagged Orders

- REASON FOR FLAG to Display When Processing Flagged Order Alert

  When a user is processing a flagged order alert, the REASON FOR FLAG did not display in the order text on the Orders tab.

  Resolution:

  When a user processes the Flagged Order alert, the REASON FOR FLAG will now display on the Orders tab. It will not display there when not processing notifications. In both cases, the reason will still be included in the order details as it currently is.

- REASON FOR FLAG Field Changed from Free-Text to Drop-Down List with Free-text Allowed

Resolution:

When a user flags an order, the REASON FOR FLAG field has been changed from a free-text entry to a selection of standard reasons defined by the site in parameter (OR FLAGGED ORD REASONS). Users can append additional free-text to the selected reason, or enter a free-text reason of their own instead of selecting from the list. The field limit is 80 characters.

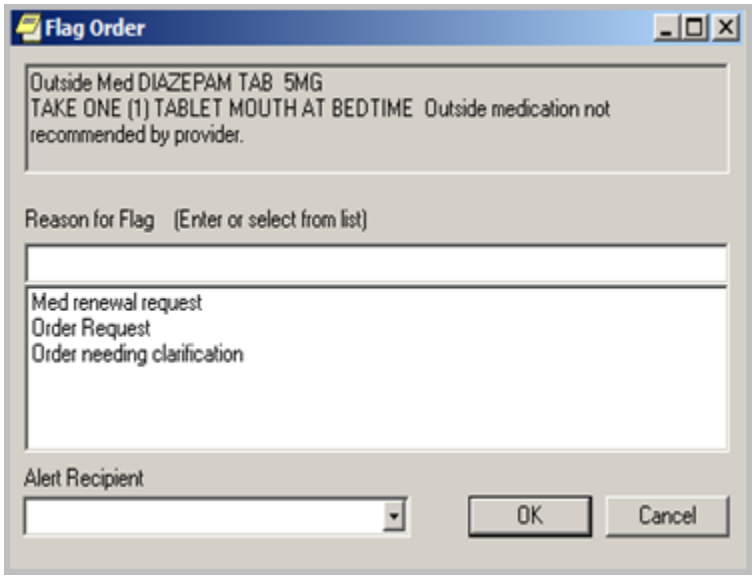


Figure 11-2: Flagged Order Reason

11.1.11 Selecting Orders

Selected Orders Inappropriately Deselected when Right-Clicking

Previously, if a user selected several orders (so that they were highlighted) and then right-clicked on an unselected order, the RPMS-EHR would deselect the other orders. If the user did not recognize that the selection had changed, the user might take an inappropriate action on an order.

Resolution:

If a user selects (highlights) one or more orders and then right-clicks on a different order, the application keeps the orders selected and brings up the pop-up menu.

11.1.12 Leading Zeros

Leading Zero in the RPMS-EHR Orders and Quick Orders has the following features.

Previously, when a user entered or edited an order or quick order in the RPMS-EHR, the VOLUME field stripped off the leading zero. Also, when a user created or edited quick orders in the RPMS roll-and-scroll, the application would accept a leading zero in the STRENGTH or VOLUME fields before the decimal (0.523), but when the order was placed the leading zero was stripped (.523). For example, if the user enters 00.25 then the value is stored as 00.25. If they enter .25 then the value is stored as 0.25. JCAHO compliance states that the volume must have the leading zero.

Resolution:

Developers have changed the RPMS-EHR to not accept orders that begin with a decimal point. Also, if the order is entered with a single leading zero (0.5), the zero will be retained.

11.1.13 Lapsed Orders

New Parameters Created for Old Unsigned Orders

Instances have occurred where providers have signed old orders accidentally.

Resolution:

To help address the signing of old unsigned orders, developers added two new parameters to the OR namespace: OR LAPSE ORDERS and OR LAPSE ORDERS DFLT. The OR LAPSE ORDERS parameter is a numeric parameter that stores the number of days to keep unsigned orders before setting them to the Lapsed status. This parameter is set up such that the instance term is a display group so that different display groups can lapse at different times. OR LAPSE ORDERS DFLT is also a numeric parameter. This parameter stores the number of days before lapsing unsigned orders that are part of a display group that does not have a value set for parameter OR LAPSE ORDERS.

There is now a nightly process that looks at overdue delayed events and lapses orders associated with these events. Previously, this lapsing only took place during a user session for that event.

```
OR LAPSE ORDERS may be set for the following:

     5   Division      DIV    [choose from INSTITUTION]
     10  System        SYS    [DEMO.MEDSPHERE.COM]

Enter selection: 10  System   DEMO.MEDSPHERE.COM

---------- Setting OR LAPSE ORDERS  for System: DEMO.MEDSPHERE.COM ----------
Select ENTER A DISPLAY GROUP: LAB  LABORATORY
Are you adding LABORATORY as a new ENTER A DISPLAY GROUP? Yes// YES

ENTER A DISPLAY GROUP: LABORATORY//   LABORATORY   LABORATORY
NUMBER OF DAYS: 120
Select ENTER A DISPLAY GROUP: NURSING
Are you adding NURSING as a new ENTER A DISPLAY GROUP? Yes//   YES
```

```
ENTER A DISPLAY GROUP: NURSING//   NURSING   NURSING
NUMBER OF DAYS: 30
```

11.1.14 Obsolete Orders

Lack of Control in Display of Obsolete Orders

Previously, the INCLUDE IN ACTIVE ORDERS attribute in the NATURE OF ORDER file applied to discontinued orders that did not create an order action (i.e., require a signature). Developers assumed that users would always want to see any discontinued order that had to be signed. At that time, housekeeping types of discontinues (DC's) such as Obsolete did not create an action or get signed, so it was up to the sites to decide if they wanted those DC's to display or not (according to the Context Hrs parameter, as noted) using this Nature attribute. With the change that all front-door DC's create an action, there was no way for sites to make DC's such as obsolete fall off the Orders display right away unless they have their Context Hrs set to 0.

Resolution:

Discontinued orders now respect the value for INCLUDE IN ACTIVE ORDERS set in the NATURE OF ORDER file for the nature that was chosen when DCing the order in RPMS-EHR, which determines whether the orders display or not.

The following example is duplicate orders:

```
Select NATURE OF ORDER NAME: 6  DUPLICATE     D
ANOTHER ONE:
STANDARD CAPTIONED OUTPUT? Yes//   (Yes)
Include COMPUTED fields:  (N/Y/R/B): NO//  - No record number (IEN), no
Computed
 Fields

NUMBER: 6                                NAME: DUPLICATE
  CODE: D                                NON-INTERACTIVE: INTERACTIVE
  FRONT/BACKDOOR: both                   DC ONLY: YES
  CREATE ACTION: NO                      PRINT CHART COPY: NO
  PRINT DAILY SUMMARY: NO                INCLUDE IN ACTIVE ORDERS: NO
```

11.2 Delayed Orders

11.2.1 Active and DC'd at the Same Time

A number of sites reported problems with pharmacy orders that showed a status of active on the Medication Management component, but which were discontinued on the PIMS side. It was discovered that the orders were being released more than once as part of the delayed order processing. In each instance, the PIMS movement information was being edited shortly after being entered. The protocol processing from the initial entry of data had not completed before the processing for the subsequent update began. In the reported instances, the processes were simultaneously releasing orders, which caused the problem with the pharmacy orders.

While researching the above problem developers noted that the first protocol processed on the DGPM PATIENT MOVEMENT list inadvertently released the lock on the patient record so that other movements could be entered or edited. The lock should be maintained until the entire list of protocols has been processed. Patch DG*5.3*549 addresses the locking issue from the PIMS side, which should greatly reduce the possibility of events being simultaneously processed.

Meanwhile, in addition to the PIMS problem, it was also discovered that a user could be attempting to manually release orders while orders were being released due to the entry of a PIMS movement or vice-versa. The DG patch will now lock the event so that only one process can be acting on an event. Patch DG*5.3*549 will now maintain the lock on the patient's movement record until protocol processing has finished. This will stop users from simultaneously processing the patient's movement information.

In addition, updates have been added to RPMS-EHR code so that users cannot be attempting to manually release orders while the event is being processed. Conversely, if a user is manually releasing orders, the processing of the delayed event due to a patient movement will be held until the user is finished with the manual release of orders.

11.2.2 Canceling Child Orders

When a patient is discharged, all existing delayed events that were written during the admission and have not been acted on yet are canceled. There is a problem canceling the events when the event is a child of another event. In this case, only the parent event and its related orders are canceled and the child orders are left alone. These orders cannot be acted upon after the parent is canceled. After installation of this patch the child orders and the child event will also be canceled.

11.2.3 Delayed Complex Orders

Delayed complex lab orders (for example, CBC Q12H x 3) were not correctly assigned a location upon release from delayed status. The parent order held the location but the individual child orders were not assigned a location. A change was made so that the location is assigned to the child orders when the delayed event occurs.

11.2.4 Changing Locations

Developers created a new dialog box that the RPMS-EHR displays when the patient location has changed between inpatient and outpatient, such as when a patient is admitted.

The provider is writing delayed orders from the emergency room.

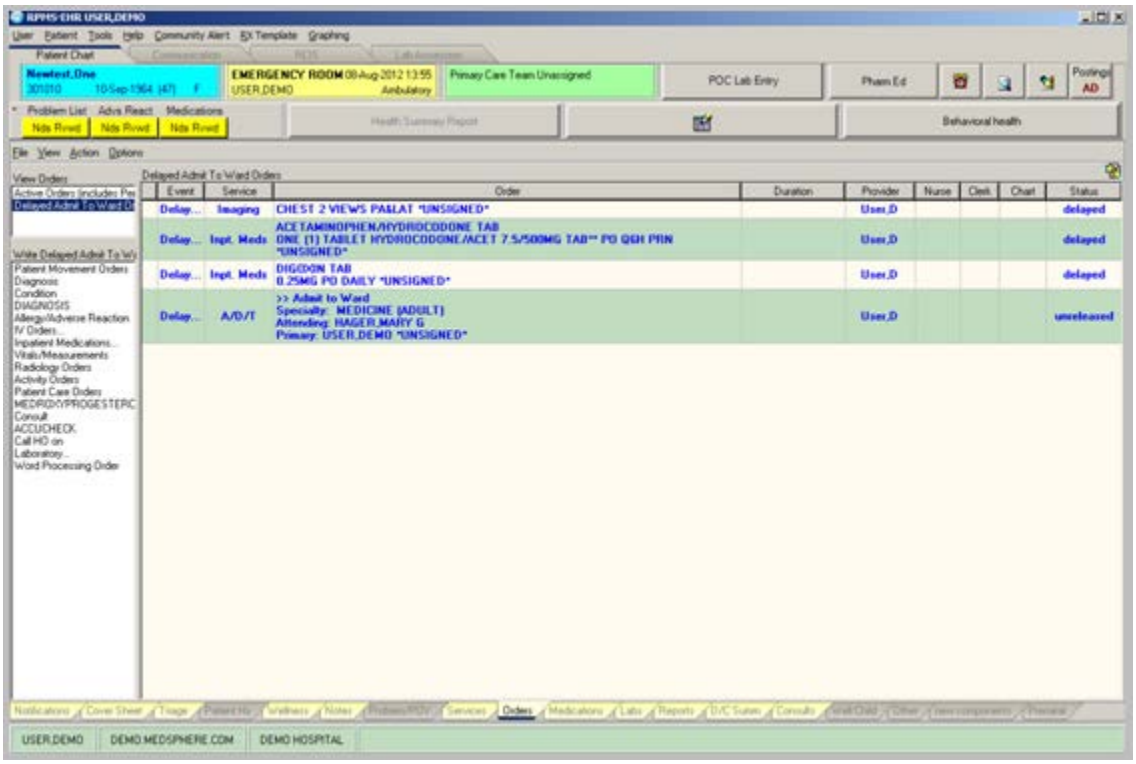


Figure 11-3: Delayed Orders for ER

The patient is admitted while this occurs. The provider sees this message:

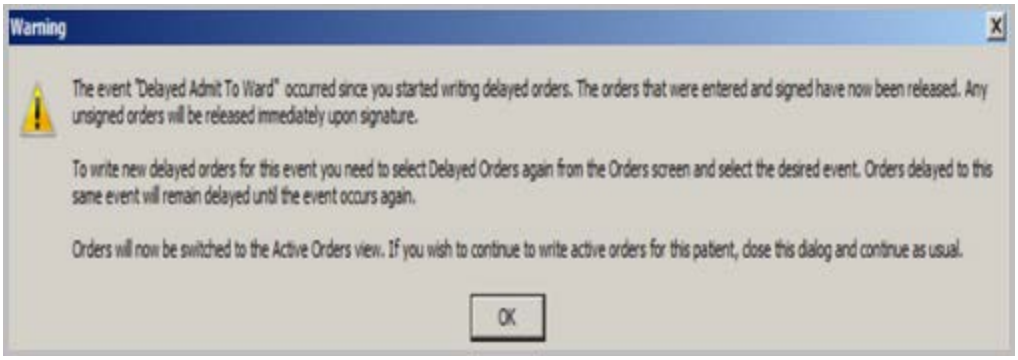


Figure 11-4: Admit Message for Provider

11.3 Inpatient Meds

11.3.1 Stop Dates

Inpatient Medications (IPM) will stop creating new orders for renewals with patch PSJ*5*110, only extending the stop date of the order; RPMS-EHR must continue to create new orders.

Since IPM will only be changing the stop date of an order when renewed, the start date will now remain unchanged for the life of the order in IPM instead of changing to the renewal date.

Prior to these patches, renewals of complex orders via IPM options did not require that all doses be renewed together at the same time. With this patch, EHR will also now check the orders being renewed from IPM to see if they are part of a complex order, and if so then create a new parent order to maintain the link between the doses.

11.3.2 Schedules

When placing an inpatient medication order, a free text schedule is no longer allowed. Instead, users must select a valid schedule from schedule list box or click OTHER to create a valid customized, day-week administrative time schedule. Only inpatient orders with valid schedules can be used in copy, transfer, and renew operations.

If a non-standard schedule is created as shown below:

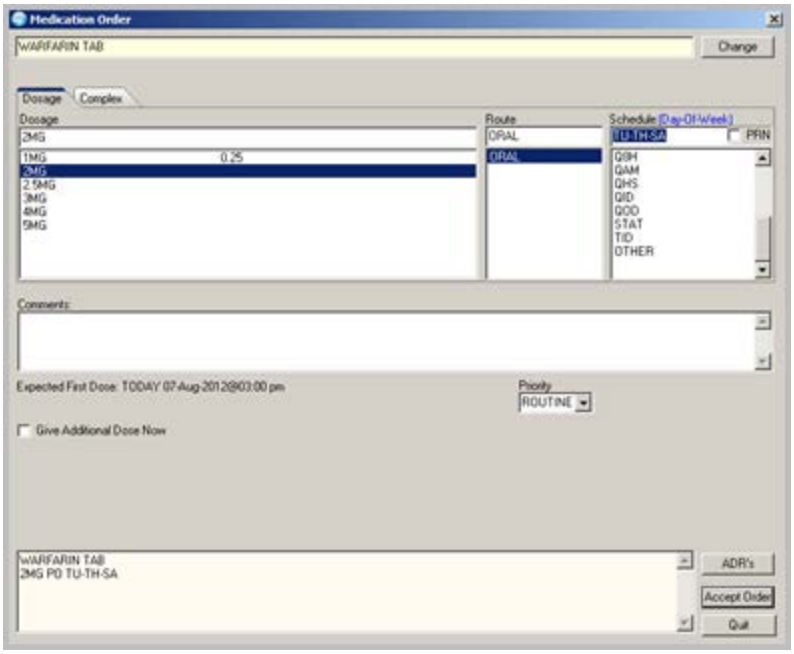


Figure 11-5: Non-Standard Schedule Selected

The following error appears:

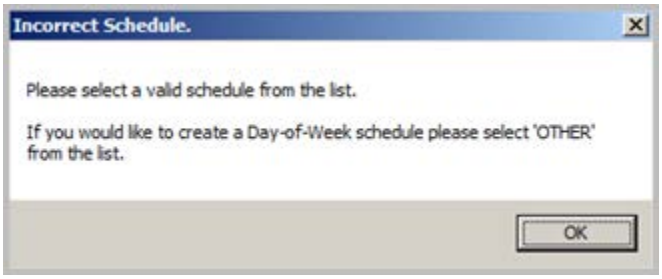


Figure 11-6: Non-standard Error Message

Select **OTHER** from the schedule list.

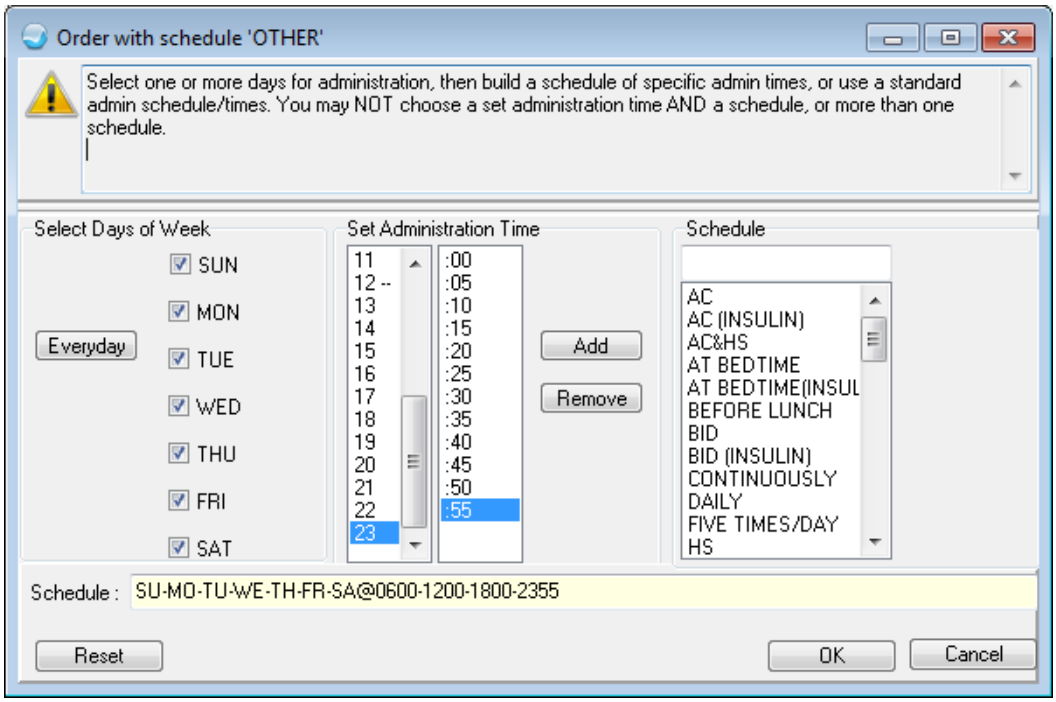


Figure 11-7: Create a Schedule

The provider can select which days of the week (or all) and which administration times. When the user clicks **Add**, it is saved to the standard schedule list. The new schedule can be used once it is saved.

Note: If the user selects Other to create a customized schedule, the order may require that the pharmacist and the physician work out a valid schedule, which might delay the order becoming active. The parameter ORWIM NSS MESSAGE enables sites to customize the message in the text box on the Order with Schedule 'OTHER' dialog box to inform providers that a delay may be caused or give instructions. A default message appears in the text box if the site does not enter one.

11.3.2.1 Administration Times

Administration times are now visible when ordering meds so that providers can see when the meds will be given on a particular unit.

- The Unit Dose ordering dialog box has another box that displays the administration times.

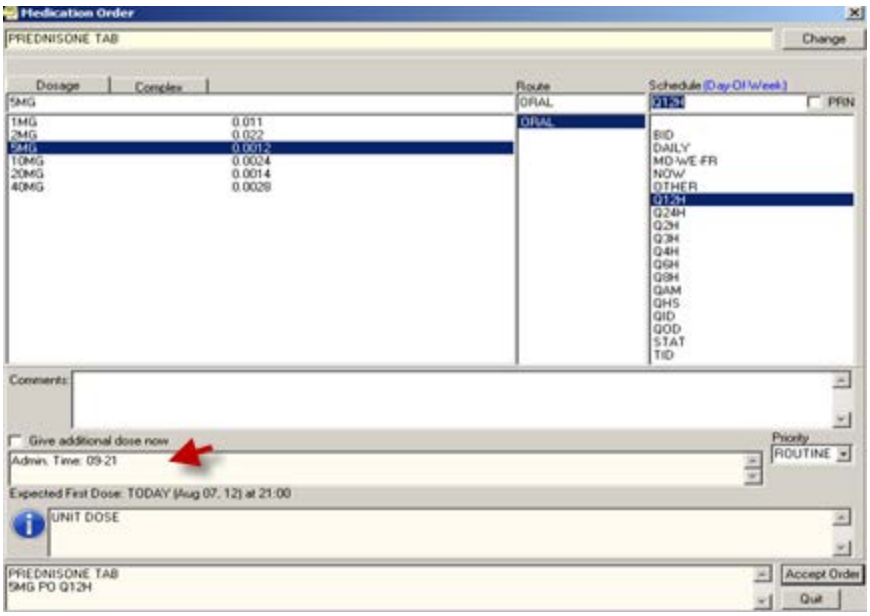


Figure 11-8: Unit Dose and Admin Times Box

- Complex Orders have the admin times in each line of the order.

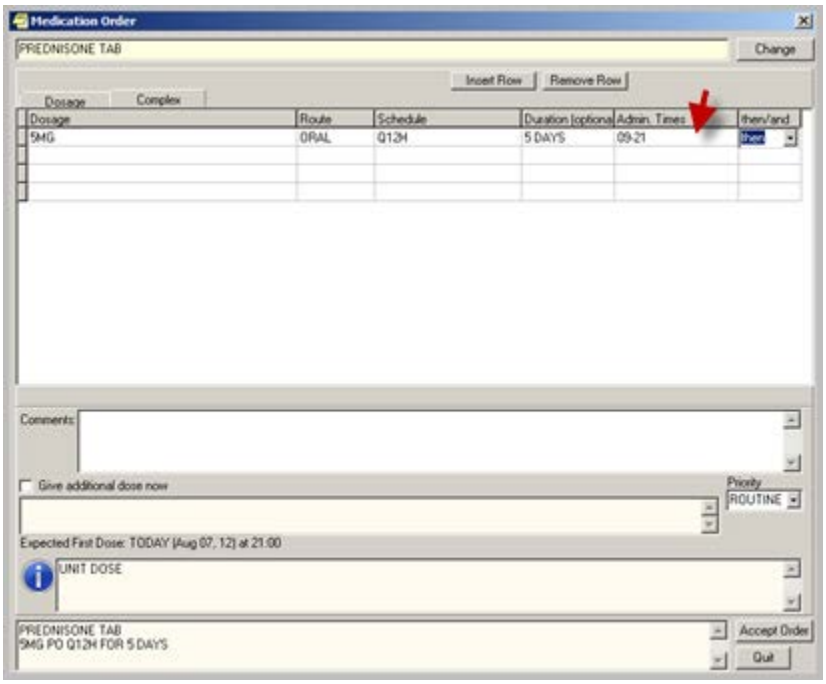


Figure 11-9: Complex Order with Admin Times

- A new Parameter was added – OR ADMIN TIME HELP TEXT.

This parameter is designed to display information describing how to change the administration times. The new parameter OR ADMIN TIME HELP TEXT enables sites to enter text that displays as a ToolTip on the Order dialog box's **Dosage** tab and as an Information Box on the **Complex** tab.

To access this box on the **Complex** tab, the user must either click or press the Enter key in the administration schedule cells.

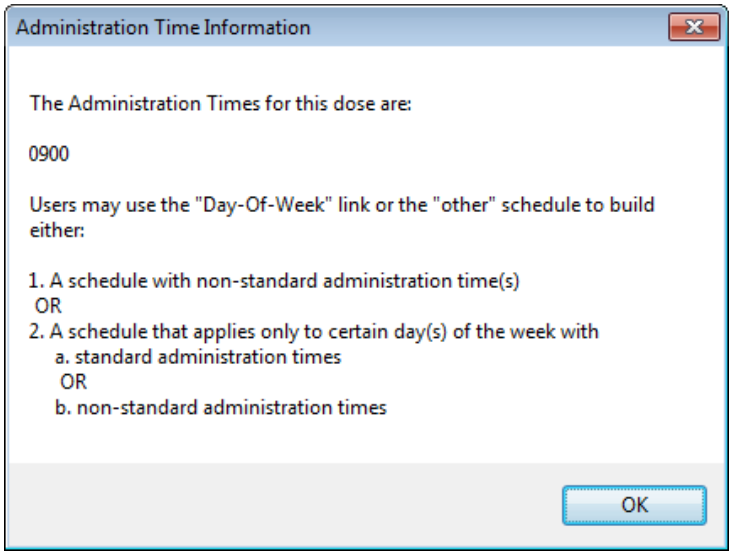


Figure 11-10: Admin Times Help

11.3.2.2 Verbal Orders

Display of Unsigned Verbal Orders Confusing

Previously, verbal orders that were unsigned displayed on the active orders list, but when a pharmacist changed the order, the changed order replaced the original order. This could cause confusion because the second order showed as needing to be signed, but it was not what was originally entered as a verbal order.

Resolution:

Developers changed the RPMS-EHR so that the original unsigned verbal order remains visible to the ordering provider when the order is edited in backdoor pharmacy while in an active status. The action by the pharmacist creates a new order that should display on the Active orders display in the RPMS-EHR. However, the original order should remain on the Unsigned orders display in the application.

11.3.3 Non-VA (Outside) Meds

11.3.3.1 Signature

An electronic signature is no longer required upon discontinuing a Non-VA med.

11.3.3.2 Quick Orders

Non-VA Meds can be made into quick orders and added to order menus.

```
Select QUICK ORDER NAME: PSOUTZ MULTIVITAMINS
  Are you adding 'PSOUTZ MULTIVITAMINS' as a new ORDER DIALOG? No// Y
(Yes)
TYPE OF QUICK ORDER: NON-VA MEDICATIONS
NAME: PSOUTZ MULTIVITAMINS//
DISPLAY TEXT: Multivitamins
VERIFY ORDER:
DESCRIPTION:
  No existing text
  Edit? NO//
Outside Medication:MULTIVITAMINS TAB
Complex dose? NO//
Choose from (or enter another):
     1   1 TABLET VIT B CMPLX VIT C TAB**
     2   2 TABLETS VIT B CMPLX VIT C TAB**
     3   1 TABLET MULTIVITAMIN TABLET**
Dose: 1   1 TABLET VIT B CMPLX VIT C TAB**
   ...OK? YES//
Route: ORAL//
Schedule: QD//
Start Date/Time: T  (AUG 07, 2012)
Comments:
  No existing text
  Edit? No//   (No)
Statement/Explanation
  No existing text
  Edit? No//   (No)

------------------------------------------------------------------------------
           Outside Medication:MULTIVITAMINS TAB
               Dispense Drug: VIT B CMPLX VIT C TAB**
                Instructions: 1 TABLET VIT B CMPLX VIT C TAB** ORAL QD
             Start Date/Time: TODAY
------------------------------------------------------------------------------

(P)lace, (E)dit, or (C)ancel this quick order? PLACE//
```

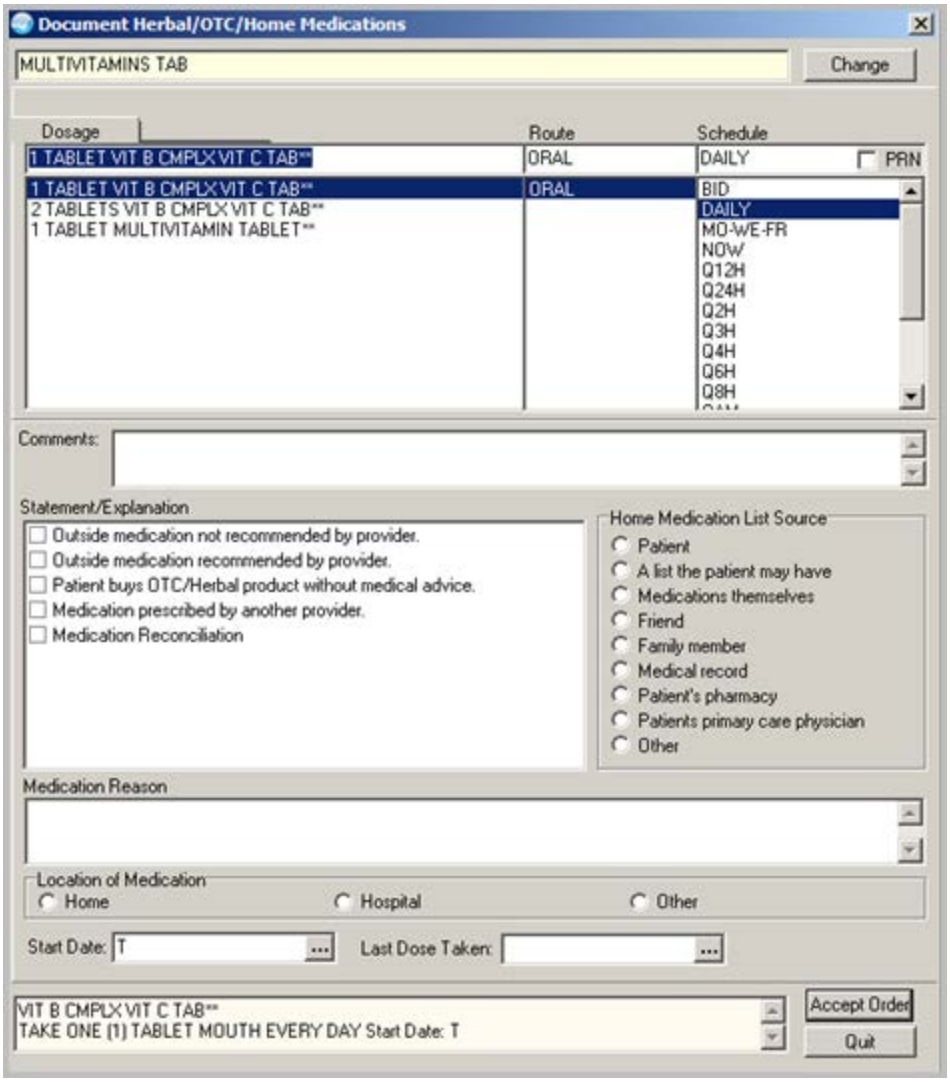


Figure 11-11: Outside Med Quick Order

11.3.4 Infusion Medications

The dialog box has changed, and was renamed to Infusion. The changes were made to make it easier to order intermittent infusions verses continuous ones. The intermittent infusions have a schedule and there are optional fields to document the length of time the infusion should run as well as the length of time the infusion should continue.

Figure 11-12: Infusion

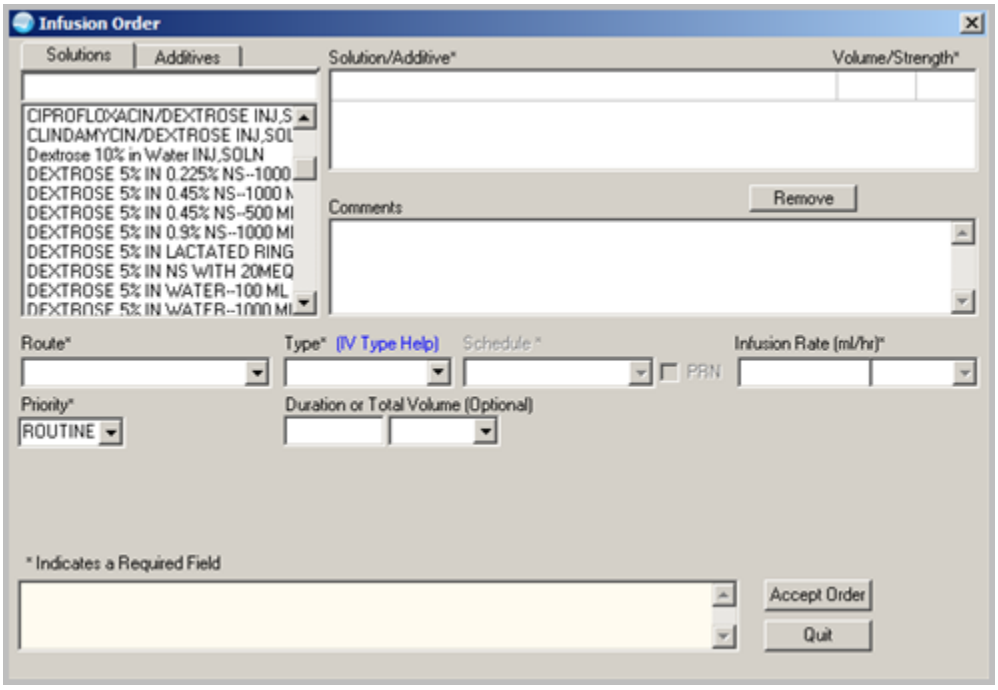


Figure 11-13: New Infusion dialog box

1. Enter the Solution as before.
2. Enter the additives as before.

> **Note:** All solutions and additives must be properly defined in the Drug File to display in this dialog box.

3. Determine the Route.

> **Note:** Routes are limited. If the user selects the route of Other, the expanded Med Route list displays.

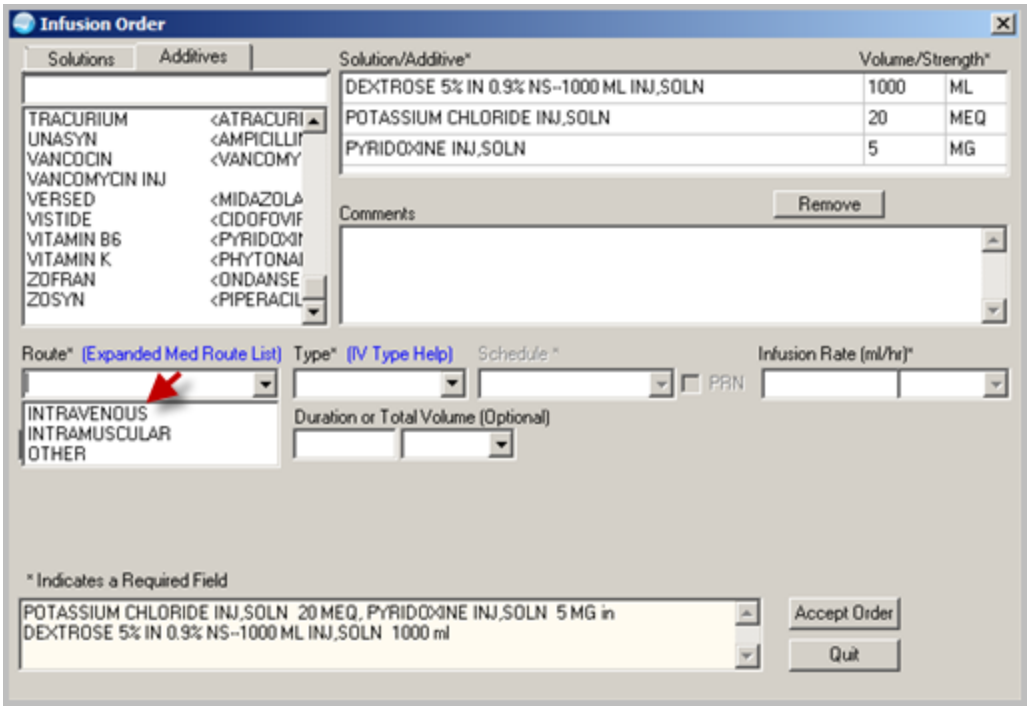


Figure 11-14: Route Selection

4. Enter the Type.

   - If the **Type** is continuous, then the infusion rate applies.

   Note: To determine what types are available, click the **IV Type Help** link.

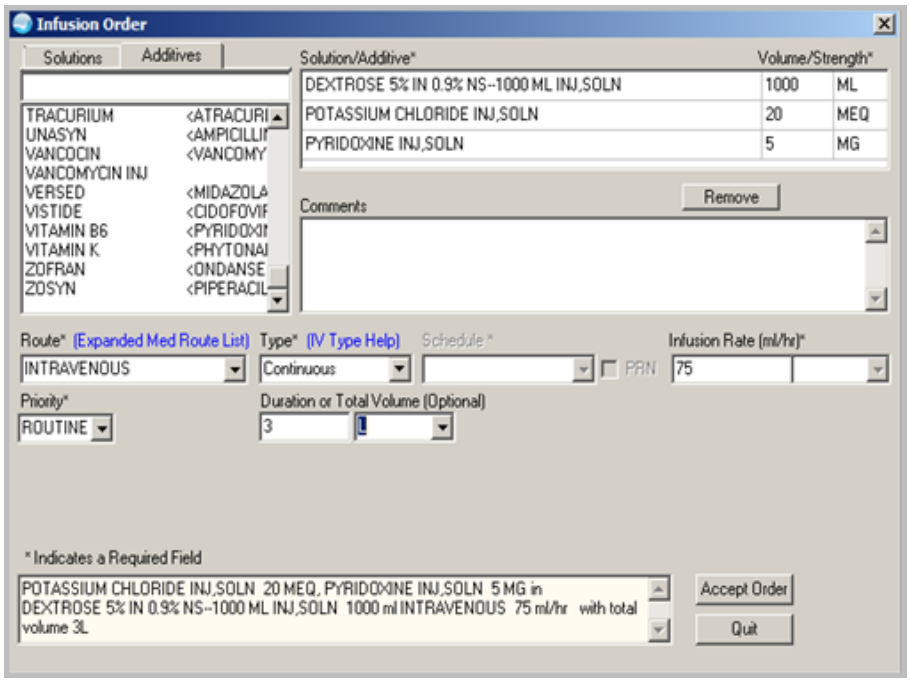


Figure 11-15: Continuous Route

- If the **Type** is intermittent, then the **Schedule** field is applicable. Also for intermittent doses, the user is asked to enter the **Infuse Over Time** if it is applicable.

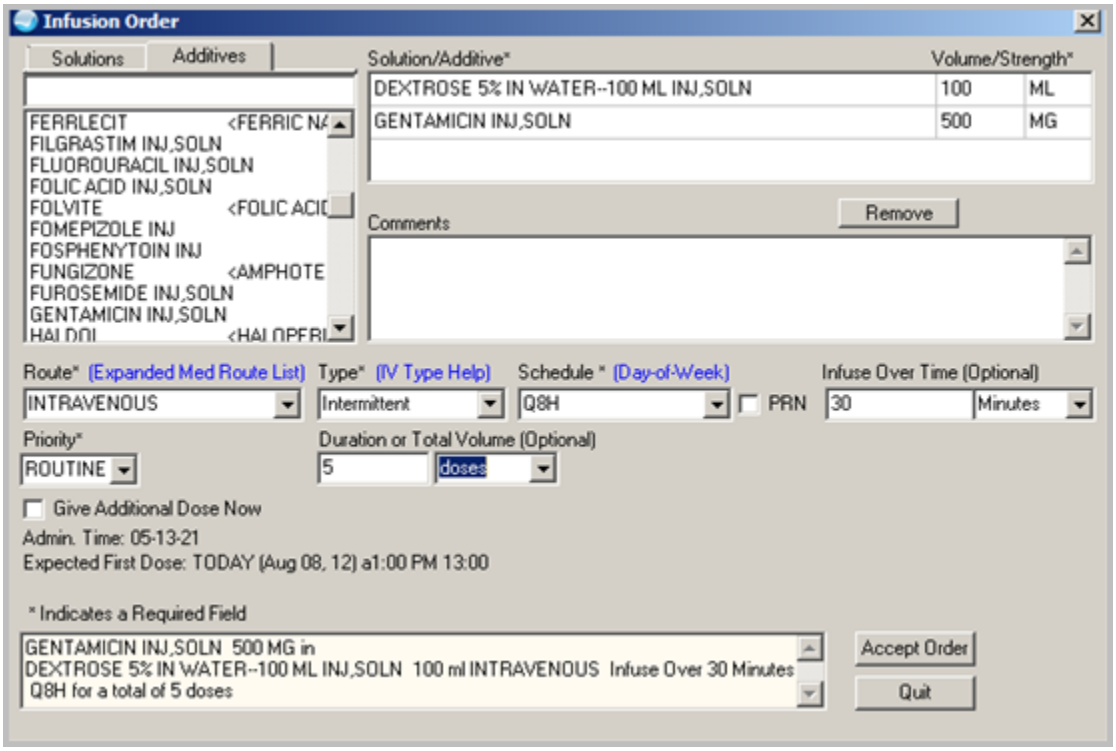


Figure 11-16: Intermittent Route

5. Enter the duration or total volume if desired.

6. Accept the order when finished.

Note:	Fields with asterisks are required, others are optional. Dialog boxes show the Admin Times and expected first dose under the Priority field. The same non-standard schedule from Inpatient Meds is available here by choosing Other or clicking the **Day-Of-Week** link.

11.3.5 Labs

When discontinuing a complex order, all child orders were discontinued. On the Review/Sign Changes window or Sign selected orders windows the user was allowed to uncheck each individual child order, leave some of the child orders signed, and some others unsigned. This has been fixed. The Provider must now sign all or none of the child orders after a discontinue action.

11.3.6 New Options

11.3.6.1 Orderable Item Validation

The issue is an active orderable item record that does not have a matching source record. To address this issue a utility has been written that will perform an analysis of the ORDERABLE ITEM FILE, file # 101.43, and produce a detailed report of its findings. This utility will scan the ORDERABLE ITEM FILE record by record. This utility determines the following about the current ORDERABLE ITEM FILE record being processed:

- Is the ID field null?
- Is the source record IEN stored in the ID field null?
- Is the source record package code stored in the ID field null?
- Is the data stored in the ID field properly formatted?
- Is the source record package code part of the current interface specification?
- Is there a matching source record?
- Is it currently flagged as active?

A temporary global is built tracking all of the above for a detailed report. Only an ORDERABLE ITEM FILE record passing all tests will be modified. At this point it will be flagged as inactive effective immediately. After the utility has printed its report the temporary global created by this utility is deleted.

It is these invalid orderable items with no matching source records that are generating the NULLSUBSCR errors described in the associated NOIS cases. The flagging of records in the ORDERABLE ITEM FILE # 101.43 without matching source records as inactive will prevent RPMS_EHR from presenting them to the user as valid orderable items. The routines in this patch can be run anytime a selected orderable item generates the NULLSUBSCR error.

How to Run the Utility:

1. Enter the “CPRS Manager Menu” in RPMS.
2. Select the “CPRS Configuration (IRM)” option.
3. Select the “CPRS Clean-up Utilities” option.
4. Select the “Orderable Items Records Validation" option.

   The user will be presented with a screen with a brief description of the option’s functionality. At the "Do you wish to run this program? Enter Yes or No?" prompt enter **Y** for yes. Entering **N** for No will return the user to the menu.

5. The user will be prompted for a device for the utilities output. The output can be sent to the terminal screen. A printer for hard copy can be selected. This is recommended. It can be queued to the Kernel Spool and set to run at a preferred later time.

11.3.6.2 Lapsed Order Search

Because the parameter now exists to lapse orders, an option was created to search and find lapsed orders by a variety of methods.

Follow these steps:

1. Enter the “CPRS Manager Menu” in RPMS.
2. Select the “CPRS Configuration (Clin Coordinator)" option.
3. Select the “Lapsed Order Search” option.

   The following will display:

```
                          Lapsed Orders Search
             This report is formatted for a 132 column output.


    Select one of the following:

         1         Service/Section
         2         Provider
         3         Patient
         4         Location
```

```
          5         Entered By
          6         Division

Enter the sort criteria: 2  Provider
Would you like a specific Provider? NO//
Enter a starting date: T-90  (MAY 10, 2012)
Enter an ending date: T  (AUG 08, 2012)
Print summary only ? NO// YES
DEVICE: HOME//   CONSOLE

Report Date: Aug 08, 2012@09:57:01  Sort Range From: May 10, 2012   To: Aug
08,
2012

                         Order Statistics for Provider sort
Provider                 Patient                 # of Orders
------------------------------------------------------------------------
USER,DEMO                TEST,CAD TWO                 2
                                                SUBTOTAL: 2
                                                ------------
                                                TOTAL: 2
```

11.3.6.3 Care Management

There are Care Management options on the Clin Coordinator menu. IHS is not using Care Management so these options will not be used.

11.3.6.4 GUI Parameters

> **Note**: This menu option is not utilized by IHS.
> Under the CPRS Clinical Coordinator menu are several options that are only used by the VA. Ask for assistance prior to attempting to set one of them.

- New items are bolded

```
   CS     GUI Cover Sheet Display Parameters ...
   HS     GUI Health Summary Types
   TM     GUI Tool Menu Items
   MP     GUI Parameters - Miscellaneous
   UC     GUI Clear Size & Position Settings for User
   RE     GUI Report Parameters ...
   NV     GUI Outside Med Statements/Reasons
   EX     GUI Expired Orders Search Hours
   RM     GUI Remove Button Enabled
   NON    GUI Remove Button Enabled for Non-OR Alerts
   CLOZ   GUI Edit Inpatient Clozapine Message
   EIE    GUI Mark Allergy Entered in Error
```

- GUI Remove Button Enabled for Non-OR Alerts

This functionality was available in the RPMS-EHR for regular alerts. The VA has added it for alerts that do not have an OR namespace.

Note: The RPMS-EHR does not support this functionality.

Value indicates if the notification/alert can be deleted without processing. A YES value indicates the notification/alert can be deleted without processing. In the CPRS GUI a YES value signifies a selected alert can be deleted when the Remove button is clicked. If a notification/alert has a blank value or a NO value, the notification/alert cannot be deleted without processing.

- GUI Edit Inpatient Clozapine Message

Note: The RPMS-EHR does not support this functionality.

This allows a site-specific message to appear if clozapine is ordered in an Inpatient setting.

```
Select GUI Parameters Option: CLOZ  GUI Edit Inpatient Clozapine Message

 Setting MSG TO DISPLAY ON INPT ORD OF CLOZAPINE  for System:
DEMO.MEDSPHERE.COM

MSG TO DISPLAY ON INPT ORD OF CLOZAPINE: //
```

- GUI Mark Allergy Entered in Error

Note: The RPMS-EHR does not support this functionality.

```
Select GUI Parameters Option: EIE  GUI Mark Allergy Entered in Error
Sites can set the level of who can mark an allergy as entered in error

Mark allergy/adr as entered in error may be set for the following:

     1   User          USR    [choose from NEW PERSON]
     2   Class         CLS    [choose from USR CLASS]
     3   Division      DIV    [choose from INSTITUTION]
     4   System        SYS    [DEMO.MEDSPHERE.COM]

Enter selection: 4  System   DEMO.MEDSPHERE.COM

 Setting Mark allergy/adr as entered in error for System:
DEMO.MEDSPHERE.COM
Allow marking entry as entered in error: ?

Enter YES if user should be allowed to use the entered in error
functionality.
 Allow marking entry as entered in error:
```

11.3.6.5 Order Checks

1. Enter the CPRS Manager Menu.
2. Select the CPRS Configuration (Clin Coordinator) option.
3. Select the Order Checking Mgmt Option option.

There is one new item on the order check menu, Order Check Override Reason Report. This report is to document the number of overrides on order checks that are occurring.

```
Select one of the following:

          1         DATE/TIME ORDERED & OVERRIDDEN BY
          2         DATE/TIME ORDERED & ORDER CHECK
          3         DATE/TIME ORDERED & DIVISION
          4         DATE/TIME ORDERED & DISPLAY GROUP
          5         DATE/TIME ORDERED, DIVISION, & DISPLAY GROUP

FILTER SEARCH by: 1//

FILTER SEARCH by: 1//   DATE/TIME ORDERED & OVERRIDDEN BY
SEARCH Orders Beginning: //T-90  (MAY 10, 2012)
                  Thru: Aug 08, 2012//  (AUG 08, 2012)

SEARCH Order Chks Overridden By: USER,DEMO
Print delimited output only? NO//
                        Order Check Override Reason Report
                          Sorted in Ascending order by:
        Date/Time Ordered, Division, Display Group, Order Chk, & Order#


Current User:  USER,DEMO                  Current Date:  Aug 08, 2012@10:26:09
Date Range Searched:  May 10, 2012 - Aug 08, 2012     WHERE
Order Chks are Overridden By:  USER,DEMO
Title:  DOCTOR

Date/Time Ordered    Division           Display Group                 Order#
-----------------    --------           -------------                 ------
May 15, 2012@10:27   DEMO               IV MEDICATIONS                1556
   D/T Overridden: May 15, 2012@10:27
   Order Text: POTASSIUM CHLORIDE INJ,SOLN  20 MEQ in
   Order Chk: ALLERGY-DRUG INTERACTION: Previous adverse reaction to: SODIUM
              CHLORIDE (LOCAL) Reac: DRY MOUTH (10/25/10@17:16)
   Override Reason: TEST

Jun 04, 2012@14:29   DEMO               UNIT DOSE MEDICATIONS         1577
   D/T Overridden: Jun 04, 2012@14:29
   Order Text: METFORMIN TAB,ORAL

   Order Chk: GLUCOPHAGE-LAB RESULTS: Metformin - no serum creatinine within
              past 60 days.
   Override Reason: test

Jul 02, 2012@12:45   DEMO               UNIT DOSE MEDICATIONS         1611
   D/T Overridden: Jul 02, 2012@12:46
   Order Text: ACETAMINOPHEN/HYDROCODONE TAB
   Order Chk: ALLERGY-DRUG INTERACTION: Previous adverse reaction to:
              ACETAMINOPHEN (LOCAL) Reac: DROWSINESS (4/30/12@18:30)
   Override Reason: TEST

Jul 02, 2012@12:46   DEMO               IV MEDICATIONS                1612
   D/T Overridden: Jul 02, 2012@12:46
   Order Text: DEXTROSE 5% IN NS WITH 20MEQ KCL--1000ML INJ,SOLN  1000 ml IV 75
               ml/hr
   Order Chk: ALLERGY-DRUG INTERACTION: Previous adverse reaction to: DEXTROSE
              (LOCAL) Reac: HIVES
```

```
Override Reason: TEST
```

11.3.6.6 Menu Management

Order menus can no longer be deleted, only inactivated. Prior to this change, a menu could be entirely deleted if created by mistake or no longer in use. In addition, several new options have been added as follows:

1. Enter the CPRS Manager Menu.
2. Select the CPRS Configuration (Clin Coordinator) option.
3. Select the Order Menu Management option. New Items are BOLDED:
   - OI – Manage orderable items
   - PM – Enter/edit prompts
   - GO – Enter/edit generic orders
   - QO – Enter/edit quick orders
   - QU – Edit personal quick orders by user
   - ST – Enter/edit order sets
   - AC – Enter/edit actions
   - MN – Enter/edit order menus
   - AO – Assign Primary Order Menu
   - CP – Convert protocols
   - SR – Search/replace components
   - LM – List Primary Order Menus
   - DS – Disable/Enable order dialog boxes
   - **CS – Review Quick Orders for Inactive ICD9 Codes**
   - **MR – Medication Quick Order Report**
   - **CV – Convert IV Inpatient QO to Infusion QO**
4. Review Quick Orders for Inactive ICD9 Codes.

   This option may be run at any time to produce a report of Consult or Procedure quick orders that have a provisional diagnosis code that has been inactivated or will be inactivated in the future.

   IHS in general does not make diagnoses required for consults and it does not do procedure ordering in this way.

5. Medication Quick Order Report.

This option generates two Quick Order (QO) reports to assist in the evaluation of Med QOs that may need to be updated to accommodate the three new fields exported in CPRS GUI v27: Route, IV Type and Schedule.

One report lists Med QOs that are contained in another entry such as an order menu, order set or reminder dialog. The other report lists Med QOs that are stand alone and are not included in another entry. These reports will be sent to you via Mailman.

6. Convert IV Inpatient QO to Infusion QO.

   This conversion utility enables users to convert IV quick orders set-up as Inpatient quick orders to Infusion quick orders. For each quick order, the conversion utility asks a series of questions to populate the minimum prompts needed to convert the quick order. Once the conversion is done, the user is placed into the Infusion quick order editor to add any values to the additional fields in the Infusion quick order, if needed.

   Possible conflicts at the time of conversion are displayed before entering the editor. An example of a conflict may be that the user should review the strength associated with the additive in the editor.

```
     Select one of the following:

          A         QO ASSIGNED TO ORDER MENUS, ORDER SETS, OR REMINDER DIALOGS
          N         QO NOT ASSIGNED TO ANY OF THESE ITEMS
          S         SPECIFIC QUICK ORDER
          Q         QUIT THE CONVERSION UTILITY

Which QO to convert?: A  QO ASSIGNED TO ORDER MENUS, ORDER SETS, OR REMINDER DIALOGS
---------------------------------------------------------------------------
                        Name: PSJZ INSULIN REGULAR
                        Type: Quick Order
                Display Text: Insulin Regular
               Display Group: UNIT DOSE MEDICATIONS
                     Package: INPATIENT MEDICATIONS
                  Medication: INSULIN REGULAR (HUMAN) INJ
               Dispense Drug: INSULIN REGULAR U-100 (HUMAN)
                Instructions: UNITS INSULIN REGULAR U-100 (HUMAN) SUBCUTANEOUS QID
                    Priority: ROUTINE
---------------------------------------------------------------------------

Convert the above Quick Order to an Infusion Quick Order?

     Select one of the following:

          Y         YES
          N         NO
          S         SKIP THIS QUICK ORDER
          Q         QUIT THE CONVERSION UTILITY

Convert:Y
```

11.3.6.7 Infusion Quick Order

The Order dialog box for IV meds has changed. The new fields are BOLDED.

```
Select ORDER DIALOG NAME: PSJI OR PAT FLUID OE
NAME: PSJI OR PAT FLUID OE  Replace
DISPLAY TEXT: Infusion//
DISABLE:
TYPE: dialog//
DISPLAY GROUP: IV MEDICATIONS//
SIGNATURE REQUIRED: ORES//
PACKAGE: INPATIENT MEDICATIONS//
VERIFY ORDER: YES//
ASK FOR ANOTHER ORDER: YES-DON'T ASK//
Select SEQUENCE: 10// ?
 Answer with ITEMS, or SEQUENCE, or PARENT
 Do you want the entire 14-Entry ITEMS List? Y  (Yes)
   Choose from:
   1      OR GTX IV TYPE
   2      OR GTX ORDERABLE ITEM
   2.1     OR GTX VOLUME
   3      OR GTX ADDITIVE
   3.1     OR GTX STRENGTH PSIV
   3.2     OR GTX UNITS
   4      OR GTX ROUTE
   5      OR GTX INFUSION RATE
   6      OR GTX SCHEDULE
   6.5     OR GTX ADMIN TIMES
   7      OR GTX DURATION
   8      OR GTX URGENCY
   9      OR GTX WORD PROCESSING 1
   10     OR GTX NOW
```

Sample below is new fields for an IV quick order.

```
Select QUICK ORDER NAME: PSJIV TEST INFUSION
TYPE OF QUICK ORDER: IV MEDICATIONS
NAME: PSJIV TEST INFUSION//
DISPLAY TEXT: Test IV quick order
VERIFY ORDER:
DESCRIPTION:
  No existing text
  Edit? NO//
ENTRY ACTION:
Type: ?
Choose from:
    C         Continuous
    I         Intermittent
Enter the infusion type for this order.

Type: Continuous
Solution: NORMAL SALINE ??
Enter a base solution for this order.
Solution: NS20K      SODIUM CHLORIDE 0.9%/20 MEQ KCL-1000ML INJ,SOLN
Additive:
Route: IV  INTRAVENOUS     IV
Infusion Rate (ml/hr): 50
Enter the length of administrative time or total volume for IV fluid order
followed by ML or CC for milliliters, L for liters, D for days, H for hours
to set limitation.
```

```
(Examples: 1500ML, 1000CC, 1L, 3D, or 72H)

This field is optional a value does not need to be entered.
Limitation:
Priority: ROUTINE//
Provider Comments:
  No existing text
  Edit? No//   (No)
 ---------------------------------------------------------------------------
                       Type: Continuous
                Solutions: SODIUM CHLORIDE 0.9%/20 MEQ KCL-1000ML INJ,SOLN
1000 ml
                     Route: INTRAVENOUS
       Infusion Rate (ml/hr): 50 ml/hr
                     Priority: ROUTINE
---------------------------------------------------------------------------
```

The sample below is for an IV Piggyback:

```
NAME: PSJIVZ ZANTAC//
DISPLAY TEXT: ZANTAC DRIP//
VERIFY ORDER: YES//
DESCRIPTION:
  No existing text
  Edit? NO//
ENTRY ACTION:
Type: in  Intermittent
Solution: RANITIDINE/SODIUM CHLORIDE INJ,SOLN // ZANTAC
RANITIDINE/SODIUM C
HLORIDE INJ,SOLN
Additive:
Route: IV  INTRAVENOUS     IV
Infuse over time (min): 45
Schedule: Q8H
     1   Q8H
     2   Q8H
CHOOSE 1-2: 1
Enter a standard schedule for administering this medication.
This field is optional a value does not need to be entered.

Enter the length of administrative time or total volume for IV fluid order
followed by ML or CC for milliliters, L for liters, D for days, H for hours
or DOSES
to set limitation.
(Examples: 1500ML, 1000CC, 1L, 3D, 72H, or 10DOSES)
This field is optional a value does not need to be entered.
Limitation:4DOSES
Priority: ROUTINE//
Provider Comments:
  No existing text
  Edit? No//   (No
---------------------------------------------------------------------------
                       Type: Intermittent
                  Solutions: RANITIDINE/SODIUM CHLORIDE INJ,SOLN  50 ml
                      Route: INTRAVENOUS
      Infuse over time (min): 45
                     Schedule: Q8H
                    Limitation:4DOSES
                     Priority: ROUTINE
---------------------------------------------------------------------------
```

```
(P)lace, (E)dit, or (C)ancel this quick order? PLACE//
```

11.3.6.8 Lab Dialog Box

OR GTX VISITSTR is a new element in the lab order dialog box.

11.3.6.9 Radiology Dialog Box

OR GTX VISITSTR is a new element in the radiology order dialog box.

OR GTX STUDY REASON is a new element in the radiology dialog box.

11.3.6.10 Print Parameters

1. Enter the CPRS Manager Menu.
2. Select the CPRS Configuration (Clin Coordinator) option.
3. Select the Print/Report Parameters option.

   The new menu option NA allows you to determine if something will print by nature of order.

   - CC – Chart Copy Parameters
   - WC – Work Copy Parameters
   - SC – Service Copy Parameters
   - RE – Requisition/Label Parameters
   - UM – Summary Report Parameters
   - HO – Print Parameters for Hospital
   - LO – Print Parameters for Wards/Clinics
   - NA – Print Parameters for Nature of Order
4. Select the Print/Report Parameters Option, NA – Print Parameters for Nature of Order.

```
Select NATURE OF ORDER: TELEPHONED       P
PRINT CHART COPY: YES//
PRINT DAILY SUMMARY: YES//
PRINT WORK COPY:
INCLUDE IN ACTIVE ORDERS: YES//
```

11.3.7 Radiology Orders

11.3.7.1 Remove Default Date

Remove Default Radiology Order Desired Date Default – Previously, when a user placed a radiology order, the prompt for Date Desired defaulted to TODAY.

Resolution:

Developers removed this default as requested. This field remains required, but is now displayed with no default. Developers also created patch OR*3.0*281 to identify orders that may need to be changed as a result of new features in some patches. One feature of patch OR*3.0*281 is to identify radiology quick orders with a desired date of TODAY. The patch creates a list of the quick orders with a date of today that are mailed to the user who runs the report (menu option, ORCM RA SEARCH). It can also be set to remove the default of TODAY from the quick orders, and can be set to disregard STAT orders.

11.3.7.2 Reason for Study

A new Reason for Study field that is required has been added. The Clinical History field is now optional.

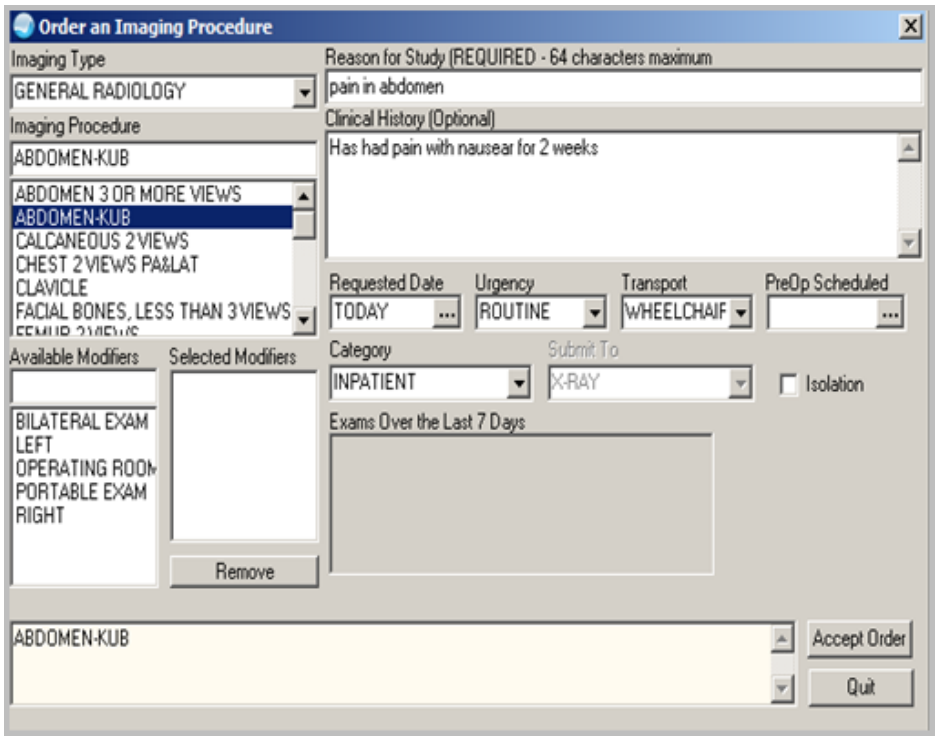


Figure 11-17: Reason for Study

12.0 Patient Record Flags

Patient Record Flags has been expanded to work with TIU Notes. Users can select note titles and then attach them to a flag. In addition, the pop-up and view of flags will include the notes attached to the flag.

12.1 Patient Record Flag Pop-Up

Selecting a patient with a record flag brings up the following pop-up dialog box (if set to pop up). Each flag is listed in its section. The user can select any flag to review. The notes are listed below and can be clicked to view the data in the note.

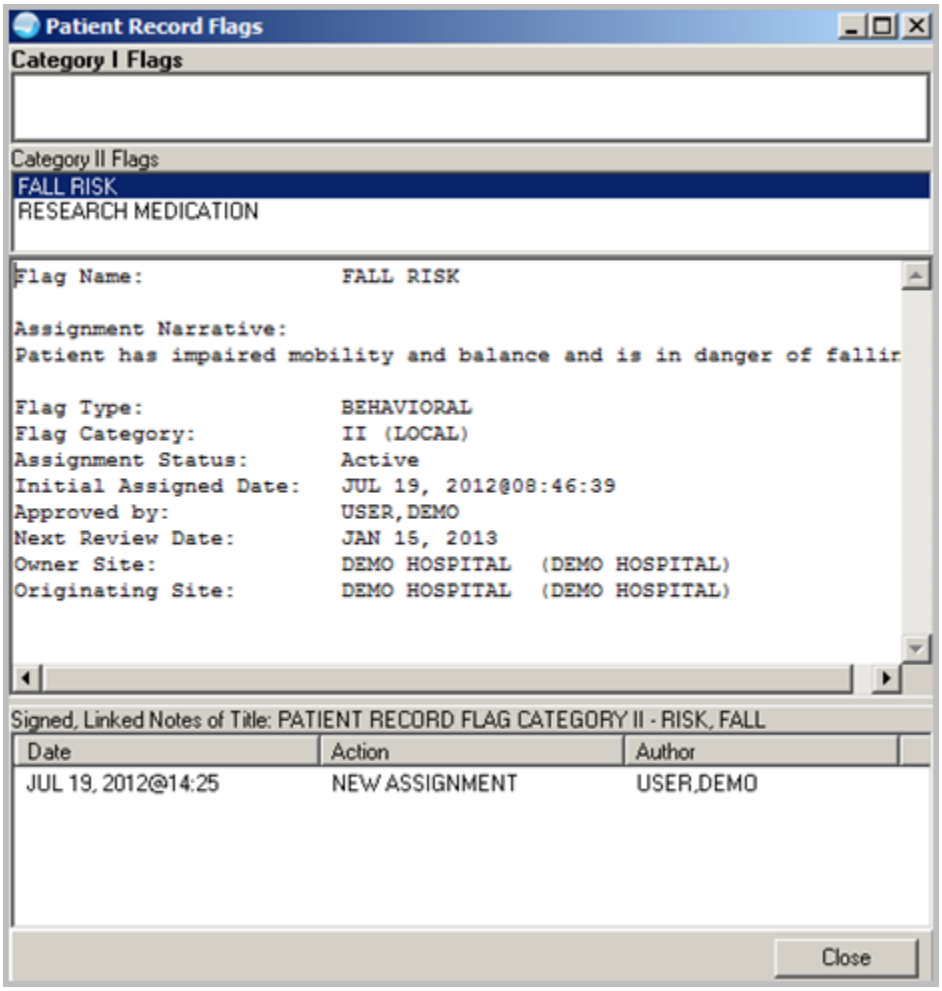


Figure 12-1: Patient Record Flag Detail

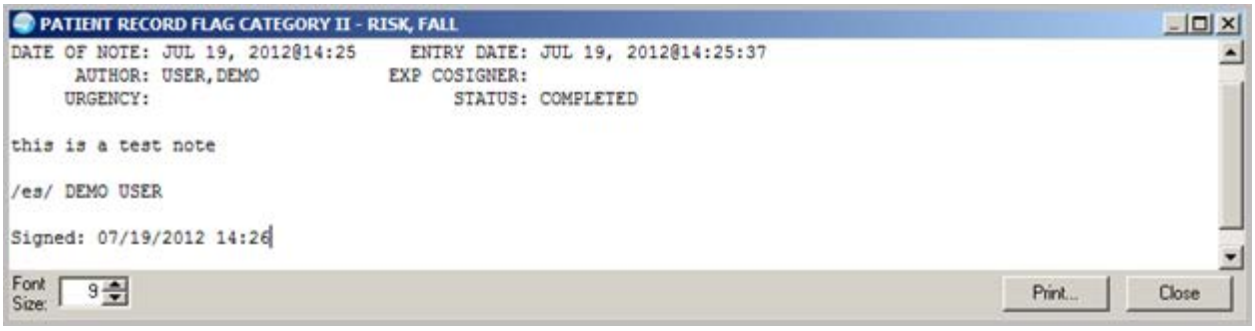


Figure 12-2: Patient Record Flag Note

12.2 Category 1 Flag

The Category 1 Flags appears in ORANGE with the name flashing.

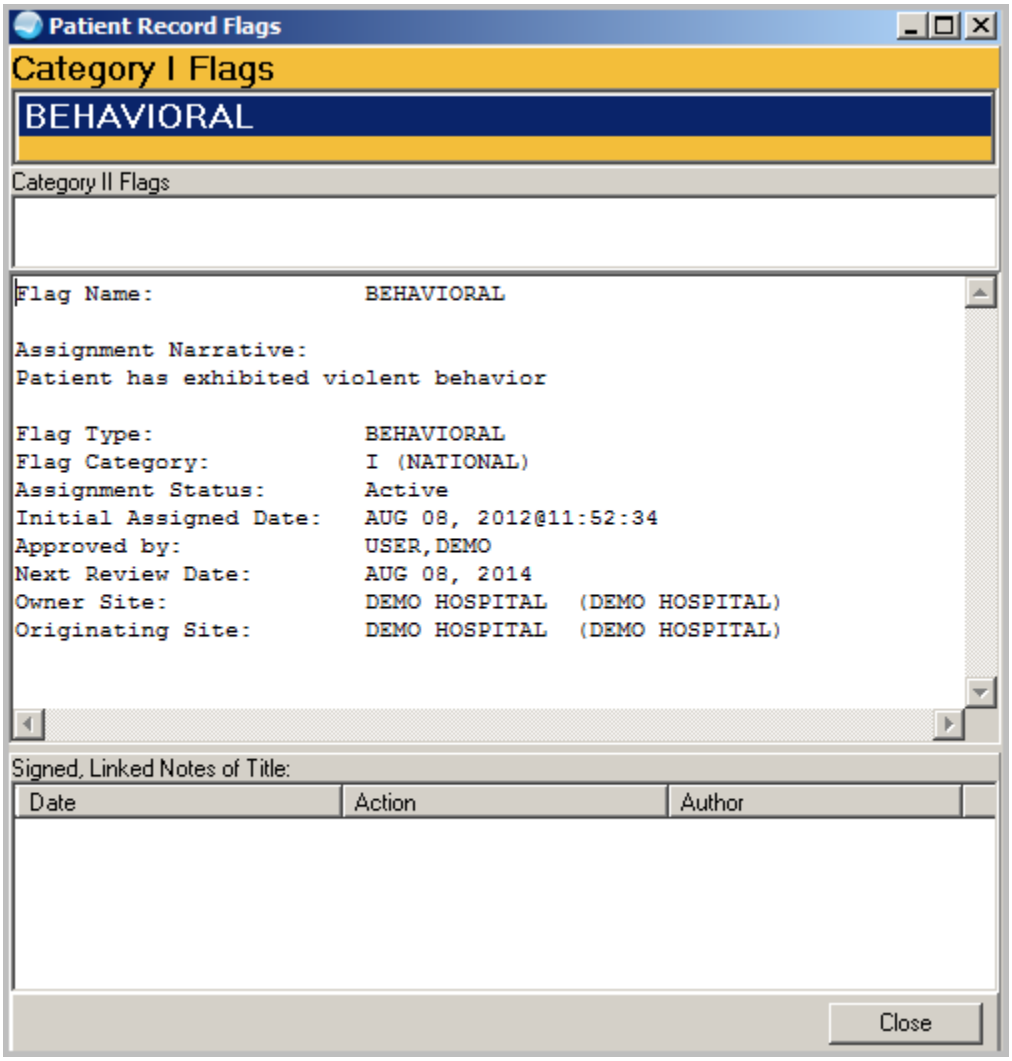


Figure 12-3: Category 1 Flag

12.3 CWAD and Patient Flags

Selecting the CWAD button on the header bar displays the Patient Postings. Clicking the flag in the Crisis Notes, Warning Notes, Directives and Record Flags area brings up the Flag dialog pop-up.

12.4 Attaching a Note to Patient Flags

After selecting a patient with a record flag, select a Note Title that has been attached to a Patient Record Flag. Attaching the note to the flag is done in PIMS when the flag is created. If the patient has a flag, the Progress Note Title will appear in the drop-down list.

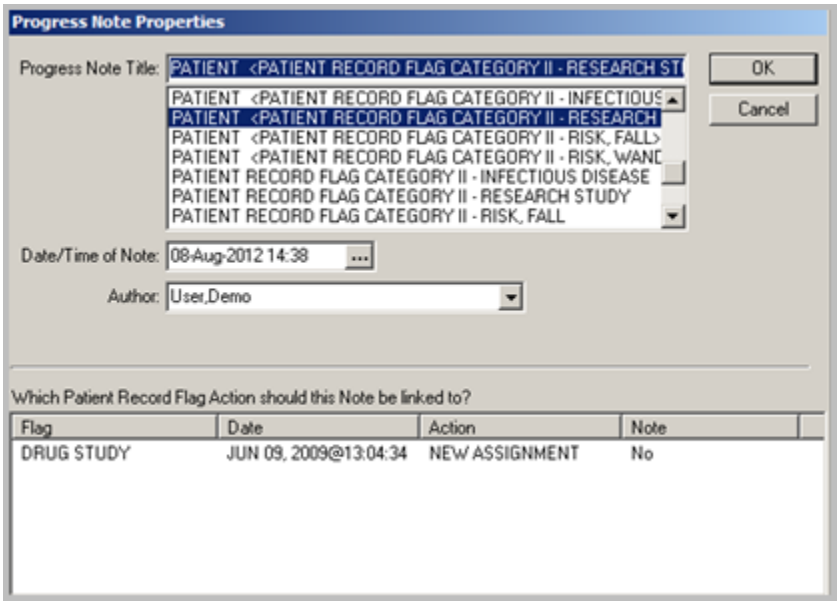


Figure 12-4: PRF Title Selected on PT with PRF

To add a note, click the Record Flag to link them together. The user can write and sign the note. The note displays the next time the flag is viewed. The note is displayed within the **Patient Recorded Flag** dialog box.

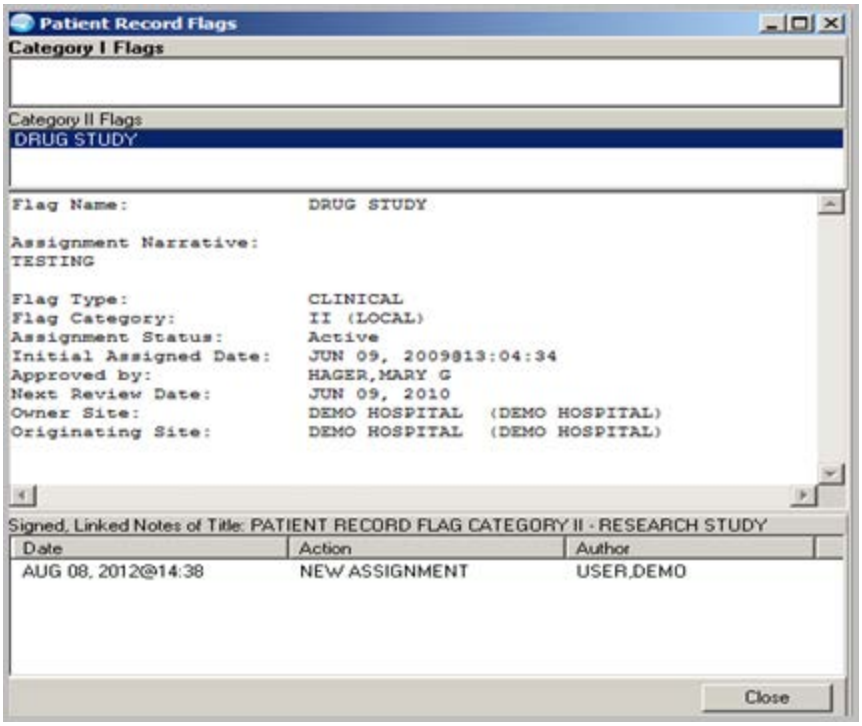


Figure 12-5: Note with Flag

If the user tries to write another note on the same flag and the same action, a pop-up message will display. Each action on the flag can only have one note.

13.0 PHQ-9

13.1 PHQ-9 for Teens (Mnemonic: PHQT)

Developers added the PHQ-9 Modified for Teens instrument to the RPMS V MEASUREMENT file along with the identified description, mnemonic, value and Informing Paragraph (Hover Help or the equivalent in the GUI applications). Results may be graphed. The allowable range is 0 – 27. A positive score is a total score equal to or greater than 11 OR a positive response to questions 12 or 13.

DEPRESSION SEVERITY**:**

- 1 – 4 = Minimal depression
- 5 – 9 = Mild depression
- 10 – 14 = Moderate depression
- 15 – 19 = Moderately severe depression
- 20 – 27 = Severe depression

SUICIDALITY: Regardless of the PHQ-9 Modified total score, endorsement of serious suicidal ideation OR past suicide attempt (a "Yes" response to questions 12 or 13) should be considered a positive screen.

14.0 Refusals

14.1 Refusal Type CPT Lookup

Users can now add a CPT as a type of refusal. Once the **Enter Service Not Provided** dialog displays, the user can check the **CPT** box.

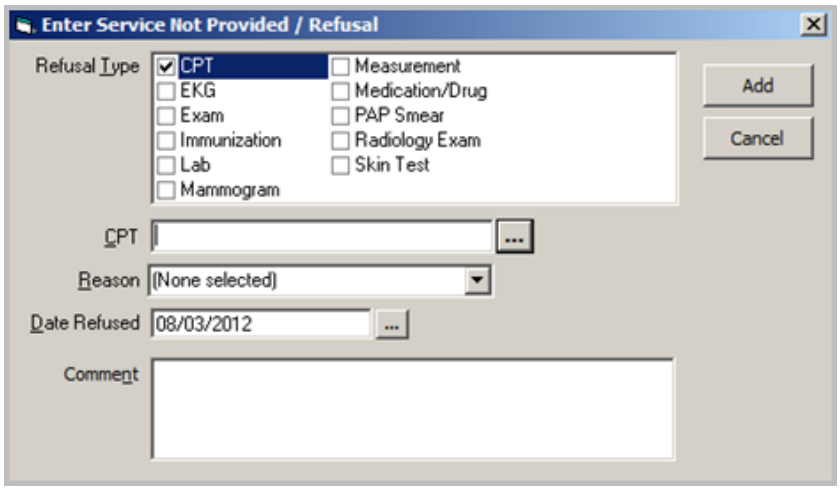


Figure 14-1: Enter CPT Refusal

Click the Ellipsis (...) button for the **CPT** field to access the **Procedure Lookup** dialog box. The user can then select the appropriate Code Set searches to include.

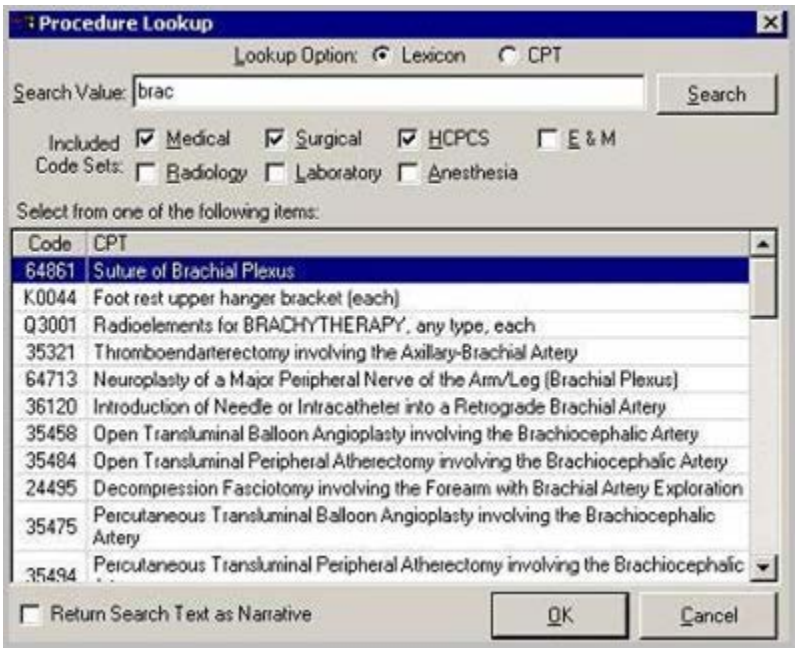


Figure 14-2: Procedure Lookup Dialog Box

If the retrieved data is an incorrect set of CPT codes, initiate a new search by entering a new value in the **Search Value** field and then clicking **Search**.

The **Return Search Text as Narrative** check box (when selected) allows the RPMS-EHR to populate the Narrative field with whatever the user enters in the Search Value field. Otherwise, the Narrative field is populated with the selected CPT description.

After selecting **OK** to accept the selected code, the user is then returned to the Refusal screen. Enter the Reason the procedure was not done, the Date Refused, and enter comments about the Refusal.

Click **Add** to add this record to the Personal Health component. (Otherwise, click **Cancel**).

14.2 Refusals for Other Components

The Reason field was added to the "Not Done" screens for Patient Education, Exams, Immunizations, and Skin Tests.

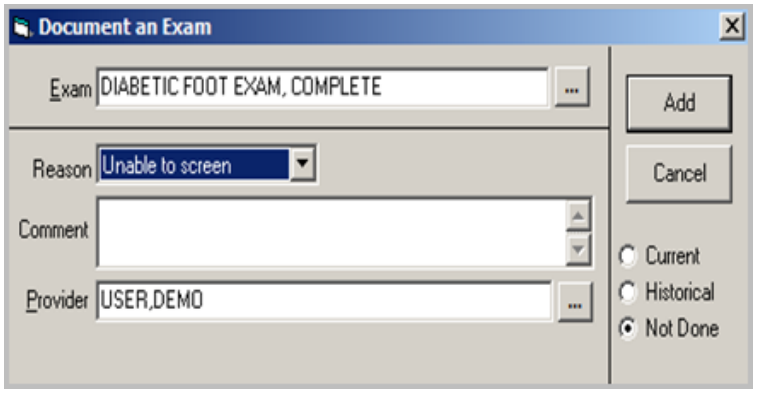
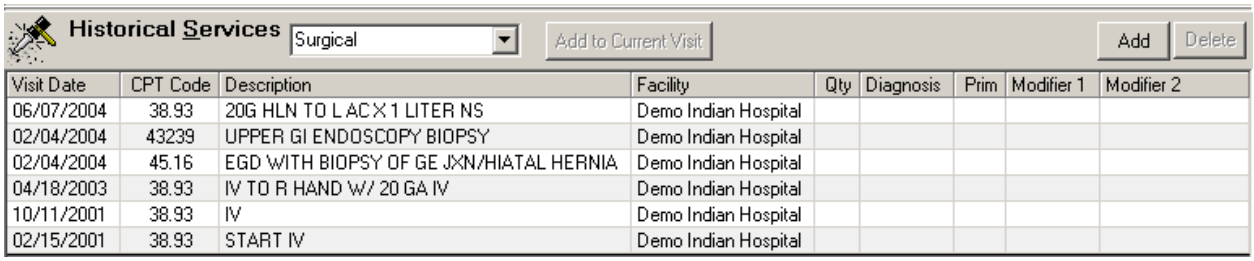


Figure 14-3: Not Done Added to Exam component

15.0 Services

15.1 Historical List Display

Historical services now displays in reverse chronological order (i.e. Most current visit date first). Surgical services only include those items in the APCH HS MAJOR PROCEDURE CPTS taxonomy when displaying Surgical Services; otherwise the services will display in the miscellaneous Historical Service Category.



Visit Date	CPT Code	Description	Facility	Qty	Diagnosis	Prim	Modifier 1	Modifier 2
06/07/2004	38.93	20G HLN TO LAC X 1 LITER NS	Demo Indian Hospital					
02/04/2004	43239	UPPER GI ENDOSCOPY BIOPSY	Demo Indian Hospital					
02/04/2004	45.16	EGD WITH BIOPSY OF GE JXN/HIATAL HERNIA	Demo Indian Hospital					
04/18/2003	38.93	IV TO R HAND W/ 20 GA IV	Demo Indian Hospital					
10/11/2001	38.93	IV	Demo Indian Hospital					
02/15/2001	38.93	START IV	Demo Indian Hospital					

Figure 15-1: Surgical Services

15.2 CPT Modifiers

Modifiers selections used in SuperBills now use the VA Modifier file following Code Set Versioning.

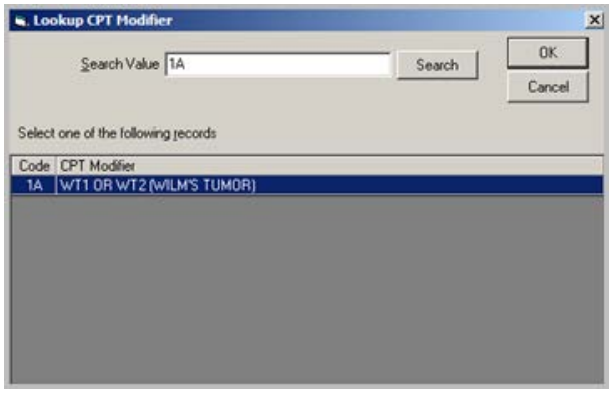


Figure 15-2: File 81.3 Modifiers

The **Lookup CPT Modifier** dialog box displays when adding/editing associations on the Edit Pick List Item dialog.

16.0 Vital Qualifiers

Vital qualifiers have been added to the RPMS-EHR, both for viewing and for entry. After entering Qualifiers, they are viewable on the Vital Measurement Display and Vital Measurement Entry components.

16.1 Adding a New Vital Qualifiers

After the user selects a patient and a visit, go to the Vital Measurement Entry component and select and enter a vital measurement. Some vitals do not have qualifiers while other vitals have multiple qualifiers. Entering qualifiers is not a mandatory requirement for entering vital measurements. However, the qualifier does further explain characteristics of the vital. For example, when taking blood pressure, the qualifier can be the location, method, position, and/or cuff size.

Accessing Qualifiers

Right-click the entered vital value to view the available qualifiers. If qualifiers are available, the Qualifiers button will be available. Users cannot enter a qualifier until values have been entered.

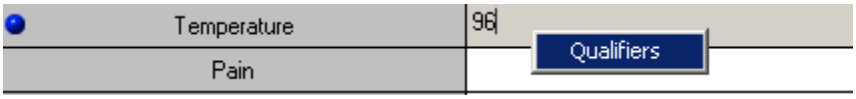


Figure 16-1: Example of Qualifiers for a vital measurement

Click **Qualifiers** to access the qualifiers dialog for the particular vital measurement.

Examples of Qualifiers

Some vital measurements have multiple qualifiers, for example for blood pressure.

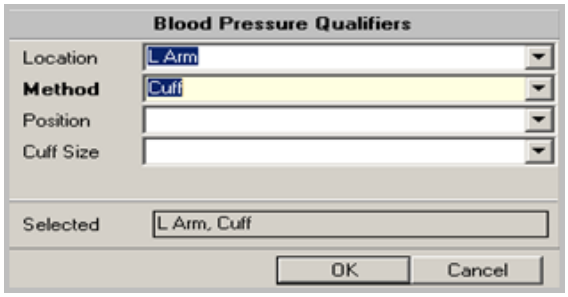


Figure 16-2: Multiple Qualifiers

O2 Saturation has both a qualifier and fields for the amount of O2 given. The method MUST be entered first and then the flow rate and/or 02 concentration can be entered.

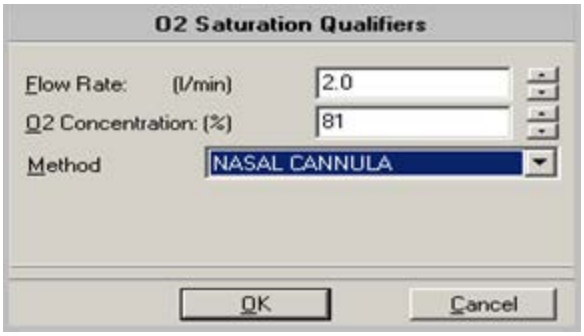


Figure 16-3: O2 with Flow Rate

16.2 Editing a Vital Qualifier

Qualifiers can be edited but it will result in the original vital marked as entered in error and a new entry made into the file.

Users can select the vital to edit and change the measurement if needed. Right-click the vital to be edited. Select the **Qualifiers** button and edit the information previously entered.

16.3 Deleting a Vital Qualifier

Select the vital containing the qualifier to delete. The application displays the value of the vital. Select the **Qualifier** button on the context menu to access the qualifiers dialog.

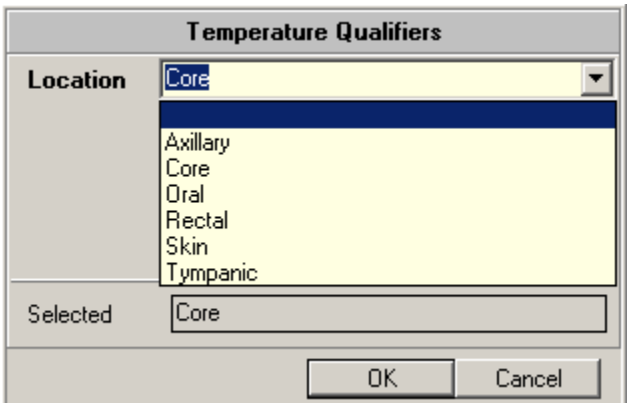


Figure 16-4: List of options for qualifiers for temperature location

The first option will be “blank” and select this first option to remove the qualifier itself. After clicking **OK** on the qualifier dialog, the particular vital measurement will have no qualifier.

16.4 Viewing Vital Qualifiers

16.4.1 Viewing Measurement Display Component

Qualifiers can now be viewed on the Vital Measurement Display component.

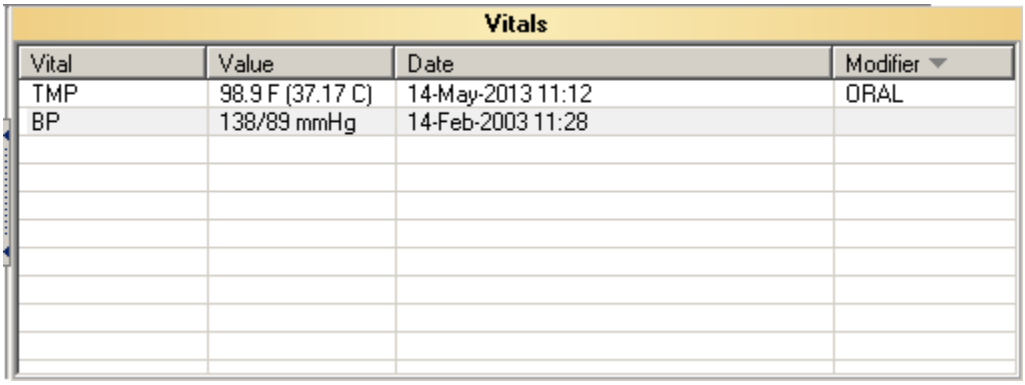


Figure 16-5: Sample vital measurement with qualifier (in Modifier column)

> **Note**: Qualifiers are displayed in their own column. Sites may need to adjust the column width to make the qualifiers more visible.

16.4.2 View Vitals Qualifiers on the Vital Measurement Entry Component

Qualifiers are visible on the Vital Measurement Entry component.

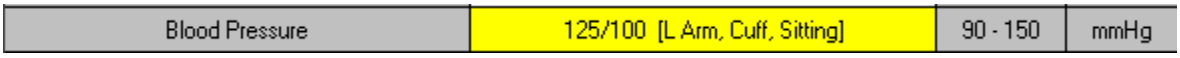


Figure 16-6: Sample showing qualifiers for blood pressure

16.4.3 View Vitals Qualifiers in Details

View Details also contains the qualifiers that were entered.

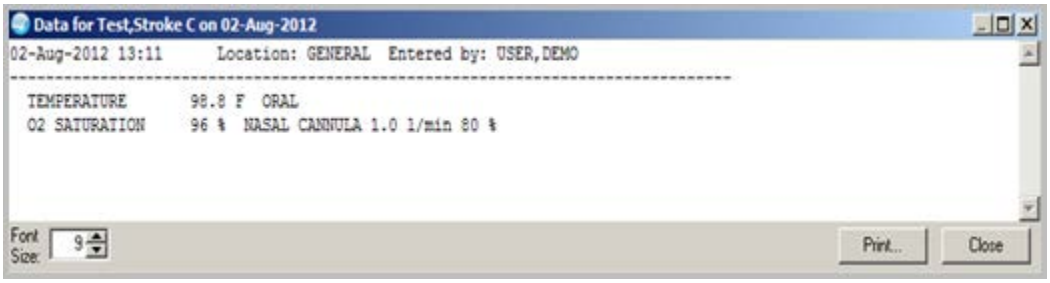


Figure 16-7: Vital Details

Contact Information

If you have any questions or comments regarding this distribution, contact the OIT User Support (IHS) by:

Phone: (505) 248-4371 or (888) 830-7280

Fax: (505) 248-4363

Web: http://www.ihs.gov/GeneralWeb/HelpCenter/Helpdesk/index.cfm

Email: mailto:support@ihs.gov