



RESOURCE AND PATIENT MANAGEMENT SYSTEM

# Clinical Reminders

(PXRM)

## User Manual

Version 2.0  
September 2014

Office of Information Technology  
Division of Information Technology  
Albuquerque, New Mexico

# Table of Contents

<b>1.0</b>	<b>Introduction.....</b>	<b>1</b>
1.1	New Options .....	1
1.2	Other Enhancements to Reminder Functionality .....	2
1.2.1	Expanded/Improved Output Format for Clinical Maintenance .....	2
1.2.2	Expanded Output Format in Reminder Inquiry .....	2
1.2.3	Changes to Finding Date Search.....	3
1.2.4	New Finding Modifiers .....	3
1.2.5	New Finding Types.....	5
1.2.6	Custom Date Due Enhancements .....	6
1.2.7	Formatting Enhancement .....	7
1.2.8	More Information in Test Option Output.....	7
1.2.9	Improved Patient Data Source in Taxonomies .....	8
1.2.10	Dialog Enhancements.....	8
1.3	EHR Changes That Affect Reminders .....	9
1.3.1	CPRS v19-25.....	9
1.3.2	CPRS v24 Changes That Affect Reminders.....	9
1.3.3	CPRS v25 Changes That Affect Reminders.....	9
<b>2.0</b>	<b>Reminder Maintenance .....</b>	<b>11</b>
2.1	Reminder Managers Menu.....	11
2.2	Menu Descriptions.....	12
<b>3.0</b>	<b>Reminder Computed Finding Management.....</b>	<b>16</b>
3.1	Steps to Create a Computed Finding .....	16
3.1.1	Write an M Routine.....	16
3.1.2	Enter Computed Finding into the Reminders Package.....	20
3.1.3	Place Finding into Reminder.....	21
3.1.4	Reminder Computed Finding Edit (CFE) .....	22
3.1.5	New National Computed Findings .....	22
<b>4.0</b>	<b>Reminder Definition Management.....</b>	<b>25</b>
4.1	Defining a Working Clinical Reminder.....	26
4.1.1	Steps to Define a Working Reminder.....	26
4.2	List Reminder Definitions (RL) .....	27
4.3	Inquire About Reminder Item (RI) .....	29
4.4	Add/Edit Reminder Definition .....	31
4.4.1	Editing Part of the Reminder Definition .....	33
4.5	Copy Reminder Definition .....	34
4.6	Reminder Definition Fields.....	35
4.6.1	Reminder Findings.....	39
4.6.2	Function Findings .....	55
4.6.3	Default Statuses .....	67
4.6.4	Outpatient Pharmacy Statuses .....	68

4.6.5	New Reminder Status.....	68
4.6.6	Clinical Maintenance Display.....	68
4.7	Activating Clinical Reminders .....	69
4.7.1	Activate CPRS Parameters: .....	69
4.8	Activate/Inactivate Reminders (RA).....	70
<b>5.0</b>	<b>Reminder Sponsor Management.....</b>	<b>71</b>
5.1	Edit Reminder Sponsor.....	71
5.2	List Reminder Sponsors [PXRM SPONSOR LIST].....	71
5.3	Reminder Sponsor Inquiry .....	72
<b>6.0</b>	<b>Reminder Taxonomy Management .....</b>	<b>73</b>
6.1	Improved Patient Data Source in Taxonomies in V2 .....	73
6.2	Reminder Taxonomy Management Menu .....	73
6.3	Taxonomy Fields .....	74
6.4	List Taxonomy Definitions (TL) .....	76
6.5	Inquire about Taxonomy Item (TI).....	77
6.6	Edit Taxonomy Item (TE) .....	78
6.7	Copy Taxonomy Item (TC).....	79
6.8	Code Set Versioning Changes.....	79
6.8.1	CSV Messages.....	80
<b>7.0</b>	<b>Reminder Term Management .....</b>	<b>84</b>
7.1	Reminder Term Management Options .....	84
7.2	List Reminder Terms (TL).....	84
7.3	Inquire about Reminder Term (TI).....	86
7.4	Reminder Term Edit (TE).....	86
7.4.1	Reminder Term Edit Example.....	86
7.5	Copy Reminder Term (TC) .....	87
<b>8.0</b>	<b>Reminder Location List Management.....</b>	<b>89</b>
8.1	Location List Inquiry.....	89
8.2	List Location Lists .....	89
8.3	Edit Location Lists.....	90
8.4	Create a New Location List.....	91
<b>9.0</b>	<b>Reminder Exchange .....</b>	<b>93</b>
9.1	Terminology .....	93
9.2	VistA MailMan.....	93
9.3	HOST File.....	94
9.4	Technical Overview .....	94
9.5	Steps to Use Reminder Exchange.....	94
9.5.1	Summary of Steps.....	94
9.5.2	Export Steps.....	94
9.5.3	Import Steps.....	95
9.6	Reminder Exchange Main Screen [PXRM REMINDER EXCHANGE] ...	95
9.6.1	Steps to Export Reminders.....	96

9.7	Detailed Steps to Export Reminders .....	97
9.8	Steps to Import Reminders .....	101
9.8.1	Tips for Exchanging Reminders .....	110
<b>10.0</b>	<b>Reminder Test.....</b>	<b>111</b>
10.1.1	Test Option Output for this Reminder .....	112
<b>11.0</b>	<b>Reminder Information Only Menu .....</b>	<b>120</b>
<b>12.0</b>	<b>Reminder Dialog Management .....</b>	<b>121</b>
12.1	Dialog Component Definitions.....	122
12.1.1	Dialog Elements .....	122
12.1.2	Dialog Groups.....	122
12.1.3	Result Elements .....	122
12.1.4	Result Groups.....	122
12.1.5	Prompts .....	123
12.2	Reminder Dialog Management Menu.....	123
12.3	Reminder Dialogs (DI) .....	123
12.3.1	Dialog Types.....	123
12.3.2	Dialog Information .....	124
12.4	Dialog Edit Screen .....	124
12.4.1	Dialog Edit Options.....	125
12.4.2	Dialog Overview .....	125
12.4.3	Dialog Enhancements.....	126
12.4.4	Branching Logic Problem.....	133
12.5	Code Set Versioning Changes .....	135
12.6	Editing Template Fields used in Reminder Dialogs .....	136
12.6.1	TIU Parameter TIU FIELD EDITOR CLASSES.....	137
12.6.2	User Class of Clinical Coordinator.....	139
12.7	New Dialog Reports.....	140
12.8	Reminder Dialog Elements Orphan Report .....	141
12.9	Empty Reminder Dialog Report .....	143
<b>13.0</b>	<b>CPRS Reminder Configuration Menu .....</b>	<b>144</b>
13.1	Add/Edit Reminder Categories (CA) .....	145
13.1.1	Actions – ADD .....	146
13.1.2	Actions – EDIT.....	147
13.2	CPRS Lookup Categories (CL) .....	147
13.3	CPRS Cover Sheet Reminder List (CS).....	148
13.4	Progress Note Headers (PN) .....	148
13.5	Mental Health Dialogs Active – <b>Not Used by IHS</b> .....	149
13.6	Reminder GUI Resolution Active (RA) .....	150
13.7	Default Outside Location.....	151
13.8	Position Reminder Text at Cursor .....	152
13.9	New Reminder Parameters .....	152
13.9.1	Cover Sheet Reminder List Edit .....	153
13.10	Clinical Reminders/Reminder Categories On Cover Sheet .....	153

13.11	Icon Legend.....	154
13.11.1	Cover Sheet Reminders (Cumulative List) .....	155
13.11.2	Location Shown in Cumulative List.....	155
13.11.3	Available Reminders and Categories .....	156
13.12	Setting up Clinical Reminders Components in Health Summary .....	156
13.12.1	Health Summary Reminder Components .....	156
<b>14.0</b>	<b>Reminder Reports .....</b>	<b>158</b>
14.1	Multiple Uses for Reminder Reports.....	159
14.1.1	Patient Care.....	159
14.1.2	Identify Patients for Case Management.....	159
14.1.3	Quality Improvement .....	159
14.1.4	Management Tool.....	160
14.1.5	Employee Performance and Evaluation .....	160
14.1.6	Changes to finding date search .....	160
14.1.7	Benefits of Date Range Finding Searches.....	160
14.2	Reminders Due Report.....	161
14.3	Reminders Due Report – Patient List Template .....	166
14.4	Reminder Due Report – Patient List.....	168
<b>14.5</b>	<b>Extract QUERI Totals – <i>Not Used by IHS</i>.....</b>	<b>170</b>
14.5.1	Future Appointments .....	173
14.6	GEC Referral Report – <i>Not Used by IHS</i> .....	179
<b>15.0</b>	<b>Reminder Patient List Management.....</b>	<b>180</b>
15.1	List Rule Management.....	180
15.2	Patient List Management.....	182
15.3	Reminder Reports Patient Lists .....	184
<b>16.0</b>	<b>Reminder Parameters .....</b>	<b>185</b>
16.1	Reminder Extract Menu .....	186
16.2	Reminder Extract Management .....	187
16.2.1	Available Actions .....	187
16.3	Manual Extract.....	196
16.4	Transmission History .....	197
<b>Appendix A:</b>	<b>Q&amp;A – Helpful Hints .....</b>	<b>198</b>
<b>Appendix B:</b>	<b>Status Enhancements .....</b>	<b>206</b>
<b>Appendix C:</b>	<b>Rules of Behavior .....</b>	<b>211</b>
C.1	All RPMS Users .....	211
C.1.1	Access.....	211
C.1.2	Information Accessibility .....	212
C.1.3	Accountability .....	212
C.1.4	Confidentiality .....	213
C.1.5	Integrity.....	213
C.1.6	System Logon.....	214
C.1.7	Passwords.....	214

---

C.1.8	Backups.....	215
C.1.9	Reporting.....	215
C.1.10	Session Timeouts.....	215
C.1.11	Hardware.....	215
C.1.12	Awareness.....	216
C.1.13	Remote Access.....	216
C.2	RPMS Developers.....	217
C.3	Privileged Users.....	218
<b>Glossary.....</b>		<b>220</b>
<b>Acronym List.....</b>		<b>223</b>
<b>Contact Information.....</b>		<b>224</b>

## Preface

This manual provides reference information on Clinical Reminders menus and options. Clinical Reminders is a Veteran's Administration (VA) application that has been adapted for IHS use.

This manual provides information on how to configure and set up Clinical Reminders and should be used along with other IHS manuals on the IHS national reminders. Since this is a VA manual, the examples provided are VA national reminders. However, since they illustrate the new features of Clinical Reminders, they are also applicable for IHS reminders. As a result, CPRS is referenced many times, including in several of the screen shots. The functionality is the same in both CPRS and the EHR.

### Recommended Users

This document is recommended for Clinical Reminders Managers.

### Related Manuals

- Clinical Reminders V. 2.0 Installation Guide(pxrm0200.i)
- Clinical Reminders V. 2.0 User Manual (pxrm0200.u)
- Clinical Reminders V 2.0 Security Manual (pxrm0200.s)
- Clinical Reminders V. 2.0 Technical Manual (pxrm0200.t)

The VA also has other manuals for Clinical Reminders. Go to [www.va.gov/vdl](http://www.va.gov/vdl) and search Clinical Applications for Clinical Reminders.

## 1.0 Introduction

Many changes have been made to Clinical Reminders, to improve processing and management. Some of the changes are in response to requirements from the National Council for Clinical Practice Guidelines (NCPG).

### 1.1 New Options

- A new option on the Reminder Definition Management menu: Reminder Edit History [PXRM REMINDER EDIT HISTORY].
- New menu: Location List Management [PXRM LOCATION LIST MANAGEMENT] This option provides options for managing Location Lists, which can be used as findings.
- New menu: Reminder Parameters [PXRM REMINDER PARAMETERS]
  - Edit Site Disclaimer
  - Edit Web Sites
- New menu: Reminder Patient List Menu [PXRM PATIENT LIST MENU]

This menu contains options for creation of term-based list rules that can be used in both extract processing and patient list creation.

  - List Rule Management
  - Patient Lists
- New menu: Reminder Extract Management [PXRM EXTRACT MENU]

This menu contains options that allow display and edit of extract finding rules and of extract parameters for use in extract processing.

  - Reminder Extract Management
  - Extract Parameter Management
  - Extract Finding Management
  - Extract Finding Group Management
  - List Rule Management
- New options on the Reminder Reports menu [PXRM REPORTS MENU]
  - Extract QUERI Totals – *Not used by IHS*
  - Review Date Report
  - GEC Referral Report – *Not used by IHS*
- New options on the Reminder Dialog Management menu ...[PXRM DIALOG MENU]

- Dialog Reports
  - Reminder Dialog Elements Orphan Report
  - Empty Reminder Dialog Report

## 1.2 Other Enhancements to Reminder Functionality

### 1.2.1 Expanded/Improved Output Format for Clinical Maintenance

The Clinical Maintenance display seen in EHR GUI has been expanded to include more details, such as relevant Reminder Terms and Health Factors. For example:

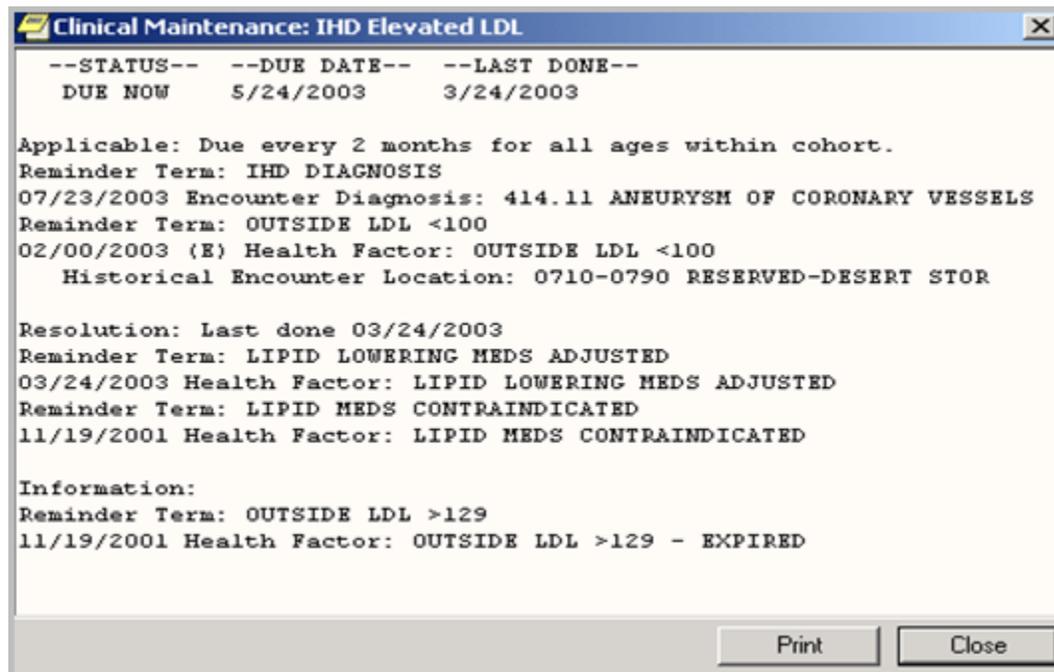


Figure 1-1: Output Format for Clinical Maintenance

### 1.2.2 Expanded Output Format in Reminder Inquiry

The Reminder Inquiry display has been expanded to include more details in the Findings section, such as more information about the relevant Reminder Terms and Health Factors. For example:

```

Findings:
----- Begin: IHD DIAGNOSIS (FI(1)=RT(27)) -----
Finding Type: REMINDER TERM
Use in Patient Cohort Logic: AND
Beginning Date/Time: OCT 01, 1999
Use Inactive Problems: N
Not Found Text: Patient has no IHD Diagnosis on file.
  
```

```

Mapped Findings:
Mapped Finding Item: TX.VA-ISCHEMIC HEART DISEASE Use Inactive Problems: NO

---- End: IHD DIAGNOSIS -----

---- Begin: OUTSIDE LDL 100-119 (FI(4)=RT(34)) -----
Finding Type: REMINDER TERM
Use in Patient Cohort Logic: AND NOT Beginning Date/Time: T-1Y

Mapped Findings:
Mapped Finding Item: HF.OUTSIDE LDL 100-119

---- End: OUTSIDE LDL 100-119 -----

---- Begin: LIPID LOWERING THERAPY MGMT - 6M (FI(10)=RT(60)) -----
Finding Type: REMINDER TERM
Use in Resolution Logic: OR Beginning Date/Time: T-6M
Found Text: Lipid lowering management underway. Reminder satisfied for 6
months.
Mapped Findings:
Mapped Finding Item: HF.NO CHANGE IN IHD LIPID TREATMENT Mapped Finding
Item: HF.OTHER DEFER ELEVATED LDL THERAPY Mapped Finding Item: HF.LIPID
MGMT PROVIDED OUTSIDE
Etc.

```

Figure 1-2. Output Format in Reminder Inquiry

### 1.2.3 Changes to Finding Date Search

- Effective period and effective date are eliminated
- Replaced with BEGINNING DATE and ENDING DATE
- Any of the FileMan date formats are acceptable
- –May 14, 2003, T-1Y, T-2M, T-3D
- Beginning date default is beginning of data
- Ending date default is today

#### 1.2.3.1 Benefits of Date Range Finding Searches

- No more expired findings – the search for findings is done only in the specified date range
- Retrospective reminder reports are now possible

### 1.2.4 New Finding Modifiers

Section 4.0 provides detail information about these modifiers.

### 1.2.4.1 Occurrence Count

This is the maximum number of occurrences of the finding in the date range. If the OCCURRENCE COUNT is entered as a positive number, N, up to N of the most recent occurrences are returned, and the finding takes the value of the most recent occurrence. If the OCCURRENCE COUNT is entered as a negative number, this behavior is reversed. Up to N of the oldest occurrences are returned, and the finding takes the value of the oldest occurrence in the list.

### 1.2.4.2 Status List

- Applies only to finding types that have a status
  - Inpatient pharmacy
  - Outpatient pharmacy
  - Orders
  - Problem List
  - Radiology
- To be true, a finding has to have a status on the list
- This is a change from v1.5 where status was not used for drugs
- Your reminders that use these finding types may work differently in V. 2.0

Section 4.2 provides information about the Status List.

### 1.2.4.3 CONDITION Enhancements

CONDITION functionality has been expanded, so you can use things such as V("SUBSCRIPT") in addition to V. Examples:

```
I V("PDX")=[ "ABNORMALITY"
I (V="COMPLETE")&(V("PDX")["ABNORMALITY"]) I V("DATE READ")<V("DATE")
```

The wildcard functionality in Conditions was rewritten. There can be multiple wildcards, but they must be differentiated by the number of \* characters. Wildcards must be enclosed in quotes.

The external form of the vital qualifier was added to the values that can be used in a Condition statement. For example, in the test option output for a weight finding you might see qualifiers such as:

```
FIEVAL(1,"QUALIFIER",1)=ACTUAL FIEVAL(1,"QUALIFIER",2)=STANDING
```

You could use these in a Condition as follows:

```
I (V("QUALIFIER",1)="ACTUAL")&(V("QUALIFIER",2)="STANDING")&(V>165)
```

Since you don't always know what subscript the various qualifiers will be associated with, you can use the wildcard in the Condition as follows:

```
I (V("QUALIFIER", "*" )="ACTUAL" )&(V("QUALIFIER", "*" )="STANDING" )&(V>165)
```

Lab results now include specimen, so that specimen can be used in the Condition statement. For example:

```
I V("SPECIMEN")="SERUM"
```

## 1.2.5 New Finding Types

### 1.2.5.1 Location List Finding

- New finding type – looks for visits at a location
- Points to file #810.9, Reminder Location List
  - Clinic Stops
  - Hospital Locations
- Tools to manage location lists on the Reminder Managers menu

### 1.2.5.2 Function Findings

Function Findings are new in version 2.0. They are called Function Findings because they do a computation on the results from regular findings. Function Findings can be used in both patient cohort logic and resolution logic.

**Note:** Function Findings make old-style MRD findings obsolete. Installation of v2.0 will create a MailMan message listing local reminders that use old-style MRD findings, which should be replaced with Function Findings. Reminders containing MRD findings will continue to work until a future patch disables them. All national reminders containing MRD findings are automatically converted during the v2.0 installation.

Section 4.6.2 provides information Function Findings.

### 1.2.5.3 Computed Findings Enhancements

There are now two types of computed findings – the old style and a new one that allows for multiple occurrences.

A new field called TYPE, that is a set of codes, was added to the reminder computed finding file. It is used to distinguish a computed finding that returns a single occurrence from one that returns multiple occurrences. The default is for a single occurrence (old style).

The arguments for the old style are:

```
(DFN, TEST, DATE, VALUE, TEXT)
```

If TEST is true you must return a date; VALUE is required if there is a condition, TEXT is optional.

The arguments for the new style are:

```
(DFN, TEST, DATE, DATA, TEXT, NGET, BDT, EDT, NFOUND)
```

TEST, DATE, DATA, and TEXT are all arrays with integer subscripts. TEST(1) is the true/false value for occurrence 1, TEST(2) for occurrence 2 and so on.

DATA is the array that contains the values for use with a condition. NGET is the number of occurrences to try to get. BDT and EDT define a date range to search for occurrences. NFOUND is the number of occurrences found in the date range. NFOUND should never be larger than NGET but it may be less.

In addition to Single and Multiple TYPE values, there is also List, which is for a computed finding that can be used for building patient lists.

The argument lists for the different types of computed findings are different so the computed findings are not interchangeable. If a computed finding's argument list does not match its type an error will be generated during reminder evaluation.

New national computed findings are exported with Clinical Reminders V. 2.0.

## 1.2.6 Custom Date Due Enhancements

Custom Date Due allows you to define more complex date ranges to use for findings. The general form for a Custom Date Due string is:

```
FUNCTION( ARG1 , ARG2 , . . . , ARGN )
```

Where FUNCTION is MAX\_DATE or MIN\_DATE and the arguments have the form M+FREQ where M is a finding number and FREQ is a number followed by D for days, M for months, or Y for years.

Example: MAX\_DATE(1+6M,3+1Y)

This will take the date of finding 1 and add 6 months, the date of finding 3, add 1 year, and set the date due to the maximum of those two dates.

## 1.2.7 Formatting Enhancement

### 1.2.7.1 Found/Not Found Text

When you are writing found/not found text, you can control the way it displays. You pass it the left margin (LM) and the right margin (RM) and it works in fill mode. In other words, it breaks or combines lines so the output fills the space between the LM and RM as closely as possible.

If a line contains nothing but white space it is left as an individual line. Sometimes you may want a line that is not combined. To designate that a line should be broken at a certain point and not combined, use \\. For example:

#### Before

IMPACT: The impact of this is ...

#### After

IMPACT:  
The impact of this is ...

## 1.2.8 More Information in Test Option Output

**Example (truncated here – refer to Section 10.0 for a more detailed example)**

```
Select Reminder Managers Menu Option:  Reminder Test
Select Patient:  CRPATIENT,ONE CRPATIENT,ONE 1-1-24 666778888 YES SC VETERAN
Enrollment Priority:  Category:  IN PROCESS  End Date:
```

```
Select Reminder:  JG-DIABETIC EYE EXAM  LOCAL
The elements of the FIEV array are:  FIEVAL(1)=1
FIEVAL(1,1)=1
FIEVAL(1,1,"CONDITION")=1
FIEVAL(1,1,"DAS")=148
FIEVAL(1,1,"DATE")=3010103
FIEVAL(1,1,"RESULT")=A FIEVAL(1,1,"VALUE")=A FIEVAL(1,1,"VISIT")=5338
FIEVAL(1,"CONDITION")=1
FIEVAL(1,"DAS")=148
FIEVAL(1,"DATE")=3010103
FIEVAL(1,"FILE NUMBER")=9000010.13
FIEVAL(1,"FINDING")=3;AUTTEXAM( FIEVAL(1,"RESULT")=A FIEVAL(1,"VALUE")=A
FIEVAL(1,"VISIT")=5338
FIEVAL(2)=1
FIEVAL(2,1)=1
```

Formatted Clinical Maintenance Output:

**Formatted Clinical Maintenance Output now available**

```
--STATUS--  --DUE DATE--  --LAST DONE--  Diabetic Eye Exam  DUE NOW
01/03/2002  01/03/2001
```

```

Encounter Diagnosis:
10/05/2000 250.01 DIABETES MELLI W/0 COMP TYP I rank: SECONDARY
Prov. Narr. - DIABETES MELLITUS WITHOUT MENTION OF COMPLICATION;
TYPE 1 (IDDM) (JUVENILE TYPE), NOT STATED AS UNCONTROLLED
Diabetic eye exam required annually for all diabetic patients. with HTN.
Exam: DIABETIC EYE EXAM
01/03/2001 result - ABNORMAL
Historical Encounter Information:
Comment: OUTSIDE LOCATION: Local Pharmacy

```

### 1.2.9 Improved Patient Data Source in Taxonomies

- More choices for sources
- Finer control of the search
- Use a “-” to remove a source from the list. For example:
  - IN,-INM ALL – all sources (default))
  - EN – All PCE encounter data (CPT & ICD9)
  - ENPP – PCE encounter data, principal procedure (CPT) only
  - ENPD – PCE encounter data primary diagnosis (ICD9) only
  - IN – All PTF inpatient data (ICD9 & ICD0)
  - INDXLS – PTF inpatient DXLS diagnosis (ICD9) only INM – PTF inpatient diagnosis (ICD9) movement only INPD – PTF inpatient primary diagnosis (ICD9) only INPR – PTF inpatient procedure (ICD0) only
  - PL – Problem List (ICD9) RA – Radiology (CPT) only

### 1.2.10 Dialog Enhancements

- Dialog overview and Dialog Summary actions added on the Reminder Dialog (DI) option
  - New options: Dialog Reports ... [PXRМ DIALOG TOOLS MENU]
  - Reminder Dialog Elements Orphan Report
  - Empty Reminder Dialog Report
- Branching logic added (see description and examples in the Dialog Management section)
- New actions on Dialog Edit screen: Dialog overview and Dialog Summary

## 1.3 EHR Changes That Affect Reminders

### 1.3.1 CPRS v19-25

Previously, if you had dialog elements with the checkbox suppressed and a finding item, the EHR would check to see if it would display the items in the progress note if it had a finding item even if the item was designated with Exclude from Progress Note. A post install routine is included in the patch that corrected this. CPRS will now honor the Exclude from Progress Note parameter as it should.

### 1.3.2 CPRS v24 Changes That Affect Reminders

- **Change to Whether Reminder Dialogs Store Text** – Before CPRS 22, the Reminder Dialog stored the dialog text on the first load. With CPRS 22, the Reminder Dialog was changed to not store the dialog text, which meant that dialogs were reloading every time a user clicked on a dialog, slowing down the application. This change was made for the Women’s Health/CPRS Integration project in CPRS GUI version 24 to look for a flag to determine if CPRS should store the dialog text. If this flag was not found, the dialog text would be stored; but if the flag is found, the dialog text will not be stored. This new flag is currently assigned to two reminders that will not be released until after Reminders version 2.0 is released.
- **Null Subscript Error Fix** – A user received a Null Subscript error when loading the list of Clinical Reminders to be evaluated in CPRS. Developers made a minor update to the routine ORQQPX to fix this problem.
- **Hyperlink Problem** – Developers fixed hyperlinks that weren’t activating in Reminder dialogs.
- **Inappropriate Text Being Passed to Progress Note** – If a user processed a Reminder dialog that contained a force value for a Primary Diagnosis, which is something internal to the reminder dialog creation, CPRS would include the text Primary Diagnosis in the progress note when the user finished the dialog. This problem has been corrected. CPRS will not pass the text to the progress note.
- **Comment Prompt Maximum Number of Characters Changed** – Developers changed the maximum number of characters for the Comment prompt to 245. Previously, the comment field was too long and could cause an error.

### 1.3.3 CPRS v25 Changes That Affect Reminders

- **Reminder Dialog Font Resize Warning Added** – Reminder dialogs must be closed to change font sizes. If a dialog is open when the user tries to change font sizes, CPRS now displays a message telling the user that they need to close the Reminder dialog to change the font size and does not allow the font to resize until the dialog is closed.

- **Reminder Dialog Now Saves Size and Location** – The Reminders dialog now saves its last size and position and opens there the next time it opens.
- **Reminder Dialog Checks Indent Progress Note** – The Reminder dialog looks only at the Indent Progress Note to determine if a Dialog Group sub-items should be indented in the Progress Note.
- **Template Field Data Not in Final Note** – When a user selected template fields and then selected the Next button, CPRS did not put the template field information into the final progress note. Developers corrected this problem.
- **PCE does not update historical data for a specific historical date that is entered through a Reminder dialog.**
  - **Problem:**

This is caused by TaskMan blocking the historical encounter date by filing the encounter visit string into file #14.8.
  - **Fix:**

There are two parts to this fix: a coding fix and manual clean-up of old data at your site. The code fix does not set the ZTSYNC variable if the encounter data is for a historical date. By not setting this variable, TaskMan will not check file #14.8 for the encounter visit string. This code change will cause the program to start filing any new data for a block historical encounter date once CPRS 25 is installed.

Any historical data that was entered before CPRS 25 that does not show in PCE will need to be cleaned up.

## 2.0 Reminder Maintenance

### 2.1 Reminder Managers Menu

The options on the Clinical Reminders Management Menu help you set up and maintain Clinical Reminders.

Clinical Reminders Management Menu [PXRM MANAGERS MENU]	
CF	Reminder Computed Finding Management ... [PXRM CF MANAGEMENT]
	CRL    Computed Finding List
	CFE    Computed Finding Edit
RM	Reminder Definition Management ... [PXRM REMINDER MANAGEMENT]
	RL    List Reminder Definitions
	RI    Inquire about Reminder Definition
	RE    Add/Edit Reminder Definition
	RC    Copy Reminder Definition
	RA    Activate/Inactivate Reminders
	RH    Reminder Edit History
SM	Reminder Sponsor Management [PXRM SPONSOR MANAGEMENT]
	SL    List Reminder Sponsors
	SI    Reminder Sponsor Inquiry
	SE    Edit Reminder Sponsor
TXM	Reminder Taxonomy Management ... [PXRM TAXONOMY MANAGEMENT]
	TXL   List Taxonomy Definitions
	TXI   Inquire about Taxonomy Item
	TE    Edit Taxonomy Item
	TC    Copy Taxonomy Item
	TX    Selected Taxonomy Expansion
TRM	Reminder Term Management ... [PXRM TERM MANAGEMENT]
	TL    List Reminder Terms
	TI    Inquire about Reminder Term
	TE    Reminder Term Edit
	TC    Copy Reminder Term
LM	Reminder Location List Management ... [PXRM LOCATION LIST MANAGEMENT]
	LL    List Location Lists
	LI    Location List Inquiry
	LE    Edit Location List
RX	Reminder Exchange [PXRM REMINDER EXCHANGE]
RT	Reminder Test [PXRM REMINDER TEST]
OS	Other Supporting Menus ... [PXRM OTHER SUPPORTING MENUS]
	TM    PCE Table Maintenance ...
	PC    PCE Coordinator Menu ...
	HS    Health Summary Coordinator's Menu ...
	EF    Print Blank Encounter Forms ...
	QO    Enter/edit quick orders
INFO	Reminder Information Only Menu ... [PXRM INFO ONLY]
	RL    List Reminder Definitions
	RI    Inquire about Reminder Definition
	TL    List Taxonomy Definitions
	TI    Inquire about Taxonomy Item
	TRL   List Reminder Terms
	TRI   Inquire about Reminder Term
	SL    List Reminder Sponsors
DM	Reminder Dialog Management ... [PXRM DIALOG MANAGEMENT]
	DP    Dialog Parameters ...

	RS	Reminder Resolution Statuses
	HR	Health Factor Resolutions
	FP	General Finding Type Parameters
	FI	Finding Item Parameters
	TD	Taxonomy Dialog Parameters
DI	Reminder Dialogs	
	DR	Dialog Reports
	OR	Reminder Dialog Elements Orphan Report
	ER	Empty Reminder Dialog Report
IA	Inactive Codes Mail Message	
CP	CPRS Reminder Configuration [PXRМ CONFIGURATION MANAGEMENT]	
	CA	Add/Edit Reminder Categories
	CL	CPRS Lookup Categories
	CS	CPRS Cover Sheet Reminder List
	MH	Mental Health Dialogs Active
	PN	Progress Note Headers
	RA	Reminder GUI Resolution Active
	DL	Default Outside Location
	PT	Position Reminder Text at Cursor
	NP	New Reminder Parameters
	GEC	GEC Status Check Active
	WH	WH Print Now Active
RP	Reminder Reports ... [PXRМ REMINDER REPORTS]	
	D	Reminders Due Report
	R	Reminders Due Report (User) U User Report Templates
	T	Extract EPI Totals
	L	Extract EPI List by Finding and SSN
	Q	Extract QUERI Totals
	V	Review Date Report
	G	GEC Referral Report
MST	Reminders MST Synchronization Management ... [PXRМ MST MANAGEMENT]	
	SYN	Reminders MST Synchronization
	REP	Reminders MST Synchronization Report
PL	Reminder Patient List Menu ... [PXRМ PATIENT LIST MENU]	
	LRM	List Rule Management
	PLM	Patient List Management
PAR	Reminder Parameters ... [PXRМ REMINDER PARAMETERS]	
	ESD	Edit Site Disclaimer
	EWS	Edit Web Sites
XM	Reminder Extract Menu [PXRМ EXTRACT MENU]	
	MA	Reminder Extract Management
	EP	Extract Parameter Management
	EF	Extract Finding Management
	EG	Extract Finding Group Management
	LR	List Rule Management
GEC	GEC Referral Report [GEC REFERRAL REPORT]	

## 2.2 Menu Descriptions

Option	Option Name	Syn	Description
Reminder Computed Finding Management	PXRМ CF MANAGEMENT	CF	This option provides tools for viewing or editing reminder computed findings

<b>Option</b>	<b>Option Name</b>	<b>Syn</b>	<b>Description</b>
Reminder Definition Management	PXRМ REMINDER MANAGEMENT	RM	This menu contains options for creating, copying, and editing reminder definitions, as well as the options for maintaining the parameters used by CPRS for reminder processing.
Reminder Sponsor Management	PXRМ SPONSOR MANAGEMENT	SM	A Reminder Sponsor is the organization or group that sponsors a Reminder Definition, such as the Office of Quality and Performance. Options on this menu lets you view, define, or edit Reminder Sponsors.
Reminder Taxonomy Management	PXRМ TAXONOMY MANAGEMENT	TXM	The REMINDER TAXONOMY file is used to define a range of coded values from ICD Diagnosis codes, ICD Operation/Procedures codes, and CPT codes that can be viewed as being part of a clinical category (taxonomy). Each entry has a low value and a high value. The software will search for matches on all the codes between the low and high values inclusive. If there is a match then the taxonomy finding will be true for the patient. This menu contains options for copying, editing taxonomies, as well as listing and inquiring about specific taxonomies.
Reminder Term Management	PXRМ TERM MANAGEMENT	TRM	This menu allows you to edit, map, and view reminder terms.
Reminder Location List Management	PXRМ LOCATION LIST MANAGEMENT	LM	Location Lists are a new kind of reminder finding, that allow you to use a list of patients for a stop code or hospital location in a reminder definition. The stop codes and hospital locations are those associated with a Visit file entry.
Reminder Exchange	PXRМ REMINDER EXCHANGE	RX	This option allows sites to exchange reminder definitions, dialogs, and other reminder components via Mailman messages and host files.

Option	Option Name	Syn	Description
Reminder Test	PXRМ REMINDER TEST	RT	This utility helps you test and troubleshoot your reminders when you create them or when you have problems.
Other Supporting Menus	PXRМ OTHER SUPPORTING MENUS	OS	This option contains menus from related packages such as PCE and Health Summary. <i>Note: Not used by IHS.</i>
Reminder Information Only Men	PXRМ INFO ONLY	INFO	This menu provides information-only options for users who need information about reminders but do not need the ability to make changes.
Reminder Dialog Management	PXRМ DIALOG MANAGEMENT	DM	This menu allows maintenance of the parameters used by the EHR for reminder dialog processing.
Reminder Reports	PXRМ REMINDER REPORTS	RP	This is a menu of Clinical Reminder reports that clinicians can use for summary and detailed level information about patients' due and satisfied reminders. This option also contains reports that clinical coordinators can use to assign menus to specific users.
Reminders MST Synchronization Management	PXRМ MST MANAGEMENT	MST	This option provides the Clinical Reminders MST management options. <i>Note: Not used by IHS.</i> The extracted data is based on the following reminders: VA-HEP C RISK ASSESSMENT, VA-NATIONAL EPI LAB EXTRACT, and VA- NATIONAL EPI RX EXTRACT.
Reminder Patient List Menu	PXRМ PATIENT LIST MENU	PL	This menu contains options to manage list rules and patient lists that are used primarily for reminder extracts that transmit data to the Austin Automation Center IHD and MH QUERI databases. These patient lists can also be used for local purposes.

Option	Option Name	Syn	Description
Reminder Parameters	PXRМ REMINDER PARAMETERS	PAR	This menu contains the options, Edit Site Disclaimer and Edit Web Sites, which allows you to modify the parameters for these items.
Reminder Extract Menu	PXRМ EXTRACT MENU	XM	This option manages the extract summary reports of compliance generated by the monthly extract runs. These extract summary reports detail the information transmitted to the central repository.
GEC Referral Report	PXRМ GEC REFERRAL REPORT	GEC	This is the option that is used to generate GEC Reports. <i>Note: Not used by IHS.</i>

## 3.0 Reminder Computed Finding Management

When none of the standard finding types will work, sites can create a computed finding. A computed finding is an M routine that takes a standard set of arguments.

The computed finding must be entered into the REMINDER COMPUTED FINDING file #811.4 before it can be used as a finding in a reminder definition.

**Note:** Only programmers who have @ access can actually write the routine and enter it into the REMINDER COMPUTED FINDINGS file. Once it is in the file, Reminders Managers can use the computed finding in reminder definitions.

In v2.0, multiple occurrence counts can be used, so the Type field was added to Computed Findings to support this. The default is single occurrence, which is compatible with all the existing computed findings. If you want a computed finding to return multiple occurrences, then it needs a type of Multiple. The argument list is different for an M type vs. an S type. The L type is for using a computed finding for list building. The argument list for this is different than either the S or the M.

A number of computed findings are distributed by the Clinical Reminders package. All of them were written to be used with the Condition field. This will allow you to create findings that are very specific. For example, using the BMI computed finding, you can create a finding that is true only for patients with a BMI that is greater than or equal to 25. You can use these as examples as you start to create your own computed findings.

### 3.1 Steps to Create a Computed Finding

#### 3.1.1 Write an M Routine

For a single occurrence computed finding, the routine takes the following arguments:

- (DFN, TEST,DATE,DATA,TEXT)

DFN is the patient's id and will be set when the computed finding routine is called. The following variables should be set by the computed finding routine.

- TEST is the logical value of the finding, set to 1 for true and 0 for false. A value for TEST must always be returned.
- DATE is the date of the finding in FileMan format. Set it to null if the finding is false.

- DATA is a value for the finding to be used by the CONDITION field. If you want additional values for use in the Condition then set DATA("SUB"). In the Condition field you can then use V("SUB"). Setting DATA is optional, but it must be set if you are going to use the Condition.
- TEXT is text to be displayed in the Clinical Maintenance output. Setting this is optional.

For a multiple occurrence computed finding, the routine takes the following arguments:

- (DFN, NGET, BDT, EDT, NFOUND, TEST, DATE, DATA, TEXT)

The following variables will be set when the computed finding routine is called:

- DFN is the patient's id.
- NGET is the number of findings to search for.
- BDT is the beginning date and time for the finding search.
- EDT is the ending date and time for the finding search.

The following variables should be set by the computed finding routine.

- NFOUND is the number of findings found; it should never be larger than NGET. If there are no true findings then NFOUND should be set to 0.

Since this form of the computed finding returns multiple occurrences, each of the following variables is an array with NFOUND entries. Entry number 1 should be the most recent in the date range, entry number 2 the second most recent, and so on up to NFOUND entries. If NGET is negative, then the date ordering should be reversed with entry 1 the oldest in the date range, entry 2 the second oldest, and so on. If there are no true findings, then NFOUND should be 0. NFOUND must have a value when the computed finding routine returns. For the Nth true occurrence, set the following values:

- TEST(N) is the logical value of the finding for occurrence N; this is set to 1 for each occurrence that is found. (Required).
- DATE(N) is the date of the finding in FileMan format for occurrence N. (Required).
- DATA is an array of values that can be used by the Condition field. For the N'th occurrence set DATA(N,"VALUE")=VALUE. Then in the Condition, you can use either V or V("VALUE"). Other values may be set as needed; for example, V(N,"SUB")=X. Then in the Condition, you can use V("SUB"). Setting the data array is optional, but it must be done if you are going to use the Condition. (Optional)

- TEXT(N) is text to be displayed in the Clinical Maintenance output for occurrence N. (Optional)

There is no need to set the unsubscripted values of TEST and DATE in a multi-occurrence computed finding.

In most cases it makes sense to create any new computed findings as multi-occurrence computed findings. They have more flexibility than single occurrence computed findings, and can operate more efficiently. This is especially true with respect to date range searches. The multi-occurrence computed finding is passed the beginning and ending dates as parameters, so it can return results from the specified date range. The original single occurrence computed finding has no provision for passing the beginning and ending dates, so it would just return the most recent occurrence. The computed finding driver must then check the date returned to determine if it is in the date range. If it is not, then there is no way to go back and look for an older result that might be in the date range.

For a list computed finding, the routine takes the following arguments:

- (NGET,BDT,EDT, PLIST,PARAM)

NGET, BDT, and EDT have the same meaning as above. (See below for a discussion of the last argument.) The routine should return the list in a ^TMP global as follows:

```
^TMP($J,PLIST,DFN,N)=DAS^DATE^FILENUM^ITEM^VALUE
```

- N is a number specifying the number of the occurrence. N=1 is the most recent occurrence, N=2 the second most recent occurrence, and so on. N should never exceed NGET.
- DAS is the DA string. See the Clinical Reminder Index Technical Manual for an explanation of what a DA string is.
- DATE is the date of the finding.
- FILENUM is the file number where the result was found.
- ITEM is the internal entry number of the item that was found.
- VALUE is the default value, if there is not one then it should be null.

If you want to use a Condition with the computed finding, then you should return the values as follows:

```
^TMP($J,PLIST,DFN,N,SUB)=DATA(N,"SUB")
```

At a minimum, one of the subscripts must be "VALUE"; i.e., DATA(N, "VALUE"); then in the Condition you can use either V or V("VALUE"), because V is set equal to V("VALUE"). If you create other subscripts, you can use them in the Condition. For example:

```

^TMP($J,PLIST,DFN,1,"VALUE")=5
^TMP($J,PLIST,DFN,1,"RATE")=5
^TMP($J,PLIST,DFN,1,"COLOR")="RED"

```

Would mean in the Condition you could use V, V("VALUE"), V("RATE") or V("COLOR").

A new field called COMPUTED FINDING PARAMETER has been added in v2.0 to the finding multiple in definitions and terms. This field can be used to pass a parameter into the computed finding routine. For single and multiple occurrence computed findings, the value is passed in TEST; for list computed findings, it is passed as PARM. The COMPUTED FINDING PARAMETER is defined as free-text field with a length of 245 characters so it can be used to pass more than one parameter. If you pass more than one parameter, you should not use ^ as the piece separator, because it will not be properly transported in Reminder Exchange. When this feature is used, it will need to be documented, so that users of the computed findings will know how to properly define the contents of the COMPUTED FINDING PARAMETER field.

### 3.1.1.1 IHS Modifications

In Version 2.0, the three files ( V MED, V RAD, and V LAB) will be handled as computed findings.

The COMPUTED FINDING PARAMETER is used to determine which findings to find by looking at the reminder term entered in this field. The reminder term must point to the correct file to proceed.

- V RAD – Radiology procedures file
- V LAB – Laboratory test file
- V MED – Drug or VA generic files

For example:

```

Searching for a REMINDER COMPUTED FINDING, (pointed-to by FINDING ITEM)
IHS-VMED VISN ..OK? Yes// (Yes)
No description defined for this computed finding
Editing Finding Number: 1
FINDING ITEM: IHS-VMED//
REMINDER FREQUENCY:
MINIMUM AGE:
MAXIMUM AGE:
RANK FREQUENCY:
USE IN RESOLUTION LOGIC: OR//
USE IN PATIENT COHORT LOGIC:
BEGINNING DATE/TIME:
ENDING DATE/TIME:
OCCURRENCE COUNT:
CONDITION:
CONDITION CASE SENSITIVE:

```

```

USE STATUS/COND IN SEARCH:
COMPUTED FINDING PARAMETER: IHS-ASPIRIN// ← Reminder Term to use
FOUND TEXT:
  No existing text
  Edit? NO//

```

Great care should be taken whenever you create a computed finding. If it is poorly written, it could affect system performance, generate errors, and produce incorrect or misleading reminder evaluation results.

**Hint:** Make sure to make all the variables used “New” to avoid strange side effects.

### 3.1.2 Enter Computed Finding into the Reminders Package

Use the option Reminder Computed Finding Edit (CFE) on the Computed Findings menu to enter/register your computed finding, which makes an entry in the REMINDER COMPUTED FINDINGS file (#811.4).

File #811.4 contains a combination of nationally distributed and local entries. Nationally distributed entry names are prefixed with **IHS-**.

Complete each of these five fields:

- **NAME** (.01 field) – This is the name of the computed finding. When a computed finding is added as a finding to a reminder definition, it is done using NAME. For example, type CF.IHS-VMED to add the exported IHS-VMED computed finding to your reminder definition.
- **ROUTINE** (.02 field) – This is the name of the MUMPS routine.
- **ENTRY POINT** (.03 field) – This is the entry point in the MUMPS routine (the line tag at which that finding begins).
- **PRINT NAME** (.04 field) – This will be displayed on the Clinical Maintenance component as the name of the computed finding. If it is blank, NAME will be used.
- **TYPE** (5 field) – This is a set of codes that specifies what type of computed finding this is. “S” stands for single occurrence, “M” for multiple occurrence, and “L” for list. If it is blank single will be assumed.

For example:

```

Select Reminder Computed Finding Management Option: cfe Reminder Computed
Finding Edit
Select Reminder Computed Finding: IHS-VMED
...OK? Yes// <Enter> (Yes)
NAME: AJEY TEST COMPUTED FINDING Replace <Enter>
ROUTINE: BPXRMDRG
ENTRY POINT:VMED

```

```

PRINT NAME: V MEDS
TYPE: ?
Choose From:
M MULTIPLE
L LIST
S SINGLE
DESCRIPTION:
1>
CLASS: LOCAL// SPONSOR:
REVIEW DATE:

```

**Note:** TYPE is new for V2. Refer to the description on the previous pages.

### 3.1.3 Place Finding into Reminder

Now that the finding is created and entered/registered, you may use it just like any other finding would be used. The prefix for adding it to the list of findings is CF. and you can choose whether it belongs to the patient cohort logic or the resolution logic. Simply keep in mind what it means to have your finding TRUE or FALSE.

The following is an example of using the GMRA finding to identify patients that have no allergy assessment data on their electronic chart. This method uses the scenario that it is DUE for all patients (no specific cohort logic), and RESOLVED by a TRUE computed finding (patient has data in ART package).

The (short) version of setting it up is captured here.

```

Select FINDING: CF.AJEY ALLERGY ASSESSMENT
Searching for a REMINDER COMPUTED FINDING, (pointed-to by FINDING ITEM)
AJEY ALLERGY ASSESSMENT
...OK? Yes// (Yes)
FINDING ITEM: AJEY ALLERGY ASSESSMENT// USE IN RESOLUTION LOGIC: AND//
USE IN PATIENT COHORT LOGIC: FOUND TEXT:
There is allergy assessment data on file in the ART package of RPMS for
this patient.
NOT FOUND TEXT:
There is no allergy assessment on file in the ART package of RPMS for this
patient.

```

For example: Test for whether patient is an inpatient.

- If you want it to be true, set TEST to 1.
- Set the DATE="" when TEST=0 and set DATE to the date of the finding when TEST=1
- Set VALUE to a value that can be tested against in the CONDITION field.
- TEXT just goes back as additional info in the Clinical Maintenance view.

So, if you made one that was testing for whether or not your patient was an inpatient, it might look like this:

```

INP(DFN,TEST,DATE,VALUE,TEXT) ; N VAIN
D INP^VADPT
I +$P(VAIN(7),"^") S TEST=1,DATE=$P(VAIN(7),"^") E S TEST=0,DATE=""
D KVA^VADPT Q

```

### 3.1.4 Reminder Computed Finding Edit (CFE)

This option lets you enter or edit computed findings in your system. In this example, a sponsor and a review date are added to an existing computed finding.

```

Select Reminder Computed Finding Management Option: CFE Reminder Computed
Finding
Edit

Select Reminder Computed Finding: Calculate BMI>27 LOCAL
...OK? Yes// <Enter> (Yes)

NAME: Calculate BMI>27// <Enter>
ROUTINE: PXRMOBES// <Enter>
ENTRY POINT: OBESE// <Enter>
PRINT NAME: Calculate BMI>27// <Enter>
TYPE: ??

Choose from:
M MULTIPLE L LIST
S SINGLE TYPE: SINGLE DESCRIPTION:
1>
CLASS: LOCAL// <Enter>
SPONSOR: Guidelines Committee
REVIEW DATE: T+90

Select Reminder Computed Finding: <Enter>

```

### 3.1.5 New National Computed Findings

#### 3.1.5.1 PROGRESS NOTE Computed Finding

- NAME: VA-PROGRESS NOTE
- ROUTINE: PXRMTIU
- ENTRY POINT: NOTE
- PRINT NAME: PROGRESS NOTE
- TYPE: MULTIPLE

#### Description

This computed finding will return multiple instances of a progress note based on the exact title of the note and, optionally, the status. The note title is specified in the COMPUTED FINDING PARAMETER field. If you want to search for notes with a certain status, then append ^status to the title. Status can be any of the following:

- 1 = UNDICTATED
- 2 = UNTRANSCRIBED
- 3 = UNRELEASED
- 4 = UNVERIFIED
- 5 = UNSIGNED
- 6 = UNCOSIGNED
- 7 = COMPLETED
- 8 = AMENDED
- 9 = PURGED
- 10 = TEST
- 11 = ACTIVE
- 13 = INACTIVE
- 14 = DELETED
- 15 = RETRACTED

**Note:** If status is not specified, the default is to search for notes with a status of COMPLETED.

For example if the COMPUTED FINDING PARAMETER field contains the following:

ADMITTING HISTORY & PHYSICAL^5

The search would be for notes with the exact title of ADMITTING HISTORY & PHYSICAL, and a status of UNSIGNED.

The values returned by this computed finding that can be used in the Condition are V=note title and V("AUTH")=author of note.

### 3.1.5.2 ALLERGY Computed Finding

- NAME: VA-ALLERGY
- ROUTINE: PXRМART
- ENTRY POINT: ARTCL
- PRINT NAME: ALLERGY
- TYPE: MULTIPLE
- DESCRIPTION: Identifies any allergies that contain either the ingredient or drug class that you specify. Ingredients will be prefixed with IN: while DR: is used for drug classes. You may also use the \* as wildcard on the end of your selection. For example, to search for the ingredient aspirin you would enter IN:ASPIRIN. For drug class MS101 you would enter DR:MS101. For all ingredients beginning with "ampi" you would type IN:AMPI\*. For all MS1-related drug classes you'd enter DR:MS1\*.

- CLASS: NATIONAL

## 4.0 Reminder Definition Management

This menu contains options for creating, editing, copying, activating, and displaying clinical reminder definitions.

To alter an IHS- prefixed reminder item, first copy it to a different name and then edit the reminder definition to reflect your site's requirements for the reminder.

Sites may change anything in a local reminder definition to meet their needs. Findings at each site may require modification to represent local use of clinical data.

Syn.	Name	Option Name	Option Definition
RA	Activate/Inactivate Reminders	PXRМ (IN)/ACTIVATE REMINDERS	This option is used to make reminders active or inactive.
RE	Add/Edit Reminder Definition	PXRМ DEFINITION EDIT	This option is used to create or edit Clinical Reminder Definitions. Nationally distributed reminder definitions items all have an IHS- prefix.
RC	Copy Reminder Definition	PXRМ DEFINITION COPY	This option allows you to copy an existing reminder definition into a new reminder definition in the Clinical Reminder Definition file (#811.9). Once a new name is defined for the new reminder definition, the new reminder definition can be edited to reflect the local reminder definition.
RI	Inquire about Reminder Definition	PXRМ DEFINITION INQUIRY	This option allows you to display a clinical reminder definition in an easy to read format.
RL	List Reminder Definitions	PXRМ DEFINITION LIST	This option provides a brief summary of selected Clinical Reminder definitions.
RH	Reminder Edit History	PXRМ REMINDER EDIT HISTORY	This option allows you to display a reminder definition's edit history. Edit history was formerly included in the Reminder Definition, but was removed and made available within this option.

## 4.1 Defining a Working Clinical Reminder

There are two parts to creating a working clinical reminder.

- **Reminder definition:** This describes the patients the reminder applies to, how often it is given, and what resolves or satisfies the reminder.
- **Process Issues:** The process issues include who will use the reminder and how the data will be captured. The process issues are extremely important; if they are not worked out, the reminder will never function as intended, even if the definition is correct.

### 4.1.1 Steps to Define a Working Reminder

These are the basic steps for defining a reminder. More detailed instructions for creating reminders and dialogs are provided in chapters that follow.

1. Write the reminder definition in a narrative form that clearly describes what you want the reminder to do. Use this narrative to identify patient data you need and how to capture it. Determine what characteristics the reminder will have (make a list). Which patients will the reminder be applicable for: age ranges, sex, diagnoses, etc. What satisfies the reminder and what makes it not applicable: diagnoses, lab results, x-rays, education, etc.

#### **Reminders Provide answers to the basic questions:**

- WHO (findings and patient cohort logic)
- WHAT resolves the reminder (findings and resolution logic)
- WHEN (frequency)
- WHERE this reminder will likely be resolved (location/provider)

#### **Example:**

Diabetic Eye Exam      Diabetic patients should have a  
diabetic eye exam done yearly.

2. Review existing reminders to see if there is an existing reminder that is close to what you need.
  - *List Reminder Definitions*, Reminder Definition Management Menu
  - *Inquire about a Reminder Definition*, Reminder Definition Management Menu
3. Create new findings if they are required.

4. Copy the existing reminder and edit it to meet your needs, or define a new reminder.
  - *Copy Reminder Definition or Add/Edit Reminder Definition*, Reminder Definition Management Menu
5. Test your reminder definition by evaluating the reminder for test patients. You should have patients who are in the cohort and who are not in the cohort. For patients who are in the cohort, you should have some who have the reminder resolved and some who do not.
  - *Options: Test Reminder* on the Reminder Management Menu, Health Summary Coordinator's Menu; Clinical Maintenance in the EHR.
6. Create a reminder dialog (following instructions in the Reminder Dialog section of this manual), if desired, for resolving the reminder in the EHR.
7. Once you are certain the reminder works as intended, set it up in one or more of the following applications:
  - a. Add it to a health summary.
  - b. In the CPRS Configuration menu:
    - Add the Reminder Dialog to CPRS Lookup Categories.
    - Set these parameters, if necessary: GUI Resolution parameter, and Mental Health dialog resolution parameter.

-or-
  - c. If the new parameter is defined – within the EHR, add the dialog to the CPRS GUI Cover Sheet
    - Reminders List

*Options:* Health Summary Coordinator's Menu, CPRS Reminder Configuration menu

**Note:** Steps to add a reminder to the coversheet vary depending on if the new parameter is defined or not. If the new parameter is defined, a user will add the reminder to the cover sheet using the EHR, not the CPRS Reminder Configuration menu prompts. Also if the new parameter is not set, users have to add categories to the coversheet by using the prompts in VistA instead of the EHR.

## 4.2 List Reminder Definitions (RL)

This option prints a summary of reminder definitions. You can limit the list by several criteria: all reminders, all national reminders, all local reminders, print name, or .01 name.

**Example:**

## List Reminder Definitions by National Reminders

**Note:** All the reminder definitions between the first one and Diabetic Eye Exam are deleted from this example, for brevity's sake.

```

RL List Reminder Definitions
RI Inquire about Reminder Definition
RE Add/Edit Reminder Definition
RC Copy Reminder Definition
RA Activate/Inactivate Reminders
Select Reminder Definition Management Option: RL List Reminder Definitions
List all reminders? Y// NO
List all local reminders? Y// NO
List only reminders starting with (prefix)? VA-// <Enter>
List Active (A), Inactive (I), Both (B)? B//<Enter> oth
Sort list by Name (N), Print Name (P)? N//<Enter> ame (.01)

A reminder list will be created using the following criteria: List all
reminders? NO
List all local reminders? NO
List only reminders starting with (prefix)? VA-HEP C List Active (A),
Inactive (I), Both (B)? Both
Sort list by Name (N), Print Name (P)? Name (.01)

Is this correct? Y// <Enter>ES
DEVICE: <Enter> ANYWHERE Right Margin: 80// <Enter>

REMINDER DEFINITION LIST FEB8,2005 09:40 PAGE 1
-----

--- Name: VA-HEP C RISK ASSESSMENT Print Name: Hepatitis C Risk Assessment

Class: NATIONAL Sponsor:
Review Date:

Usage: CPRS Priority:
Reminder Description:
Assess all patients for hepatitis C risk factors once. Patients with a
previous laboratory test for hepatitis C or a previous diagnosis of
hepatitis C do not require further risk assessment.

REMINDER DEFINITION LIST FEB8,2005 09:40 PAGE 2
----- Findings
Finding Item: VA-PREVIOUSLY ASSESSED HEP C R (FI(1)=RT(3)) Finding Item:
VA-RISK FACTOR FOR HEPATITIS C (FI(2)=RT(4)) Finding Item: VA-NO RISK
FACTORS FOR HEP C (FI(3)=RT(2)) Finding Item: VA-DECLINED HEP C RISK
ASSESSM (FI(4)=RT(1)) Finding Item: VA-HEP C VIRUS ANTIBODY POSITI
(FI(5)=RT(5)) Finding Item: VA-HEP C VIRUS ANTIBODY NEGATI (FI(6)=RT(6))
Finding Item: VA-HEPATITIS C INFECTION (FI(7)=RT(7))

Default PATIENT COHORT LOGIC to see if the Reminder applies to a patient:
(SEX)&(AGE)

Expanded Patient Cohort Logic: (SEX)&(AGE)

```

```
Default RESOLUTION LOGIC defines findings that resolve the Reminder:
FI(1)!FI(2)!FI(3)!FI(4)!FI(5)!FI(6)!FI(7)
```

```
Expanded Resolution Logic:
FI(VA-PREVIOUSLY ASSESSED HEP C RISK)!
FI(VA-RISK FACTOR FOR HEPATITIS C)!FI(VA-NO RISK FACTORS FOR HEP C)!
FI(VA-DECLINED HEP C RISK ASSESSMENT)! FI(VA-HEP C VIRUS ANTIBODY
POSITIVE)!
FI(VA-HEP C VIRUS ANTIBODY NEGATIVE)!FI(VA-HEPATITIS C INFECTION
```

### 4.3 Inquire About Reminder Item (RI)

You can select a specific reminder to see all the details.

```
DEVICE:  CONSOLE      Right Margin: 80//
REMINDER DEFINITION INQUIRY                Jul 10, 2012 11:33:44 am  Page 1
-----

IHS-BLOOD PRESSURE 2012                    No. 162
-----

Print Name:          Blood Pressure
Class:              NATIONAL
Sponsor:
Review Date:
Rescission Date:
Usage:              CPRS, DATA EXTRACT, REPORTS
Related VA-* Reminder:
Reminder Dialog:    IHS-BLOOD PRESSURE 2012
Priority:
Reminder Description:
    This is a blood pressure screening reminder.
Technical Description:

Baseline Frequency:

    Do In Advance Time Frame:  Do if DUE within 1 day
    Sex Specific:
    Ignore on N/A:
    Frequency for Age Range:  1 year for ages 22Y to 110Y
    Match Text:
    No Match Text:
    Frequency for Age Range:  2 years for ages 2Y to 21Y
    Match Text:
    No Match Text:

Findings:
```

```

----- Begin: IHS-HYPERTENSION 2007 (FI(1)=TX(69)) -----
      Finding Type: REMINDER TAXONOMY
      Use in Patient Cohort Logic: AND NOT
      Beginning Date/Time: T-3Y
----- End: IHS-HYPERTENSION 2007 -----

----- Begin: IHS-DIABETES DX 2007 (FI(2)=TX(71)) -----
      Finding Type: REMINDER TAXONOMY
      Use in Patient Cohort Logic: AND NOT
      Beginning Date/Time: T-3Y
----- End: IHS-DIABETES DX 2007 -----

----- Begin: IHS-HIGH BP 2007 (FI(3)=RT(12)) -----
      Finding Type: REMINDER TERM
      Match Frequency/Age: 1 day for ages 2Y to 110Y

      Use in Resolution Logic: OR

      Mapped Findings:
      Mapped Finding Item: MT.BP
      Condition: I
($P(V,"/",1)>139)!($P(V,"/",2)>89)

----- End: IHS-HIGH BP 2007 -----

----- Begin: IHS-HIGH DIASTOLIC (FI(4)=RT(8)) -----
      Finding Type: REMINDER TERM
      Match Frequency/Age: 1 year for ages 2Y to 21Y
      Use in Resolution Logic: OR

      Mapped Findings:
      Mapped Finding Item: MT.BP
      Condition: I
($P(V,"/",2)>84)&($P(V,"/",2)<90)

----- End: IHS-HIGH DIASTOLIC -----
----- Begin: BP (FI(5)=MT(4)) -----
      Finding Type: MEASUREMENTS
      Use in Resolution Logic: OR
----- End: BP -----

General Patient Cohort Found Text:
      This is a blood pressure screening reminder.  REMINDER ON if patient
      does not have hypertension or diabetes AND      Last BP was over 139 OR
89
      No BP recorded in past 1 year if over 21 OR if under 21 and last DBP
      85-89.      No BP recorded in past 2 years if age 2-21

General Resolution Found Text:

Default PATIENT COHORT LOGIC to see if the Reminder applies to a patient:
      (SEX)&(AGE)&'FI(1)&'FI(2)

Expanded Patient Cohort Logic:
      (SEX)&(AGE)&'FI(IHS-HYPERTENSION 2007)&'FI(IHS-DIABETES DX 2007)

```

```

Default RESOLUTION LOGIC defines findings that resolve the Reminder:
  FI(3)!FI(4)!FI(5)

Expanded Resolution Logic:
  FI(IHS-HIGH BP 2007)!FI(IHS-HIGH DIASTOLIC)!FI(BP)

```

## 4.4 Add/Edit Reminder Definition

You can define a reminder through this option or through the Copy Reminder Definition.

To edit existing reminders, a sub-menu is displayed that allows selection of specific fields in the reminder definition for edit.

```

Select Reminder Definition: JG DIABETIC EYE EXAM LOCAL

Select one of the following:

  A All reminder details
  G General
  B Baseline Frequency
  F Findings
  FF Function Findings
  L Logic
  C Custom date due
  D Reminder Dialog
  W Web Addresses

Select section to edit: a All reminder details

NAME: JG DIABETIC EYE EXAM Replace

PRINT NAME: Diabetic Eye Exam//

CLASS: LOCAL//
SPONSOR:
REVIEW DATE: MAY 3,2000//
USAGE: C//

RELATED REMINDER GUIDELINE:

INACTIVE FLAG:

RESCISSION DATE:
REMINDER DESCRIPTION:
Patients with the VA-DIABETES taxonomy should have a diabetic eye exam done
yearly.

  Edit? NO//

TECHNICAL DESCRIPTION:
This reminder is based on the Diabetic Eye Exam reminder from the New
York VAMC which was designed to meet the guidelines defined by the PACT
panel. Additional input came from the Saginaw VAMC.
  Edit? NO//
PRIORITY:
Baseline Frequency

```

```

DO IN ADVANCE TIME FRAME: 1M//
SEX SPECIFIC:
IGNORE ON N/A:

Baseline frequency age range set
Select REMINDER FREQUENCY: 0Y//
  REMINDER FREQUENCY: 0Y//
  MINIMUM AGE:
  MAXIMUM AGE:
  AGE MATCH TEXT:
  No existing text
  Edit? NO//
  AGE NO MATCH TEXT:
  No existing text
  Edit? NO//
Select REMINDER FREQUENCY:

Reminder Definition Findings

Choose from:
  EX DIABETIC EYE EXAM
  TX VA-DIABETES
Select FINDING: ex.DIAB

  Yes// (Yes)
  FINDING ITEM: DIABETIC EYE EXAM//
  MINIMUM AGE:
  MAXIMUM AGE:
  REMINDER FREQUENCY:
  RANK FREQUENCY:
  USE IN RESOLUTION LOGIC: OR//
  USE IN PATIENT COHORT LOGIC:
  BEGINNING DATE/TIME:
  ENDING DATE/TIME:
  OCCURRENCE COUNT:
  CONDITION:

Function Findings
Select FUNCTION FINDING: ?
  You may enter a new FUNCTION FINDINGS, if you wish
  Enter the number of the function finding you are defining

Select FUNCTION FINDING:

Patient Cohort and Resolution Logic
CUSTOMIZED PATIENT COHORT LOGIC (OPTIONAL):
GENERAL PATIENT COHORT FOUND TEXT:
  No existing text
  Edit? NO//
GENERAL PATIENT COHORT NOT FOUND TEXT:
  No existing text
  Edit? NO//
CUSTOMIZED RESOLUTION LOGIC (OPTIONAL):
GENERAL RESOLUTION FOUND TEXT:
  No existing text
  Edit? NO//
GENERAL RESOLUTION NOT FOUND TEXT:
  No existing text
  Edit? NO//
Reminder Dialog
LINKED REMINDER DIALOG: JG DIABETIC EYE EXAM//

```

```
Web Addresses for Reminder Information
```

```
Select URL:
```

```
Select one of the following:
```

- A All reminder details
- G General
- B Baseline Frequency
- F Findings
- FF Function Findings
- L Logic
- C Custom date due
- D Reminder Dialog
- W Web Addresses

```
Select section to edit:
```

```
Input your edit comments.
```

```
Edit? NO//
```

#### 4.4.1 Editing Part of the Reminder Definition

This is an example of editing Logic.

```
Select Reminder Definition Management Option: RE Add/Edit Reminder
Definition
Select Reminder Definition: JG-DIABETIC EYE EXAM
Select one of the following:
  A All reminder details
  G General
  B Baseline Frequency
  F Findings
  FF Function Findings
  L Logic
  C Custom date due
  D Reminder Dialog
  W Web Addresses
Select section to edit: Logic

Patient Cohort and Resolution Logic
CUSTOMIZED PATIENT COHORT LOGIC (OPTIONAL): (SEX)&(AGE)&FI(SLC DIABETES)
GENERAL PATIENT COHORT FOUND TEXT:
1> <Enter>
GENERAL PATIENT COHORT NOT FOUND TEXT:
1><Enter>
CUSTOMIZED RESOLUTION LOGIC (OPTIONAL): FI(DIABETIC EYE EXAM)
GENERAL RESOLUTION FOUND TEXT:
1><Enter>
GENERAL RESOLUTION NOT FOUND TEXT:
1><Enter>
```

## 4.5 Copy Reminder Definition

This option allows you to copy an existing reminder definition into a new reminder definition in the Clinical Reminder Definition file (#811.9). The original reminder definition to be copied is selected first. If the original reminder definition is prefixed with **VA-**, the **VA-** will be stripped off the name automatically to create the name for the new reminder definition. The new name must be unique. If the new name is not unique, you must enter a unique name for the new reminder definition entry. If no name is provided, the new entry will not be created. Once a new name is defined for the new reminder definition, the new reminder definition can be edited to reflect the local reminder definition

```
Select Reminder Definition Management Option: copy Reminder Definition

Select the reminder item to copy: VA-WH PAP SMEAR SCREENING NATIONAL
PLEASE ENTER A UNIQUE NAME: JG-WH PAP SMEAR SCREENING

The original reminder VA-WH PAP SMEAR SCREENING has been copied into JG-WH
PAP SMEAR SCREENING.
Do you want to edit it now? YES

Select one of the following:
  A All reminder details
  G General
  B Baseline Frequency
  F Findings
  FF Function Findings
  L Logic
  C Custom date due
  D Reminder Dialog
  W Web Addresses
Select section to edit: General

PRINT NAME: VA-PAP Smear Screening  Replace VA With LOCAL Replace
            LOCAL-PAP Smear Screening

CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
USAGE: CR//

RELATED REMINDER GUIDELINE:

INACTIVE FLAG:

REMINDER DESCRIPTION: . . .

. . .
* PCE CPT procedure code
* Completed consult order for outside procedure

The following will resolve this reminder for one week:
* PAP smear obtained at this encounter
* Patient declined PAP smear
* PAP smear deferred
* Health Factor documenting an order related to PAP Smear screening was
  placed
```

```

Edit? NO//

TECHNICAL DESCRIPTION:. . .

. . .
ordering options for the clinicians. Some sites have clinicians order
a consult to a service that provides PAP smears. If your site does
this, copy the reminder dialog to a local reminder dialog, then
add the local dialog element for the consult order to the reminder
dialog so this practice can continue.

4. If your site chooses not to send letters via the WH package, copy the
appropriate national dialog components to local components and remove the
findings related to WH notifications.

Edit? NO//

PRIORITY:
Select one of the following:
A All reminder details
G General
B Baseline Frequency
F Findings
FF Function Findings
L Logic
C Custom date due
D Reminder Dialog
W Web Addresses

Select section to edit:
    
```

## 4.6 Reminder Definition Fields

Name	Description
NAME	This field is the name of a clinical reminder definition. Nationally distributed reminder definition names are prefixed with "VA-". The VA-prefixed reminder definitions cannot be altered by a site, but may be inactivated so they will not be selectable.
PRINT NAME	This is the name that is used when the results of a reminder evaluation are displayed.
CLASS	This is the class of definition. National definitions cannot be edited or created by sites. N NATIONAL V VISN L LOCAL
SPONSOR	This is the name of a group or organization that sponsors the reminder.
REVIEW DATE	The review date is used to determine when the definition should be reviewed to verify that it is current with the latest standards and guidelines.

Name	Description
USAGE	<p>This field allows the reminder creator to specify how the reminder can be used. This is a free text field that can contain any combination of the following characters: C - CPRS (the reminder can be used in the EHR GUI)</p> <p>L – Reminder Patient List</p> <p>R – Reminder Reports (the reminder can be used in reminder reports) X - Reminder Extracts (the reminder is used for data extraction)</p> <p>* – The reminder can be used for any of the above</p> <p>P – Patient; patients can view “My Health” reminders; the wildcard (*) excludes P</p> <p>To enter more than one code, type the codes with no spaces or punctuation between them.</p>
RELATED REMINDER GUIDELINE	<p>If this local reminder replaces an NCHP related reminder, then identify the related NCHP reminder here. The National Center for Health Promotion (NCHP) has identified reminders that must be tracked at local facilities and reported on to Congress. The reminders that address the NCHP reminders are prefixed with "VA-*". These reminders may be used in the Health Summary Components, or replaced by a local reminder that also satisfies the NCHP guideline.</p>
INACTIVE FLAG	<p>Reminders that are inactive will not be evaluated. The Clinical Maintenance component will return a message stating the reminder is inactive and the date when it was made inactive.</p> <p>Other applications that use reminders may use this flag to determine if a reminder can be selected for inclusion.</p>
REMINDER DESCRIPTION	<p>This is a description of the clinical purpose of the reminder.</p>
TECHNICAL DESCRIPTION	<p>This is a description of how the reminder works.</p>
PRIORITY	<p>The reminder priority is used by the EHR GUI for sorting purposes.</p>
DO IN ADVANCE TIME FRAME	<p>This field is used to let a reminder become due earlier than the date determined by adding the frequency to the date when the reminder was last resolved. For example, if the frequency is 1Y (one year) and the DO IN ADVANCE TIME FRAME is 1M (one month) the reminder would have a status of "DUE SOON" 11 months after it was last resolved. After one year has passed the STATUS would be "DUE."</p>
SEX SPECIFIC	<p>This field is used to make a reminder sex-specific. If an "F" is entered, the reminder applies only to females. If an "M" is entered, the reminder applies only to males. If it is left blank, then the reminder is applicable to either sex.</p>

Name	Description
IGNORE ON N/A	<p>This field allows the user to stop reminders from being printed in the Clinical Maintenance component if the reminder is N/A. This is a free- text field that can contain any combination of the following codes:</p> <p>Code Description</p> <p>A N/A due to not meeting age criteria. I N/A due to inactive reminder.</p> <p>R N/A due to the wrong race.</p> <p>S N/A due to the wrong sex.</p> <p>* N/A for any reason.</p>
FREQUENCY AGE RANGE SET	<p>The Frequency Age Range set is a multiple that allows you to define different frequencies for different non-overlapping age ranges. The fields in this multiple are:</p> <p><b>REMINDER FREQUENCY:</b></p> <p>This is the frequency to give the reminder. It is input as nD, nM, or nY, where D stands for days, M for months, Y for years, and n is a number. Thus, for a reminder that is to be given once a year, the values 365D, 12M, or 1Y would all work. If a reminder is only to be given once in a lifetime, use a frequency of 99Y.</p> <p><b>MINIMUM AGE:</b></p> <p>This field specifies the minimum age for defining an age range associated with a frequency. Leave it blank if there is no minimum age.</p> <p><b>MAXIMUM AGE:</b></p> <p>This field specifies the maximum age for defining an age range associated with a frequency. Leave it blank if there is no maximum age.</p> <p><b>AGE MATCH TEXT:</b></p> <p>This text will be displayed in the Clinical Maintenance component if the patient's age falls in the age range.</p> <p><b>AGE NO MATCH TEXT:</b></p> <p>This text will be displayed in the Clinical Maintenance component if the patient's age does not fall in the age range.</p>

Name	Description
FINDING	<p>The Findings multiple is documented later in this chapter. The fields in this multiple include: FINDING ITEM MINIMUM AGE MAXIMUM AGE REMINDER FREQUENCY FOUND TEXT NOT FOUND TEXT RANK FREQUENCY USE IN RESOLUTION LOGIC USE IN PATIENT COHORT LOGIC BEGINNING DATE/TIME USE INACTIVE PROBLEMS WITHIN CATEGORY RANK ENDING DATE/TIME MH SCALE (FX) CONDITION (FX) CONDITION CASE SENSITIVE RX TYPE (S) OCCURRENCE COUNT USE COND IN FINDING STATUS LIST INTERNAL CONDITION V SUBSCRIPT LIST NO. OF FOUND TEXT LINES NO. NOT FOUND TEXT LINES</p>
FUNCTION FINDINGS	<p>Function Findings are new in version 2.0. They are called Function Findings because they do a computation on the results from regular findings. Function Findings can be used in both patient cohort logic and resolution logic.</p> <p>The general form of the function string is: FUNCTION(finding list) operator FUNCTION(finding list) where FUNCTION is one of the available functions and finding list is a comma-separated list of regular finding numbers.</p>
CUSTOMIZED PATIENT COHORT LOGIC	<p>This field may be used to define a customized Boolean logic string that defines how and what findings in a reminder should be used to determine if the reminder applies to the patient. The customized logic is used when the USE IN PATIENT COHORT LOGIC fields associated with each finding do not provide the ability to create the required logic string. (e.g., grouping various findings within parenthesis)</p> <p><b>Tip:</b> Before defining the Boolean string, review the default logic defined in the DEFAULT PATIENT COHORT LOGIC field using the reminder inquiry option.</p>
GENERAL PATIENT COHORT FOUND TEXT	<p>This text is displayed in the Clinical Maintenance component if the patient is in the cohort and the reminder is applicable.</p>
GENERAL PATIENT COHORT NOT FOUND TEXT	<p>This text will be displayed in the Clinical Maintenance component if the patient is not in the cohort and the reminder is not applicable.</p>

Name	Description
CUSTOMIZED RESOLUTION LOGIC	This field may be used to define a customized Boolean logic string that defines how and what reminder findings should be used to determine if the reminder has been resolved. The customized logic is used when the USE IN RESOLUTION LOGIC fields associated with each finding do not provide the ability to create the required logic string. (e.g., grouping various findings within parenthesis) <b>Tip:</b> Before defining the Boolean string, review the default logic defined in the DEFAULT RESOLUTION LOGIC field using the reminder inquiry option.  Boolean Operators AND (&), AND NOT (&'), OR (!), OR NOT (!') The package uses these to build the logic strings Example FI(1)&(FI(3)!FI(7))
GENERAL RESOLUTION FOUND TEXT	This text will be displayed in the Clinical Maintenance component if the reminder has been resolved.
GENERAL RESOLUTION NOT FOUND TEXT	This text will be displayed in the Clinical Maintenance component if the reminder has not been resolved.
LINKED REMINDER DIALOG	This is the Reminder Dialog that will be used when the reminder is processed in the EHR GUI.
WEB SITES	This multiple contains Web site(s) for information related to this reminder. When processing a reminder in the EHR GUI you will be able to launch a browser and visit the Web site.
Select URL	This is the URL for the web site.
WEB SITE TITLE	This is the web site title that is used by the EHR GUI. It will appear after a right-click, allowing you to select the web site.
WEB SITE DESCRIPTION	This field contains a description of the Web site.

## 4.6.1 Reminder Findings

Findings are the heart of the reminder definition. Findings have three functions in reminder definitions:

- To select the applicable patient population (Patient Cohort Logic)
- To resolve the reminder (Resolution Logic)
- For informational purposes

### 4.6.1.1 Findings Types

Finding Type	Source File Number	Abbreviation
Drug	50	DR
Education Topic	9999999.09	ED
Exam	9999999.15	EX

Finding Type	Source File Number	Abbreviation
Health Factor	9999999.64	HF
Immunization	9999999.14	IM
Laboratory Test	60	LT
Measurement Type	9999999.07	MT
Orderable Item	101.43	UI
Radiology Procedure	71	RP
Reminder Computed Finding	811.4	CF
Reminder Taxonomy	811.2	TX
Reminder Term	811.5	RT
Skin Test	9999999.28	ST
VA Drug Class	50.605	DC
VA Generic	50.6	DG
Vital Measurement	120.51	VM
Reminder Location List	810.9	RL
PCC Asthma Control Values	9001002.95	ASM
Refusal Type	9999999.73	REF

**Tip:** When editing findings in a reminder definition or term, you can save time by giving an exact specification of the name of the finding by using the abbreviation. This tells FileMan exactly where to find it and avoids long searches.

**Example:**

- For finding: VA-DIABETES taxonomy
- Enter: TX.VA-DIABETES

#### 4.6.1.2 Drug

Drugs are found in the DRUG file #50. Drug information for a patient is obtained using a Pharmacy API. The date of a drug finding corresponds to the last day the patient has the drug. Therefore, these findings may have a date that is in the future. For outpatient drugs, the finding date is determined by taking the last release date and adding the day's supply. For inpatient drugs, the finding date is the stop date. If no date can be found, the finding will be false. The date calculation is identical for all three of the drug-related findings: Drug, Drug Class, and VA Generic.

In many cases, you will want to use either the EFFECTIVE PERIOD or EFFECTIVE DATE with drug findings. For example:

- If you want to know if the patient had the drug within the last 45 days, you would use an EFFECTIVE PERIOD of 45D.

- If you want to know if the patient had taken the drug on or since October 1, 1998, use an EFFECTIVE DATE of October 1, 1998.
- If you want to know if the patient is on the drug today, use an EFFECTIVE PERIOD of 0D.
- If you want to know if the patient has ever taken the drug, then you would leave both the EFFECTIVE PERIOD and EFFECTIVE DATE blank.

STATUS is now used in evaluating drug findings.

#### 4.6.1.3 Education Topic

Education topics are found in the EDUCATION TOPICS file #9999999.09. Results for individual patients are found in the V PATIENT ED file #9000010.16. The value used for the CONDITION is LEVEL OF UNDERSTANDING. Possible values are:

- '1' FOR POOR
- '2' FOR FAIR
- '3' FOR GOOD
- '4' FOR GROUP-NO ASSESSMENT
- '5' FOR REFUSED

If you want to allow only those educations where the LEVEL OF UNDERSTANDING is GOOD to be true, the CONDITION field would be I V=3.

#### 4.6.1.4 Exam

Exams are found in the EXAM file #9999999.15. Results for individual patients are found in the V EXAM file #9000010.13. The value used for the CONDITION is the RESULT. Possible values are:

- 'A' FOR ABNORMAL
- 'N' FOR NORMAL

If you want only those exams where the RESULT is NORMAL to be true, the CONDITION field would be I V="N".

#### 4.6.1.5 Health Factor

Health factors are found in the HEALTH FACTOR file #9999999.64. Results for individual patients are found in the V HEALTH FACTOR file #9000010.23. The value used for the CONDITION is LEVEL/SEVERITY. Possible values are:

- 'M' FOR MINIMAL
- 'MO' FOR MODERATE

- 'H' FOR HEAVY/SEVERE

If you want only those health factors whose LEVEL/SEVERITY is HEAVY/SEVERE to be true, then the CONDITION field would be I V="H".

Health Factors have a field called ENTRY TYPE. There are two possible values for this field, CATEGORY and FACTOR. Each factor health factor must belong to a category. This provides a way to group health factors. Examples of categories are ALCOHOL/DRUG,ACTIVITY LEVEL and TOBACCO (EXPOSURE). When reminders are evaluated, if there is more than one health factor from a category in the definition, only the most recent health factor in the category can be true.

When health factors are mapped to a Term, the categorization is done only for the health factors in the Term. The Term factors are not combined with health factors in the definition for the categorization.

The field WITHIN CATEGORY RANK will let you change this behavior. See that section for a description of how to use it.

Only those Health Factors with an ENTRY TYPE of FACTOR can be used in reminder definitions. However, when you create a packed reminder definition using the reminder Exchange Utility, each factor health factor and its category health factor are included. This is done so that a receiving site can install the factor health factors used in the reminder definition. Factor health factors cannot be installed if their category health factor does not exist first. Category health factors should be installed before factor health factors.

#### 4.6.1.6 Immunization

Immunizations are found in the IMMUNIZATION file #9999999.14. Results for individual patients are found in the V IMMUNIZATION file #9000010.11. The value used for the CONDITION is the SERIES. Possible values are:

- 'P' FOR PARTIALLY COMPLETE
- 'C' FOR COMPLETE
- 'B' FOR BOOSTER
- '1' FOR SERIES 1
- '2' FOR SERIES 2
- '3' FOR SERIES 3
- '4' FOR SERIES 4
- '5' FOR SERIES 5
- '6' FOR SERIES 6

- '7' FOR SERIES 7
- '8' FOR SERIES 8

#### 4.6.1.7 Laboratory Test

Laboratory tests are found in the LABORATORY TEST file #60. Data for a test in the LABORATORY TEST file and a selected patient is found using a Lab API. Note that only individual tests in the chemistry/hematology node can be used for Clinical Reminders. The value for the CONDITION is the result returned by the lab test. The normal range of values and the units will be a function of the particular test.

#### 4.6.1.8 Measurement Type

Measurements are found in the MEASUREMENT TYE file # 9999999.07. Data for a measurements and found in the V MEASUREMENT file. The value for the CONDITION is RATE, which is the value of the measurement. Conditions are handled in the same way as the VA's vitals. See the Vital Section for information on conditions.

#### 4.6.1.9 Reminder Computed Findings

Reminder Computed Findings are found in the COMPUTED FINDINGS file #811.4. Computed findings provide the ability to create custom findings for situations when none of the standard findings will work.

Refer to the chapter on Computed Findings for more details.

#### 4.6.1.10 Reminder Taxonomy

Reminder taxonomies are found in the REMINDER TAXONOMY file #811.2. Reminder taxonomies provide a convenient way to group coded values and give them a name. For example, the IHS-DIABETES DX 2007 taxonomy contains a list of diabetes diagnoses.

A taxonomy can contain ICD0, ICD9, and CPT codes. The codes are entered as a low value and a high value. These pairs are automatically expanded into a set that contains the low value, the high value, and every code in between. Clinical Reminders searches in a number of places for code matches. For ICD9 codes, it looks in V POV and PROBLEM LIST. For CPT codes, it looks in V CPT and Radiology. For ICD0 codes, it looks in V PROCEDURE.

There are two dates associated with ICD9 diagnoses found in PROBLEM LIST. There is the date entered and the date last modified. The PRIORITY field is used to determine if a problem is chronic or acute. If the problem is chronic, Clinical Reminders will use today's date in its date calculations; otherwise it will use the date last modified. Problems that are "chronic" can never expire. Note that it only uses active problems unless the field USE INACTIVE PROBLEMS is yes.

The following are fields that can be specified for each taxonomy finding:

- USE INACTIVE PROBLEMS – Normally, Problem List problems that are marked as inactive are ignored during the reminder evaluation. If you want them to be used, give this field a value of "YES."
- PATIENT DATA SOURCE specifies where to search for patient data. It is a string of comma-separated key words. The keywords and their meanings are:

KEYWORD	MEANING
IN	Search in the inpatient data file PTF (V PROCEDURE for IHS)
INDXLS	Search in PTF for DXLS only
INPR	Search in PTF for principal diagnosis only
EN	Search encounter (PCC) data
ENPR	Search PCC data for primary diagnosis only
PL	Search for Problem List diagnosis only
RA	Search in Radiology for radiology CPT codes

You may use any combination of these keywords. An example is EN,RA. This would cause the search to be made in V CPT and Radiology for CPT codes. If PATIENT DATA SOURCE is left blank, the search is made in all the possible sources.

Selecting IN in RPMS will result in a lookup into the V PROCEDURE file rather than the PTF file.

Refer to the chapter that describes Reminder Taxonomy options.

#### 4.6.1.11 Reminder Term

Reminder Terms are found in file #811.5. Reminder Terms provide a way to define a general term, for example diabetes diagnosis, which can be mapped to specific findings. A Reminder Term must be mapped to at least one finding before it can be used for reminder evaluation. A Reminder Term can be mapped to more than one finding. Reminder Terms can be mapped to any of the findings, except Reminder Terms, that can be used in a Reminder Definition.

Each node of the findings multiple in a term has the following fields: EFFECTIVE PERIOD, USE INACTIVE PROBLEMS, WITHIN CATEGORY RANK, CONDITION, MH SCALE, and RXTYPE. These fields work exactly the same as the fields with the same names in the findings multiple of the reminder definition. If one of these fields is specified at the definition findings level, where the term is the finding, then each finding in the term will inherit the value. If the field is specified at the finding level of the term, then it will take precedence and replace what has been specified at the definition level.

Refer to the section later in this manual that describes Reminder Term options.

#### **4.6.1.12 Skin Test**

Skin Tests are found in the SKIN TEST file #9999999.28. Results for individual patients are found in the V SKIN TEST file #9000010.12. The value used for CONDITION is RESULTS. Possible values are:

- 'P' FOR POSITIVE
- 'N' FOR NEGATIVE
- 'D' FOR DOUBTFUL
- 'O' FOR NO TAKE

If you want only those findings to be true for skin tests whose results are positive, the CONDITION would be I V="P".

#### **4.6.1.13 VA Drug Class**

VA Drug Class entries are found in the VA DRUG CLASS file #50.605. An entry from the VA Drug Class file points to one or more entries in the Drug file. Each of the corresponding entries in the Drug file is processed as described in the Drug section. The information displayed in the Clinical Maintenance component includes the VA Drug Class and the particular drug that was found.

#### **4.6.1.14 VA Generic**

VA Generic entries are found in the VA GENERIC file #50.6. (This was formerly called the National Drug file.) An entry from the VA Generic file points to one or more entries in the Drug file. Each of the corresponding entries in the Drug file is processed as described in the Drug section. The information displayed in the Clinical Maintenance component includes the VA Generic name and the particular drug that was found.

#### 4.6.1.15 Vital Measurement

IHS does not use V measurements although the files are on the database. V measurements will be used in exactly the same way as Vital Measurements. Vital Measurement entries are found in the GMRV VITAL MEASUREMENT file #120.5.

A Vitals API is used to obtain the information for a selected measurement and patient. The value for the CONDITION is RATE, which is the value of the measurement. If you are going to use a CONDITION with this finding, you need to be familiar with how the Vitals package returns the Rate data. For example, if the vital sign is weight, the Rate will be a number that is the weight in pounds. If the vital sign is blood pressure, the rate will have the form systolic/diastolic. If you want the finding to be true only for systolic pressures greater than 140, then the CONDITION would be I \$P(V,"/",1)>140. If you want it to be true for diastolic pressures greater than 90, the CONDITION would be I \$P(V,"/",2)>90. Finally, if you want it to be true for systolic pressures greater than 140 and diastolic pressures greater than 90, the CONDITION would be I (\$P(V,"/",1)>140)&(\$P(V,"/",2)>90).

BP is recorded as *Systolic/Intermediate/Diastolic*. The Intermediate pressure is OPTIONAL and may or may not be present in the Blood Pressure vitals finding. This needs to be taken into account when the CONDITION field is populated. The table below may help illustrate the issue:

Blood Pressure Vital	FIEV(DA,"RATE")	Condition	Result
130/80	130/80	I \$P(V,"/",2)<75	FALSE
130/80/75	130/72/80	I \$P(V,"/",2)<75	TRUE
130/80	130/80	I (\$P(V,"/",1)>125)&(\$P(V,"/",2)<75)	FALSE
130/80/75	130/72/80	I (\$P(V,"/",1)>125)&(\$P(V,"/",2)<75)	TRUE

#### 4.6.1.16 Reminder Location List

Reminder Location List entries are found in the REMINDER LOCATION LIST file #810.9. This file contains lists of stop codes and hospital locations for use as a reminder finding. The stop codes and hospital locations are those associated with a Visit file entry.

#### 4.6.1.17 Refusal File

Refusal types are found in the REFUASAL TYPE #9999999.73 file. A finding type of refusal will contain the refusal type:

- CPT
- EDUCATION TOPICS
- EKG

- EXAM
- ICD OPERATION/PROCEDURE
- IMMUNIZATION
- LAB
- MAMMOGRAM
- MEASUREMENTS
- MEDICATION/DRUG
- PAP SMEAR
- RADIOLOGY EXAM
- SKIN TEST

Then the condition field is used to determine which EXAM, LAB, etc. to check for. In reminders version 2.0, this can be either a single entry or a REMINDER TERM.

```
Select FINDING: REF.EXAM
      Searching for a REFUSAL TYPE, (pointed-to by FINDING ITEM)
EXAM
      ...OK? Yes//   (Yes)
Editing Finding Number: 1
FINDING ITEM: EXAM//
REMINDER FREQUENCY:
MINIMUM AGE:
MAXIMUM AGE:
RANK FREQUENCY:
USE IN RESOLUTION LOGIC: OR//
USE IN PATIENT COHORT LOGIC:
BEGINNING DATE/TIME: T-3Y//
ENDING DATE/TIME:
OCCURRENCE COUNT:
CONDITION: I V="TEST-EXAM"//   << Name of Reminder Term
CONDITION CASE SENSITIVE:
USE STATUS/COND IN SEARCH:
FOUND TEXT
```

#### 4.6.1.18 Findings Fields

There are a number of fields in the Findings multiple that control how each Finding is used in the reminder evaluation process. Each of these fields is described in detail below. Note that each field is optional. If it is not present, the finding will not be used for the purpose of the field.

- FINDING ITEM MINIMUM AGE
- MAXIMUM AGE REMINDER FREQUENCY FOUND TEXT
- NOT FOUND TEXT RANK FREQUENCY
- USE IN RESOLUTION LOGIC

- USE IN PATIENT COHORT LOGIC BEGINNING DATE/TIME
- USE INACTIVE PROBLEMS WITHIN CATEGORY RANK ENDING DATE/TIME
- MH SCALE CONDITION
- CONDITION CASE SENSITIVE RXTYPE
- OCCURRENCE COUNT
- USE COND IN FINDING SEARCH STATUS LIST
- INTERNAL CONDITION V SUBSCRIPT LIST
- NO. OF FOUND TEXT LINES NO.
- NOT FOUND TEXT LINES
- COMPUTED FINDING PARAMETER

#### 4.6.1.18.1 Findings Fields Description

- MINIMUM AGE, MAXIMUM AGE, and FREQUENCY – These are treated as a set that we can call a frequency age range set. If a finding is true then the frequency age range set will override the baseline frequency age range set. This is used when a finding should override the baseline. For example, a patient with a particular health factor needs to get the reminder at an earlier age than normal and it should be done more frequently.
- REMINDER FREQUENCY – If this finding is true (found) then use this frequency and the age range specified by the MINIMUM AGE and MAXIMUM AGE to override the baseline frequency age range set. The frequency is input as nD, nM, or nY, where n is a number and D stands for days, M for months, Y for years. Thus, for a reminder that is to be given once a year, the values 365D, 12M, or 1Y would all work.
- FOUND TEXT – This is a word-processing field. The contents of this field will be displayed in the Clinical Maintenance component whenever the finding is found (true).
- NOT FOUND TEXT – This is a word-processing field. The contents of this field will be displayed in the Clinical Maintenance component whenever the finding is not found (false).

**Note:** Both FOUND TEXT and NOT FOUND TEXT can contain TIU objects. In both, you can control the output format by using \\ or <br> for line breaks.

- **RANK FREQUENCY** – If more than one finding that has a frequency age range set is true, then how do we decide which frequency age range set to use? That is the purpose of the RANK FREQUENCY. The frequency age range set from the finding with the highest RANK FREQUENCY will be used. In the absence of RANK FREQUENCY, the frequency age range set that will cause the reminder to be given the most often will be used. RANK FREQUENCY is a numerical value with 1 being the highest.
- **USE IN RESOLUTION LOGIC** – This field specifies how a finding is used in resolving a reminder. It is a set of codes that can contain the Mumps Boolean operators and their negations. The operators are ! (OR), & (AND), !' (OR NOT), and &' (AND NOT). If a particular finding must be true in order for the reminder to be resolved, then you would use an AND in this field. If the finding is one of a number of findings that will resolve a reminder, then you would use an OR. For those cases where this mechanism does not allow you to describe the exact logical combination of findings you require, you can input the logic directly in the CUSTOM RESOLUTION LOGIC field.
- **USE IN PATIENT COHORT LOGIC** – This field specifies how a finding is used in selecting the applicable patient population (for example, the patient cohort). It is a set of codes that works exactly like the USE IN RESOLUTION LOGIC. For those cases where this mechanism does not allow you to describe the exact logical combination of findings you require, you can input the logic directly in the CUSTOM PATIENT COHORT LOGIC field.
- **BEGINNING DATE/TIME** – This is the beginning date/time to search for findings.
  - The date/time cannot be in the future.
  - The date/time can be any of the acceptable FileMan date/time formats or abbreviations.
  - In addition you may use the abbreviations T-NY or NOW-NY, where N is an integer and Y stands for years.
  - If this is null then the beginning date/time will correspond with the date/time of the oldest entry. See the FileMan Getting Started Manual to learn about acceptable FileMan date/time formats and abbreviations.
- **ENDING DATE/TIME** – This is the ending date/time to search for findings.
  - The date/time cannot be in the future.
  - The date/time can be any of the acceptable FileMan date/time formats or abbreviations.
  - In addition you may use the abbreviations T-NY or NOW-NY, where N is an integer and Y stands for years.
  - If this is null then the ending date/time will be NOW.

- **USE INACTIVE PROBLEMS** – This field applies only to taxonomies containing ICD 9 diagnoses. If the diagnosis is found in the **PROBLEM LIST** and it is inactive, then the finding cannot be true unless this field is set to **YES**.
- **OCCURRENCE COUNT** – This is the maximum number of occurrences of the finding in the date range to return. If the **OCCURRENCE COUNT** is input as a positive number, N, up to N of the most recent occurrences will be returned and the finding will take the value of the most recent occurrence. If the **OCCURRENCE COUNT** is input as a negative number then this behavior is reversed. Up to N of the oldest occurrences will be returned and the finding will take the value of the oldest occurrence in the list.
- **WITHIN CATEGORY RANK** – This field applies only to health factors. In order to understand how it works, you need to understand how health factors work in the reminder evaluation process. If you are not clear about this, see the Health Factor section. The default is to use only the most recent Health factor within a category. A problem can arise if there are two or more Health factors within a category and they both have the same date. (This can happen if both Health factors are given during the same encounter.) When the dates are the same, the Health factor with the highest **WITHIN CATEGORY RANK** will be used. This is a numerical value like **RANK FREQUENCY** with 1 being the highest rank.

In some cases, you may want to have a Health factor treated as an individual finding, suppressing the category behavior. To do this, use the special value of 0 for the **WITHIN CATEGORY RANK**.

- **CONDITION** – Many types of findings have associated values. For example, for Education Topics, the value is Level of Understanding; for Vital Measurement, it is the value of the measurement. More specific information can be found in the detailed section for each finding type. The **CONDITION** field can be used to make the finding true or false depending on the value of the finding. The contents of this field are a single line of Mumps code that should evaluate to true or false. If the code evaluates to true, then the finding is true; if it evaluates to false, then the finding is false.

The **CONDITION** value for each finding type is given in the following table:

Finding Type	Value
Drug	None
Education Topic	Level of Understanding
Exam	Result
Health Factor	Level/severity
Immunization	Series
Laboratory Test	Value
Mental Health Instrument	Raw score
Orderable Item	Status
Radiology Procedure	None
Reminder Computed Finding	Determined by the programmer
Reminder Taxonomy	None
Skin Test	Results
VA Drug Class	None
VA Generic	None
Vital Measurement	Rate
Measurement type	Rate
Reminder Location List	None
Refusal Type	Reminder Term

In addition to the values for type of finding shown in the above table, the following variables can be used in any CONDITION:

- PXRМAGE - patient's age
- PXRМDOB - patient's date of birth in FileMan format PXRMRACE - patient's race (this is the text from the RACE file) PXRМSEX - patient's sex, in the format M^MALE or F^FEMALE

The use of these variables is very similar to how you use the V variable. For example, if you want the finding to apply only to patients who are 65 and younger, the CONDITION is I PXRМAGE'>65 (in English if AGE is not greater than 65). You can combine these new variables and the V in a CONDITION. Let's say we want a finding that is true for all patients whose BMI>25, were born before 1955, and whose race is Asian. Our finding is the BMI finding, so the CONDITION is (I V>25)&(PXRМDOB<2550101)&(PXRMRACE["ASIAN"]).

When using PXRМSEX in a CONDITION, you can use it a number of ways. Examples:

```
I $P(PXRМSEX, "^", 1) = "M" I $P(PXRМSEX, "^", 2) = "MALE" I PXRМSEX["FE" I
$P(PXRМSEX, "^", 1) = "F" I $P(PXRМSEX, "^", 2) = "FEMALE" I PXRМSEX["FE"
```

The first set selects male patients while the second set selects female patients.

CONDITION functionality has been expanded, so you can use things such as V("SUBSCRIPT") in addition to V.

### Examples:

```
I V("PDX")=[ "ABNORMALITY"
I (V="COMPLETE" )&(V("PDX") [ "ABNORMALITY" )
I V("DATE READ" )<V("DATE" )
```

Service Category was added as the value for Location List findings. This means you can now use the Service Category in the Condition statement. The possible values for Service Category are:

- 'A' FOR AMBULATORY
- 'H' FOR HOSPITALIZATION
- 'T' FOR IN HOSPITAL
- 'C' FOR CHART REVIEW
- 'T' FOR TELECOMMUNICATIONS
- 'N' FOR NOT FOUND
- 'S' FOR DAY SURGERY
- 'O' FOR OBSERVATION
- 'E' FOR EVENT (HISTORICAL)
- 'R' FOR NURSING HOME
- 'D' FOR DAILY HOSPITALIZATION DATA
- 'X' FOR ANCILLARY PACKAGE DAILY DATA

Therefore, if you wanted only ambulatory visits, your Condition would be: I V="A". The code for evaluating the Condition was restructured to make it more efficient.

The wildcard functionality in Conditions was rewritten. There can be multiple wildcards, but they must be differentiated by the number of "\*" characters. Wildcards must be enclosed in quotes.

The external form of the vitals qualifier was added to the values that can be used in a Condition statement. For example, in the test option output for a weight finding you might see qualifiers such as:

```
FIEVAL(1, "QUALIFIER", 1)=ACTUAL FIEVAL(1, "QUALIFIER", 2)=STANDING
```

You could use these in a Condition as follows:

```
I (V("QUALIFIER",1)="ACTUAL")&(V("QUALIFIER",2)="STANDING")&(V>165)
```

Since you don't always know what subscript the various qualifiers will be associated with, you can use the wildcard in the Condition as follows:

```
I (V("QUALIFIER","*")="ACTUAL")&(V("QUALIFIER","**")="STANDING")&(V>165)
```

Lab results now include specimen, so that specimen can be used in the Condition statement. For example:

```
I V("SPECIMEN")="SERUM".
```

#### 4.6.1.19 Reminder Findings Condition Table

Some examples of simple CONDITIONS are shown in the following table:

Finding Type	Results File	Result Fields that Can Be Used in CONDITION	Data Example	CONDITION Field Example
Drug (50)		NONE – but you can use EFFECTIVE PERIOD of 0D, 0M, OR 0Y in the reminder definition to restrict view to current medications only		
Education Topic (9999999.09)	V PATIENT ED (9000010.06)	LEVEL OF UNDERSTANDING	1 for Poor 2 for Fair 3 for Good 4 for Group-no Assessment 5 for Refused	I V=1 I V=2 I V=3 I V=4 I V=5
Exam (9999999.15)	V EXAM (9000010.13)	RESULT	A for Abnormal N for Normal	I V="A" I V="N"
Health Factor (9999999.64)	V HEALTH FACTOR (9000010.23)	LEVEL/SEVERITY	M for Minimal MO for Moderate H for Heavy/Severe	I V="M" I V="MO" I V="H"

Finding Type	Results File	Result Fields that Can Be Used in CONDITION	Data Example	CONDITION Field Example
Immunization (9999999.14)	V IMMUNIZATION (9000010.11)	SERIES	P for Partially Complete C for Complete B for Booster 1 for Series 1 2 for Series 2 3 for Series 3 4 for Series 4 5 for Series 5 6 for Series 6 7 for Series 7 8 for Series 8	V="P"   V="C"   V="B"   V=1   V=2   V=3   V=4   V=5   V=6   V=7   V=8
Laboratory Test (60)	LAB RESULTS in "CH" node	Number returned from the Lab API as the lab result	180	V>130
Measurement Type	V measurement	Value (.04)	60	V>80
Orderable Item (101.43)				

#### 4.6.1.20 Additional Reminder Findings

- **MH SCALE** – This is applicable only to Mental Health Instrument findings. The scale can be selected by scale number or scale name. IHS does not have the mental health instrument file.
- **CONDITION CASE SENSITIVE** – When this field is set to "NO" then the **CONDITION** will not be case-sensitive. The default is case-sensitive.
- **USE COND IN FINDING SEARCH** – Give this field a value of "Yes" if you want the Condition applied to each result found in the date range for this finding. Only results for which the Condition is true will be retained. The maximum number to retain is specified by the Occurrence Count.
- **RXTYPE** – **RXTYPE** controls the search for medications. The possible **RXTYPEs** are:
  - A – all
  - I – inpatient
  - N – non-VA meds
  - O – outpatient

You may use any combination of the above in a comma-separated list. For example, I,N would search for inpatient medications and non-VA meds.

The default is to search for all possible types of medications. So a blank RXTYPE is equivalent to A.

- **OCCURRENCE COUNT** – This is the maximum number of occurrences of the finding in the date range to return. If the OCCURRENCE COUNT is input as a positive number, N, up to N of the most recent occurrences will be returned and the finding will take the value of the most recent occurrence. If the OCCURRENCE COUNT is input as a negative number, then this behavior is reversed. Up to N of the oldest occurrences will be returned and the finding will take the value of the oldest occurrence in the list.
- **STATUS LIST** – This field applies to finding types that have an associated status. When the search for patient findings is done only those findings that have a status on the list can be true. The allowable values depend on the finding type. If no statuses are specified then the default list for each finding type will be used.
- **INTERNAL CONDITION** – This is the internal form of the condition. It is set automatically and should never be set by hand.
- **V SUBSCRIPT LIST** – This is a list of V value subscripts used in the CONDITION. It is used when the CONDITION is not case sensitive. This should never be set by hand.
- **NO. OF FOUND TEXT LINES** – This is the number of lines in the found text. If the number ends with "T" then the text contains TIU objects. This field is set automatically during reminder edit and should never be edited by hand.
- **NO. NOT FOUND TEXT LINES** – This is the number of lines in the not found text. If the number ends with "T" then the text contains TIU objects. This field is set automatically during reminder edit and should never be edited by hand.
- **COMPUTED FINDING PARAMETER** – This field is used to pass a parameter into the computed finding.

#### 4.6.2 Function Findings

New functionality called Function Findings has been added to Clinical Reminders version 2.0. Function Findings use the results of regular Findings in computations to determine both Patient Cohort and Resolution logic. They can also be used to change the frequency and age range and to display informative text under Information in Clinical Maintenance.

Function Findings expand upon, and are intended to replace, the old-style "Most Recent Date" (MRD) functionality of Reminders 1.5 that could be used in customized Patient Cohort Logic to return the most recent date from a list of finding items. Old MRD logic released in National Reminders will be converted to Function Findings and the reminders will be redeployed with v2.0.

The old 1.5 MRD functionality will still function when Reminders v2.0 is released, but will eventually be inactivated. Sites will need to convert their local 1.5 MRD functions into new Function Findings before the old functionality is disabled. Installation of v2.0 includes a utility that send a MailMan message with a list of reminders that use old-style MRD findings.

Note that this new functionality may be difficult to comprehend. Be advised that you should not attempt to modify existing Function Findings or create new Function Findings unless you understand what they do and test the results thoroughly.

#### 4.6.2.1 Benefits of Using Function Findings

Besides providing new and expanded functionality, Function Findings (FF) can make custom logic much simpler to understand. Before we discuss how to build a Function Finding, let's look at an example of how MRD used in custom logic can be converted to a FF.

This custom logic looks complicated because the MRD comparison of FI(2) and FI(9) must be enclosed in so many parentheses:

```
FI(2)&FI(11)&((MRD(FI(2)))>(MRD(FI(9))))&'FI(13)
```

Here is the custom logic when the old MRD logic is replaced with a Function Finding:

```
FI(2)&FI(11)&FF(1)&'FI(13)
```

By moving the MRD part of the equation into a Function Finding, the custom logic is much easier to read. Remember: the old MRD functionality in custom logic will be inactivated and must be converted to Function Findings.

This is the Function String of Function Finding 1. Notice that this string is much easier to read and to write:

```
---- Begin: FF(1)-----
Function String: MRD(2)>MRD(9)
Expanded Function String:
MRD(VA-HYPERTENSION CODES)>MRD(VA-HTN INCORRECT DIAGNOSIS)
---- End: FF(1) -----
```

#### 4.6.2.2 Creating a Function Finding

To define or edit a Function Finding, select the new option “FF Function Finding” from the reminder definition editor (in Add/Edit Reminder Definition or Copy Reminder Definition on the Reminder Definition Management menu).

The name of a Function Finding is a number, so, when prompted to “Select FUNCTION FINDING,” you would enter a number. Function Finding number 1 is created in the following example:

```
Select Reminder Definition:  FFTEST LOCAL
  Select one of the following:
  A All reminder details
  G General
  B Baseline Frequency
  F Findings
  FF Function Findings
  L Logic
  C Custom date due
  D Reminder Dialog
  W Web Addresses

Select section to edit: FF    Function Findings

Function Findings
Select FUNCTION FINDING: 1
Are you adding '1' as a new FUNCTION FINDINGS (the 1ST for this REMINDER
DEFINITION)? No// Y
(Yes)
FUNCTION FINDINGS FUNCTION STRING: MRD(1,3)>MRD(11,8,4) FUNCTION FINDING
NUMBER: 1//
FUNCTION STRING: MRD(1,3)>MRD(11,8,4)  Replace
FOUND TEXT:
No existing text
Edit? NO//
NOT FOUND TEXT:
No existing text
Edit? NO//
USE IN RESOLUTION LOGIC:
USE IN PATIENT COHORT LOGIC: MINIMUM AGE:
MAXIMUM AGE: REMINDER FREQUENCY: RANK FREQUENCY:

Select FUNCTION FINDING:
```

When prompted, enter the number of the finding you want to create/edit. If the finding number does not exist, you will be asked to confirm that you want to add a new finding:

```
Select FUNCTION FINDING: 1
Are you adding '1' as a new FUNCTION FINDINGS (the 1ST for this REMINDER
DEFINITION)? No// Y (Yes)
```

Next, you will be prompted to add the Function Finding computation. This will be explained in detail later in this document.

```
FUNCTION FINDINGS FUNCTION STRING: MRD(1,3)>MRD(11,8,4)
```

Then the name and the FUNCTION STRING will be displayed on the screen so you can modify the FUNCTION STRING if you wish to do so:

```
FUNCTION FINDING NUMBER: 1//
```

```
FUNCTION STRING: MRD(1,3)>MRD(11,8,4)  Replace
```

Lastly, you will be prompted for the following fields, which work the same as they do with regular Findings.

```
FOUND TEXT:
No existing text
Edit? NO//
NOT FOUND TEXT:
No existing text
Edit? NO//
USE IN RESOLUTION LOGIC:
USE IN PATIENT COHORT LOGIC: MINIMUM AGE:
MAXIMUM AGE:
REMINDER FREQUENCY:
RANK FREQUENCY:
```

**If the FF is true and USE IN RESOLUTION LOGIC and USE IN PATIENT COHORT LOGIC are not specified, the FF text will appear under the Clinical Maintenance Information heading.**

#### 4.6.2.3 Function Finding Components

These Mumps operators can be used in a Function Finding FUNCTION STRING. The operators “-“ and “+” will be of more use in the future.

```
+ plus
- minus
> greater than
< less than
= equal to
& and
! or
\ not
```

These functions can be used in a Function Finding FUNCTION STRING: These are the only functions provided and should be the only ones used in Function Findings.

Select one of the following:

```
1 COUNT
2 FI
3 MAX_DATE
4 MIN_DATE
5 MRD
```

The general form for a function finding is:

```
FUN1(arg1,arg2,...argN) oper1 FUN2(arg1,arg2,...,argN) ...
```

Where

- FUN1 stands for function 1, FUN2 stands for function 2, etc.
- arg1,arg2,...,argN stand for argument 1, argument 2, etc. These should be numbers that correspond to the regular findings that will be evaluated
- oper1 stands for operator 1, etc., which are a Mumps operators

A Function Finding String must be 2 to 245 characters in length. When a Function Finding is evaluated, the result will be treated as a logical true or false, where 0 is false and non-zero is true.

#### 4.6.2.3.1 Count

Function: COUNT

Print name: Count

The COUNT function works in conjunction with the Finding parameter OCCURRENCE COUNT. For example, if the OCCURRENCE COUNT for finding number 2, FI(2), is set to “5,” and there are three occurrences, then COUNT(2) will return a value of “3.”

Here is an example of a Function Finding that uses the COUNT function. The FI(2) has been defined with an Occurrence Count of 4:

```
---- Begin: SOME FINDING (FI(2)=RT(74)) -----
Finding Type: REMINDER TERM
Occurrence Count: 4
RT Mapped Finding: SOME REMINDER TERM
---- End: SOME FINDING RESULTS -----
```

The function finding uses the COUNT function. If the occurrence count of FI(2) is greater than one, then FF(1) is true and will be used in the patient cohort logic:

```
---- Begin: FF(1)-----
Function String: COUNT(2)>1
Expanded Function String:
COUNT(SOME FINDING)>1
Use in Patient Cohort Logic: AND
---- End: FF(1) -----
```

FF(1) will be true if the occurrence count is 2, 3, or 4. FF(1) will be false if the occurrence count is 0 or 1.

#### 4.6.2.3.2 DUR

- Function: DUR
- Print name: DUR

For findings that have a start and stop date, DUR will be the number of days between the start and stop date. For findings that have only a single date, DUR works in conjunction with the Occurrence Count parameter and is the number of days between the first and last occurrence. If there is only one occurrence, then DUR will be 0.

#### 4.6.2.3.3 FI

- Function: FI
- Print name: FI

The FI function returns the value of a regular reminder Finding. FI can be used in Function Findings to evaluate the results of a group of findings and make changes based on the result.

For instance, the frequency of a reminder could be changed using FI. In this example, the baseline frequency of a reminder is 1 year for all ages for patients with diabetes:

```
----- Begin: DIABETES DIAGNOSIS (FI(1)=RT(553)) -----
Finding Type: REMINDER TERM Match Frequency/Age: 1 year for all ages
. . .
Mapped Finding Item: TX.VA-DIABETES
----- End: DIABETES DIAGNOSIS -----
```

But the reminder should only be due every 2 years for all ages if a certain combination of conditions is true. FI can be used in a Function Finding to change the frequency. Each condition is defined as a regular Finding, then these findings are evaluated in a Function Finding and the frequency is changed if the Function String evaluates as true.

```
--- Begin: FF(4)-----
Function String: FI(1)&FI(2)&FI(4)&'FI(7)
Expanded Function String:
(FI(DIABETES DIAGNOSIS)&FI(SOME CONDITION)
&FI(ANOTHER CONDITION)&'FI(STILL ANOTHER CONDITION)
Match Frequency/Age: 2 years for all ages
Found Text: Frequency changed to every 2 years for all ages for
this patient because s/he has been diagnosed with
diabetes and SOME CONDITION and ANOTHER CONDITION
are true and STILL ANOTHER CONDITION is not true.
--- End: FF(4) -----
```

#### 4.6.2.3.4 Maximum Date

- Function: MAX\_DATE
- Print Name: Maximum Date

The MAX\_DATE function returns the most recent finding date for a given list of findings. Example of a Function Finding that uses the MAX\_DATE function:

```
--- Begin: FF(2)-----
Function String: MAX_DATE(1,3)>MAX_DATE(6)
```

```

Expanded Function String:
MAX_DATE(SOME FINDING,SOME OTHER FINDING)
>MAX_DATE(STILL ANOTHER FINDING)
Use in resolution logic: AND
--- End: FF(2) -----

```

This Function Finding would be true if the largest date from the first group (finding 1 and finding 3) is greater than the largest date from second group (finding 6). Note that you can have only one date in the group.

**Note:** The functions MAX\_DATE and MRD are exactly the same. MAX\_DATE was created to be the opposite of MIN\_DATE. MRD is the name that was used in version 1.5 and it was kept in case users were more familiar with it and preferred MRD to MAX\_DATE.

The following examples produce the same result:

```

MAX_DATE(1,2,3,7)>MAX_DATE(8,9,11)
MRD(1,2,3,7)>MRD(8,9,11)
MAX_DATE(1,2,3,7)>MRD(8,9,11)
MRD(1,2,3,7)>MAX_DATE(8,9,11)

```

#### 4.6.2.3.5 Minimum Date

- Function: MIN\_DATE
- Print Name: Minimum Date

The MIN\_DATE function returns the oldest finding date for a given list of findings. Example of a Function Finding that uses the MIN\_DATE function:

```

--- Begin: FF(2)-----
Function String: MIN_DATE(1)>MAX_DATE(6)
Expanded Function String:
MIN_DATE(SOME FINDING)>MAX_DATE(SOME OTHER FINDING)
Use in patient logic: AND
--- End: FF(2) -----

```

This Function Finding will be true if the smallest (oldest) date from the first group (finding 1 and finding 3) is less than the smallest (oldest) date from second group (finding 2 and finding 4).

#### 4.6.2.3.6 MRD

- Function: MRD
- Print Name: Most Recent Date

The MRD function returns the most recent finding date for a given list of findings. Example of a Function Finding that uses the MRD function:

```
MRD(1,7,13)>MRD(2,4,11)
```

This Function Finding would be true if the most recent date of the group of findings 1,7, and 13 is greater than the most recent date of the group of findings 2, 4, and 11.

**Note:** The functions MRD and MAX\_DATE *are exactly the same*. Examples of Function Findings Used in National Reminders:

**Example: Function Findings in VA-HTN ASSESSMENT BP >=140/90**

This is what the MRD logic looks like under Reminders 2.0. The Customized patient cohort logic has been changed to include an FF(1) and the MRD logic it's replaced is now the Function String within FF(1), Function Finding 1.

```
----- Begin: FF(1)-----
Function String: MRD(2)>MRD(9)
Expanded Function String:
MRD(VA-HYPERTENSION CODES)>MRD(VA-HTN INCORRECT DIAGNOSIS)
----- End: FF(1) -----
Customized PATIENT COHORT LOGIC to see if the Reminder applies to a
patient:
FI(2)&FI(11)&FF(1)&'FI(13)
Expanded Patient Cohort Logic:
FI(VA-HYPERTENSION CODES)&FI(BLOOD PRESSURE)&FF(1)&'FI(BLOOD PRESSURE)
```

This is what the MRD logic used to look like under Reminders 1.5:

```
Customized PATIENT COHORT LOGIC to see if the Reminder applies to a
patient:
FI(2)&FI(11)&(MRD(FI(2))>MRD(FI(9)))&'FI(13)
Expanded Patient Cohort Logic:
FI(VA-HYPERTENSION CODES)&FI(BLOOD PRESSURE)&
(MRD(FI(VA-HYPERTENSION CODES))>MRD(FI(VA-HTN INCORRECT DIAGNOSIS)))&'
FI(BLOOD PRESSURE)
```

**Example: Function Findings in VA-IHD LIPID PROFILE**

This is what the MRD logic looks like under Reminders 2.0. The Customized patient cohort logic has been changed to include an FF(1) and the MRD logic it's replaced is now the Function String within FF(1), Function Finding 1.

```
----- Begin: FF(1)-----
Function String: MRD(1)>MRD(10)
Expanded Function String:
MRD(VA-IHD DIAGNOSIS)>MRD(VA-UNCONFIRMED IHD DIAGNOSIS)
----- End: FF(1) -----
Customized PATIENT COHORT LOGIC to see if the Reminder applies to a
patient:
FI(1)&FF(1)
Expanded Patient Cohort Logic:
FI(VA-IHD DIAGNOSIS)&FF(1)
```

This is what the MRD logic used to look like under Reminders 1.5:

Customized PATIENT COHORT LOGIC to see if the Reminder applies to a patient:

```
FI(1)&(MRD(FI(1))>MRD(FI(10)))
```

Expanded Patient Cohort Logic:

```
FI(IHD DIAGNOSIS)&(MRD(FI(IHD DIAGNOSIS))>
MRD(FI(UNCONFIRMED IHD DIAGNOSIS)))
```

### Example: Function Findings in VA-IHD LIPID PROFILE

This is what the MRD logic looks like under Reminders 2.0. The Customized patient cohort logic has been changed to include an FF(1) and FF(2). The MRD logic that used to be in the Customized patient cohort logic has been moved to the Function String within FF(1), Function Finding 1. There is new MRD logic in FF(2) that is used in the Customized resolution logic, which is new with 2.0.

Note that there have also been some changes to the findings so the comparison strings from the old/new reminder do not exactly map. The findings in red have gone away, the findings in green are new. One finding, VA-UNCONFIRMED IHD DIAGNOSIS, changed from FI(11) to FI(13), so it is both red and green.

```
----- Begin: FF(1)-----
Function String: MRD(3,4,7,8)>MRD(5,6,9,10)
Expanded Function String:
MRD(VA-OUTSIDE LDL <100,VA-OUTSIDE LDL 100-119,VA-LDL <100,
VA-LDL 100-119)>MRD(VA-OUTSIDE LDL 120-129,VA-OUTSIDE LDL >129,
VA-LDL 120-129,VA-LDL >129) Use in Resolution Logic: AND
----- End: FF(1) -----

----- Begin: FF(2)-----
Function String: MRD(1)>MRD(11)
Expanded Function String:
MRD(VA-IHD 412 DIAGNOSIS)>MRD(VA-UNCONFIRMED IHD DIAGNOSIS)
----- End: FF(2) -----

Customized PATIENT COHORT LOGIC to see if the Reminder applies to a
patient: FI(1)&FF(2)

Expanded Patient Cohort Logic: FI(VA-IHD 412 DIAGNOSIS)&FF(2)

Customized RESOLUTION LOGIC defines findings that resolve the Reminder:
(FI(3)!FI(4)!FI(5)!FI(6)!FI(7)!FI(8)!FI(9)!FI(10))&FF(1)

Expanded Resolution Logic:
(FI(VA-OUTSIDE LDL <100)!FI(VA-OUTSIDE LDL 100-119)!
FI(VA-OUTSIDE LDL 120-129)!FI(VA-OUTSIDE LDL >129)!FI(VA-LDL <100)!
FI(VA-LDL 100-119)!FI(VA-LDL 120-129)!FI(VA-LDL >129))&FF(1)
```

This is what the MRD logic used to look like under Reminders 1.5. Note that the MRD logic used to be in the Customized patient cohort logic.

```

Customized PATIENT COHORT LOGIC to see if the Reminder applies to a
patient:
FI(1)&(MRD(FI(1))>MRD(FI(13)))
Expanded Patient Cohort Logic:
FI(I&(MRD(FI(IHD 412 DIAGNOSIS))>
HD 412 DIAGNOSIS) MRD(FI(UNCONFIRMED IHD DIAGNOSIS)))
Default RESOLUTION LOGIC defines findings that resolve the Reminder:
FI(3)!FI(4)!FI(5)!FI(6)!FI(7)!FI(8)
Expanded Resolution Logic:
February 2005 Clinical Reminders V. 2.0 Manager Manual 71
FI(OUTSIDE LDL <100)!FI(OUTSIDE LDL 100-119)!
FI(OUTSIDE LDL 120-129)!FI(OUTSIDE LDL >129)!
FI(LDL >119)!FI(LDL <120)

```

### Example: Function Findings in VA-WH Mammogram Screening

This is one of the new Function Findings from the Women's Health Mammogram Screening reminder. FF(1) determines whether a mammogram result is the most recent finding. If it is true, the default's frequency is changed to the baseline frequency of two years for ages 40 to 69. The found text displays in the Clinical Maintenance.

```

Function Findings:
---- Begin: FF(1)-----
Function String:
($P(MRD(4,5,6),".")'<($P(MRD(7,8,9,10),"."))&(MRD(4,5,6)>0)
Expanded Function String:
($P(MRD(VA-WH MAMMOGRAM SCREEN IN WH PKG,
VA-MAMMOGRAM SCREEN IN RAD PKG,
VA-WH MAMMOGRAM SCREEN DONE),".")'<($P(MRD(
VA-WH BREAST CARE ORDER HEALTH FACTOR,
VA-WH MAMMOGRAM SCREEN NOT INDICATED,VA-WH MAMMOGRAM SCREEN DEFER,
VA-MAMMOGRAM UNSATISFACTORY IN RAD/WH PKG),"."))&(MRD(
VA-WH MAMMOGRAM SCREEN IN WH PKG,VA-MAMMOGRAM SCREEN IN RAD PKG,
VA-WH MAMMOGRAM SCREEN DONE)>0)
Match Frequency/Age: 2 years for ages 40 to 69
Found Text: Mammogram result is the most recent finding.
---- End: FF(1) -----

```

This looks complicated (because it is!), so let's look at this example in more detail.

**Important:** Do not try to write or modify Function Findings yourself unless you understand how they work and you test them thoroughly!

Since the dates come from different systems (Women's Health, Radiology, PCE), it was necessary to make sure we were accurately comparing dates. Some packages store dates and time, while some packages just store the date. If time is stored, Mumps adds the time to the end of a date and separates the two with a period (".").

If we compare dates with time to dates without time, the dates with time will always be considered the most recent

July 14, 2004	11:00	would evaluate as the most recent date
July 14, 2004	(no time)	could have happened at 0800 or at 1130; there's no way to tell

In this Function Finding, we wanted to drop the time and just compare dates. To do this, we used the Mumps \$P function. In this example, we are looking for the "." in the date/time string. We will keep everything before the "." (the date) and will ignore everything that comes after the "." (the time). This means that all the dates that are compared now only have year, month, and day.

This Function Finding is made up of several sections:

(\$P(MRD(4,5,6),"."))	First group of findings, dates with time removed '< operators (not less than)
(\$P(MRD(7,8,9,10),"."))	Second group of findings, dates with time removed & operator (and) (MRD(4,5,6)>0) making sure first MRD of first group of findings is really a date and not blank or 0)

So, FF(1)

- Removes the time from all the dates      \$P with ".", M date
- Finds the most recent date in the first group      MRD(4,5,6)
- Finds the most recent date in the second group      MRD(7,8,9,10)
- FF(1) is true if the MRD of the first group is not less than the MRD of the second group, and the MRD of the first group is greater than zero.

Here is FF(2) from the VA-WH MAMMOGRAM SCREENING reminder:

```

--- Begin: FF(2)-----
Function String: (MRD(8,11,12,13,14)=MRD(11))&(MRD(11)>0)
Expanded Function String:
(MRD(VA-WH MAMMOGRAM SCREEN NOT INDICATED,
VA-WH MAMMOGRAM SCREEN FREQ - 4M,VA-WH MAMMOGRAM SCREEN FREQ - 6M,
VA-WH MAMMOGRAM SCREEN FREQ - 1Y,
VA-WH MAMMOGRAM SCREEN FREQ - 2Y)=
MRD(VA-WH MAMMOGRAM SCREEN FREQ - 4M))&
(MRD(VA-WH MAMMOGRAM SCREEN FREQ - 4M)>0)
Match Frequency/Age: 4 months for all ages
Found Text: Mammogram screening every 4 months specified
for this patient.
--- End: FF(2) -----

```

FF(2) is similar to FF(1) but does not strip off the time. If it is true, the frequency is changed to every 4 months for all ages.

#### 4.6.2.4 Custom Date Due

Custom Date Due is new with Version 2. The general form for a Custom Date Due string is:

```
FUNCTION( ARG1 , ARG2 , . . . , ARGN )
```

Where FUNCTION is MAX\_DATE or MIN\_DATE and the arguments have the form: M+FREQ, where M is a finding number and FREQ is a number followed by D for days, M for months, or Y for years.

##### Example:

```
MAX_DATE ( 1+6M , 3+1Y )
```

This will take the date of finding 1 and add 6 months, the date of finding 3 and add 1 year, and set the date due to the maximum of those two dates.

When a Custom Date Due is defined, it takes precedence over the standard date due calculation. This means the normal date due calculation that is based on the dates of the resolution findings and the final frequency is not done. Only the dates of the findings and the frequencies specified in the Custom Date Due string are used. Any finding that is in the reminder definition can be used in the Custom Date Due string – it is not limited to those defined as resolution findings.

If none of the findings in the Custom Date Due string are true (this means they won't have a date) then the standard date due calculation will be used.

The final age range will still be used to determine if the patient is in the cohort; however the frequency associated with this age range is not used. Only the frequencies specified in the Custom Date Due String are used. They are added to the date of the associated finding to determine the dates used by either the MIN\_DATE or MAX\_DATE functions.

#### 4.6.2.5 Status List

Status List is new in Version 2. It applies only to finding types that have a status of:

- Inpatient Pharmacy
- Outpatient Pharmacy
- Orders
- Problem List
- Radiology

To be true, a finding has to have a status on the list, which is a change from v1.5, where status was not used for drugs. Your reminders that use these finding types may work differently in v2.0.

The status field in the reminder definition has been modified to work with Reminder terms. Assumptions for the rules for this prompt include:

1. The status field will not appear if the term has different types of finding items (for example, Radiology procedure and a drug finding item).
2. If the term contains drug finding items or taxonomies, the user will see the status field, but they will not be able to edit the field if the values in the RX TYPE are different or the Taxonomy types are different.
3. If the Reminder Term contains drugs finding items, the only status that will display will be the status that corresponds to the RX TYPE at the term level. And a blank RX TYPE will be considered as if the user enters “ALL” at the RX TYPE.
4. The Reminder Definition RX TYPE will override the term RX TYPE. So if the user has set up multiple drug finding items in the term and the RX TYPE is set to Inpatient and then they set the RX TYPE at the definition level to Outpatient, the user will only be able to select statuses that correspond to a RX TYPE of Outpatient.

#### 4.6.2.5.1 Changes Supporting the Use of Non-VA Meds (Home Meds) in Reminders

The field RXTYPE was changed to allow for non-VA meds. The allowed values are now “A” for all, “I” for inpatient, “N” for non-VA, and “O” for outpatient. “A” replaces the previous “B”. During the installation of v2.0, all “B” values will be changed to “A”. If RXTYPE is null, then it will be treated like an “A”. If RXTYPE includes non-VA meds, they will be searched for automatically, with no changes to the definition or term. This works as follows: Non-VA meds are stored by Pharmacy Orderable item and not by dispense drug; however, a dispense drug entry can have a pointer to the Pharmacy Orderable Item. If the pointer exists and RXTYPE allows it, then a search for the corresponding non-VA med will be made.

### 4.6.3 Default Statuses

Finding Type	Status
Inpatient Pharmacy	active
Outpatient Pharmacy	active
Orderable Item	suspended
Problem List	active
Radiology	active

#### 4.6.4 Outpatient Pharmacy Statuses

#	Status	Description
0	ACTIVE	Rx is active - edit, renewal, D/C, copy, refill, partial etc., could be done
1	NON-VERIFIED	EHR orders completed by a pharmacy tech. (not holding PSORPH key), need verification by a Pharmacist (holder of PSORPH key)
2	REFILL	Not used
3	HOLD	When a Rx is put on hold, no action is allowed except D/C until it is taken off hold
4	DRUG INTERACTIONS	Pending due to Drug Interactions
5	SUSPENDED	An active Rx that has a future fill date
10	DONE	Not used
11	EXPIRED	Expired Rx, copy, partials, D/C are allowed
12	DISCONTINUED	Any D/C via the backdoor -Manual D/C, D/C due to Renewal, D/C due to duplicate drug, D/C due to Drug-Drug interaction
13	DELETED	Manual delete by the supervisor - same as Rx does not exist; never shown in the profile or reports
14	DISCONTINUED BY PROVIDER	D/C via EHR by the provider
15	DISCONTINUED (EDIT)	Any edit through the backdoor for an active Rx that results in a new Rx will have this set. This will be displayed in the patient profile with status 'DE'
16	PROVIDER HOLD	On hold via EHR by the provider

- Editing a Status List
  - You are prompted for a status list only for those findings that have a status
  - Typing a “?” will give a list of appropriate statuses for the finding

#### 4.6.5 New Reminder Status

CNBD for **Can Not Be Determined**.

#### 4.6.6 Clinical Maintenance Display

```

--STATUS-- --DUE DATE-- --LAST DONE--
DEMO REMINDER - WITH GROUP          CNBD          CNBD          01/11/2001
Cohort:
Reminder Term: DEMO HYPERTENSION DIAGNOSIS
Encounter Diagnosis:
02/20/1997 401.9 HYPERTENSION NOS rank: SECONDARY
Prov. Narr. - UNKNOWN

Resolution: Last done 01/11/2001
Reminder Term: DEMO SYS >90 <131
Vital Measurement: BLOOD PRESSURE

```

```
01/11/2001; rate - 120/76

Information:
Reminder Term: DEMO DIS < 80
Vital Measurement: BLOOD PRESSURE
01/11/2001; rate - 120/76
```

```
Information about the reminder evaluation:
Patient does not meet any age criteria!
There is no reminder frequency!
```

The “Information about the reminder evaluation:” section is new.

A warning message will be sent when the status can't be determined.

### Example:

```
Subj: Reminder evaluation warnings [#37193] 10/25/04@10:55 5 lines
From: POSTMASTER (Sender: CRPROVIDER,ONE G) In 'IN' basket. Page 1 *New*
-----
The following warnings were encountered:
No reminder frequency - cannot compute due date!
While evaluating reminder JG-DEMO REMINDER
For patient DFN=54
The time of the evaluation was 10/25/2004@10:55:18
Enter message action (in IN basket): Ignore//
```

## 4.7 Activating Clinical Reminders

Once you are certain the reminder works as intended, activate the reminder and set it up in one or more of the following applications:

- Add it to a health summary
- Add it to an encounter form

### 4.7.1 Activate CPRS Parameters:

1. Add it to the CPRS GUI Cover Sheet Reminder List OR Activate the New Reminders Parameters.
2. Add it to CPRS Lookup Categories.
3. Activate the GUI Resolution parameter.
4. Set Default Outside Location.
5. Set Position Reminder Text at Cursor.

## 4.8 Activate/Inactivate Reminders (RA)

Use this option to make individual reminders active or inactive in the EHR,, Health Summary, and Encounter Forms. It is very important to inactivate old reminders in IHS since ICare uses all active reminders in its reports. If old reminders are left active, the ICare:

```
Select Reminder Definition Management Option: RA Activate/Inactivate
Reminders
Select REMINDER DEFINITION NAME: ??
Answer with REMINDER DEFINITION NAME, or REMINDER TYPE, or
PRINT NAME
Choose from:
CHOLESTEROL SCREEN (F)
LOCAL FOBT
VA-*BREAST CANCER SCREEN
VA-*CERVICAL CANCER SCREEN
VA-*CHOLESTEROL SCREEN (F)
VA-*CHOLESTEROL SCREEN (M)
VA-*COLORECTAL CANCER SCREEN (
VA-*COLORECTAL CANCER SCREEN (
VA-*FITNESS AND EXERCISE SCREE
VA-*HYPERTENSION SCREEN
VA-*INFLUENZA IMMUNIZATION
VA-*PNEUMOCOCCAL VACCINE
VA-*PROBLEM DRINKING SCREEN
Select REMINDER DEFINITION NAME: CHOLESTEROL SCREEN (F)
INACTIVE FLAG: ?
Enter "1" to inactivate the reminder item.
Choose from:
1 INACTIVE
INACTIVE FLAG: 1
```

## 5.0 Reminder Sponsor Management

This option provides the functions for Reminder Sponsor Management.

**Important:** At this time IHS is not using the reminder sponsor, but it could be used locally.

Syn.	Name	Option Name	Description
SL	List Reminder Sponsors	PXRM SPONSOR LIST	This option is used to get a list of Reminder Sponsors.
SI	Reminder Sponsor Inquiry	PXRM SPONSOR INQUIRY	This option is used to do a reminder sponsor inquiry.
SE	Edit Reminder Sponsor	PXRM SPONSOR EDIT	The option allows for editing of Reminder Sponsors.

### 5.1 Edit Reminder Sponsor

```
Select Reminder Sponsor Management Option: SE Edit Reminder Sponsor
Select Reminder Sponsor: Office of Quality & Performance NATIONAL
You cannot edit National Class Sponsors!
Select Reminder Sponsor: A NEW SPONSOR VISN
NAME: A NEW SPONSOR//
CLASS: VISN//
Select CONTACT:
Select ASSOCIATED SPONSORS:
Select Reminder Sponsor: ?
```

### 5.2 List Reminder Sponsors [PXRM SPONSOR LIST]

```
Select Reminder Sponsor Management Option: SL List Reminder Sponsors
DEVICE: ANYWHERE Right Margin: 80//
REMINDER SPONSOR LIST JAN 28,2003 10:39 PAGE 1
-----
Name: A NEW SPONSOR
Class: VISN
Name: CRPROVIDER,TWO
Class: VISN
Name: CRPROVIDER,THREE
Class: LOCAL
Name: Guidelines committee
Class: LOCAL
Name: HOSPITAL COMMITTEE
Class: LOCAL
REMINDER SPONSOR LIST JAN 28,2003 10:39 PAGE 2
-----
Name: INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ
Class: NATIONAL
Name: CRPROVIDER,FOUR
Class: NATIONAL
Name: Mental Health Group
Class: LOCAL
```

```

Name: Mental Health and Behavioral Science Strategic Group
Class: NATIONAL
Name: Mental Health and Behavioral Science Strategic Group and Women
Veterans
Health Program
Class: NATIONAL
REMINDER SPONSOR LIST JAN 28,2003 10:39 PAGE 3
-----
Name: NEW
Class: LOCAL
Name: Office of Quality & Performance
Class: NATIONAL
Name: PJH
Class: NATIONAL
Name: QUERI IHD
Class: NATIONAL
Name: SLC OIFO DEVELOPMENT
Class: NATIONAL
Name: Women Veterans Health Program
Class: NATIONAL

```

### 5.3 Reminder Sponsor Inquiry

```

Select Reminder Sponsor Management Option: SI Reminder Sponsor Inquiry
Select Reminder Sponsor: ?
Answer with REMINDER SPONSOR NAME, or ASSOCIATED SPONSORS
Do you want the entire REMINDER SPONSOR List? N (No)
Select Reminder Sponsor: ??
Choose from:
Guidelines committee LOCAL
HOSPITAL COMMITTEE LOCAL
INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ NATIONAL
CRPROVIDER,TEN NATIONAL
Mental Health Group LOCAL
Mental Health and Behavioral Science Strategic Group NATIONAL
Office of Quality & Performance NATIONAL
QUERI IHD NATIONAL
SLC OIFO DEVELOPMENT NATIONAL
Women Veterans Health Program NATIONAL
Select Reminder Sponsor: Office of Quality & Performance NATIONAL
DEVICE: ANYWHERE Right Margin: 80//
REMINDER SPONSOR INQUIRY Jan 28, 2003 10:41:47 am Page 1
-----
NUMBER: 15
Name: Office of Quality & Performance
Class: NATIONAL
Associated Sponsors:
Select Reminder Sponsor:

```

## 6.0 Reminder Taxonomy Management

The REMINDER TAXONOMY file is used to define a range of coded values from ICD Diagnosis codes, ICD Operation/Procedures codes, and CPT codes that can be viewed as being part of a clinical category (taxonomy). Reminder taxonomies provide a convenient way to group coded values and give them a name. For example, the VA-DIABETES taxonomy contains a list of diabetes diagnoses. Options on the Taxonomy Management Menu let you view and edit taxonomy definitions.

### 6.1 Improved Patient Data Source in Taxonomies in V2

- More choices for sources
- Finer control of the search
- Use a “-” to remove a source from the list, for example IN,-INM

Refer to a later section in this chapter for information about Code Set Versioning (CSV) and related MailMan messages.

### 6.2 Reminder Taxonomy Management Menu

Synonym	Option	Option Name	Description
TL	List Taxonomy Definitions	PXRM TAXONOMY LIST	Use this option to get a summary of all the taxonomies on your system. It shows the name of the taxonomy and the low and high codes for each of the possible code types.
TI	Inquire about Taxonomy Item	PXRM TAXONOMY INQUIRY	This option provides a detailed report of a Taxonomy item's definition, with a list of all the ICD0, ICD9, and CPT codes included in the taxonomy.
TE	Edit Taxonomy Item	PXRM TAXONOMY EDIT	This option is used to edit Reminder Taxonomy Item definitions.
TC	Copy Taxonomy Item	PXRM TAXONOMY COPY	This option allows the user to copy an existing taxonomy definition into a new taxonomy entry in the REMINDER TAXONOMY file (#811.2).
TX	Selected Taxonomy Expansion	PXRM TAXONOMY EXPANSION	This option can be used to selectively rebuild a taxonomy expansion.

## 6.3 Taxonomy Fields

NAME	DESCRIPTION
NAME	This is the name of the taxonomy. It must be unique. Nationally distributed taxonomies start with IHS-.
BRIEF DESCRIPTION	This is a brief description of what the taxonomy represents. This may be used to further define the intended use of this taxonomy.
DIALOG HEADER TEXT	This text will be displayed as a checkbox in the reminder dialog for this taxonomy.
INACTIVE FLAG	Enter "1" to inactivate the taxonomy. This flag is set to ACTIVE in the distribution. As part of the installation, each site should review the taxonomy definitions and inactivate those that do not meet the site's needs. If desired, a site can copy a distributed taxonomy, using the taxonomy copy option, to a local version and edit it to meet the site's needs.
PATIENT DATA SOURCE	Specifies where to search for patient data. It is a string of comma-separated key words.
USE INACTIVE PROBLEMS	Applies only to searches in Problem List. Normally inactive problems are not used. However when this field is set to YES, then both active and inactive problems are used. This field works just like the field with the same name that can be specified for a reminder definition finding or a reminder term finding. If this field is defined in the taxonomy, it will take precedence over the value of the corresponding field at the term or definition level.
CLASS	This is the class of the entry. Entries whose class is National cannot be edited or created by sites. <ul style="list-style-type: none"> <li>• N NATIONAL</li> <li>• V VISN</li> <li>• L LOCAL</li> </ul>
SPONSOR	This is the name of a group or organization that sponsors the taxonomy.
REVIEW DATE	The review date is used to determine when the entry should be reviewed to verify that it is current with the latest standards and guidelines.
EDIT HISTORY	If changes were made, the date and the name of the user making the changes will be inserted automatically. You can optionally type in a description of the changes made during the editing session.
ICD9 RANGE OF CODES (multiple)	This multiple is used to define ranges of ICD9 coded values that constitute taxonomy entries. A range is defined by a low and high value that is inclusive. The low and high values are actual codes from the source file, not internal entry numbers.
ICD0 RANGE OF CODES (multiple)	This multiple is used to define ranges of ICD0 coded values that constitute taxonomy entries. A range is defined by a low and high value that is inclusive. The low and high values are actual codes from the source file, not internal entry numbers.

NAME	DESCRIPTION
CPT RANGE OF CODES (multiple)	This multiple is used to define ranges of CPT coded values that constitute taxonomy entries. A range is defined by a low and a high value that are inclusive. The low and high values are actual codes from the source file, not internal entry numbers.
SELECTABLE DIAGNOSIS	These are the diagnosis codes that may be selected when processing a taxonomy dialog within the EHR. The list of codes is built from the code ranges within the taxonomy when the Clinical Reminders package is installed and includes only active codes.
SELECTABLE PROCEDURE	These are the procedure codes that may be selected when processing a taxonomy dialog within the EHR. The list of codes is built from the code ranges within the taxonomy when the Clinical Reminders package is installed and includes only active codes.
GENERATE DIALOG DX PARAMETER	If this parameter is set, then each active code in the selectable diagnosis list will be presented as a separate question in the EHR with text generated from the finding parameter file. Otherwise, the active selectable diagnoses will be displayed as a checkbox with the dialog header text for diagnoses. This is the default option.
CURRENT VISIT DX DIALOG HDR	This is the diagnosis dialog sub-header text that will be selectable for EHR use document a diagnosis from the taxonomy as treated at the current visit. The header text will display with a checkbox that EHR users can select to see the select diagnoses list. If this field is not present, the taxonomy name will be used.
HISTORICAL VIXIT DX DIALOG HDR	This is the diagnosis dialog sub-header text that will be selectable for EHR use document a diagnosis from the taxonomy as a historical diagnosis. The header text will display with a checkbox which EHR users can select to see the selectable diagnoses list. Historical diagnoses selected will require the EHR user to enter date. If this field is not present, the taxonomy name followed by "(HISTORICAL)" used.
GENERATE DIALOG PR PARAMETER	If this parameter is set, then each active code in the selectable procedure list will be presented as a separate question in the EHR with text generated from the finding parameter file. Otherwise, the active selectable procedures will be displayed as checkboxes with the dialog header text for procedures. This is the default option.
CURRENT VISIT PR DIALOG HDR	This is the procedure dialog sub-header text that will be selectable for EHR user document a procedure from the taxonomy as done at the current visit. The head will display with a checkbox which EHR users can select to see the selectable procedure list. If this field is not present, the taxonomy name will be used.
HISTORICAL VISIT PR DIALOG HDR	This is the procedure dialog sub-header text that will be selectable for EHR user document a procedure from the taxonomy as a historical procedure. The header will display with a checkbox which EHR users can select to see the selectable procedure list. Historical procedures selected will require the EHR user to enter a visit date. If this field is not present, the taxonomy name followed by "(HISTORICAL)" used.

PATIENT DATA SOURCE specifies where to search for patient data. It is a string of comma-separated key words. The keywords and their meanings are:

KEYWORD	MEANING
ALL	Search in All sources (default)
EN	Search encounter (PCC) data
ENPP	Search PCC encounter data, principal procedure (CPT) only
ENPD	Search PCC encounter data, principal diagnosis (ICD9) only
ENPR	Search PCC data for primary diagnosis only
IN	Search in the inpatient data file PTF (V PROCEDURE for IHS)
INDXLS	Search in PTF for DXLS diagnosis (ICD9) only
INM	Search in PTF inpatient diagnosis (ICD9) movement only Not for IHS
INPD	Search in PTF inpatient primary diagnosis (ICD9) only
INPR	Search in PTF for principal diagnosis only
PL	Search for Problem List diagnosis only
RA	Search in Radiology for radiology CPT codes.

You may use any combination of these keywords. An example is EN,RA. This would cause the search to be made in V CPT and Radiology for CPT codes. If PATIENT DATA SOURCE is left blank, the search is made in all the possible sources. You can also use a “-” to remove a source from the list; for example, IN,-INM.

**Note:** IHS does not use the PTF file. Inpatient procedure codes are entered into the V PROCEDURE file. An index into this file was created for version 2.0 and will be used if ICD0 codes are selected and Inpatient visits are chosen.

## 6.4 List Taxonomy Definitions (TL)

Use this option to get a summary of all the taxonomies on your system. It shows the name of the taxonomy and the low and high codes for each of the possible code types.

```
Select Reminder Taxonomy Management Option: TL List Taxonomy Definitions
DEVICE: <Enter> ANYWHERE Right Margin: 80//<Enter>
REMINDER TAXONOMY LIST
      ICD9 RANGE          ICD0 RANGE          CPT RANGE
NAME  LOW    HIGH    LOW    HIGH    LOW    HIGH
-----
FTTEST1
      100.9 100.9  99.52  99.52
PAIN TAXONOMY
```

```

388.71 388.72 62350 62351
719.40 719.49 90783 90784
724.1 724.1
789.00 789.09
724.2 724.2
926.11 926.11
724.5 724.5
PROBTTEST 1
311. 311. 90724 90724
PROBTTEST 2
495.2 495.2
Pain - Lower Back
388.71 388.72 62350 62351
719.40 719.49 90783 90784
724.1 724.1
789.00 789.09
724.2 724.2
926.11 926.11
724.5 724.5
RADTAX
76091 76091
71030 71030
SL ALCOHOL ABUSE
291.0 291.9
303.00 303.93
305.00 305.03
571.0 571.3
760.71 760.71
790.3 790.3
980.0 980.0
357.5 357.5
425.5 425.5
535.3 535.31
V11.3 V11.3

```

## 6.5 Inquire about Taxonomy Item (TI)

Use this option to get the details of a single taxonomy.

Note the new headings for Activation and Inactivation Dates and Selectable; these are a result of the Code Set Versioning project.

```

Select Reminder Taxonomy MTInquire about Taxonomy Item
anagement Option: ISelect Reminder Taxonomy: VA-PNEUMOCOCCAL VACCINE
Pneumococcal vaccine codes
...OK? Yes// <Enter> (Yes)
DEVICE: <Enter> ANYWHERE Right Margin: 80// <Enter>
REMINDER TAXONOMY INQUIRY Jan 13, 2004 10:15:50 am Page 1
-----
NUMBER: 25
VA-PNEUMOCOCCAL VACCINE
-----
Brief Description:
Pneumococcal vaccine codes
Class: NATIONAL
Sponsor:
Review Date:
Edit History:

```

```

Patient Data Source:
Use Inactive Problems:
ICD9 Codes:
Range V06.6-V06.6 Adjacent Lower-V06.5 Adjacent Higher-V06.8
Code ICD Diagnosis Activation Inactivation Selectable
-----
V06.6 PROPHY VACC STREP PNEU&FLU 10/01/1978 X
ICD0 Codes:
Range 99.55-99.55 Adjacent Lower-99.54 Adjacent Higher-99.56
Code ICD Operation/Procedure Activation Inactivation
-----
99.55 VACCINATION NEC 10/01/1978
Range 99.59-99.59 Adjacent Lower-99.58 Adjacent Higher-99.60
Code ICD Operation/Procedure Activation Inactivation
-----
99.59 VACCINATION/INNOCULA NEC 10/01/1978
CPT Codes:
Range G0009-G0009 Adjacent Lower-G0008 Adjacent Higher-G0010
Code CPT Short Name Activation Inactivation Selectable
-----
G0009 Admin pneumococcal vaccine 07/01/1995 X
Range 90732-90732 Adjacent Lower-90731 Adjacent Higher-90733
Code CPT Short Name Activation Inactivation Selectable
-----
90732 PNEUMOCOCCAL VACCINE 06/01/1994

```

## 6.6 Edit Taxonomy Item (TE)

Use this option to edit a single taxonomy definition. National IHS taxonomies are editable.

```

Select Reminder Taxonomy Management Option: TE Edit Taxonomy Item
Select Reminder Taxonomy Item: SLC DIABETES SLC DIABETES CODES
General Taxonomy Data
NAME: SLC DIABETES// <Enter>
BRIEF DESCRIPTION: SLC DIABETES CODES// <Enter>
CLASS: LOCAL
SOURCE:
REVIEW DATE:
PATIENT DATA SOURCE: PL
USE INACTIVE PROBLEMS: <Enter>
INACTIVE FLAG: <Enter>
ICD0 Range of Coded Values
Select ICD0 LOW CODED VALUE: <Enter>
ICD9 Range of Coded Values
Select ICD9 LOW CODED VALUE: 391.8// <Enter>
ICD9 LOW CODED VALUE: 391.8//<Enter>
ICD9 HIGH CODED VALUE: 391.8// <Enter>
Select ICD9 LOW CODED VALUE: <Enter>
CPT Range of Coded Values
Select CPT LOW CODED VALUE: 10060// <Enter>
CPT LOW CODED VALUE: 10060// <Enter>
CPT HIGH CODED VALUE: 100<Enter>
60// Select CPT LOW CODED VALUE: <Enter>
Select Reminder Taxonomy Item: <Enter>

```

## 6.7 Copy Taxonomy Item (TC)

Use this option to copy an existing taxonomy definition into a new entry in the REMINDER TAXONOMY file (#811.2). Once the taxonomy has been copied, you have the option of editing it.

```
Select Reminder Taxonomy Management Option: TC Copy Taxonomy Item
Select the taxonomy item to copy: VA-ALCOHOL ABUSE Alcohol abuse codes
PLEASE ENTER A UNIQUE NAME: SL ALCOHOL ABUSE
The original taxonomy VA-ALCOHOL ABUSE has been copied into SL ALCOHOL
ABUSE.
Do you want to edit it now? YES
General Taxonomy Data
.
.
.
```

*If you choose to edit the taxonomy you've copied, you will see the same prompts as in Edit Taxonomy Item, described on the previous page.*

## 6.8 Code Set Versioning Changes

The Health Insurance Portability and Accessibility Act (HIPAA) stipulates that specific code sets used for billing purposes must be versioned based on the date of service. Those code sets must be applicable at the time the service is provided. Clinical Reminders was required to make changes to ensure that users would be able to select codes and translations based upon a date that an event occurred with the SDO established specific code and translation that existed on an event date. Clinical Reminders has been modified so that Clinical Application Coordinators (CACs) can identify ranges of codes where the adjacent values have changed because of a code set versioning update. A new option and several wording and format changes appear in taxonomy and dialog options.

Changes in Clinical Reminders:

- Taxonomy option changes: Updating taxonomies (adjacent codes) in Edit Taxonomy
- Dialog Management option changes: Editing FINDING ITEMS and ADDITIONAL FINDING ITEMS
- Mail Messages (List Manager and GUI)

After Version 2 of Clinical Reminders is installed, you may start receiving mail messages about taxonomy/code updates and Reminder Dialog ICPT Code changes. Those individuals assigned to the Reminders mail group at your site will receive the messages. These updates normally occur quarterly, so you shouldn't receive these continuously. When you receive the messages, review them to see what action should be taken, if any. You may need to change the taxonomy low or high-coded values. It may be appropriate to retain inactive codes for some reminders and dialogs; for example, Pneumovaxes, which are only given once in a lifetime.

## 6.8.1 CSV Messages

```

Subj: Reminder Dialog ICPT Code changes [#17926] 04/10/03@14:42 33 lines
From: POSTMASTER (Sender: CRPROVIDER,ONE) In 'IN' basket. Page 1 *New*
-----
New Code Set Post Installation Processing
Clinical Reminder Post Installation Processing for
Reminder Dialog file (801.41) Finding Items - ICPT Changes.
-----
Please review the FINDING ITEM and ADDITIONAL FINDING Items changes
currently used by REMINDER DIALOGS that need changes before the EFFECTIVE
DATE. If the changes are not made, the FINDING ITEM will not be used in
CPRS GUI processing once the effective date has passed.

Consider adding another ADDITIONAL FINDING Items to the reminder dialog
entry, which will be active after the FINDING ITEM code status effective
date makes the current FINDING ITEM inactive. This will allow the dialog to
have old and new codes to be associated with a dialog element, and only use
the one effective for the encounter date.

Eventually, the inactive FINDING ITEM or ADDITIONAL FINDING Items should be
removed from the dialog element. Make changes using the Reminder Dialog
Management [PXRM DIALOG MANAGEMENT] option.

Note: FI=FINDING ITEM field AFI=ADDITIONAL FINDING ITEMS field.

Note: [finding type] (status)
-----
Report Data to Follow:
ICPT FI: A9160 Podiatrist non-covered servi (Inactive 4/1/02 Past)
Found in: CODE SET ELEMENT [dialog element] (Enabled)
Used by: CODE SET TEST [reminder dialog] (Enabled)
-----
ICPT AFI: A0215 AMBULANCE SERVICE, MISCELLAN (Inactive 7/1/95 Past)
Found in: CODE SET ELEMENT [dialog element] (Enabled)
Used by: CODE SET TEST [reminder dialog] (Enabled)
-----
Enter message action (in IN basket): Ignore//
Subj: Taxonomy updates due to new CPT global installation. [#17925]
04/10/03@14:42 174 lines
From: POSTMASTER (Sender: CRPROVIDER,ONE) In 'IN' basket. Page 1
-----
There was a CPT code set update on 04/10/2003.
This could affect adjacent codes and/or taxonomy expansions.
Detailed information for affected taxonomies follows.
Taxonomy: VA-FLEXISIGMOIDOSCOPY = TX(15)
Selectable CPT code 45336 is inactive.
Selectable CPT code 45360 is inactive.

```

Selectable CPT code 45365 is inactive.  
 Selectable CPT code 45367 is inactive.  
 Selectable CPT code 45368 is inactive.  
 Selectable CPT code 45369 is inactive.  
 Selectable CPT code 45370 is inactive.  
 Selectable CPT code 45372 is inactive.  
 Taxonomy: VA-MASTECTOMY = TX(19)  
 Selectable CPT code T1950 is inactive.  
 Selectable CPT code T1951 is inactive.  
 Selectable CPT code T1952 is inactive.  
 Selectable CPT code T1953 is inactive.  
 Selectable CPT code T1954 is inactive.  
 Selectable CPT code T1955 is inactive.  
 Selectable CPT code T1956 is inactive.  
 Selectable CPT code T1957 is inactive.  
 Selectable CPT code T1958 is inactive.  
 Selectable CPT code T1959 is inactive.  
 Selectable CPT code T1960 is inactive.  
 Selectable CPT code T1961 is inactive.  
 Selectable CPT code T1962 is inactive.  
 Selectable CPT code T1963 is inactive.  
 Selectable CPT code T1964 is inactive.  
 Selectable CPT code T1965 is inactive.  
 Selectable CPT code T1966 is inactive.  
 Selectable CPT code T1967 is inactive.  
 Selectable CPT code T1968 is inactive.  
 Selectable CPT code T1969 is inactive.  
 Selectable CPT code T1970 is inactive.  
 Selectable CPT code T1971 is inactive.  
 Selectable CPT code T1972 is inactive.  
 Selectable CPT code T1973 is inactive.  
 Selectable CPT code T1975 is inactive.  
 Selectable CPT code T1976 is inactive.  
 Taxonomy: VA-OBESITY = TX(20)  
 Selectable CPT code 44131 is inactive.  
 Taxonomy: VA-HYPERTENSION SCREEN = TX(23)  
 Selectable CPT code 80060 is inactive.  
 Taxonomy: VA-CHOLESTEROL = TX(24)  
 Selectable CPT code 82470 is inactive.  
 Selectable CPT code 83700 is inactive.  
 Selectable CPT code 83705 is inactive.  
 Selectable CPT code 83720 is inactive.  
 Selectable CPT code G0054 is inactive.  
 Taxonomy: VA-TETANUS DIPHTHERIA = TX(29)  
 Selectable CPT code 90711 is inactive.  
 Taxonomy: VA-CERVICAL CANCER SCREEN = TX(30)  
 Selectable CPT code Q0060 is inactive.  
 Selectable CPT code Q0061 is inactive.  
 Taxonomy: VA-INFLUENZA IMMUNIZATION = TX(33)  
 Selectable CPT code 90724 is inactive.  
 Selectable CPT code Q0034 is inactive.  
 Taxonomy: CSTEST = TX(41)  
 Adjacent codes have changed for the range defined by:  
 Low code C2805-Jewel AF 7250 Defib  
 High code C2807-Contak CD 1823  
 Old adjacent lower code C2803-Ventak Prizm DR HE Defib  
 New adjacent lower code C2804-Ventak Prizm 2 DR Defib  
 Old adjacent higher code C2808-Contak TR 1241  
 New adjacent higher code C3001-Kainox SL/RV defib lead  
 Adjacent codes have changed for the range defined by:  
 Low code C2805-Jewel AF 7250 Defib

High code C2807-Contak CD 1823  
 Old adjacent lower code C2803-Ventak Prizm DR HE Defib  
 New adjacent lower code C2804-Ventak Prizm 2 DR Defib  
 Old adjacent higher code C2808-Contak TR 1241  
 New adjacent higher code C3001-Kainox SL/RV defib lead  
 Adjacent codes have changed for the range defined by:  
 Low code C2805-Jewel AF 7250 Defib  
 High code C2807-Contak CD 1823  
 Old adjacent lower code C2803-Ventak Prizm DR HE Defib  
 New adjacent lower code C2804-Ventak Prizm 2 DR Defib  
 Old adjacent higher code C2808-Contak TR 1241  
 New adjacent higher code C3001-Kainox SL/RV defib lead  
 Adjacent codes have changed for the range defined by:  
 Low code C2805-Jewel AF 7250 Defib  
 High code C2807-Contak CD 1823  
 Old adjacent lower code C2803-Ventak Prizm DR HE Defib  
 New adjacent lower code C2804-Ventak Prizm 2 DR Defib  
 Old adjacent higher code C2808-Contak TR 1241  
 New adjacent higher code C3001-Kainox SL/RV defib lead  
 The following are new CPT codes in the expansion for this taxonomy:  
 C2804-Ventak Prizm 2 DR Defib  
 C2805-Jewel AF 7250 Defib  
 C2808-Contak TR 1241  
 Selectable CPT code C2804 is inactive.  
 Selectable CPT code C2805 is inactive.  
 Selectable CPT code C2806 is inactive.  
 Selectable CPT code C2807 is inactive.  
 Selectable CPT code C2808 is inactive.  
 Taxonomy: VA-PSYCHOTHERAPY CPT CODES = TX(50)  
 Adjacent codes have changed for the range defined by:  
 Low code C2805-Jewel AF 7250 Defib  
 High code C2807-Contak CD 1823  
 Old adjacent lower code C2803-Ventak Prizm DR HE Defib  
 New adjacent lower code C2804-Ventak Prizm 2 DR Defib  
 Old adjacent higher code C2808-Contak TR 1241  
 New adjacent higher code C3001-Kainox SL/RV defib lead  
 Adjacent codes have changed for the range defined by:  
 Low code C2805-Jewel AF 7250 Defib  
 High code C2807-Contak CD 1823  
 Old adjacent lower code C2803-Ventak Prizm DR HE Defib  
 New adjacent lower code C2804-Ventak Prizm 2 DR Defib  
 Old adjacent higher code C2808-Contak TR 1241  
 New adjacent higher code C3001-Kainox SL/RV defib lead  
 Adjacent codes have changed for the range defined by:  
 Low code C2805-Jewel AF 7250 Defib  
 High code C2807-Contak CD 1823  
 Old adjacent lower code C2803-Ventak Prizm DR HE Defib  
 New adjacent lower code C2804-Ventak Prizm 2 DR Defib  
 Old adjacent higher code C2808-Contak TR 1241  
 New adjacent higher code C3001-Kainox SL/RV defib lead  
 Adjacent codes have changed for the range defined by:  
 Low code C2805-Jewel AF 7250 Defib  
 High code C2807-Contak CD 1823  
 Old adjacent lower code C2803-Ventak Prizm DR HE Defib

```
New adjacent lower code C2804-Ventak Prizm 2 DR Defib
Old adjacent higher code C2808-Contak TR 1241
New adjacent higher code C3001-Kainox SL/RV defib lead
The following are new CPT codes in the expansion for this taxonomy:
C2804-Ventak Prizm 2 DR Defib
C2805-Jewel AF 7250 Defib
C2808-Contak TR 1241
Taxonomy: SLC-Ear Mites = TX(660001)
Selectable CPT code 69221 is inactive.
Taxonomy: PROBTEST 1 = TX(660006)
Selectable CPT code 90724 is inactive.
Subj: Reminder Dialog ICD9 AND CPT Code changes [#14085] 05/20/03@10:48
6 lines
From: POSTMASTER (Sender: CRPROVIDER,ONE) In 'IN' basket. Page 1 *New*
-----
Report of Inactive ICD9 and CPT Codes referenced in the Reminder
Dialog file.
Note: FI=FINDING ITEM field AFI=ADDITIONAL FINDING ITEMS field
Note: [finding type] (status)
```

## 7.0 Reminder Term Management

A reminder term provides a way to group findings under a single name, just as a taxonomy lets you group a set of codes under a single name. Each term has a findings multiple that is just like the findings multiple in the reminder definition. The list of possible findings in a term is the same as in a definition except that a term cannot have another term as a finding.

When a term is evaluated, the entire list of findings is evaluated and the most recent true finding is used for the value of the term. If none of the findings are true, then the term is false.

A term's Class can be:

- National (N)
- VISN (V)
- Local (L)

These options are necessary for national guidelines/reporting. The Reminder Term functionality allows you to map local or VISN-level findings to national terms.

### 7.1 Reminder Term Management Options

Synonym	Option	Option Name	Description
TL	List Reminder Terms	PXRМ TERM LIST	This option allows a user to display a list of reminder terms that have been defined.
TI	Inquire about Reminder Term	PXRМ TERM INQUIRY	This option allows a user to display the contents of a reminder term in an easy-to-read format.
TE	Reminder Term Edit	PXRМ TERM EDIT	This option is used to edit reminder terms. <b>Note:</b> Name the reminder terms using all capital letters because the names are case-sensitive.
TC	Copy Reminder Term	PXRМ TERM COPY	This option allows a user to copy an existing reminder term into a new one. The new term must have a unique name.

### 7.2 List Reminder Terms (TL)

This option is used to give a brief listing of reminder terms.

```

Select Reminder Term Management Option: TL List Reminder Terms
DEVICE: ANYWHERE Right Margin: 80//
REMINDER TERM LIST SEP 16,2003 14:17 PAGE 1
-----
ACUTE MEDICAL CONDITION
  Class: NATIONAL
  Date Created:
  Sponsor:
  Review Date:
  Description: Screening for depression may not be possible in patients
with acute medical conditions. This term represents any data element
that is used to indicate that the patient has an acute medical condition
that prevents screening for depression. E.g. delirium, alcohol
hallucinosi s, florid psychosis, MI's and other medical emergencies.

Findings: UNABLE TO SCREEN-ACUTE MED CONDITION (FI(1)=HF(107))
AIM EVALUATION NEGATIVE
  Class: NATIONAL
  Date Created:
  Sponsor:
  Review Date:
  Description: Represents any AIM evaluation that is negative or normal.

  Findings: AIMS (FI(2)=MH(234))

AIM EVALUATION POSITIVE
  Class: NATIONAL
  Date Created:
  Sponsor:
  Review Date:
  Description: Represents any AIM evaluation that is positive or scored
above the cutoff defined as abnormal. (AIMS greater than or equal to 7)

  Findings: AIMS (FI(2)=MH(234))

ALANINE AMINO (ALT) (SGPT)
  Class: NATIONAL
  Date Created: MAY 21,2000
  Sponsor: INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ
  Review Date:
  Description: This term represents serum glutamic-pyruvic transaminase
or ALT laboratory tests. Enter the finding items from the
Laboratory Test file (#60) that represent the SGPT test.
National terms related to this term.
WKLD CODE file (#64): The national lab test term is
Transferase Alanine Amino SGPT.
CPT File (#81) procedure:
CPT code: 84460 SHORT NAME: ALANINE AMINO (ALT) (SGPT)
CPT CATEGORY: CHEMISTRY SOURCE: CPT
EFFECTIVE DATE: JUN 01, 1994 STATUS: ACTIVE
DESCRIPTION: TRANSFERASE;
DESCRIPTION: ALANINE AMINO (ALT) (SGPT)
Lexicon: The CPT code is in the Lexicon term as a
Laboratory Procedure term.
Findings:
ANTIDEPRESSANT MEDICATIONS
  Class: NATIONAL
  Date Created: DEC 28,2000
  Sponsor:
  Review Date:
  Description:

```

```
Findings: CN600 (FI(1)=DC(86))
CN609 (FI(2)=DC(395))
CN602 (FI(3)=DC(88))
CN601 (FI(4)=DC(87))
BUSPIRONE (FI(5)=DG(1165))
```

## 7.3 Inquire about Reminder Term (TI)

This option lets you display the contents of a reminder term in an easy-to-read format.

```
Select Reminder Term Management Option: TI Inquire about Reminder Term
Select Reminder Term:      IHD DIAGNOSIS      NATIONAL
...OK? Yes//      (Yes)
DEVICE: ANYWHERE      Right Margin: 80//
REMINDER TERM INQUIRY      Jul 03, 2003 11:06:58 am Page 1
-----
IHD DIAGNOSIS      No.27
-----
Class:      NATIONAL
Sponsor:      Office of Quality & Performance
Date Created:      JUL 23,2001
Review Date:
Description:
This term represents patients diagnosed with Ischemic Heart Disease (IHD).

This term is distributed pre-mapped to the VA-ISCHEMIC HEART DISEASE
taxonomy. The Active Problem list, Inpatient Primary Diagnosis and
Outpatient Encounter Diagnosis are used to search for IHD ICD9 diagnoses.

Edit History:
  Edit Date: JAN 18,2002 16:03 Edit By: CRPROVIDER,ONE
  Edit Comments: Exchange Install
Findings:

  Finding Item: VA-ISCHEMIC HEART DISEASE (FI(1)=TX(14))
  Finding Type: REMINDER TAXONOMY

Use Inactive Problems: NO
```

## 7.4 Reminder Term Edit (TE)

You can edit terms or add new ones with this option. If the term is National, you can enter new Findings Items, but can't edit other fields. You can edit any fields for VISN or Local terms.

**Note:** Dates, Conditions, and other data entered for Reminder Terms take precedence over the same data entered in Reminder Definitions.

### 7.4.1 Reminder Term Edit Example

**Mapping the local findings, HEPATITIS B SURFACCE ANTIBODY, to the National term, HBs.**

```

Select Reminder Term: HBS
  1 HBS Ab positive NATIONAL
  2 HBS Ag positive NATIONAL
CHOOSE 1-2: 1 HBS Ab positive NATIONAL
Select Finding: HEPATITIS B SURFACE ANTIBODY < This is where you enter
the local finding name.
FINDING ITEM: HEPATITIS B SURFACE ANTIBODY// <Enter>
BEGINNING DATE/TIME: <Enter>
ENDING DATE/TIME: <Enter>
OCCURRENCE COUNT: ??
  This is the maximum number of occurrences of the finding to return.
OCCURRENCE COUNT: 3
CONDITION: I (V["POS"]!(V=
"+") CONDITION CASE SENSITIVE: <Enter>
USE COND IN FINDING SEARCH: ?
  Enter a "Yes" if you want the Condition used in the finding search.
  Choose from: 1
    1 YES
    0 NO
USE COND IN FINDING SEARCH:
  Choose from: 1
    IM HEPATITIS B
Finding #: 1

Select Finding: <Enter>
Input your edit comments.
Edit? NO// <Enter>

Select Reminder Term: <Enter>

```

**Note:** In most cases a finding modifier on a term takes precedence over the modifier in the definition. An exception to this is the Occurrence Count. The reason for this can be understood by looking at an example. Let's say a term has been mapped to three findings with an Occurrence Count of 1 for finding 1, 2 for finding 2, and 3 for finding 3. If the maximum number of occurrences is found for each finding then how do you determine how many occurrences to display? In this case we would have 6 occurrences so we have the possibility of displaying anywhere between 1 and 6 of them. The solution is to display the number of occurrences specified at the definition level.

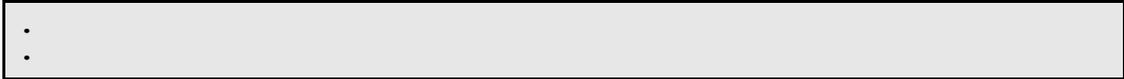
## 7.5 Copy Reminder Term (TC)

This option lets you copy an existing reminder term into a new one. The new term must have a unique name.

```

Select Reminder Term Management Option: TC Copy Reminder Term
Select the reminder term to copy: EDUTERM
Reminder term to copy: EDUTERM
...OK? Yes// <Enter> (Yes)
PLEASE ENTER A UNIQUE NAME: SLC EDUTERM
The original reminder term EDUTERM has been copied into SLC EDUTERM.
Do you want to edit it now? YES
NAME: SLC EDUTERM// <Enter>
.

```



**If you choose to edit the copied term, the sequence of prompts is the same as those shown under Reminder Term Edit, shown on the previous pages.**

## 8.0 Reminder Location List Management

This menu provides options for creating and editing Reminder Location Lists. Location Lists are a new finding type; they look for visits at a location, and can include Clinic Stops and Hospital Locations.

Syn.	Name	Option Name	Description
LL	List Location Lists	PXRМ LOCATION LIST LIST	This option is used to get a list of Location Lists.
LI	Location List Inquiry	PXRМ LOCATION LIST INQUIRY	This option is used to do a Location List inquiry.
LE	Edit Location List	PXRМ LOCATION LIST EDIT	This option allows creation and editing of Location Lists.

### 8.1 Location List Inquiry

```
Select Reminder Location List Management Option: ll Location List Inquiry
Select LOCATION LIST: jg-list LOCAL
DEVICE: ;;999 ANYWHERE Right Margin: 80//
REMINDER LOCATION LIST INQUIRY Sep 16, 2003 2:11:04 pm Page 1
-----
NUMBER: 6
Name: jg-list
Class: LOCAL
Description:
Clinic Stops:
ALCOHOL SCREENING 706
ALCOHOL TREATMENT 81
Hospital Locations:
8W SUBSTANCE ABUSE
Select LOCATION LIST:
```

### 8.2 List Location Lists

This option is used to get a list of Location Lists.

```
Select Reminder Location List Management Option: ll List Location Lists
DEVICE: ;;999 ANYWHERE Right Margin: 80//
REMINDER LOCATION LIST LIST SEP 16,2003 14:08 PAGE 1
AMIS
REPORTING
CLINIC STOP STOP CODE
HOSPITAL LOCATION
-----
Name: TEST LOCATION LIST
Class: LOCAL
Clinic Stops:
Hospital Locations:
CARDIOLOGY
PULMONARY CLINIC
```

```

OR 1
Name: VA-IHD QUERI CLINIC STOPS
Class: NATIONAL

Clinic Stops:
GENERAL INTERNAL MEDICINE 301
CARDIOLOGY 303
ENDO./METAB (EXCEPT DIABETES) 305
DIABETES 306
HYPERTENSION 309
PULMONARY/CHEST 312
PRIMARY CARE/MEDICINE 323
GERIATRIC PRIMARY CARE 350
MENTAL HEALTH CLINIC - IND 502
WOMEN'S CLINIC 322

Hospital Locations:
Name: VA-MH QUERI MH CLINIC STOPS
Class: NATIONAL

Clinic Stops:
MENTAL HEALTH CLINIC - IND 502
Hospital Locations:
Name: VA-MH QUERI PC CLINIC STOPS
Class: NATIONAL

Clinic Stops:
GENERAL INTERNAL MEDICINE 301
CARDIOLOGY 303
WOMEN'S CLINIC 322
ENDO./METAB (EXCEPT DIABETES) 305
PRIMARY CARE/MEDICINE 323
DIABETES 306
HYPERTENSION 309
PULMONARY/CHEST 312
MH PRIMARY CARE TEAM - IND 531

Hospital Locations:
Name: jg-list
Class: LOCAL

Clinic Stops:
ALCOHOL SCREENING 706
ALCOHOL TREATMENT 81
Hospital Locations:
8W SUBSTANCE ABUSE
Name: new location list
Class: LOCAL

Clinic Stops:
CARDIOLOGY 29

Hospital Locations:

```

## 8.3 Edit Location Lists

```

Select Reminder Location List Management Option: 1e Edit Location List
Select Location List: tEST LOCATION LIST          LOCAL

```

```

NAME: TEST LOCATION LIST//
CLASS: LOCAL//
DESCRIPTION:
l>test list
EDIT Option:
Select CLINIC STOP: CARDIOLOGY//
Select HOSPITAL LOCATION: OR 1//

Select Location List:

```

## 8.4 Create a New Location List

Use Edit Location List to create a new list.

```

Select Reminder Location List Management Option: le Edit Location List

Select Location List: jg-list
  Are you adding 'jg-list' as a new REMINDER LOCATION LIST (the 6TH)?
  No//y
  (Yes)
REMINDER LOCATION LIST CLASS: l LOCAL
NAME: jg-list//
CLASS: LOCAL//
DESCRIPTION:
  No existing text
  Edit? NO//
Select CLINIC STOP: ?
  You may enter a new CLINIC STOP LIST, if you wish
  Enter a clinic stop code

Answer with CLINIC STOP NAME, or AMIS REPORTING STOP CODE
Do you want the entire 405-Entry CLINIC STOP List
  ^
Select CLINIC STOP: alcohol screening          706
  Are you adding 'ALCOHOL SCREENING' as a new CLINIC STOP LIST (the 1ST
  For this REMINDER LOCATION LIST)? No// y
  (Yes)
Select CLINIC STOP: alcohol tr
  1 ALCOHOL TREATMENT          81
  2 ALCOHOL TREATMENT-GROUP    556
  3 ALCOHOL TREATMENT-INDIVIDUAL 508
CHOOSE 1-3: 1 ALCOHOL TREATMENT          81
  Are you adding 'ALCOHOL TREATMENT' as a new CLINIC STOP LIST (the 2ND
  For this REMINDER LOCATION LIST)? No// y
  (Yes)
Select CLINIC STOP:
Select HOSPITAL LOCATION: ?
  You may enter a new HOSPITAL LOCATION LIST, if you wish
  Enter a hospital location

Answer with HOSPITAL LOCATION NAME, or ABBREVIATION, or STOP CODE NUMBER,
or CREDIT STOP CODE, or TEAM
Do you want the entire 50-Entry HOSPITAL LOCATION List?

Select HOSPITAL LOCATION: 8w SUBSTANCE ABUSE
  Are you adding '8W SUBSTANCE ABUSE' as a new HOSPITAL LOCATION LIST (the
  1ST for this REMINDER LOCATION LIST)? No//y
  (Yes)

```

Select HOSPITAL LOCATION:

## 9.0 Reminder Exchange

The Clinical Reminders Exchange Utility provides a mechanism for sharing reminder definitions and dialogs among sites throughout IHS or among sites within area. Exchanging reminders helps to simplify reminder and dialog creation. It also helps to promote standardization of reminders based on local, area-wide, and national guidelines.

With the Exchange Utility, you can put a set of “packed reminders” into a host file, and the host file can be posted on a web site for download. Once the host file is on the site’s system, the Exchange Utility can load the host file into the site’s Exchange File (#811.8). After the host file is loaded into the Exchange File, the packed reminders can be installed.

**Note:** Using the Reminder Exchange options generally requires programmer access (@).

Reminder Exchange allows the exchange of Clinical Reminders and reminder dialogs:

- From test account to production
- Between sites
- National Reminders

### 9.1 Terminology

Exchange File (#811.8): Stores entries of packed reminders and dialogs with their components. Think of it as a ZIP file that contains:

- All Reminder information
- All Dialog information

The default file extension is .PRD (Packed Reminder Definition).

Packed reminders can be exchanged through VistA MailMan or as a HOST file.

### 9.2 VistA MailMan

MailMan allows users to send the packed reminder via a VistA mail message. When sites are collaborating on development of new reminders and dialogs, messages may be sent between sites for loading into the Clinical Reminders Exchange File (#811.8).

## 9.3 HOST File

Often the domains for MailMan transmission for test accounts are closed. In this case, a host file is used to transport the packed reminders. When a host file is created, it is initially stored on the Mumps server.

(Host file is the terminology used in Kernel.) Typically, you would generate a host file for use on a web site. The Host File will have to be moved from the Mumps server to the web server. Once it is on the web server, it can be downloaded using a web browser. This will initially put it on your PC. Then it will have to be moved from the PC to the Mumps server, at which point it can be loaded into the Exchange File (#811.8).

## 9.4 Technical Overview

In the reminder exchange utility, reminder definitions are first packed into the Exchange File (#811.8) in XML format. Host file or MailMan messages can then be created from the Exchange File for distribution to other sites. Each host file or MailMan message may contain several packed reminders. When the receiving site loads a host file or MailMan message into its Exchange File, all the packed reminders in the host file or MailMan message are put into the Exchange File. Different versions of the same packed reminder may be stored in the Exchange File. They are differentiated by the Date Packed.

All the components used in the reminder definition and dialog are included. Whenever an installation is done, a history of the installation details is retained in the Exchange File.

Reminder dialogs are installed with the disabled field set to “DISABLED IN REMINDER EXCHANGE.” (When you edit the dialog, one of the fields is DISABLE. If this field contains any text, then the dialog is disabled. To enable it, delete the text.)

## 9.5 Steps to Use Reminder Exchange

### 9.5.1 Summary of Steps

Detailed steps are provided in the following pages.

### 9.5.2 Export Steps

Step	Action
1. Decide which reminder to pack	LR – List Reminder Descriptions and RI – Reminder Inquiry

2. Put the reminder into the Exchange File – this packs it	CFE – Create File Entry
3. Export the reminder(s)	CHF – Create Host File or CMM – Create MailMan Message

### 9.5.3 Import Steps

Step	Action
1. Import the reminder(s) into your Exchange File	LHF – Load Host File or LMM – Load MailMan Message
2. Install the reminder	IFE – Install File Entry
3. Review what you have done	IH – Installation History
4. Remove entries from your Exchange File when they are no longer needed	DFE – Delete File Entry

## 9.6 Reminder Exchange Main Screen [PXRМ REMINDER EXCHANGE]

When you select Reminder Exchange from the Reminder Managers Menu, the Clinical Reminder Exchange main screen opens, which contains a list of current Exchange File entries in your system (if any) and all the options (actions) to create and delete Exchange File entries, to load them into host files and MailMan messages for export, and to import packed reminders from incoming host files and MailMan messages.

List Reminder Definitions and Reminder Definition Inquiry are also included so that you can review reminders before loading them into the Exchange File.

Clinical Reminder Exchange		Sep 16, 2004@15:20:11	Page: 1 of 1
Exchange File Entries.			
Entry	Source	Date Packed	
1 CDUE	CRUSER, ONE@SALT CITY	08/08/2003@10:59:52	
2 CHA UNVESTED PATIENTS	CRPROVIDER, TWO@VAMC ONE	09/26/2004@13:00:59	
6 EDUTEST	CRUSER, ONE@SALT CITY	06/19/2004@11:59:52	
8 Hypertension Screen (VHACHS	CRPROVIDER, SIX@VAMC SIX	09/20/2004@10:59:22	
+ Next Screen    - Previous Screen    More Actions			
CFE Create Exchange File Entry	IH	Installation History	
CHF Create Host File	LHF	Load Host File	
CMM Create MailMan Message	LMM	Load MailMan Message	
DFE Delete Exchange File Entry	LR	List Reminder Definitions	
IFE Install Exchange File Entry	RI	Reminder Definition Inquiry	

Figure 9-1: Clinical Reminder Exchange window

### 9.6.1 Steps to Export Reminders

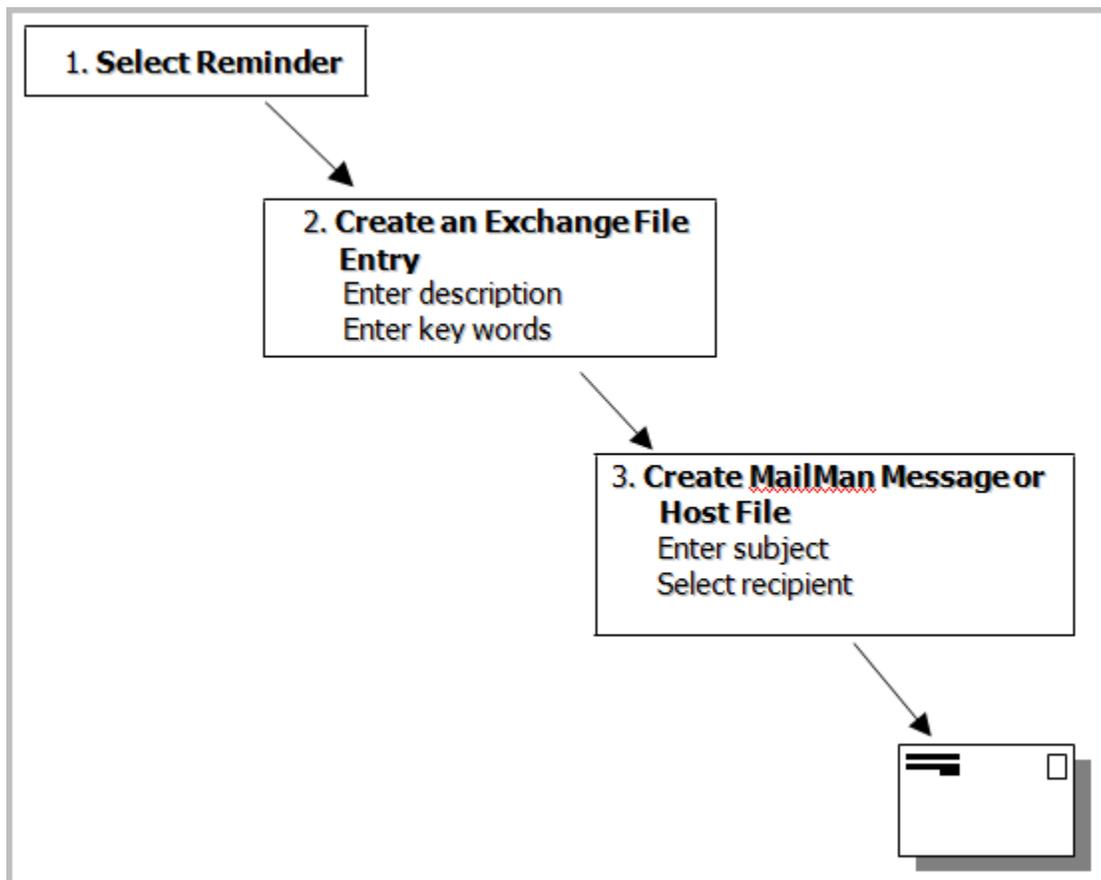


Figure 9-2: Export Reminders Steps

## 9.7 Detailed Steps to Export Reminders

1. Select a Reminder that you want to exchange.
2. Review all of your local reminders with the action LR, then review a specific reminder definition using RI.

Clinical Reminder		Exchange Jul 23, 2005@10:33:26		Page: 1 of 2
Exchange File Entries				
Entry	Source	Date Packed		
+ +Next Screen	-	Prev Screen	??	More Actions
CHF	Create Host File	LHF	Load Host File	
CMM	Create MailMan Message	LMM	Load MailMan Message	
DFE	Delete Exchange File Entry	LR	List Reminder Definitions	
IFE	Install Exchange File Entry	RI	Reminder Definition Inquiry	
Select Action: Next Screen// RI Reminder Definition Inquiry				
Select Reminder Definition: JG-DIABETIC EYE EXAM LOCAL				

Figure 9-3: Review reminder definition using RI

JG-DIABETIC EYE EXAM	No. 660078
-----	
Print Name:	Diabetic Eye Exam
Class:	LOCAL
Sponsor:	
Review Date:	
Usage:	CPRS
Related VA-* Reminder:	
Reminder Dialog:	
Priority:	
Reminder Description:	Patients with the VA-DIABETES taxonomy should have a diabetic eye exam done yearly.
Technical Description:	This reminder is based on the Diabetic Eye Exam reminder from the New York VAMC which was designed to meet the guidelines defined by the PACT panel. Additional input came from the Saginaw VAMC.
Edit History:	
Baseline Frequency:	Do In Advance Time Frame: Do if DUE within 1 month
	Sex Specific:
	Ignore on N/A:
	Frequency for Age Range: 0Y - Not Indicated for all ages
	Match Text:
	No Match Text:
Findings:	
	Finding Item: DIABETIC EYE EXAM (FI(1)=EX(3))
	Finding Type: EXAM
Use in Resolution Logic:	OR
Item:	VA-DIABETES (FI(2)=TX(28)) Finding Type: REMINDER TAXONOMY
Match Frequency/Age:	1 year for all ages
Etc.	

3. Create an Exchange File Entry.

Use the action CFE – Create Exchange File Entry to create and load a packed reminder into the Exchange File (#811.8). This allows selection of a reminder and entry of a description and keywords to be stored in the Exchange File. The description will be initialized with the description from the reminder definition. You may edit it as necessary.

Clinical Reminder Exchange		Apr 02, 2004@11:21:47	Page: 1 of 1
Exchange File Entries			
Entry	Source	Date Packed	
1 BLOOD PRESSURE CHECK	CRPROVIDER,ONE@VAMC1	03/28/2004@13:12:26	
3 VA-+CHOLESTEROL SCREEN (M)	CRPROVIDER,SIX@VAMC6	03/27/2004@14:59:42	
4 VA-ADVANCED DIRECTIVES EDUC	CRPROVIDER,TEN@VAMC10	03/27/2004@14:54:24	
5 VA-HEP C RISK ASSESSMENT	CRPROVIDER,ONE@VAMC1	03/27/2004@14:56:13	
2 SLC PNEUMOCOCCAL VACCINE	CRPROVIDER,TWO@VAMC2	03/29/2004@11:55:11	
+ Next Screen		- Prev Screen	?? More Actions
CFE Create Exchange File Entry		IH Installation History	
CHF Create Host File		LHF Load Host File	
CMM Create MailMan Message		LMM Load MailMan Message	
DFE Delete Exchange File Entry		LR List Reminder Definitions	
IFE Install Exchange File Entry		RI Reminder Definition Inquiry	
Select Action: Quit// CFE Exchange File Entry Creation			

```
Select Reminder Definition to save: JG DIABETIC EYE EXAM LOCAL
Enter a description of the reminder you are packing.
  1>Patients with the VA-DIABETES taxonomy should have a diabetic eye exam
  2>done yearly
EDIT Option: <Enter>
Enter keywords or phrases to help index the reminder you are packing.
Separate the keywords or phrases on each line with commas.
Diabetes, Eye, Exam
2><Enter>
EDIT Option: <Enter>
Packing the reminder ...
```

Clinical Reminder Exchange		May 03, 2004@11:21:51	Page: 1 of 1
Packed reminder for JG DIABETIC EYE EXAM was saved in Exchange File.			
Entry	Source	Date Packed	
1 AGETEST	CRPROVIDER,ONE@VAMC1	04/27/2004@13:16:19	
2 JG DIABETIC EYE EXAM	CRPROVIDER,ONE@VAMC1	05/03/2004@11:21:01	
3 TEST EXCHANGE CHANGES	CRPROVIDER,ONE@VAMC2	05/02/2004@15:45:55	
+ Next Screen		- Prev Screen	?? More Actions
CFE Create Exchange File Entry		IH Installation History	
CHF Create Host File		LHF Load Host File	
CMM Create MailMan Message		LMM Load MailMan Message	
DFE Delete Exchange File Entry		LR List Reminder Definitions	
IFE Install Exchange File Entry		RI Reminder Definition Inquiry	
Select Action: Quit// CFE Exchange File Entry Creation			

Figure 9-4: Using CFE action

#### 4. CHF-Create Host File

Use this action to create a host file containing selected entries from the Exchange File (#811.8).

A host file is any file that is stored in your site's local "host" directory or system. A complete host file consists of a path, file name, and extension. A path consists of a device and directory name. The default extension is PRD (Packed Reminder Definition). Your default path is determined by your system manager. If necessary, contact your IRM to learn how host files work at your site.

### Examples of valid paths:

```
VMS USER$:[SPOOL]
CACHE T:\TEMP
```

Clinical Reminder Exchange		Apr 02, 2004@11:21:47	Page: 1 of 1
Exchange File Entries.			
Entry	Source	Date Packed	
1 BLOOD PRESSURE CHECK	CRPROVIDER,ONE@VAMC1	03/28/2004@13:12:26	
2 SLC PNEUMOCOCCAL VACCINE	CRPROVIDER,TWO@VAMC2	03/29/2004@11:55:11	
3 VA-*CHOLESTEROL SCREEN (M)	CRPROVIDER,SIX@VAMC6	03/27/2004@14:59:42	
4 VA-ADVANCED DIRECTIVES EDUC	CRPROVIDER,TEN@VAMC1	03/27/2004@14:54:24	
5 VA-HEP C RISK ASSESSMENT	CRPROVIDER,ONE@VAMC1	03/27/2004@14:56:13	
+ Next Screen    - Prev Screen    ?? More Actions			
CFE Create Exchange File Entry	IH Installation History		
CHF Create Host File	LHF Load Host File		
CMM Create MailMan Message	LMM Load MailMan Message		
DFE Delete Exchange File Entry	LR List Reminder Definitions		
IFE Install Exchange File Entry	RI Reminder Definition Inquiry		
Select Entry(s): (1-5): 2			

```
Enter a path: USER$:[SPOOL]// ?
A host file is a file in your host system.
A complete host file consists of a path, file name, and extension
A path consists of a device and directory name.
The default extension is prd (Packed Reminder Definiton).
The default path is USER$:[SPOOL]
Enter a path: USER$:[SPOOL]// <Enter>
Enter a file name: ?
A file name has the format NAME.EXTENSION, the default extension is PRD
Therefore if you type in FILE for the file name, the host file will be:
    USER$:[SPOOL]FILE.PRD
Enter a file name: DiabeticEye
Will save reminder to host file USER$:[SPOOL]DiabeticEye.PRD? Y//<Enter> ES
```

Figure 9-5: Host File

### 5. CMM-Create MailMan Message.

Use this action to create a MailMan Message containing selected entries from the Exchange File (#811.8).

Clinical Reminder Exchange		Apr 02, 2004@11:21:47	Page: 1 of 1
Exchange File Entries.			
Entry	Source	Date Packed	
1 BLOOD PRESSURE CHECK	CRPROVIDER,ONE@VAMC1	03/28/2004@13:12:26	
2 SLC PNEUMOCOCCAL VACCINE	CRPROVIDER,TWO@VAMC2	03/29/2004@11:55:11	
3 VA-*CHOLESTEROL SCREEN (M)	CRPROVIDER,SIX@VAMC6	03/27/2004@14:59:42	
4 VA-ADVANCED DIRECTIVES EDUC	CRPROVIDER,TEN@VAMC1	03/27/2004@14:54:24	
5 VA-HEP C RISK ASSESSMENT	CRPROVIDER,ONE@VAMC1	03/27/2004@14:56:13	
+ Next Screen		- Prev Screen	?? More Actions
CFE Create Exchange File Entry	IH Installation History		
CHF Create Host File	LHF Load Host File		
CMM Create MailMan Message	LMM Load MailMan Message		
DFE Delete Exchange File Entry	LR List Reminder Definitions		
IFE Install Exchange File Entry	RI Reminder Definition Inquiry		
Select Action: Quit// CMM MailMan Message Creation			

Figure 9-6: CMM-Create MailMan Message

**Note:** The number of reminders you can send via a MailMan message is limited to the MailMan parameters set locally for the number of lines in a message. Check with your IRM for the number of lines allowed.

```
Select Entry(s):
(1-5): 2 Enter a subject: [Enter a description of the Mail Message.]
Forward mail to: ?
Enter the recipient(s) of this message in any of the following formats:
Lastname,first           for a user at this site
Lastname,first@REMOTE-SITE for a user at another site
    (note: DUZ may be used, instead of Lastname,first for local or remote
    users)
G.<group-name>           for a mail group
D.<device-name>         for a device
*                         for a limited broadcast or broadcast to all
                           users
                           (must be Postmaster or XMSTAR key holder)
Prefix any user address with 'I:' to send Information only.
                             'C:' to send Carbon Copy.
                             'L:' to send Later.
                             '-' to delete it.

Enter:
G.?                         for a list of mail groups
D.?                         for a list of devices
Enter '???' for detailed help.
Forward mail to: [Enter a user or Mail Group.]
Select basket to send to: IN//
And Forward to:
```

Clinical Reminder Exchange		Apr 02, 2004@11:21:47	Page: 1 of 1
Exchange File Entries.			
Entry	Source	Date Packed	
1 BLOOD PRESSURE CHECK	CRPROVIDER,ONE@VAMC1	03/28/2004@13:12:26	
2 SLC PNEUMOCOCCAL VACCINE	CRPROVIDER,TWO@VAMC2	03/29/2004@11:55:11	
3 VA-*CHOLESTEROL SCREEN (M)	CRPROVIDER,SIX@VAMC6	03/27/2004@14:59:42	
4 VA-ADVANCED DIRECTIVES EDUC	CRPROVIDER,TEN@VAMC1	03/27/2004@14:54:24	
5 VA-HEP C RISK ASSESSMENT	CRPROVIDER,ONE@VAMC1	03/27/2004@14:56:13	
+ Next Screen		- Prev Screen	?? More Actions
CFE Create Exchange File Entry	IH Installation History		
CHF Create Host File	LHF Load Host File		
CMM Create MailMan Message	LMM Load MailMan Message		
DFE Delete Exchange File Entry	LR List Reminder Definitions		
IFE Install Exchange File Entry	RI Reminder Definition Inquiry		
Select Action: Quit//			

Figure 9-7: Clinical Reminder Exchange

## 9.8 Steps to Import Reminders

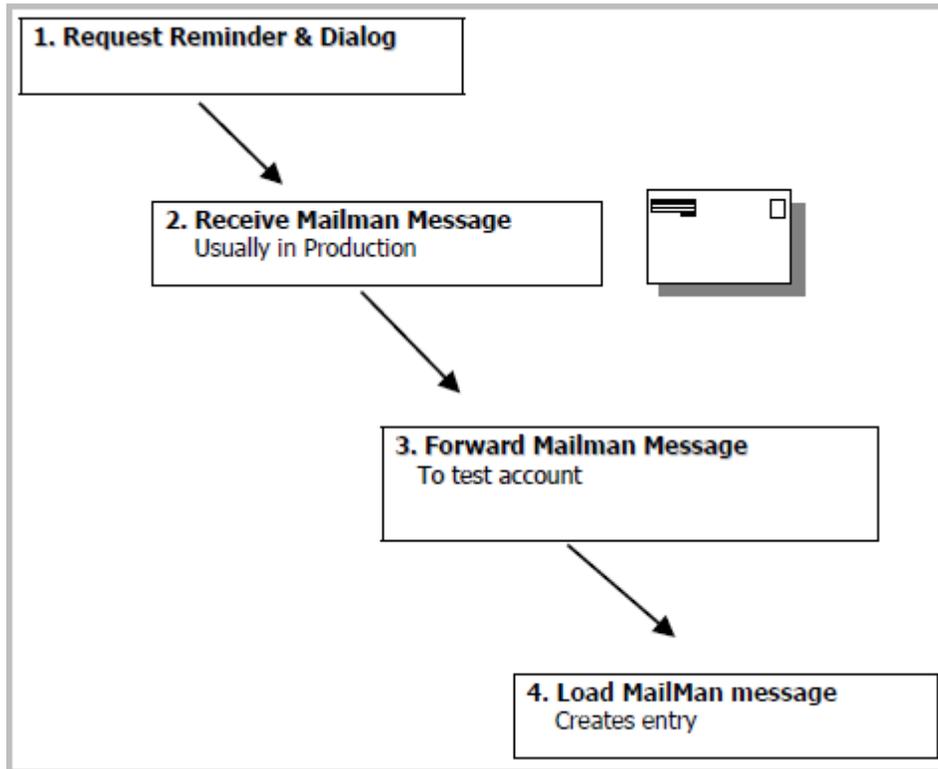


Figure 9-8: Import Reminders Steps

### 1. LHF – Load Host File

This action lets you load a host file containing packed reminder definitions into your local Exchange File (#811.8).

**Note:** Programmer access may be required to upload local host files, depending on how local file protections are set).

Clinical Reminder Exchange		Apr 02, 2004@11:21:47	Page: 1 of 1
Exchange File Entries.			
Entry	Source	Date Packed	
1 BLOOD PRESSURE CHECK	CRPROVIDER,ONE@VAMC1	03/28/2004@13:12:26	
2 SLC PNEUMOCOCCAL VACCINE	CRPROVIDER,TWO@VAMC2	03/29/2004@11:55:11	
3 VA-*CHOLESTEROL SCREEN (M)	CRPROVIDER,SIX@VAMC6	03/27/2004@14:59:42	
4 VA-ADVANCED DIRECTIVES EDUC	CRPROVIDER,TEN@VAMC1	03/27/2004@14:54:24	
5 VA-HEP C RISK ASSESSMENT	CRPROVIDER,ONE@VAMC1	03/27/2004@14:56:13	
+ Next Screen		- Prev Screen	?? More Actions
CFE Create Exchange File Entry		IH Installation History	
CHF Create Host File		LHF Load Host File	
CMM Create MailMan Message		LMM Load MailMan Message	
DFE Delete Exchange File Entry		LR List Reminder Definitions	
IFE Install Exchange File Entry		RI Reminder Definition Inquiry	
Select Action: Quit// <u>lhf</u> Load Host File			
Enter a path: USER\$:[SPOOL]// <Enter>			
The following PRD files were found in USER\$:[SPOOL]			
DIABETICEYE.PRD;			
Enter a file name: DIABETICEYE.PRD			
Loading host file USER\$:[SPOOL]DIABETICEYE.PRD			
Select Action: Quit// - -			

Figure 9-9: Using LHF action

Clinical Reminder Exchange		Jul 23, 2005@11:17:42	Page: 1 of 2
Host file USER\$:[SPOOL]DIABETICEYE.PRD successfully loaded.			
+ Next Screen		- Prev Screen	?? More Actions
CFE Create Exchange File Entry		IH Installation History	
CHF Create Host File		LHF Load Host File	
CMM Create MailMan Message		LMM Load MailMan Message	
DFE Delete Exchange File Entry		LR List Reminder Definitions	
IFE Install Exchange File Entry		RI Reminder Definition Inquiry	
Select Action: Next Screen//			

Figure 9-10: Next Screen

## 2. LHF – Load MailMan Message

This option lets you load a MailMan message containing packed reminder definitions into your site’s Exchange File (811.8).

Clinical Reminder Exchange		Jul 23, 2005@11:40:01	Page: 1 of 2
Entry	Source	Date Packed	
+ Next Screen		- Prev Screen	?? More Actions
CFE Create Exchange File Entry	IH Installation History		
CHF Create Host File	LHF Load Host File		
CMM Create MailMan Message	LMM Load MailMan Message		
DFE Delete Exchange File Entry	LR List Reminder Definitions		
IFE Install Exchange File Entry	RI Reminder Definition Inquiry		
Select Action: Next Screen// LMM	Load MailMan Message		
1	CREX: diabetic eye exam		
	CRPROVIDER,ONE JUL 23, 2001@11:39:51		
2	CREX: pain screening		
	CRPROVIDER,ONE JUL 23, 2001@11:37:59		
CHOOSE 1-2: 1	CREX: diabetic eye exam		
	CRPROVIDER,ONE JUL 23, 2001@11:39:51		
Loading MailMan message number 44024			

Figure 9-11: Loading MailMan message

### 3. Installing Reminders from the Exchange File

The action IFE allows a reminder definition to be selected for installation from the Exchange File (#811.8). Details of the exchange file entry are displayed. Reminder findings are displayed (grouped by type), followed by the reminder dialog, and finally the reminder definition. All or individual components may be selected for installation.

Exchange Entry Component		Jan 26, 2005@12:21:39	Page: 1 of 3	
Component	Category	Exists		
Reminder: SMOKING CESSATION EDUCATION				
Source: CRPROVIDER,ONE at SALT LAKE OEX				
Date Packed: 01/26/2001@09:38				
Description: FINAL VERSION FROM SALT LAKE				
Keywords: SMOKING				
Components:				
EDUCATION TOPICS				
1 VA-ADVANCED DIRECTIVES SCREENING		X		
2 VA-ADVANCED DIRECTIVES		X		
GMRV VITAL TYPE				
3 BLOOD PRESSURE		X		
HEALTH FACTORS				
4 REMINDER FACTORS		X		
5 HEPATITIS C		X		
6 ACTIVATE PNEUMOCOCCAL VACCINE		X		
7 PREV POSITIVE TEST FOR HEP C		X		
MH INSTRUMENT				
8 CAGE		X		
9 DOM80		X		
10 AIMS		X		
REMINDER TERM				
11 TERMTEST6		X		
REMINDER DIALOG				
12 SMOKING CESSATION EDUCATION		X		
REMINDER DEFINITION				
13 SMOKING CESSATION EDUCATION		X		
+ Enter ?? for more actions				
IA	Install all Components	IS	Install Selected Component	
Select Action: Next Screen//				

Figure 9-12: Installing Reminders

The Exists column indicates if the component exists on the system already. The Category column applies to health factors to indicate whether or not the health factor defines a category. If it does, it must be installed before any health factors that belong to that category.

**Note:** Some findings, such as lab tests, are not transportable. These findings will be in the component list, as they are used by the definition or dialog, but you will not be able to select them for installation. Non-selectable findings will not have a number. When you install a definition or a dialog that uses a non-transportable finding, you will be prompted to enter a replacement. If it is a lab test, enter the name of the equivalent lab test at your site. The replacement item must match the finding type. A lab test cannot be replaced with anything but a lab test.

If a component is selected for installation, it may be installed without change, or copied to a new name. When installing reminder definitions or dialogs, if a component contained within the definition or dialog is missing from your system, you will be prompted to supply a replacement.

**Caution:** Before starting an installation, you should examine the list of components in the packed reminder and determine which ones already exist on your system. You should decide what you are going to do with each component and have a plan of action before proceeding with the installation.

```
REMINDER TERM entry TERMTEST6 already EXISTS, what do you want to do?
```

```
Select one of the following:
```

```
  C Create a new entry by copying to a new name
```

```
  I Install or Overwrite the current entry
```

```
  Q Quit the install
```

```
  S Skip, do not install this entry
```

```
Enter response: S// C reate a new entry by copying to a new name
```

#### 4. Installing a Reminder Dialog

If a reminder dialog is selected for installation, details of the dialog are displayed on an additional screen. The entire dialog may be installed or individual components of the dialog (e.g. dialog groups or sub-groups).

Dialog Components		Jan 26, 2005@12:38:51		Page: 1 of 1	
Packed reminder dialog					
Item	Seq.	Dialog Summary	Type	Exists	
1	1	HF ACTIVATE PNEUMOCOCCAL VACCINE DONE ELSEWHERE	element	X	
2	2	MH AIMS	element	X	
3	3	VM BLOOD PRESSURE DONE	element	X	
4		SMOKING CESSATION EDUCATION	dialog	X	
+ Next Screen		- Prev Screen		?? More Actions	
DD	Dialog Details	DT	Dialog Text	IS	Install Selected
DF	Dialog Findings	DU	Dialog Usage	QU	Quit
DS	Dialog Summary	IA	Install All		
Select Action: Quit//					

Figure 9-13: Details displayed

**Note:** Order dialogs (quick orders) will be treated like findings that are not transportable, such as lab tests. They will appear in the list, as they are used by the dialog; however, they will not be selectable for installation. When you install the dialog, you will be given the opportunity to replace the quick order with a local one or to delete it from the dialog.

**Other views may be selected:**

- DD Dialog Details – displays dialog summary plus any PXRМ type additional prompts.
- DF Dialog Findings – displays the findings associated with each dialog component and if the finding already exists on the system.
- DT Dialog Text – displays the dialog question text for each component. This gives a preview of how the dialog will display in the EHR.
- DU Dialog Usage – displays any other existing reminder dialogs using these components.

The reminder dialog or dialog component may be installed from any view in the same manner as other reminder components. Dialog components may be installed or copied to a new name.

**5. Quick Install of Reminder Dialogs**

If the reminder dialog and all components are new (or exist already), you can use a quick install option. If only some of the components exist, you will be stepped through them individually. Note that if a dialog is installed without the reminder definition, the option is given to link the dialog to an existing reminder.

Dialog Components		Jan 26, 2005@12:52:05	Page: 1 of 1	
Packed reminder dialog: DEMO REMINDER - SIMPLE				
Item	Seq.	Dialog Summary	Type	Exists
1		DEMO REMINDER - SIMPLE	dialog	
2		IM HEP A DONE	element	
3	10	IM HEP A DONE ELSEWHERE	element	
4	15	IM HEP A CONTRA	element	
<b>+ Next Screen</b>		<b>- Prev Screen</b>		<b>?? More Actions</b>
DD	Dialog Details	DT	Dialog Text	IS Install Selected
DF	Dialog Findings	DU	Dialog Usage	QU Quit
DS	Dialog Summary	IA	Install All	
Select Action: Quit// IA Install All				
All dialog components for DEMO REMINDER - SIMPLE are new.				
Install reminder dialog without making any changes: Y// ES				
Reminder Dialog DEMO REMINDER - SIMPLE is not linked to a reminder.				
Select Reminder to Link: LOCAL HEP A IMMUNIZATION				

Figure 9-14: Install All

Dialog Components		Jan 26, 2005@12:52:05	Page: 1 of 1	
Packed reminder dialog: DEMO REMINDER - SIMPLE				
DEMO REMINDER - SIMPLE (reminder dialog) installed from exchange file.				
Item	Seq.	Dialog Summary	Type	Exists
1		DEMO REMINDER - SIMPLE	dialog	
2		IM HEP A DONE	element	
3	10	IM HEP A DONE ELSEWHERE	element	
4	15	IM HEP A CONTRA	element	
+ Next Screen		- Prev. Screen		?? More Actions
DD	Dialog Details	DT	Dialog Text	IS Install Selected
DF	Dialog Findings	DU	Dialog Usage	QU Quit
DS	Dialog Summary	IA	Install All	
Select Action: Quit//				

Figure 9-15: Quit action

If local findings have been mapped to terms or dialogs, the local finding mappings are retained when a new version of the term or dialog is loaded into the system. This applies to both reminders loaded as a patch and reminders loaded from mail messages.

Reminder terms retain the existing mappings and add any new findings imported on the term. Dialog components retain the existing mappings and ignore the incoming mappings.

You will no longer get a MailMan message telling you that a term or a dialog was skipped during the patch install.

## 6. IH – Installation History

Use this option to review the installation of an imported reminder.

Clinical Reminder Exchange			Jul 23, 2004@11:27:15	Page: 1 of 2
Exchange File Entries.				
Entry	Source	Date Packed		
1	A NEW REMINDER	CRPROVIDER,ONE@VAMC1	06/18/2004@11:50:40	
2	A**A SG PAIN SCREENING	CRPROVIDER,SIX@VAMC6	07/23/2004@10:55:23	
4	AIMS	CRPROVIDER,TWO@VAMC2	06/04/2004@13:55:59	
<b>+ Next Screen</b>		<b>- Prev Screen</b>	<b>?? More Actions</b>	
CFE Create Exchange File Entry		IH Installation History		
CHF Create Host File		LHF Load Host File		
CMM Create MailMan Message		LMM Load MailMan Message		
DFE Delete Exchange File Entry		LR List Reminder Definitions		
IFE Install Exchange File Entry		RI Reminder Definition Inquiry		
Select Action: Next Screen// IH Installation History				
Select Entry(s): (1-4): 2				

Installation History			Jul 23, 2004@11:27:27	Page: 1 of 1
Entry	Source	Date Packed		
A**A SG PAIN SCREENING	CRPROVIDER,ONE@VAMC1	07/23/2004@10:55:23		
<u>Installation Date</u>	<u>Installed By</u>			
1 07/23/2004@10:58:48	CRPROVIDER,ONE			
<b>Enter ?? for more actions</b>				
DH Delete Install History		ID Installation Details		
Select Action: Quit// ID Installation Details				
A**A SG PAIN SCREENING	07/23/2001@10:55:23	07/23/2001@10:58:48		
Component	Action	New Name		
EDUCATION TOPICS				
1 MANAGING PAIN	S			
HEALTH FACTORS				
2 REMINDER FACTORS	S			
3 Pain New Category	S			
4 PAIN PATIENT DECLINED TO REPORT PAIN	S			
5 PATIENT UNABLE TO REPORT PAIN SCORE	S			
6 PAIN PATIENT REPORTS NEW PAIN	S			
7 PATIENT REPORTS NEW PAIN	S			
8 HF.SG PATIENT NEEDS PAIN ASSESSMENT	S			
TIU TEMPLATE FIELD				
9 SUSAN OLD/NEW	S			
<u>Installation Detail</u>			Jul 23, 2004@11:27:39	Page:2 of 2
+ Entry	Date Packed	Date Installed		
REMINDER DEFINITION				
10 A**A SG PAIN SCREENING	S	Enter ?? for more actions		
Select Action: Quit//				

Figure 9-16: Installation History

## 7. Delete Exchange File Entry

Use this option to delete selected entries from the Exchange File (811.9).

Select Reminder Managers Menu Option: RX Reminder Exchange																										
Clinical Reminder Exchange	Jun 21, 2004@12:09:19	Page: 1 of 3																								
Exchange File Entries.																										
Entry	Source	Date																								
<u>Packed</u>																										
1 BLOOD PRESSURE CHECK	CRPROVIDER,ONE@VAMC1	03/28/2004@13:12:26																								
2 SLC PNEUMOCOCCAL VACCINE	CRPROVIDER,TWO@VAMC2	03/29/2004@11:55:11																								
3 VA-*CHOLESTEROL SCREEN (M)	CRPROVIDER,SIX@VAMC6	03/27/2004@14:59:42																								
4 VA-ADVANCED DIRECTIVES EDUC	CRPROVIDER,TEN@VAMC1	03/27/2004@14:54:24																								
5 VA-HEP C RISK ASSESSMENT	CRPROVIDER,ONE@VAMC1	03/27/2004@14:56:13																								
<table border="0"> <tr> <td>+ Next Screen</td> <td>- Prev Screen</td> <td>?? More Actions</td> </tr> <tr> <td>CFE Create Exchange File Entry</td> <td>IH Installation History</td> <td></td> </tr> <tr> <td>CHF Create Host File</td> <td>LHF Load Host File</td> <td></td> </tr> <tr> <td>CMM Create MailMan Message</td> <td>LMM Load MailMan Message</td> <td></td> </tr> <tr> <td>DFE Delete Exchange File Entry</td> <td>LR List Reminder Definitions</td> <td></td> </tr> <tr> <td>IFE Install Exchange File Entry</td> <td>RI Reminder Definition Inquiry</td> <td></td> </tr> <tr> <td>Select Action: Next Screen// DFE</td> <td>Delete Exchange File Entry</td> <td></td> </tr> <tr> <td>Select Entry(s): (1-10): 6</td> <td></td> <td></td> </tr> </table>			+ Next Screen	- Prev Screen	?? More Actions	CFE Create Exchange File Entry	IH Installation History		CHF Create Host File	LHF Load Host File		CMM Create MailMan Message	LMM Load MailMan Message		DFE Delete Exchange File Entry	LR List Reminder Definitions		IFE Install Exchange File Entry	RI Reminder Definition Inquiry		Select Action: Next Screen// DFE	Delete Exchange File Entry		Select Entry(s): (1-10): 6		
+ Next Screen	- Prev Screen	?? More Actions																								
CFE Create Exchange File Entry	IH Installation History																									
CHF Create Host File	LHF Load Host File																									
CMM Create MailMan Message	LMM Load MailMan Message																									
DFE Delete Exchange File Entry	LR List Reminder Definitions																									
IFE Install Exchange File Entry	RI Reminder Definition Inquiry																									
Select Action: Next Screen// DFE	Delete Exchange File Entry																									
Select Entry(s): (1-10): 6																										

Clinical Reminder Exchange																							
Clinical Reminder Exchange	Jun 21, 2004@12:09:47	Page: 1 of 3																					
Deleted 1 Exchange File entry.																							
Entry	Source	Date																					
<u>Packed</u>																							
1 BLOOD PRESSURE CHECK	CRPROVIDER,ONE@VAMC1	03/28/2004@13:12:26																					
2 SLC PNEUMOCOCCAL VACCINE	CRPROVIDER,TWO@VAMC2	03/29/2004@11:55:11																					
3 VA-*CHOLESTEROL SCREEN (M)	CRPROVIDER,SIX@VAMC6	03/27/2004@14:59:42																					
4 VA-ADVANCED DIRECTIVES EDUC	CRPROVIDER,TEN@VAMC1	03/27/2004@14:54:24																					
5 VA-HEP C RISK ASSESSMENT	CRPROVIDER,ONE@VAMC1	03/27/2004@14:56:13																					
<table border="0"> <tr> <td>+ Next Screen</td> <td>- Prev Screen</td> <td>?? More Actions</td> </tr> <tr> <td>CFE Create Exchange File Entry</td> <td>IH Installation History</td> <td></td> </tr> <tr> <td>CHF Create Host File</td> <td>LHF Load Host File</td> <td></td> </tr> <tr> <td>CMM Create MailMan Message</td> <td>LMM Load MailMan Message</td> <td></td> </tr> <tr> <td>DFE Delete Exchange File Entry</td> <td>LR List Reminder Definitions</td> <td></td> </tr> <tr> <td>IFE Install Exchange File Entry</td> <td>RI Reminder Definition Inquiry</td> <td></td> </tr> <tr> <td>Select Action: Next Screen//</td> <td></td> <td></td> </tr> </table>			+ Next Screen	- Prev Screen	?? More Actions	CFE Create Exchange File Entry	IH Installation History		CHF Create Host File	LHF Load Host File		CMM Create MailMan Message	LMM Load MailMan Message		DFE Delete Exchange File Entry	LR List Reminder Definitions		IFE Install Exchange File Entry	RI Reminder Definition Inquiry		Select Action: Next Screen//		
+ Next Screen	- Prev Screen	?? More Actions																					
CFE Create Exchange File Entry	IH Installation History																						
CHF Create Host File	LHF Load Host File																						
CMM Create MailMan Message	LMM Load MailMan Message																						
DFE Delete Exchange File Entry	LR List Reminder Definitions																						
IFE Install Exchange File Entry	RI Reminder Definition Inquiry																						
Select Action: Next Screen//																							

Figure 9-17: Delete Exchange File Entry

**Note:** This does not delete the Host file or MailMan message from the RPMS system. If the Host file or MailMan message are not needed any more, you must delete these separately.

### 9.8.1 Tips for Exchanging Reminders

- Try at least one simple one first – and check the dialog!
- To use your own finding in a reminder you are importing, use the SKIP option. Then when the reminder is installed, you will be prompted for the finding to use in the reminder.
- Review local findings carefully.
- Allow dedicated time.
- Review the findings (terms, taxonomies).
- Document in your reminders what your intent and logic were in making it.
- Remember: When you import a reminder, it is YOURS.
- Test!

**Note/Reminder Exchange Tip:** If you try to exchange a reminder containing a location list from one system to another and there is an inconsistency or mismatch between systems in the AMIS stop code, you will get the following error message. (in this case the system has two selectable entries for stop code 560 - DSS/IRM will correct).

```

REMINDER LOCATION LIST entry NEXUS STOP CODES FY05 is NEW, what do you want
to do?

  Select one of the following:

  C Create a new entry by copying to a new name
  I Install
  Q Quit the install
  S Skip, do not install this entry

Enter response: i Install
Name associated with AMIS stop code does not match the one in the packed
reminder:
AMIS=560
Site Name=ZZSUBSTANCE ABUSE - GROUP
Name in packed reminder=SUBSTANCE ABUSE - GROUP
The update failed, UPDATE^DIE returned the following error message:
MSG("DIERR")=1^1
MSG("DIERR",1)=701
MSG("DIERR",1,"PARAM",0)=3
MSG("DIERR",1,"PARAM",3)=GYNECOLOGY MSG("DIERR",1,"PARAM","FIELD")=.01
MSG("DIERR",1,"PARAM","FILE")=810.90011
MSG("DIERR",1,"TEXT",1)=The value 'GYNECOLOGY' for field CREDIT STOP TO
EXCLUDE
in CREDIT STOPS TO EXCLUDE SUB-FIELD in CLINIC STOP LIST SUB-FIELD in file
REMIN
DER LOCATION LIST is not valid. MSG("DIERR","E",701,1)=

REMINDER LOCATION LIST entry NEXUS STOP CODES FY05 did not get installed!
Examine the above error message for the reason.

```

## 10.0 Reminder Test

Before a new or modified reminder is put into production, it should be thoroughly tested. The Reminder Test option provides a convenient tool that can be used as an aid in setting up new reminders and tracking down problems with existing ones. It lets you run a reminder without going through the EHR or Health Summary.

*Version 2 of Clinical Reminders provides more information in the Reminder Test output, including Formatted Clinical Maintenance Output that corresponds to a Health Summary's display.*

The output from this option provides a view of the internal workings of the Clinical Reminders software and allows you to see what happened as the reminder was evaluated. Errors and warnings that are not always seen on the Health Summary are displayed here. When setting up a reminder, it's a good idea to have test patients with known clinical data such as examinations, immunizations, ICDs, CPTs, etc., that are pertinent to the reminder being developed. Using this option to run the reminder for test patients allows you to see if the reminder operates as expected.

You should have patients who are in the cohort and who are not in the cohort. For patients who are in the cohort, you should have some who have the reminder resolved and some who do not.

It is very useful to have the output from the Reminder Inquiry option available when using the test option. Here is the inquiry for the VA-DIABETIC EYE EXAM.

```

REMINDER DEFINITION INQUIRY                               Sep 16, 2003 3:27:17 pm Page 1
-----
JG-DIABETIC EYE EXAM                                     No. 660078
-----
Print Name:                                             Diabetic Eye Exam
Class:                                                  LOCAL
Sponsor:
Review Date:
Usage:                                                  CPRS
Related VA-* Reminder:
Reminder Dialog:
Priority:
Reminder Description:
    Patients with the VA-DIABETES taxonomy should have a diabetic eye exam
    done yearly.
Technical Description:
    This reminder is based on the Diabetic Eye Exam reminder from the New
    York VAMC which was designed to meet the guidelines defined by the PACT
    panel. Additional input came from the Saginaw VAMC.
Baseline Frequency:
    Do In Advance Time Frame: Do if DUE within 1 month
    Sex Specific:
    Ignore on N/A:
    Frequency for Age Range: 0Y - Not Indicated for all ages
    Match Text:
    No Match Text:
  
```

```

Findings:
----Begin: DIABETIC EYE EXAM (FI(1)=EX(3)) -----
      Finding Type: EXAM
      Use in Resolution Logic: OR
      Condition: I V("RESULT")="A"
Use Cond in Finding Search: YES
---- End: DIABETIC EYE EXAM -----

---- Begin: VA-DIABETES (FI(2)=TX(28)) -----
      Finding Type: REMINDER TAXONOMY
      Match Frequency/Age: 1 year for all ages
      Use in Patient Cohort Logic: AND
      Found Text: Diabetic eye exam required annually for all diabetic
patients. with HTN.
      Not Found Text: No history of diabetes on file.
---- End: VA-DIABETES -----

General Patient Cohort Found Text:
General Patient Cohort Not Found Text:
General Resolution Found Text:
General Resolution Not Found Text:
Default PATIENT COHORT LOGIC to see if the Reminder applies to a patient:
      (SEX)&(AGE)&FI(2)
Expanded Patient Cohort Logic:
      (SEX)&(AGE)&FI(VA-DIABETES)
Default RESOLUTION LOGIC defines findings that resolve the Reminder:
      FI(1)
Expanded Resolution Logic:
      FI(DIABETIC EYE EXAM)
Web Sites:

```

### 10.1.1 Test Option Output for this Reminder

```

Select Reminder Managers Menu Option: Reminder Test
Select Patient: CRPATIENT,TWO CRPATIENT,TWO 1-1-24 666778888 YES
SC VETERAN
Enrollment Priority: Category: IN PROCESS End Date:

Select Reminder: JG-DIABETIC EYE EXAM LOCAL

The elements of the FIEV array are:
FIEVAL(1)=1
FIEVAL(1,1)=1
FIEVAL(1,1,"CONDITION")=1
FIEVAL(1,1,"DAS")=148
FIEVAL(1,1,"DATE")=3010103
FIEVAL(1,1,"RESULT")=A
FIEVAL(1,1,"VALUE")=A
FIEVAL(1,1,"VISIT")=5338
FIEVAL(1,"CONDITION")=1
FIEVAL(1,"DAS")=148
FIEVAL(1,"DATE")=3010103
FIEVAL(1,"FILE NUMBER")=9000010.13
FIEVAL(1,"FINDING")=3:AUTTEXAM(
FIEVAL(1,"RESULT")=A
FIEVAL(1,"VALUE")=A
FIEVAL(1,"VISIT")=5338
FIEVAL(2)=1
FIEVAL(2,1)=1
FIEVAL(2,1,"CLINICAL TERM")=

```

```

FIEVAL(2,1,"CODEP")=851
FIEVAL(2,1,"CONDITION")=1
FIEVAL(2,1,"DAS")=2451
FIEVAL(2,1,"DATE")=3001005.154431
FIEVAL(2,1,"DATE OF INJURY")=
FIEVAL(2,1,"FILE NUMBER")=9000010.07
FIEVAL(2,1,"FILE SPECIFIC")=S
FIEVAL(2,1,"FINDING")=28;PXD(811.2,
FIEVAL(2,1,"MODIFIER")=
FIEVAL(2,1,"PRIMARY/SECONDARY")=S
FIEVAL(2,1,"PROBLEM LIST ENTRY")=
FIEVAL(2,1,"PROVIDER NARRATIVE")=74
FIEVAL(2,1,"VISIT")=4432
FIEVAL(2,"CLINICAL TERM")=
FIEVAL(2,"CODEP")=851
FIEVAL(2,"CONDITION")=1
FIEVAL(2,"DAS")=2451
FIEVAL(2,"DATE")=3001005.154431
FIEVAL(2,"DATE OF INJURY")=
FIEVAL(2,"FILE NUMBER")=9000010.07
FIEVAL(2,"FILE SPECIFIC")=S
FIEVAL(2,"FINDING")=28;PXD(811.2,
FIEVAL(2,"MODIFIER")=
FIEVAL(2,"PRIMARY/SECONDARY")=S
FIEVAL(2,"PROBLEM LIST ENTRY")=
FIEVAL(2,"PROVIDER NARRATIVE")=74
FIEVAL(2,"VISIT")=4432
FIEVAL("AGE")=1
FIEVAL("DFN")=73
FIEVAL("EVAL DATE/TIME")=3031208.111137
FIEVAL("PATIENT AGE")=79
FIEVAL("SEX")=1

```

The elements of the ^TMP(PXRМID,\$J) array are:

```

^TMP(PXRМID,$J,660078,"EXAM DIABETIC EYE EXAM")=01/03/2001 result -
ABNORMAL
^TMP(PXRМID,$J,660078,"ICD9VPOV 250.01","CODE")=250.01
^TMP(PXRМID,$J,660078,"ICD9VPOV 250.01","DATE")=3001005.154431
^TMP(PXRМID,$J,660078,"ICD9VPOV 250.01","DIAG")=DIABETES MELLI W/0 COMP TYP
I
^TMP(PXRМID,$J,660078,"ICD9VPOV 250.01","PN")=DIABETES MELLITUS WITHOUT
MENTION
OF COMPLICATION; TYPE 1 (IDDM) (JUVENILE TYPE), NOT STATED AS UNCONTROLLED
^TMP(PXRМID,$J,660078,"PATIENT COHORT LOGIC")=1^(SEX)&(AGE)&FI(2)^(1)&(1)&1
^TMP(PXRМID,$J,660078,"REMINDER NAME")=Diabetic Eye Exam
^TMP(PXRМID,$J,660078,"RESOLUTION LOGIC")=1^(0)!FI(1)^(0)!1
^TMP(PXRМID,$J,660078,"ZFREQARNG")=1Y^^

```

The elements of the ^TMP("PXRHM",\$J) array are:

```

^TMP("PXRHM",$J,660078,"Diabetic Eye Exam")=DUE NOW^3020103^3010103
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",1)= Encounter Diagnosis:
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",2)= 10/05/2000 250.01
DIABETES
MELLI W/0 COMP TYP I rank: SECONDARY
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",3)= Prov. Narr. - DIABETES
MELLITUS WITHOUT MENTION OF COMPLICATION;
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",4)= TYPE 1 (IDDM)
(JUVENILE TYPE), NOT STATED AS UNCONTROLLED
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",5)=
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",6)= Diabetic eye exam
required annually for all diabetic patients. with

```

```

^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",7)= HTN.
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",8)=
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",9)= Exam: DIABETIC EYE
EXAM
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",10)= 01/03/2001 result -
ABNORMAL
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",11)= Historical Encounter
Information:
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",12)= Comment: OUTSIDE
LOCATION: Local Pharmacy
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",13)=

Formatted Clinical Maintenance Output:
--STATUS-- --DUE DATE-- --LAST DONE--

Diabetic Eye Exam DUE NOW 01/03/2002 01/03/2001

Encounter Diagnosis:
10/05/2000 250.01 DIABETES MELLI W/O COMP TYP I rank: SECONDARY
Prov. Narr. - DIABETES MELLITUS WITHOUT MENTION OF COMPLICATION;
TYPE 1 (IDDM) (JUVENILE TYPE), NOT STATED AS UNCONTROLLED

Diabetic eye exam required annually for all diabetic patients. with HTN.

Exam: DIABETIC EYE EXAM
01/03/2001 result - ABNORMAL
Historical Encounter Information:
Comment: OUTSIDE LOCATION: Local Pharmacy

```

There are three sections in this output. We will go through them individually.

The first section is the FIEVAL array, which corresponds to the findings in the reminder definition. If we look back at our definition inquiry, we see there are two findings in this reminder.

1. The exam, DIABETIC EYE EXAM
2. The taxonomy, VA-DIABETES

**The entries in FIEVAL(1) show us what was found for the eye exam:**

```

The elements of the FIEV array are: FIEVAL(1)=1 < The 1 tells us the
finding is true. A 0 would mean it is false.

FIEVAL(1,1,"DATE")=3010110E < The date of the finding in FileMan format.
The E means it's historical.

FIEVAL(1,"FINDING")=3;AUTTEXAM( < The finding is entry 3 in the Exam
file.

FIEVAL(1,1,"RESULT")=

FIEVAL(1,"SOURCE")=129;AUPNVXAM( < The patient data came from the V Exam
file and is entry 129.

FIEVAL(1,"VALUE")=

FIEVAL(1,"VIEN")=4647

```

```

FIEVAL(1)=1
FIEVAL(1,1)=1
FIEVAL(1,1,"CONDITION")=1
FIEVAL(1,1,"DAS")=148
FIEVAL(1,1,"DATE")=3010103
FIEVAL(1,1,"RESULT")=A
FIEVAL(1,1,"VALUE")=A
FIEVAL(1,1,"VISIT")=5338
FIEVAL(1,"CONDITION")=1
FIEVAL(1,"DAS")=148
FIEVAL(1,"DATE")=3010103
FIEVAL(1,"FILE NUMBER")=9000010.13
FIEVAL(1,"FINDING")=3;AUTTEXAM(
FIEVAL(1,"RESULT")=A FIEVAL(1,"VALUE")=A
FIEVAL(1,"VISIT")=5338 < The entry in the Visit 5358

```

**The entries in FIEVAL(2) show us what was found for the taxonomy.**

```

FIEVAL(2)=1
FIEV(2,"CODEP")=851 < The ICD9 code is entry 851 in the ICD9 File.
FIEV(2,"DATE")=3000317.08
FIEV(2,"FINDING")=28;PXD(811.2, < The taxonomy is entry 28.
FIEV(2,"SOURCE")=2082;AUPNVPOV < The patient data is entry 2082 in the V
POV file.
FIEV(2,"VIEN")=3787
FIEV("DFN")=54 < The patient's DFN is 54.
FIEV("PATIENT AGE")=48 < The patient's age is 48.
FIEVAL(2)=0
FIEVAL("AGE")=1
FIEVAL("AGE",1)=1
FIEVAL("DFN")=73
FIEVAL("EVAL DATE/TIME")=3030916.153039
FIEVAL("PATIENT AGE")=79
FIEVAL("SEX")=1

```

**The next section gives us additional information:**

```

The elements of the ^TMP(PXR MID,$J) array are:
^TMP(PXR MID,$J,17,"EXAM DIABETIC EYE EXAM")=01/10/2001 (E) Exam: DIABETIC
EYE EX AM < The date of the exam in a standard format.
^TMP(PXR MID,$J,17,"FINDING 2_FOUNDB")=Diabetic eye exam required annually
for all diabetic patients. with < Age range found text.
^TMP(PXR MID,$J,17,"FINDING 2_FOUNDC")=HTN.
^TMP(PXR MID,$J,17,"ICD9VPOV 250.01","CODE")=250.01

```

```

^TMP(PXRМID,$J,17,"ICD9VPOV 250.01","DATE")=3000317.08 < The ICD9 code
250.01 was found in the V POV File.

^TMP(PXRМID,$J,17,"ICD9VPOV 250.01","DIAG")=DIABETES MELLI W/O COMP TYP I
< This is where the diagnosis and provider narrative is located.

^TMP(PXRМID,$J,17,"ICD9VPOV 250.01","PN")=DIABETES MELLITUS WITHOUT MENTION
OF COMPLICATION; TYPE 1 (IDDM) (JUVENILE TYPE), NOT STATED AS UNCONTROLLED

^TMP(PXRМID,$J,17,"PATIENT COHORT LOGIC")=1^(SEX)&(AGE)&FI(2)^(1)&(1)&1 <
The (2) is the actual Patient Cohort Logic. It matches what you see in the
inquiry. The (1) & (1) &1 is what the logic elements evaluated to. 1 is
true and 0 is false.

^TMP(PXRМID,$J,17,"REMINDER NAME")=Diabetic Eye Exam

^TMP(PXRМID,$J,17,"RESOLUTION LOGIC")=1^(0)!FI(1)^(0)!1 < Resolution
Logic is the same format as the Patient Cohort Logic.

^TMP(PXRМID,$J,17,"zFREQARNG")=Due every 1 year for all ages < Final
frequency and age range,

```

**The final section shows the Clinical Maintenance information that is returned to the calling application, for example Health Summary or the EHR:**

```

The elements of the ^TMP("PXRHM",$J) array are:
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam")=DUE NOW^3020103^3010103 < This
is the status, the due date, and the last done date. The rest of the lines
are in their final format.
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",1)= Encounter Diagnosis:
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",2)= 10/05/2000 250.01 D
MELLI W/O COMP TYP I rank: SECONDARY
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",3)= Prov. Narr. - DIABETES
MELLITUS WITHOUT MENTION OF COMPLICATION;
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",4)= TYPE 1 (IDDM)
(JUVENILE TYPE), NOT STATED AS UNCONTROLLED
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",5)=
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",6)= Diabetic eye exam
required annually for all diabetic patients. with
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",7)= HTN.
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",8)=
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",9)= Exam: DIABETIC EYE
EXAM
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",10)= 01/03/2001 result -
ABNORMAL
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",11)= Historical Encounter
Information:
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",12)= Comment: OUTSIDE
LOCATION: Local Pharmacy
^TMP("PXRHM",$J,660078,"Diabetic Eye Exam","TXT",13)=

Formatted Clinical Maintenance Output:

```

```

--STATUS--      --DUE DATE--      --LAST DONE--
< The Reminder Test output now includes the formatted Clinical Maintenance
Output as it appears on Health Summaries.

```

```

Diabetic Eye Exam          DUE NOW          01/03/2002          01/03/2001
Encounter Diagnosis:
  10/05/2000 250.01 DIABETES MELLI W/O COMP TYP I rank: SECONDARY
  Prov. Narr. - DIABETES MELLITUS WITHOUT MENTION OF COMPLICATION;
  TYPE 1 (IDDM) (JUVENILE TYPE), NOT STATED AS UNCONTROLLED
Diabetic eye exam required annually for all diabetic patients. with HTN.

Exam: DIABETIC EYE EXAM
      01/03/2001 result - ABNORMAL
Historical Encounter Information:
Comment: OUTSIDE LOCATION: Local Pharmacy IABETES

```

**Note:** The reminder test now includes a “CSUB” for CONDITION subscripts, if the reminder contains conditions.

### Example:

```

FIEVAL(1,1,"CONDITION")=1
FIEVAL(1,1,"CSUB","EXAM D/T")=3040130.1555
FIEVAL(1,1,"CSUB","EXAM STATUS")=COMPLETE
FIEVAL(1,1,"CSUB","INTERPRETING PHYSICIAN")=CRPROVIDER,THREE
FIEVAL(1,1,"CSUB","PDX")=NORMAL
FIEVAL(1,1,"CSUB","PROCEDURE")=MAMMOGRAM BILAT
FIEVAL(1,1,"CSUB","STATUS")=COMPLETE
FIEVAL(1,1,"CSUB","VALUE")=COMPLETE

```

#### 10.1.1.1 Testing in Health Summary

The following are steps for testing reminders in Health Summary:

1. Activate Clinical Reminders components in the Health Summary Component file. Create a Health Summary Type for testing new reminders being defined.
2. Add the Maintenance and Reminder components to the reminder Health Summary Type.
3. Select the reminder definition(s) to be tested in the selection items prompt from Clinical Maintenance and Clinical Reminder components.
4. If you can't select the clinical reminder components for the Health Summary, the components must be enabled for use, and the Rebuild Ad Hoc Health Summary Type option must be run.
5. Use the Print Health Summary Menu, Patient Health Summary option to begin testing the component for individual patients.
6. Find patients with data in RPMS that should match the reminder definitions, as well as some that won't have data matches.

7. Assess the reminder results: Are the age range and frequency evaluation working? Are the target findings found, taxonomy findings found, and health factors found presenting the actual data found for patients that you know may have some results? When there is no data found, are the no-match comments being displayed (if defined)? Are pertinent negative alterations of the age and frequency criteria working as expected based on taxonomy or health factor findings?
8. Use the “Hospital Location Health Summary” option of the Print Health Summary Menu to print the reminders for a clinic, based on a recently passed date range, or next week’s date range. Did the Health Summary print run to completion without any errors?

### 10.1.1.2 Reminder Evaluation in the EHR

Clinical Reminders Managers or clinicians can use the Reminder evaluation utility that’s available in the EHR GUI to test reminders and dialogs as they are created.

**HINT:** Keeping one or more terminal emulator screens open with the List Manager Reminder Management menu, along with an open EHR window, is an effective way to work as you are creating working reminders and dialogs, to ensure that your definitions are appropriate. You can use both the Evaluate Reminder and Refresh options on the Action (or right-click) menu to see the effects of your changes.

There are two forms of the Reminder Evaluation option, for use before and after processing reminders.

#### 1. Evaluate Reminder

Before you process a reminder, you can select this option to see if specific reminders in the Other Category folder should be Applicable or should be Due for the selected patient.

For example, in a diabetic clinic, you might see a patient around flu season and evaluate the flu shot reminder in the other category to see if a flu shot is needed.

To evaluate reminders, right-click in a tree view (from the Reminders Button or Drawer) and select Evaluate Reminder.

#### 2. Evaluate Processed Reminders

After you have processed a reminder, you can use this option to see if your actions during the encounter satisfied the reminder.

Satisfying a reminder may require more than you originally think. You may want to evaluate the reminders after you have processed them to make sure you have satisfied the reminder.

**Note:** PCC data may take a few minutes to be correctly recorded. Please wait a few minutes after processing a reminder before evaluating it again to ensure that it was satisfied.

To evaluate processed reminders, choose Action in the Available Reminders window, and then click on Evaluate Processed Reminders.

## 11.0 Reminder Information Only Menu

This menu contains options for users who need information about reminders, but do not need the ability to make changes. Most of the options are described previously in this manual.

Syn.	Option	Option Name	Description
RL	List Reminder Definitions	PXRM DEFINITION LIST	This option provides a brief summary of selected Clinical Reminder definitions.
RI	Inquire about Reminder Definition	PXRM DEFINITION INQUIRY	Allows a user to display a clinical reminder definition in an easy to read format.
TXL	List Taxonomy Definitions	PXRM TAXONOMY LIST	This option lists the current definitions of all the taxonomies defined in the REMINDER TAXONOMY file. The REMINDER TAXONOMY file is used to define a range of coded values from ICD Diagnosis codes, ICD Operation/ Procedures codes, and CPT codes that can be viewed as being part of a clinical category (taxonomy). Each entry has a low value and a high value. The software will search for matches on all the codes between the low and high values inclusive. If there is a match then the taxonomy finding will be true for the patient.
TXI	Inquire about Taxonomy Item	PXRM TAXONOMY INQUIRY	This option provides a detailed report of a Taxonomy item's definition, with a list of the actual ICD codes that will meet the taxonomy definition from the ICD DIAGNOSIS and ICD OPERATION/ PROCEDURE files
TRI	List Reminder Terms	PXRM TERM LIST	This option is used to give a brief listing of reminder terms.
TR	Inquire about Reminder Term	PXRM TERM INQUIRY	This option allows a user to display the contents of a reminder term in an easy to read format.
SL	List Reminder Sponsors	PXRM SPONSOR LIST	This option is used to get a list of Reminder Sponsors.

## 12.0 Reminder Dialog Management

Reminder Dialogs are used in the EHR to allow clinicians to select actions that satisfy or resolve reminders for a patient. Information entered through reminder dialogs update progress notes, place orders, and update other data in the patient's medical record.

A reminder dialog is created by the assembly of elements in groups into an orderly display, which is seen by the user in the EHR GUI.

Steps to create a dialog:

1. First, you create elements, which may include additional prompts, template fields, objects, or orders.
2. Next, organize the elements into groups.
3. Then add the groups or single elements to the dialog.
4. Once a dialog is created, you can link it to a reminder.

It's possible to autogenerate a dialog, which would automatically incorporate all the defining elements, but would not add informational elements, orderable items, or templates. By manually creating your dialog, you can customize your dialog. Most sites prefer to create dialogs manually.

Reminder dialogs and all their related components are stored in the Reminder Dialog File #801.41. This file is used to define all of the components that work together to define a reminder dialog.

This file contains a combination of nationally distributed entries, local auto-generated entries, site, and local manually created entries. Any local entries are assigned an internal entry number prefixed with your site number. Nationally distributed entries have their name prefixed with PXRМ. Entries in this file may be auto-generated via the Dialog Management Menu option. Manually created dialog entries should use local namespacing conventions.

This file is similar to the option file where there are different types of entries (reminder dialog, dialog elements (sentences), prompts, and groups of elements, result elements and groups of result elements). Where an option has menu items, the dialog file has components that are entered with the sequence field as the .01 field.

## 12.1 Dialog Component Definitions

### 12.1.1 Dialog Elements

A dialog element is defined primarily to represent sentences to display in the EHR window with a check box. When the user checks the sentence off, the FINDING ITEM in the dialog element and the ADDITIONAL FINDINGS will be added to the list of PCC updates and orders.

The updates won't occur on the EHR GUI until the user clicks on the FINISH button. Dialog elements may have components added to them. Auto-generated components will be based on the additional prompts defined in the Finding Type Parameters. Once a dialog element is auto-generated, the sites can modify them.

Dialog elements may also be instructional text or a header. The FINDING ITEM and components would not be defined in dialog elements.

### 12.1.2 Dialog Groups

A dialog group is similar to a menu option. It groups dialog elements and dialog groups within its component multiple. The dialog group can be defined with a finding item and check-box. The components in the group can be hidden from the EHR GUI window until the dialog group is checked off.

### 12.1.3 Result Elements

The result element is only used with mental health test finding items. A result element contains special logic that uses information entered during the resolution process to create a sentence to add to the progress note. The special logic contains a CONDITION that, when true, will use the ALTERNATE PROGRESS NOTE TEXT field to update the progress note. A separate result element is used for each separate sentence needed. Default result elements are distributed for common mental health tests, prefixed with PXRМ and the mental health test name. Sites may copy them and modify their local versions as needed.

### 12.1.4 Result Groups

A result group contains all of the result elements that need to be checked to create sentences for one mental health test finding. The dialog element for the test will have its RESULT GROUP/ELEMENT field defined with the result group. Default result groups for mental health tests are distributed with the Clinical Reminders package. Sites may copy them and modify their local versions as needed.

### 12.1.5 Prompts

A prompt is defined for PXRМ prompts or as locally created comment check-boxes. The prompts will not have any components within them. PXRМ-prefixed prompts are distributed in this file with the Clinical Reminder package.

## 12.2 Reminder Dialog Management Menu

Syn.	Name	Option Name	Description
DP	Dialog Parameters	PXRМ DIALOG PARAMETERS	This menu allows maintenance of parameters used in dialog generation: RS - Resolution Statuses FP - Finding Type Parameters FI - Finding Item Parameters HR - Health Factor Resolutions TD - Taxonomy Dialogs
DI	Reminder Dialogs	PXRМ DIALOG/COMPONENT EDIT	A reminder dialog contains questions (dialog elements) and/or groups of questions (dialog groups) that are related to the reminder findings. Dialog file entries may be created or amended with this option.
DR	Dialog Reports	PXRМ DIALOG TOOLS MENU	This sub-menu contains two options that can be used as dialog maintenance tools: Reminder Dialog Elements Orphan Report and Empty Reminder Dialog Report
IA	Inactive Codes Mail Message	PXRМCS INACTIVE DIALOG CODES	This option is used to search the Dialog File #801.41 for ICD and CPT Codes that have become inactive and send the report in a mail message to the Clinical Reminders mail group.

## 12.3 Reminder Dialogs (DI)

Use this option to create and edit Dialog file entries. When you first select the option, all of the available reminders at your facility are listed, with linked dialogs, if they exist, and dialog statuses. You can select a reminder by name or number and then perform actions on that reminder, or you can select the action CV Change View, which will allow you to autogenerate dialogs, create or edit dialogs, and create or add dialog elements or groups.

### 12.3.1 Dialog Types

- D Reminder Dialogs
- E Dialog Elements
- F Forced Values
- G Dialog Groups

- P Additional Prompts
- R Reminders
- RG Result Group (Mental Health)
- RE Result Element (Mental Health)

### 12.3.2 Dialog Information

- Reminder dialogs are linked to reminders by a field (REMINDER DIALOG) on the reminder definition. The reminder dialog may be executed by the EHR if the reminder is due or applicable.
- A reminder dialog contains questions (dialog elements) and/or groups of questions (dialog groups) that are related to the reminder findings.
- Dialog groups can contain one or more questions (dialog elements).
- Each question (dialog element) may have a number of additional prompts (e.g. date, location) or forced values.
- New reminder dialogs can be created using the action, AD - Add Dialog.
- The reminder dialog may be created manually or autogenerated from the reminder definition using the General Finding Type Parameters.

## 12.4 Dialog Edit Screen

When you select an existing reminder dialog, the following actions are available:

Abbrev	Action Name	Description
#	Select Item	To copy, edit or delete a component in this dialog.
ADD	Add Element/Group	Allows a dialog element or dialog group to be added to the reminder dialog.
CO	Copy Dialog	Copies this reminder dialog to a new name.
DD	Detailed Display	Displays dialog element names and resolution detail for this reminder dialog.
DP	Progress Note Text	Displays text that will be entered in the progress note.
DS	Dialog Summary (default)	Displays dialog element names.
DO	Dialog Overview	Displays the top-level dialog groups/elements. This option will not display any nested dialog elements or group.
DT	Dialog Text	Displays the dialog text as it should appear in the EHR.

Abbrev	Action Name	Description
ED	Edit/Delete Dialog	Edit or delete this reminder dialog. Allows addition and deletion of existing dialog elements from this reminder dialog. Allows the sequence numbers to be changed. Also enable/disable dialog.
INQ	Inquiry/Print (for Reminder Dialogs only)	Print details of this reminder dialog.

### 12.4.1 Dialog Edit Options

The edit options allow changes to the selected reminder dialog. When making changes to dialog elements and prompts, it should be remembered that dialog elements and prompts might be used in more than one reminder dialog. Changing one reminder dialog may affect others.

Additional prompts, forced values, dialog elements and dialog groups may be edited or printed.

Dialog Edit List		Dec 15, 2004@14:04:59		Page: 1 of 4	
Reminder Dialog Name: VA-DEPRESSION ASSESSMENT [NATIONAL] *LIMITED EDIT*					
Item	Seq.	Dialog Summary	Type	Exists	
1	5	Element: VA-TEXT DEPRESSION EVAL INSTRUCTIONS			
2	7	Element: VA-TEXT BLANK LINE WITH TEMPLATE FIELD			
3	10	Group: VA-GP DEP MDD CRITERIA DISPLAY			
4	10.5	Element: VA-TEXT MDD DSM-IV CRITERIA DISPLAY			
5	12	Group: VA-GP PHQ 9			
6	12.5	Element: VA-TEXT PHQ 9			
7	15	Element: VAA-TEXT BLANK LINE			
8	20	Group: VA-GP DEP ASSESSMENT RESULTS			
+ Next Screen		- Prev Screen		?? More Actions	
ADD	Add Element/Group	DS	Dialog Summary	INQ	Inquiry/Print
CO	Copy Dialog	DO	Dialog Overview	QU	Quit
DD	Detailed Display	DT	Dialog Text		
DP	Progress Note Text	ED	Edit/Delete Dialog		
Select Item: Next Screen//					

Figure 12-1: Edit options

### 12.4.2 Dialog Overview

The action Dialog Overview (DO) allows you to see just the top level of the dialog elements, without the nested items, if the dialog has groups containing elements.

Dialog Edit List		Dec 15, 2004@14:04:59		Page: 1 of 4	
Reminder Dialog Name: VA-DEPRESSION ASSESSMENT [NATIONAL] *LIMITED EDIT*					
Item	Seq.	Dialog Overview			
1	5	Element: VA-TEXT DEPRESSION EVAL INSTRUCTIONS			
2	7	Element: VA-TEXT BLANK LINE WITH TEMPLATE FIELD			
3	10	Group: VA-GP DEP MDD CRITERIA DISPLAY			
4	12	Group: VA-GP PHQ 9			
5	15	Element: VAA-TEXT BLANK LINE			
6	20	Group: VA-GP DEP ASSESSMENT RESULTS			
7	224	Element: VAA-TEXT BLANK LINE			
8	30	Element: VA-HF PT FOLLOWED FOR DEPRESSION			
+      + Next Screen                      - Prev Screen                      ?? More Actions					
ADD	Add Element/Group	DS	Dialog Summary	INQ	Inquiry/Print
CO	Copy Dialog	DO	Dialog Overview	QU	Quit
DD	Detailed Display	DT	Dialog Text		
DP	Progress Note Text	ED	Edit/Delete Dialog		
Select Item: Next Screen//					

Figure 12-2: Dialog Overview action

### 12.4.3 Dialog Enhancements

#### 12.4.3.1 Replace (Branching) Logic

New Branching/conditional logic has been added to dialog editing options that allows display of alternate checkboxes in dialogs (as seen in the EHR), depending on whether defined conditions meet certain criteria.

Four new fields have been added to the dialog editors to support this logic enhancement. The following three will only be seen when editing a reminder element or group:

- **Reminder Term** This field is the pointer to the Reminder Term file and must be set for this functionality to work.
- **Term Status** This field is used as a condition statement and can only be set to a True/False value. If the reminder term evaluation matches this field, the specialized action will work. This field must be set for this functionality to work.
- **Replacement Element/Group** This is the pointer to Reminder Dialogs and will allow the users to pick an alternate dialog element or dialog group that will display if the evaluation of the Reminder Term is the same as the value of Term Status. This field may be left blank. If this field is left blank, the current item will be suppressed if the Reminder Term status matches the term evaluations.

This field will only be seen at the Reminder Dialog level:

- **Patient Specific** This is a field used by the EHR to determine if the Dialog text should be stored between patients or not. **This field must have a value of YES to work.**

### 12.4.3.2 Process

The EHR will evaluate any reminder term that is defined in the dialog element/group for a true/false status. If the reminder term true/false status matches the true/false status defined in the Term Status field, the EHR will then look at the Replacement Reminder Element/Group Field. If something is defined here, the EHR will display the element/group that is defined. If nothing is defined in the Replacement Reminder Element/Group field, then the EHR will not display the current element/group.

#### 12.4.3.2.1 Example 1

Here is an example of the replace logic used in Women's Health:

```

NAME: VA-WH PAP RESULTS//
DISABLE:
SPONSOR: Women Veterans Health Program//
REVIEW DATE:
RESOLUTION TYPE:
ORDERABLE ITEM:
FINDING ITEM:
DIALOG/PROGRESS NOTE TEXT: PAP SMEAR RESULTS:
Edit? NO//
ALTERNATE PROGRESS NOTE TEXT: CLASS: NATIONAL//
No existing text Edit? NO//
EXCLUDE FROM PROGRESS NOTE: NO//
SUPPRESS CHECKBOX: SUPPRESS//
Select ADDITIONAL FINDINGS:
RESULT GROUP/ELEMENT:
SEQUENCE: 5//
ADDITIONAL PROMPT/FORCED VALUE: PXRM WH PAP RESULT PROMPT
//
OVERRIDE PROMPT CAPTION: This report indicates:
Replace
EXCLUDE FROM PN TEXT:
REQUIRED: YES//
Select SEQUENCE:
REMINDER TERM: VA-WH PAP SMEAR PENDING REVIEW//
REMINDER TERM STATUS: FALSE//
REPLACEMENT ELEMENT/GROUP: AGP WH PAP SMEAR REVIEW UNPROCESS Select
SEQUENCE: 5// START NEW LINE: YES//

```

If the reminder term returns a value of false, the dialog element AGP WH PAP SMEAR REVIEW UNPROCESS will display in the EHR. If the evaluation logic is true, then the VA-WH PAP RESULTS element will display.

```

Example of the Suppress functionality
NAME: AGP DIALOG GROUP 2//
DISABLE:
SPONSOR:
REVIEW DATE:
RESOLUTION TYPE:
ORDERABLE ITEM:
FINDING ITEM:
PUT A BOX AROUND THE GROUP:
SHARE COMMON PROMPTS:
MULTIPLE SELECTION:
HIDE/SHOW GROUP:

```

```

GROUP HEADER DIALOG TEXT:
DIALOG GROUP 2
  Edit? NO//
GROUP HEADER ALTERNATE P/N TEXT:
  No existing text
  Edit? NO//
EXCLUDE FROM PROGRESS NOTE:
SUPPRESS CHECKBOX:
NUMBER OF INDENTS: 2//
INDENT PROGRESS NOTE TEXT: INDENT//
Select ADDITIONAL FINDINGS:
Select SEQUENCE: 1//
  SEQUENCE: 1//
  DIALOG ELEMENT: AGP DIALOG GROUP 3//
  EXCLUDE FROM PN TEXT:
Select SEQUENCE:
REMINDER TERM: VA-WH PAP SMEAR SCREEN IN LAB PKG//
REMINDER TERM STATUS: TRUE//
REPLACEMENT ELEMENT/GROUP: CLASS: LOCAL// GROUP CAPTION:

```

If the Reminder Term evaluates as true, the Dialog group AGP Dialog Group 2 will not show in the EHR. If the term evaluates as False, then the dialog group will show in the EHR.

#### 12.4.3.2.2 Example 2

Follow-up of a positive Audit-C. For scores of 4-7 (3-7 for women) there is one set of interventions and for scores of 8 or higher, there is a different more limited set.

So instead of having these interventions in 2 separate dialogs, we could now combine them into one. Group 1 has a reminder term (A) that looks for a score of 8 or higher, if true then group 1 is displayed and it contains the more limited set of interventions

If (A) is false, then the replacement group is displayed which has the interventions for scores 4-7 (women 3-7).

Element 1 in the replacement group has a reminder term that looks for the sex=M. If true, element 1 is displayed with the instructions that the man has a score of 4-7 and needs an intervention. If false, then the replacement element is displayed which has instructions that the woman's score was 3-7.

Another scenario is a new integrated pneumovax reminder that might better accomplish the true nature of the recommended guidelines without presenting too much information to the user.

For example, the reminder dialog could show one version for patients who had never had a pneumovax administration before, and then if they had their one shot, and needed the booster 5 years later because of their age, the dialog could show a totally different version, including different health factors to help track this difference when the administration was appropriate for the second shot.

**Dialogs in Reminder exchange if they contain a replacement element/group.**

Packed reminder dialog: AGP DIALOG GROUP TEST				
-Item-	-Seq.-	-Dialog Findings-	-Type-	-Exists-
1		AGP DIALOG GROUP TEST	dialog	X
2	1	AGP DIALOG GROUP	group	X
		Finding: TAKING ASA OTHER SOURCE (HEALTH FACTOR)		X
3	1.1	AGP DIALOG GROUP 2	group	X
		Finding: *NONE*		
4	1.1(R)	AGP GEC GRP1	group	X
		Finding: GEC 2-3 MONTHS (HEALTH FACTOR)		X
		Add. Finding: GEC 2-3 WEEKS (HEALTH FACTOR)		X
		Add. Finding: GEC 4-6 MONTHS (HEALTH FACTOR)		X
5	1.2(R)	VA-HF GEC COMMUNITY SKILLED HOME HEALTH CARE	element	X
		Finding: GEC COMMUNITY SKILLED HOME HEALTH CARE (HEALTH FACTOR)		X
6	1.3(R)	VA-HF GEC HBPC REFERRED TO	element	X
		Finding: GEC HOME BASED PR. CARE (REFERRED TO) (HEALTH FACTOR)		X
7	1.4(R)	VA-HF GEC HOMEMAKER/HOME HEALTH AIDE	element	X
		Finding: GEC HOMEMAKER/HOME HEALTH AIDE (HEALTH FACTOR)		X
8	1.5(R)	VA-HF GEC VA BOWEL AND BLADDER	element	X
		Finding: GEC VA BOWEL AND BLADDER (HEALTH FACTOR)		X
9	1.6(R)	VA-HF GEC ADULT DAY HEALTH CARE (REFERRED TO)	element	X
		Finding: GEC ADULT DAY HEALTH CARE (REFERRED TO) (HEALTH FACTOR)		X
10	1.7(R)	VA-HF GEC VA IN-HOME RESPITE	element	X
		Finding: GEC VA IN-HOME RESPITE (HEALTH FACTOR)		X
11	1.1.1	AGP DIALOG GROUP 3	group	X
		Finding: *NONE*		
12	1.1.1.5	123456789 123456789 123456789 123456789 123456789	element	X
		Finding: TEMPERATURE (GMRV VITAL TYPE)		X
13	5	URL TEST	element	X

**12.4.3.2.3 Example 3**

Standard dialog for Colorectal cancer screening

Reminder Resolution: Colorectal Cancer Screening

Orders

- Order occult blood panel.
- Order Colonoscopy or Sigmoidoscopy

Outside Screening Done Previously

- Outside Occult Blood Result
- Prior Normal Colonoscopy
- Prior Colonoscopy - Abnormal
- Prior Sigmoidoscopy
- No outside colonoscopy or sigmoidoscopy

Deferrals or Refusals

- Family history of Colon Cancer in a First Degree Relative
- Education

Clear Clinical Maint Visit Info < Back Next > Finish Cancel

<No encounter information entered>

\* Indicates a Required Field

Figure 12-3: Reminder Resolution Colorectal Cancer Screening

Same reminder but the first dialog group is replaced by a different one if the patient has an ICD code that suggests visual impairment.

**Reminder Resolution: Colorectal Cancer Screening**

Orders

\*\*\* Visual Impairment \*\*\*  
 An ICD code has been entered for this patient that suggests that they have severe visual impairment or blindness. Patients who are severely visually impaired may not be able to adequately perform occult blood testing. If this patient has severe visual impairment that would affect their ability to perform the occult blood test then please consider ordering a colonoscopy for screening for colorectal cancer.

Order Colonoscopy or Sigmoidoscopy  
 Order occult blood panel.

Outside Screening Done Previously

Outside Occult Blood Result  
 Prior Normal Colonoscopy  
 Prior Colonoscopy - Abnormal  
 Prior Sigmoidoscopy  
 No outside colonoscopy or sigmoidoscopy

Deferrals or Refusals  
 Family history of Colon Cancer in a First Degree Relative  
 Education

Clear   Clinical Maint   Visit Info   < Back   Next >   Finish   Cancel

<No encounter information entered>

\* Indicates a Required Field

Figure 12-4: Reminder Resolution Colorectal Cancer Screening - 2

#### 12.4.3.2.4 Example 4

For patients at risk for Hepatitis C who have not been tested, this reminder dialog is available from the reminder. It also offers testing for Hepatitis B and for HIV.

**Reminder Resolution: Serology for Hepatitis C Risk**

Order lab test for Hepatitis C

Previously tested for Hepatitis C

Declines testing for Hepatitis C

Life Expectancy < 6 months

---

EVALUATE FOR TESTING FOR OTHER CHRONIC VIRAL INFECTIONS

**HEPATITIS B TESTING**

Hepatitis B profile

Outside Hepatitis B surface antigen positive (carrier)  
Hep B surface Ag pos (HBsAg +)

Record Outside Result - Hep B seropos (immune or prior infection)  
Hepatitis B core antibody positive (HBcAb +) or  
Hepatitis B surface antibody positive (HBsAb +)

Record Outside Result - Hepatitis B seronegative  
Hep B core Ab neg and no prior immunization series

Hepatitis B Serology Not Indicated

**HIV TESTING**

HIV Serology

Prior HIV serology negative

Prior HIV serology positive

Clear    Clinical Maint    Visit Info    < Back    Next >    Finish    Cancel

<No encounter information entered>

\* Indicates a Required Field

Figure 12-5: Reminder Resolution for Hepatitis

If the patient has prior testing for either of those illnesses, then a text statement replaces that portion of the dialog that testing has been done previously.

Reminder Resolution: Serology for Hepatitis C Risk

Order lab test for Hepatitis C

Previously tested for Hepatitis C

Declines testing for Hepatitis C

Life Expectancy < 6 months

---

EVALUATE FOR TESTING FOR OTHER CHRONIC VIRAL INFECTIONS

Hepatitis B serology has been performed previously.

HIV testing has been done previously

Clear Clinical Maint Visit Info < Back Next > Finish Cancel

<No encounter information entered>

\* Indicates a Required Field

Figure 12-6: Reminder Resolution: Serology for Hepatitis C Risk

## 12.4.4 Branching Logic Problem

### 12.4.4.1 Acceptable Ways for Branching – and Some Pitfalls

The Reminder dialog will allow branching only once at an entry at the same level. You can have multiple elements in a dialog or a group and the branching logic will evaluate each of these elements, and if the item should branch, it will. If you have a dialog with eight elements assigned to it and branching logic defined on elements 2, 5, and 8, each item will be evaluated and will branch accordingly. If a current item in a dialog is replaced with a group, each element/group assigned to the group will be evaluated for branching, and these items will branch accordingly.

The branching logic will allow branching continually throughout the dialog, but it will not allow multiple branching at the same level in the dialog, so a dialog with elements such as in the following diagram will not work:

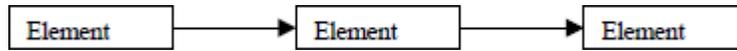


Figure 12-7: Branching Logic

An example of multiple branching logic that will work is on the following page.

#### 12.4.4.2 Reported Questions/Problems and Solutions:

**Q:** I assigned a Reminder Term, added a value to the Reminder Term Status field, and assigned a replacement element and the dialog is not changing from patient to patient.

**A:** Make sure the Patient Specific field is set to True; this field can be found by editing the dialog itself.

**Q:** I set everything up correctly and the branching logic works if I do something to the dialog, but if I pulled it up and cancel the dialog out without checking anything, the branching logic does not work. The site is using CPRS 24.27.

**A:** There is a bug in any version of CPRS before 25. Launching a dialog from the Reminder.

Drawer and canceling out of the dialog will not allow it to branch. To fix this problem, your first element in the dialog must be set to suppress, or an item must be checked in the dialog. We are recommending that the dialog be set up with a dummy element set to suppress and the text in the dialog text field contains five blank spaces.

**Q:** I think I set everything up correctly, but the branching logic does not seem to be working correctly.

**A:** Verify that the term is evaluating correctly for your patient; you can do this by running the reminder test output from VistA.

### 12.4.4.3 Example Diagram of Correct Branching Elements

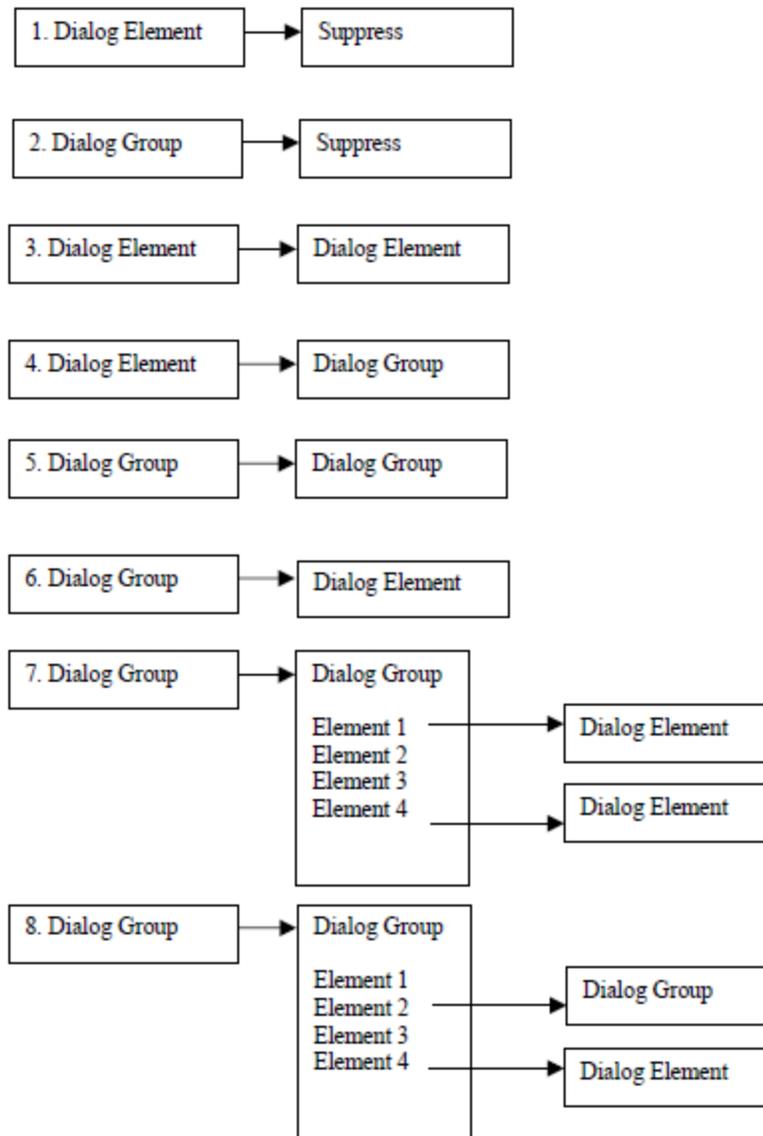


Figure 12-8: Diagram of Correct Branching Elements

## 12.5 Code Set Versioning Changes

The Health Insurance Portability and Accessibility Act (HIPAA) stipulates that specific code sets used for billing purposes must be versioned based on the date of service. Those code sets must be applicable at the time the service is provided. Clinical Reminders was required to make changes to ensure that users would be able to select codes and translations based upon a date that an event occurred. Clinical Reminders has been modified so that Clinical Application Coordinators (CACs) can identify ranges of codes where the adjacent values have changed because of a code set versioning update. A new option and several wording and format changes appear in taxonomy and dialog options.

- Taxonomy option changes: Updating taxonomies (adjacent codes) in Edit Taxonomy
- Dialog Management option changes: New option – Inactive Codes Mail Message; new fields: Editing FINDING ITEMS and ADDITIONAL FINDING ITEMS
- Mail Messages (List Manager and GUI)

After Version 2 of Clinical Reminders is installed, you may start receiving mail messages about taxonomy/code updates and Reminder Dialog ICPT Code changes. Those individuals assigned to the Reminders mail group at your site will receive the messages. These updates normally occur quarterly, so you shouldn't receive these continuously. When you receive the messages, review them to see what action should be taken, if any. You may need to change the taxonomy low or high-coded values. It may be appropriate to retain inactive codes for some reminders and dialogs; for example, Pneumovaxes, which are only given once in a lifetime.

## 12.6 Editing Template Fields used in Reminder Dialogs

**How to set the TIU parameter that allows a user access to the Options/Edit Template Fields from the EHR GUI Notes tab.**

Users can use the Edit Template Fields option to create sets of checkboxes, option buttons, etc. that can be used in reminder dialogs.

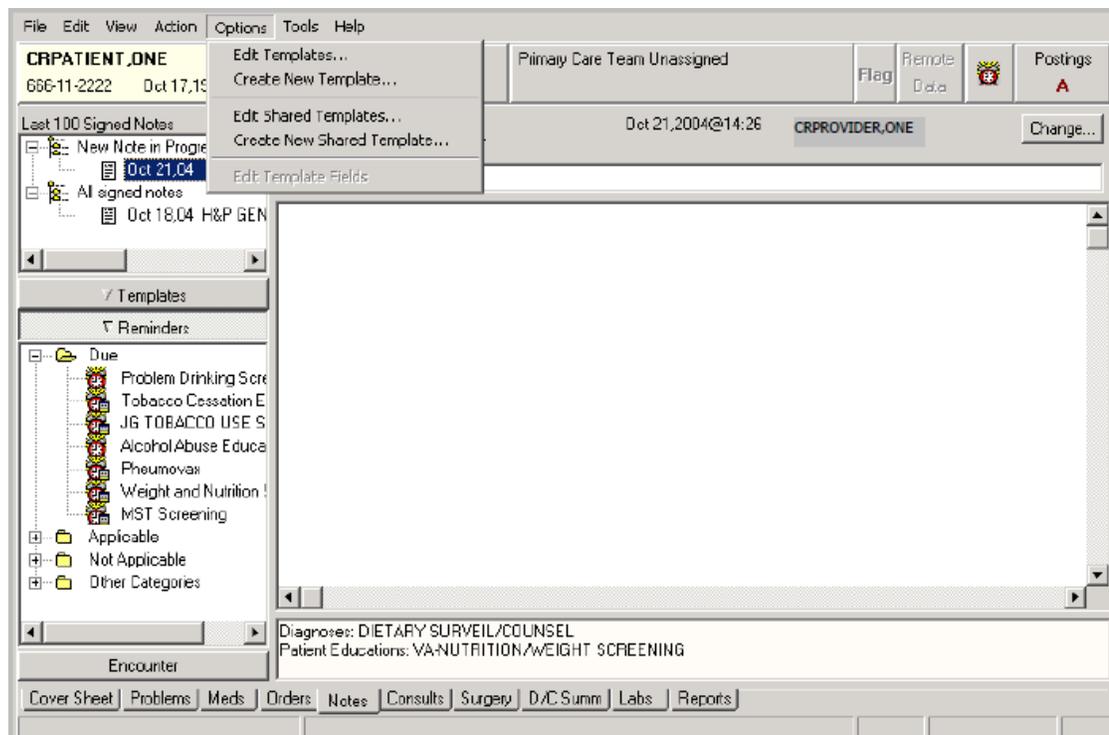


Figure 12-9: Selections on the Options menu

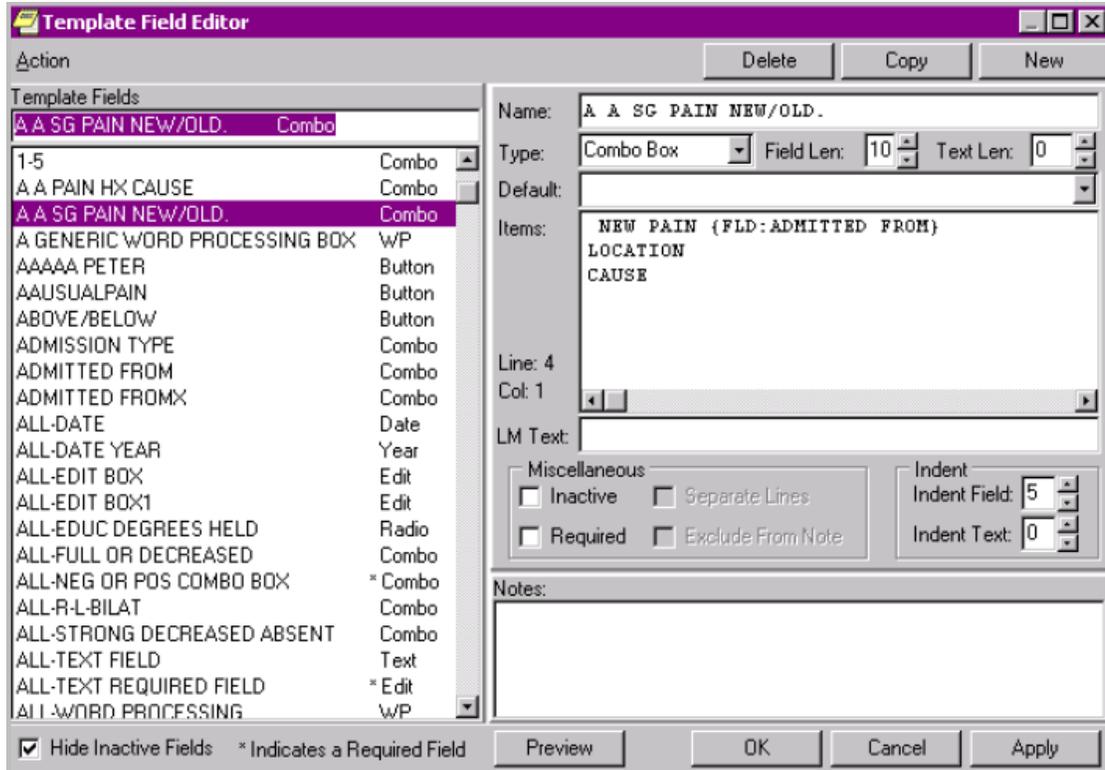


Figure 12-10: Template Field Editor

Users need two things in order to use the Edit Template Fields option to edit template fields used in Reminder Dialogs.

- TIU parameter TIU FIELD EDITOR CLASSES.
- User Class of Clinical Coordinator on to edit template fields used in ITOR CLASSES F,DEV>D ^XUP.

### 12.6.1 TIU Parameter TIU FIELD EDITOR CLASSES

```
DVF,DEV>D ^XUP

Select OPTION NAME: xpar edit
1  XPAR EDIT BY TEMPLATE          Edit Parameter Values with Template action
2  XPAR ED3 XPAR EDIT KEYWORD     Edit Parameter Definition Keyword  edit
3  XPAR EDIT PARAMETER           Edit Parameter Values              action
CHOOSE 1-3: 3 XPAR EDIT PARAMETER Edit Parameter Values              action
Edit Parameter Values

--- Edit Parameter Values ---

Select PARAMETER DEFINITION NAME:  tiu field EDITOR CLASSES  Template
Field Editor User Classes

TIU FIELD EDITOR CLASSES may be set for the following:
```

```
User USR [choose from NEW PERSON]
3 Service SRV [choose from SERVICE/SECTION]
4 Division DIV [choose from INSTITUTION]
5 System SYS [DVF.FO-SLC.MED.VA.GOV]
6 Package PKG [TEXT INTEGRATION UTILITIES]
Enter selection: u User NEW PERS
Select NEW PERSON NAME: CRUSMR CRUSER,ONE OC SYSTEMS ANALYST/PROGRAMMER
----- Setting TIU FIELD EDITOR CLASSES for User: CRUSER,ONE -----
Select Sequence Number: 1
Are you adding 1 as a new Sequence Number? Yes// y YES

Sequence Number: 1// 1
User Class: Clin
1 Clinical And Laboratory Immuno CLINICAL AND LABORATORY IMMUNOLOGIST
2 Clinical Biochemical Geneticis CLINICAL BIOCHEMICAL GENETICIST
3 Clinical Biochemical Molecular CLINICAL BIOCHEMICAL MOLECULAR GENETIC
4 Clinical Clerk CLINICAL CLERK 5 Clinical Coordinator CLINICAL COORDINATOR
5 Clinical Coordinator CLINICAL COORDINATOR
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 5 CLINICAL COORDINATOR
Select Sequence Number: ?

Sequence Number Value
-----
1 CLINICAL COORDINATOR

Select Sequence Number:
```

### 12.6.2 User Class of Clinical Coordinator

```

DVF,DEV>D ^XUP

Select OPTION NAME: TIU Maintenance Menu TIU IRM MAINTENANCE MENU
TIU Maintenance Menu

    1  TIU Parameters Menu ...
    2  Document Definitions (Manager) ...
    3  User Class Management ...
    4  TIU Template Mgmt. Functions ...
    5  TIU Alert Tools ...

Select TIU Maintenance Menu Option:    3  User Class Management

          --- User Class Management Menu ---

    1  User Class Definition
    2  List Membership by User
    3  List Membership by Class
    5  Manage Business Rules

Select User Class management Option:  2  List Membership by User
Select USER: CRPROVIDER,ONE CHIEF, MEDICAL SERVICE

Current User Classes          Jan 23, 2003@14:55:15          Page: 1 of 1
                               CRPROVIDER,ONE                2 Classes

User Class                    Effective              Expires
1  Clinical Coordinator        04/28/00
2  Physician                   11/16/98          04/11/15

+ Next Screen    - Previous Screen    ?? More Actions    _____

Add              Remove              Quit
Edit            Change View
    
```

Figure 12-11: Using User Class Management

### 12.6.2.1 Add a New Class to an Existing User

Current User Classes		Jan 23, 2003@14:55:15	Page: 1 of 1
		CRPROVIDER,ONE	2 Classes
User Class	Effective	Expires	
1 CRPROVIDER's Consult Class			
2 Business Rule Manager	09/22/00		
3 Medical Administration Special	09/11/01		
4 Social Worker Supervisor			
+ Next Screen    - Previous Screen    ?? More Actions			
Add	Remove	Quit	
Edit	Change View		
Select Action: Quit// add <u>Add</u>			
Select USER CLASS: <u>Clin</u>			
1 Clinical And Laboratory Immuno	CLINICAL AND LABORATORY IMMUNOLOGIST		
2 Clinical Biochemical Geneticis	CLINICAL BIOCHEMICAL GENETICIST		
3 Clinical Biochemical Molecular	CLINICAL BIOCHEMICAL MOLECULAR		
4 Clinical Clerk	CLINICAL CLERK		
5 Clinical Coordinator CLINICAL	COORDINATOR		
Press <RETURN> to see more, '^' to exit this list, OR			
CHOOSE 1-5: 5 CLINICAL COORDINATOR			
EFFECTIVE DATE: t (JAN 23, 2003)			
EXPIRATION DATE: t+1 (JAN 24, 2003)			
Select Another USER CLASS:			
Rebuilding membership list			
Current User Classes		Jan 23, 2003@14:55:15	Page: 1 of 1
		CRUSER, TWO	2 Classes
User Class	Effective	Expires	
1 A Consult Class			
2 Business Rule Manager	09/22/00		
3 Clinical Coordinator	01/23/03	01/28/03	
4 Medical Administration Special	09/11/01		
4 Social Worker Supervisor			
+ Next Screen    - Previous Screen    ?? More Actions			
Add	Remove	Quit	
Edit	Change View		

Figure 12-12: Using Add

## 12.7 New Dialog Reports

Two Reminder Dialog Reports have been added under a new menu, Dialog Reports.

- Reminder Dialog Elements Orphan Report

This report lists all dialog sub-items that are not attached to any parent item.

- Empty Reminder Dialog Report

This report lists all Reminder Dialogs that do not have any items attached to them.

Both reports can be tasked out.

## 12.8 Reminder Dialog Elements Orphan Report

```
Select Reminder Managers Menu Option: DM   Reminder Dialog Management

DP Dialog Parameters ...
  DI Reminder Dialogs
  DR Dialog Reports ...
IA Inactive Codes Mail Message

You have PENDING ALERTS
  Enter "VA to jump to VIEW ALERTS option

Select Reminder Dialog Management Option: DR Dialog Reports

  OR Reminder Dialog Elements Orphan Report
  ER Empty Reminder Dialog Report

You have PENDING ALERTS
  Enter "VA to jump to VIEW ALERTS option

Select Dialog Reports Option: OR Reminder Dialog Elements Orphan Report
DEVICE: HOME// ;;99999999 ANYWHERE           Right Margin: 80//
```

```
Reminder Dialog Elements Orphan Report Page: 1

Dialog Elements
=====
  A NEW DIALOG ELEMENT FOR IMMUNIZATION
  A NEW HEP A ELEMENT
  EC HISTORICAL (3)
  EC TAXON
  ED ADVANCED DIRECTIVE SCREENING DONE (10)
  ED ADVANCED DIRECTIVE SCREENING DONE (2)
  ED ADVANCED DIRECTIVE SCREENING DONE (3)
  .
  .
  .
ZZVA-WV PAP SMEAR CLINICAL
ZZVA-WV TEST FORCED VALUE
A new test field
  blank

Dialog Groups
=====
  DG LEVEL 2 GROUP
  EXCLUDE FROM P/N GROUP
  GP DEMO GROUP GP
  HEP C RISKS
  GP IMM PNEUMO
  GP SPECIAL
```

```

GP TEST TAXONOMY GROUP
GP TOBACCO
GP VITALS
GPZ UNVESTED PXZ MSK VESTING C/O
GPZ VIAGRA INITIATION DOSES
    IHD LIPID DONE ELSEWHERE GROUP
IHD LIPID LOWER MANAGE GROUP
PJH TEST GROUP
SP EXERCISE COUNSELING (1)
TEST OF WH GROUP
TEST P/N TEXT
VA-DG GEC ADDL INFO
ZZVA-WH GP PAP FOLLOW-UP TX/HIDE
ZZVA-WH GP PAP SCREENING REPEAT - ABNORMAL PAP
ZZVA-WV GP CERVICAL CARE
ZZVA-WV GP MAM FOLLOW-UP TX
ZZVA-WV GP MAM REVIEW - NOTIFY & F/U XXXXX
ZZVA-WV GP PAP REVIEW F/U W/O NOTIFY

```

## Result Groups

```

=====

```

```

PXR AIMS RESULT GROUP
PXR AUDC RESULT GROUP
PXR AUDIT RESULT GROUP
PXR BDI RESULT GROUP
PXR CAGE RESULT GROUP
PXR DOM80 RESULT GRO
PXR DOMG RESULT GROUP
PXR MISS RESULT GROUP
PXR ZUNG RESULT GROUP
SLC ZUNG RESULT GROUP
SLC ZUNG2

```

## Additional Prompts

```

=====

```

```

A A PAIN BLANK TEXT PROMPT
A A PAIN ENTER ALL APPLY
A A PAIN FREQ HX
A A PAIN ONSET PROMPT
A A PAIN TXT 3CHR
A A SG PAIN HISTORY LOCATION PROMPT
NEW PROMPT FOR COMMENT
PJH PXR COMMENT
PR SG PAIN SCREENING NOT DONE
PXR FORCE VALUE TEST
PXR WH REVIEW RESULT COMMENT
PXR*1.5*5 PERSON TYPE

```

## Force Values

```

=====

```

```

A A *PAIN TRIGGERS PROMPT
A A ENTER ALL THAT APPLY
A A PAIN ACCEPTABLE PROMPT
A A PAIN NEW HX PROMPT
A ASUSAN'S TEST
PXR FORCE DATE TEST
PXR WH NOTIFICATION TYPE
    PYR SERIES FORCED
WH NOTIFICATION FORCE VALUE
a new forced value

```

```

Enter RETURN to continue or '^' to exit:

  OR Reminder Dialog Orphan Report
  ER Empty Reminder Dialog Report

You have PENDING ALERTS
  Enter "VA to jump to VIEW ALERTS option

```

## 12.9 Empty Reminder Dialog Report

```

Select Dialog Reports Option:          ER   Empty Reminder Dialog Report
DEVICE: HOME// ;;99999999             ANYWHERE Right Margin: 80//

Empty Reminder Dialogs Report                               Page: 1
=====
  A COPY OF AGETEST
  AGP EMPTY DIALOG TEST
  ANOTHER NEW REMINDER
  TEST EDIT (1)
  TEST EDIT COPY

Enter RETURN to continue or '^' to exit:

  OR Reminder Dialog Elements Orphan Report
  ER Empty Reminder Dialog Report

You have PENDING ALERTS
  Enter "VA to jump to VIEW ALERTS option

Select Dialog Reports Option:

```

## 13.0 CPRS Reminder Configuration Menu

This menu contains options to maintain reminder categories and to set up reminder dialogs within the EHR.

Synonym	Add/Edit Reminder Categories	Option Name	Description
CA	CPRS Lookup Categories	PXRM CATEGORY EDIT/INQUIRE	A reminder category may contain a list of reminders and/or other sub-categories. Use this option to edit the list.
CL	CPRS Cover Sheet Reminder List	PXRM CPRS LOOKUP CATEGORIES	Reminder Categories to be displayed in the Other Categories folder of the note tab are entered here.
CS	Mental Health Dialogs Active	PXRM CPRS COVER SHEET LIST	Use this option to enter reminders that will be displayed on the EHR cover sheet if the New Reminders Parameter is NOT set to Yes.
MH	Progress Note Headers	PXRM MENTAL HEALTH ACTIVE <b>NOT USED IN IHS</b>	This option allows a user to modify the "Mental Health Dialogs Active" CPRS parameter. You can activate Mental Health reminder resolution processing at a user, service, division, or system level. When activated for one of these levels, mental health tests can be performed in a reminder dialog.
PN	Reminder GUI Resolution Active	PXRM PN HEADER	The header inserted into the progress note when processing a reminder may be modified for user, location, or service. The default header is Clinical Reminders Activity.
RA	Default Outside Location	PXRM GUI REMINDERS ACTIVE	This option allows a user to modify the "Reminders Active" CPRS parameter. You can activate GUI reminder resolution processing at a user, service, division, or system level. When activated for one of these levels, a reminders drawer is available on the notes tab for selecting and processing reminders.

Synonym	Add/Edit Reminder Categories	Option Name	Description
DL	GEC Status Check Active	PXRМ DEFAULT LOCATION	Allows the default outside location for reminder dialogs to be specified at user, service, division, or system level.
GEC	Position Reminder Text at Cursor	PXRМ GEC STATUS <i>NOT USED IN IHS</i>	To assist the ongoing management of completing GEC Referrals, the GEC Status Indicator may be added to the CPRS GUI Tools drop-down menu. It may be set at the User or Team level.
PT	New Reminder Parameters	PXRМ TEXT AT CURSOR	Allows the position reminder note text at cursor feature to be enabled at user, service, division, or system level.
NP	GEC Status Check Active	PXRМ NEW REMINDER PARAMETERS	This option allows a user to modify the ORQQPX NEW REMINDER PARAMS parameter, which controls which parameters are used to store cover sheet reminders. If the New Reminders Parameter is set to Yes, you don't need to use PXRМ CPRS COVER SHEET LIST above.
GEC	WH Print Now Active	PXRМ GEC STATUS CHECK <i>NOT USED IN IHS</i>	A GEC Status Indicator may be added to the CPRS GUI Tools drop-down menu, to be viewed at any time and used to close the referral if needed. It may be set at the User or Team level through this option.
WH		PXRМ WH PRINT NOW <i>NOT USED IN IHS</i>	This option allows sites to include the Print Now button on Women's Health dialogs for notification letters.

### 13.1 Add/Edit Reminder Categories (CA)

Reminder categories are maintained with this option. A category defines a group of reminders and may include other sub-categories. To activate categories so that they appear in the reminders window in CPRS (under Other Categories), use the option CPRS Lookup Categories.

The first screen in this option displays the existing reminder categories:

<u>Selection List</u>		Aug 18, 1999 15:04:41		Page: 1 of 1	
Reminder Categories					
<u>Item</u>	<u>Reminder Category</u>				
1	DIABETES CLINIC REMINDERS				
2	WEIGHT AND NUTRITION				
+      + Next Screen      - Previous Screen      ?? More Actions      >>>					
Ad	Add	PT	List/Print	All	QU Quit
Select Item:    Quit//					

Figure 13-1: First screen in this option

### 13.1.1 Actions – ADD

- AD**    Add a new reminder category
- PT**    List or print all reminder categories
- QU**    Return to menu
- #**      Enter the item number to be edited

If you select a reminder category, a description and related reminders are displayed. You can then edit the category.

<u>Edit List</u>		April 18, 2000 15:04:41		Page: 1 of 1	
Category Description:					
This is the text for that summarizes what this category represents. A category may contain reminders and/or a number of sub-categories.					
Sequence: 1	Reminder:	SLC CANCER SCREEN			
Sequence: 2	Reminder:	SLC DIABETIC EYE EXAM			
Sequence: 3	Reminder:	SLC LIFE STYLE EDUCATION			
Sequence: 4	Reminder:	SLC PNEUMOCOC			
Sequence: 90	Reminder:	SLC DIABETIC FOOT CARE ED AL VACCINE			
Sequence: 99	Reminder:	MHTEST			
Sub-category:		SUBSTANCE ABUSE		Sequence: 3	
Sequence: 1	Reminder:	TOBACCO EDUCATION			
Sequence: 2	Reminder:	TOBACCO USE SCREEN			
Sequence: 3	Reminder:	VA-* PROBLEM DRINKING SCREEN			
+      + Next Screen      - Previous Screen      ?? More Actions      >>>					
ED	Edit	INQ	Inquiry/Print	QU	Quit
Select Item:    Quit// ED					

Figure 13-2: Selecting a reminder category

### 13.1.2 Actions – EDIT

**ED** Edit/Delete this reminder category  
**INQ** List or print this reminder category  
**QU** Return to previous screen

## 13.2 CPRS Lookup Categories (CL)

Enter the Reminder Categories that you want to be displayed on the reminder tree section of the Note tab. These will appear in the Other Categories folder.

```
Select CPRS Reminder Configuration Menu Option: CL  CPRS Lookup Categories

Reminder Categories for Lookup may be set for the following:

  1 User      USR      [choose from NEW PERSON]
  2 Location  LOC      [choose from HOSPITAL LOCATION]
  3 Service   SRV      [choose from SERVICE/SECTI
  4 Division  DIV      [ISC SALT LAKE]
  5 System    SYS      [DEVCUR.ISC-SLC.VA.GOV]

Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: CRPROVIDER,ONE jg

---- Setting Reminder Categories for Lookup for User: CRPROVIDER,ONE ----
Select Display Sequence: ?

Display Sequence      Value
-----
  1                   SUBSTAN
  5                   HEPATIT
 10                   WEIGHT AND NUTRITION
 15                   SLC REMINDER CATEGORY
 20                   Usability Test Reminders

Select Display Sequence: 25
Are you adding 25 as a new Display Sequence? Yes//<Enter> Y

Display Sequence: 25// <Enter> 25
Reminder Category: ??

Choose from:
Acute Pain
Cancer Pain
Chronic Pain
HEPATITIS C
Pain Management
SLC REMINDER CATEGORY
SUBSTANCE ABUSE
RUSH POLICY
Usability Test Reminders
WEIGHT AND NUTRITION

Reminder Category:CRPROVIDER'S REMINDER CATEGORY
...OK? Yes// <Enter> (Yes)
```

```
Select Display Sequence: <Enter>
```

### 13.3 CPRS Cover Sheet Reminder List (CS)

Use this option to enter reminders that will be displayed on the EHR cover sheet if the New Reminder Parameter option is set to No. If the New Reminders Parameter is set to Yes (ORQQPX NEW REMINDER PARAMS), you don't need to use this option.

```
Select CPRS Reminder Configuration Menus Option: CS CPR Cover Sheet
Reminder List

Clinical Reminders for Search may be set for the following:

1  User          USR          [choose from NEW PERSON]
2  Location      LOC          [choose from HOSPITAL LOCATION]
3  Service       SRV          [choose from SERVICE/SECTION]
4  Division      DIV          [ISC SALT LAKE]
5  System        SYS          [DEVCUR.ISC-SLC.VA.GOV]

Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: CRPROVIDER,ONE      jq

--- Setting Clinical Reminders for Search for User: CRPROVIDER,ONE ---
Select Display Sequence: ?

    Display Sequence Value
    -----
    1  VA-DIABETIC FOOT CARE ED
    2  VA-TOBACCO EDUCATION
    5  VA-*PNEUMOCOCCAL VACCINE
    10 VA-INFLUENZA VACCINE
    15 VA-*BREAST CANCER SCREEN
    25 TOBACCO USE SCREEN
    30 VA-*CHOLESTEROL SCREEN (M)
    35 VA-*COLORECTAL CANCER SCREEN (FOBT)
    40 VA-*HYPERTENSION SCREEN

Select Display Sequence: 20
Display Sequence: 20// <Enter> 20
Clinical Reminder: MENTAL HEALTH TESTS
Select Display Sequence: <Enter>
```

### 13.4 Progress Note Headers (PN)

This option lets you modify the header inserted into the progress note when processing a reminder. It can be modified for user, location, or service. The default header is Clinical Reminders Activity.

```
Select CPRS Reminder Configuration Menus Option: PN Progress Note Headers
Progress Note Header may be set for the following:

1  User  USR [choose from NEW PERSON]
2  Location  LOC [choose from HOSPITAL LOCATION]
3  Service  SRV [choose from SERVICE/SECTION]
```

```

4 Division DIV [REGION 5]
5 System SYS [DEVСUR.ISC-SLC.VA.GOV]
6 Package PKG [CLINICAL REMINDERS]

Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: CRPROVIDER,ONE jg

----- Setting Progress Note Header for User: CRPROVIDER,ONE -----
PROGRESS NOTE HEADER: ?

This response can be free text.

PROGRESS NOTE HEADER: GREEN NOTES
    
```

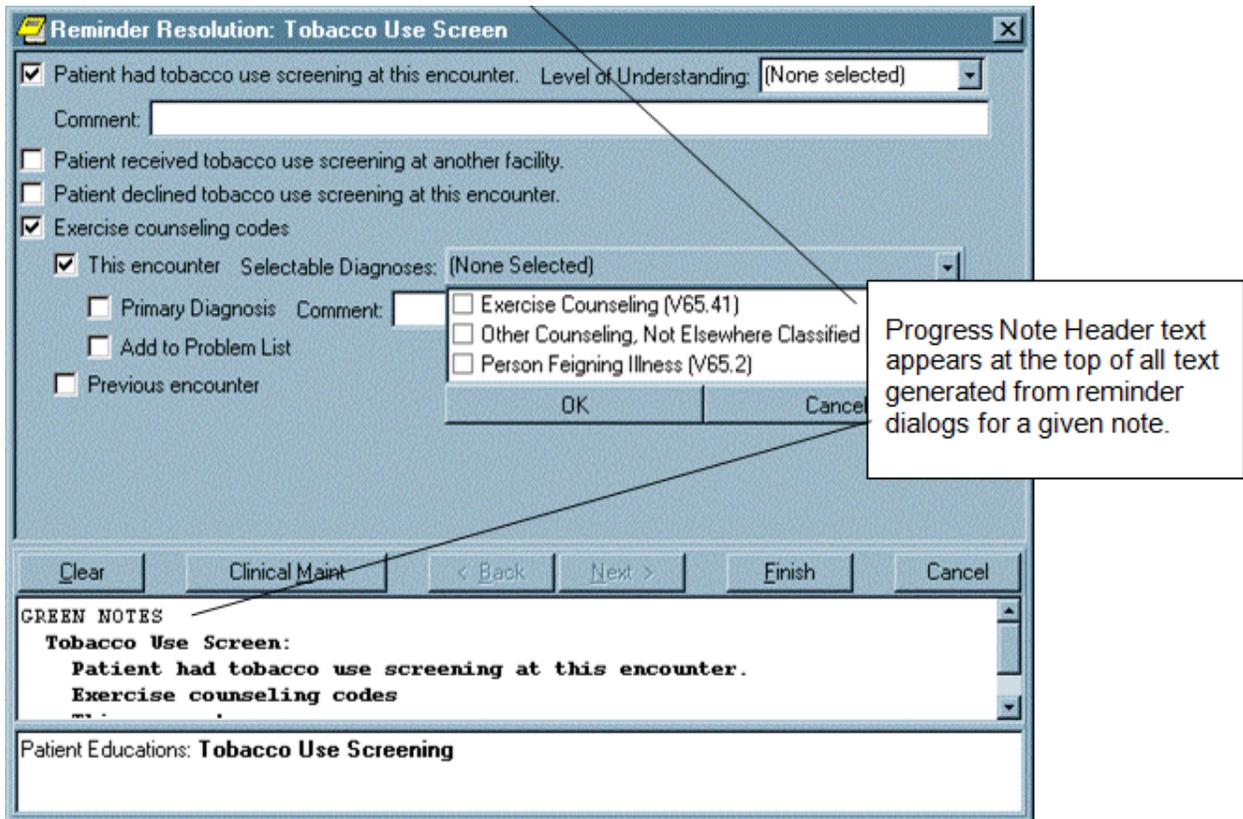


Figure 13-3: Using the Tobacco Use Screen

### 13.5 Mental Health Dialogs Active – *Not Used by IHS*

This option lets you modify the “Mental Health Active” CPRS parameter. You can activate mental health dialogs for reminder resolution processing at a user, service, division, or system level. When activated, mental health tests in a reminder dialog can be performed.

```

Select CPRS Reminder Configuration Option: MH Mental Health Dialogs
Active

Mental Health Active may be set for the following:
    
```

```

1 User   USR [choose from NEW PERSON]
2 Service SRV [choose from SERVICE/SECTION]
3 Division DIV [choose from INSTITUTION]
4 System SYS [DEVCUR.ISC-SLC.VA.GOV]

Enter selection: 1 User   NEW PERSON
Select NEW PERSON NAME: CRPROVIDER,SIX          sc

----- Setting Mental Health Active for User: CRPROVIDER,SIX -----
MENTAL HEALTH ACTIVE: YES// <Enter>

CA Add/Edit Reminder Categories
CL CPRS Lookup Categories
CS CPRS Cover Sheet Reminder List
MH Mental Health Dialogs Active
PN Progress Note Headers
RA Reminder GUI Resolution Active
DL Default Outside Location
PT Position Reminder Text at Cursor
NP New Reminder Parameters

You have PENDING ALERTS
Enter "VA VIEW ALERTS to review alerts Select <Enter>

Select CPRS Reminder Configuration Option: <Enter>

```

## 13.6 Reminder GUI Resolution Active (RA)

This option lets you activate GUI reminder resolution processing at a user, service, division, or system level. When activated, a reminders drawer is available on the notes tab for selecting and processing reminders.

```

Select CPRS Reminder Configuration Menus Option: RA Reminder GUI Resolution
Active

Reminders Active may be set for the following:

1 User   USR [choose from NEW PERSON]
2 Service SRV [choose from SERVICE/SECTION]
3 Division DIV [choose from INSTITUTION]
4 System SYS [DEVCUR.ISC-SLC.VA.GOV]

Enter selection: 1 User   NEW PERSON
Select NEW PERSON NAME: CRPROVIDER,ONE          jg

----- Setting Reminders Active for User: CRPROVIDER ONE -----
REMINDERS ACTIVE: YES// <Enter>

```

## 13.7 Default Outside Location

Within portions of a reminder dialog where historical encounter information is entered, a new parameter, ORQQPX DEFAULT LOCATIONS, can be set up to define default outside locations for the PXRМ OUTSIDE LOCATION prompt. Each free-text entry in this multi-valued parameter will appear at the top of the list of locations in the drop-down list in the EHR. If a number is entered as the free-text value, the EHR will attempt to locate an entry in the Institution file (#4) with the same internal entry number.

```
Select CPRS Reminder Configuration Option: dl Default Outside Location
Default Outside Locations may be set for the following:
1 User    USR [choose from NEW PERSON]
3 Service SRV [choose from SERVICE/SECTION]
4 Division DIV [choose from INSTITUTION]
5 System SYS [DEVCUR.ISC-SLC.VA.GOV]
6 Package PKG [ORDER ENTRY/RESULTS REPORTING] Enter selection: 1
User    NEW PERSON
Select NEW PERSON NAME: CRPROVIDER,TWO TC
----- Setting Default Outside Locations for User: CRPROVIDER,ONE -----
Select Display Sequence: 1

Display Sequence: 1// 1
Outside Location (Text or Pointer): 663
Select Display Sequence: 2
Are you adding 2 as a new Display Sequence? Yes// <Enter> YES

Display Sequence: 2// <Enter>
Outside Location (Text or Pointer): Local Pharmacy

Select Display Sequence: 3
Are you adding 3 as a new Display Sequence? Yes// <Enter> YES Display
Sequence: 3// <Enter> 3
Outside Location (Text or Pointer): 640

Select Display Sequence: 4
Are you adding 4 as a new Display Sequence? Yes// <Enter> YES Display
Sequence: 4// <Enter> 4
Outside Location (Text or Pointer): Outside Physician's Office
Select Display Sequence: ???
Display Sequence  Value
-----
1                663
2                Local Pharmacy
3                640
4  Outside Physician's Office
```

Default Location as it appears in the EHR:

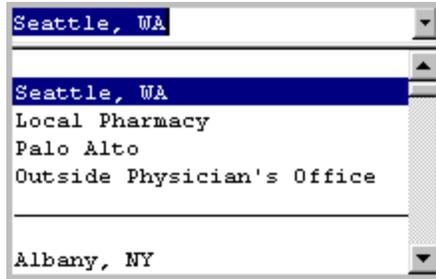


Figure 13-4: Default Location in the EHR

Note that Seattle, WA and Palo Alto are entries in the institution file with internal entry numbers of 663 and 640, respectively.

## 13.8 Position Reminder Text at Cursor

The default behavior of reminder dialogs is to insert any text generated by the reminder dialog at the bottom of the current note. When the ORQQPX REMINDER TEXT AT CURSOR parameter is set, text will be inserted at the current cursor location.

```

Select CPRS Reminder Configuration Option: PT Position Reminder Text at
Cursor

Position Reminder Text at Cursor may be set for the following:

1  User      USR  [choose from NEW PERSON]
3  Service   SRV  [choose from SERVICE/SECTION]
4  Division  DIV  [choose from INSTITUTION]
5  System    SYS  [DEVCUR.ISC-SLC.VA.GOV]

Enter selection: 1 User  NEW PERSON
Select NEW PERSON NAME: <Enter> CRPROVIDER,ONE  jg

--- Setting Position Reminder Text at Cursor for User: CRPROVIDER,ONE ---

REMINDER TEXT AT CURSOR: ?

Insert Reminder Dialog Generated Text at Cursor Location.

Select one of the following:

0 NO
1 YES REMINDER TEXT AT CURSOR: YES

```

## 13.9 New Reminder Parameters

This option lets you activate a new parameter (ORQQPX NEW REMINDER PARAMS) for editing cover sheet reminders.

### 13.9.1 Cover Sheet Reminder List Edit

You can change the reminders list that appears on the Cover Sheet from three places:

- Action Menu in Available Reminders window
- Options under Tools Menu
- CPRS Cover Sheet Reminder List on the CPRS Reminder Configuration Menus Option

**Note:** This option is described previously in this section of the Manager Manual.

If you click on the Reminders button on the EHR Cover Sheet, the Available Reminders window opens. You can select the Action menu, and then select Edit Cover Sheet Reminders List. You can also reach this same option from the Tools menu on the Cover Sheet, then selecting Options, and then Reminders.

Activating ORQQPX NEW REMINDER PARAMS) determines which of two dialogs you will see, Clinical Reminders on Cover Sheet or Clinical Reminders and Reminder Categories Displayed on Cover Sheet. Instructions for using these dialogs are given following the description of the New Reminder Parameters option.

#### 13.9.1.1 New Reminder Parameters Example

```
Select CPRS Reminder Configuration Option: NP New Reminder Parameters

Use New Reminder Parameters may be set for the following:
1 User    USR [choose from NEW PERSON]
2 Service SRV [choose from SERVICE/SECTION]
3 Division DIV [choose from INSTITUTION]
4 System SYS [DEVCUR.ISC-SLC.VA.GOV]
5 Package PKG [ORDER ENTRY/RESULTS REPORTING]

Enter selection: 1 User    NEW PERSON
Select NEW PERSON NAME: CRPROVIDER,ONE jg

----- Setting Use New Reminder Parameters for User: CRPROVIDER,ONE -----

USE NEW REMINDER PARAMS: YES
```

### 13.10 Clinical Reminders/Reminder Categories On Cover Sheet

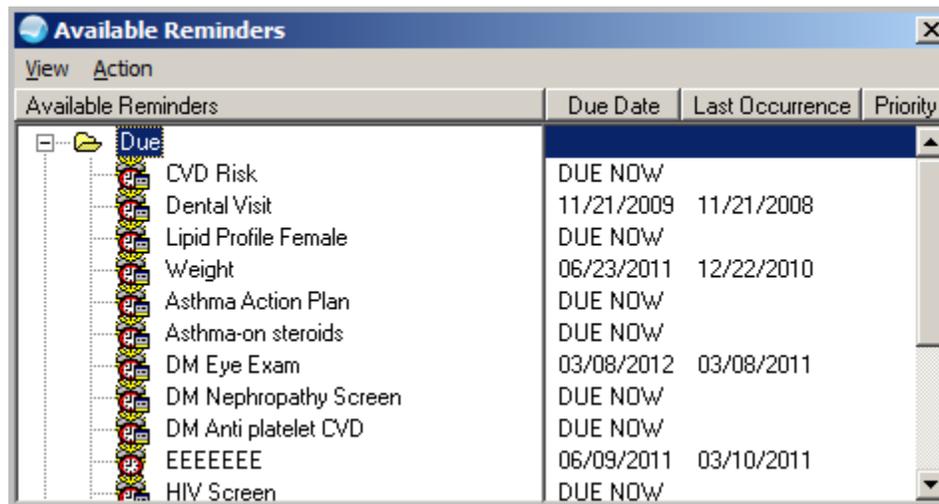
This advanced dialog provides more management capabilities. The dialog consists mainly of three large-list areas.

- Cover Sheet Reminders (Cumulative List) displays selected information on the Reminders that will be displayed on the Cover Sheet.

- Available Reminders & Categories lists all available Reminders and serves as a selection list.
- User Level Reminders displays the Reminders that you have added to or removed from the cumulative list.

You may sort the Reminders in Cover Sheet Reminders (Cumulative List) by clicking on any of the column headers. Click on the Seq (Sequence) column header to view the Reminders in the order in which they will be displayed on your cover Sheet.

Access to the dialog is through the Alarm Clock and then selecting the action menu from the drop-down ACTION.



Available Reminders	Due Date	Last Occurrence	Priority
Due			
CVD Risk	DUE NOW		
Dental Visit	11/21/2009	11/21/2008	
Lipid Profile Female	DUE NOW		
Weight	06/23/2011	12/22/2010	
Asthma Action Plan	DUE NOW		
Asthma-on steroids	DUE NOW		
DM Eye Exam	03/08/2012	03/08/2011	
DM Nephropathy Screen	DUE NOW		
DM Anti platelet CVD	DUE NOW		
EEEEEE	06/09/2011	03/10/2011	
HIV Screen	DUE NOW		

Figure 13-5: Available Reminders

Access to editing the display of reminders is controlled by the parameter – BEHORM EHR CONFIGURATION. Normally this parameter is given to the USER CLASS of CLINICAL COORDINATOR and can be given to others on an individual basis.

## 13.11 Icon Legend

An icon legend is displayed to the right of Cover Sheet Reminders (Cumulative List).

- Folder icon represents a group of Reminders
- Red alarm clock represents an individual Reminder
- Plus sign in the first column means a reminder has been added to the list
- Minus sign in the first column means a reminder has been removed from the list
- Padlock icon means you cannot remove reminder (mandatory)

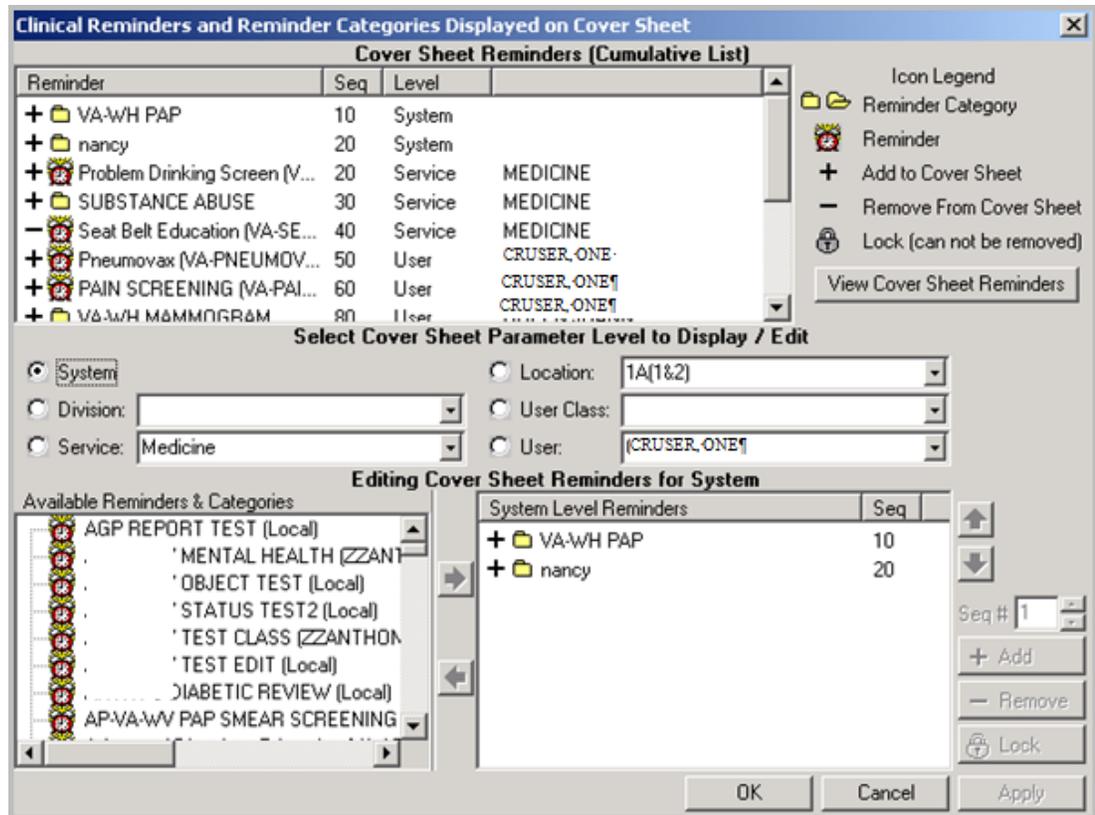


Figure 13-6: Clinical Reminders and Reminder Categories displayed on Cover Sheet

### 13.11.1 Cover Sheet Reminders (Cumulative List)

The Level column of the Cover Sheet Reminders (Cumulative List) field displays the originating authority of the Reminder, which can include System, Division, Location, User Class, and User. Reminders on this list that display a small gray padlock icon at the beginning of the line cannot be removed. These Reminders are mandatory. The Seq (Sequence) column defines the order in which the Reminders will be displayed on the Cover Sheet. If there are two or more Reminders with the same sequence number, the Reminders will be listed by level (System, Division, Service, Location, User class, User).

**Note:** The above screen will be slightly different if you do not have programmer access, or if you do not have the New Parameter turned on. If you do not have programmer access, you will not be able to assign reminders at the System, Division, and Service levels.

### 13.11.2 Location Shown in Cumulative List

Click this drop-down menu and select a location. The Reminders assigned to that location appear on the Cumulative List.

### 13.11.3 Available Reminders and Categories

This area displays all of the Reminders and Categories available to the user. Categories are groups of related Reminders that can be added as a group. Individual reminders within a category can be removed from the User Level Reminders field. Highlight a Reminder or Category from the field and click the right arrow to add them to the User Level Reminders field.

#### 13.11.3.1 User Level Reminders

This area displays all of the Reminders selected by the user.

- To add a Reminder to your User Level Reminders, highlight the desired Reminder in the Available Reminders & Categories field and click the Right Arrow button.
- To delete a Reminder from your User Level Reminders field, highlight the Reminder in the User Level Reminders field and click the Left arrow.
- To determine the order in which the Reminders are displayed on the Cover Sheet, change the Reminder's Sequence number. For example, to place a Reminder at the top of the Reminders list, assign it a number less than 10.
- To change the order of User Level Reminders, highlight Reminders and click the Up arrow or Down arrow until the desired order is achieved.
- To remove any or all non-mandatory Reminders assigned at any level, add the Reminder to your User Level and then click the Remove button.

After you have made all of the desired changes to the Reminders that will be displayed on the Cover Sheet, click OK.

## 13.12 Setting up Clinical Reminders Components in Health Summary

Reminder items are added to health summary selection components for a given health summary type. When the health summary type is run, the Clinical Reminders software evaluates the patient's data and returns the results to the health summary for display.

Use options on the Health Summary Coordinator's Menu (on the Other Supporting Menus on the Clinical Reminders Manager Menu) to add Reminders components.

### 13.12.1 Health Summary Reminder Components

Reminders Due is an abbreviated component indicating only what is due now.

Example, Reminders Due as displayed on a health summary:

	--STATUS--	--DUE DATE--	--LAST DONE--
Advanced Directives Education	DUE NOW	DUE NOW	unknown
Alcohol Abuse Education	DUE NOW	DUE NOW	unknown

Reminder Summary is a component providing the status (Due Now, Due Soon, Resolved), next due date, and the last done date.

Example of Reminder Summary as displayed on a health summary:

	--STATUS--	--DUE DATE--	--LAST DONE--
Mammogram	RESOLVED	03/01/2000	10/01/1998
Pap Smear	DUE NOW	DUE NOW	unknown
Diabetic Eye Exam	DUE NOW	DUE NOW	10/01/1999

Reminder Maintenance: This component provides:

- Details about what was found from searching the VistA clinical data.
- Text related to the findings found or not found (as defined in the reminder). This includes taxonomies (ICD or CPT codes), health factors, and test results related to the reminder and computed findings (for example, Body Mass Index).
- Final frequency and age range used for the reminder.

**Note:** Statuses include DUE SOON to allow you to process a reminder in advance, if convenient.

Example of Reminder Maintenance as displayed on a health summary:

----- CM - Reminder Maintenance -----			
	--STATUS--	--DUE DATE--	--LAST DONE--
Fecal Occult Blood Test	DUE NOW	DUE NOW	unknown
Applicable: Due every 1 year for ages 50 and older. No HX of colorectal cancer on file - presumed no HX.			
Health Factor Test	DUE NOW	DUE NOW	unknown
Applicable: Due every 1 year for ages 40 to 60. Baseline set to 1Y for 40-60.			

## 14.0 Reminder Reports

The Reports menu contains Clinical Reminder reports that clinicians can use for summary and detailed level information about patients' reminders due and satisfied. This menu also contains reports that clinical coordinators can use to review data extracted based on reminder definitions.

Syn.	Name	Option Name	Description
D	Reminders Due Report	PXRM REMINDERS DUE	For a selected reminder the report lists any reminders that are currently due.
R	Reminders Due Report (User)	PXRM REMINDERS DUE (USER)	Reminders Due Reports may be run from any report template allocated to this user.
U	User Report Templates	PXRM REPORT TEMPLATE (USER)	This option allows you to modify the PXRM REPORT TEMPLATE (USER) parameter. This parameter defines which reminder report templates are available to a restricted user.
T	Extract EPI Totals	PXRM EXTRACT EPI TOTALS <b>NOT USED BY IHS</b>	This option is used to summarize total counts for each type of finding item that was extracted for the target date range of the LREPI extract option run.
L	Extract EPI List by Finding and SSN	PXRM EXTRACT EPI FINDING LIST <b>NOT USED BY IHS</b>	This option allows you to print extract results stored in the Reminder Extract Summary file (810.3). Extracted data is listed by finding item and social security number.
Q	Extract Queri Totals	PXRM EXTRACT QUERI TOTALS <b>NOT USED BY IHS</b>	This option prints reminder and finding totals for extract summaries created by automatic extracts.
V	Review Date Report	PXRM REVIEW DATES	The Review Date Report may be run for the following files: Computed Findings, Reminder Definition, Reminder Dialogs, and Reminder Taxonomies. A cutoff date may be entered and all review dates prior or equal to that date in the file selected are reported.

Syn.	Name	Option Name	Description
G	GEC Referral Report	PXRМ GEC REFERRAL REPORT <b>NOT USED BY IHS</b>	This is the option that is used to generate GEC Reports. GEC (Geriatrics Extended Care) are used for referral of geriatric patients to receive further care.

## 14.1 Multiple Uses for Reminder Reports

### 14.1.1 Patient Care

- Future Appointments
  - Which patients need an intervention?
- Past Visits
  - Which patients missed an intervention?
- Action Lists
- Inpatients
  - Which patients need an intervention prior to discharge?

### 14.1.2 Identify Patients for Case Management

- Diabetic patients with poor control
- Identify patients with incomplete problem lists
  - Patients with (+) Hep C test, but no PL entry
- Identify high risk patients
  - On warfarin, amiodarone
- Track annual PPD due (Employee Health)

### 14.1.3 Quality Improvement

- Provide feedback (team/provider)
- Identify (and share) best practices
- Identify under-performers (develop action plan)
- Track performance
- Implementation of new reminders or new processes
- Identify process issues early (mismatch of workload growth versus staffing)
- Provide data for external review (JCAHO)

#### 14.1.4 Management Tool

- Aggregate reports
  - Facility/Service
  - Team (primary care team)
  - Clinic/Ward
- Provider-specific reports
  - Primary Care Provider
  - Encounter location
  - If one provider per clinic location

#### 14.1.5 Employee Performance and Evaluation

- Re-credentialing data for providers
- Annual Proficiency - Nursing
- Support for Special Advancement
- Support for Bonuses
- Employee Rewards & Recognition

#### 14.1.6 Changes to finding date search

Version 2.0 of Reminders contains changes to the date range that can be used in searches. The changes include:

- Effective period and effective date are eliminated
  - Replaced with beginning date and ending date
- Any of the FileMan date formats are acceptable
  - May 14, 2003, T-1Y, T-2M, T-3D
- Beginning date default is beginning of data
- Ending date default is today

#### 14.1.7 Benefits of Date Range Finding Searches

- The search for findings is done only in the specified date range
- Retrospective reminder reports are now possible

## 14.2 Reminders Due Report

```

Select Reminder Managers Menu Option:  rp Reminder Reports

  D Reminders Due Report
  R Reminders Due Report (User) U User Report Templates
  T Extract EPI Totals
  L Extract EPI List by Finding and SSN Q   Extract QUERI Totals
  V Review Date Report

You have PENDING ALERTS
Enter "VA to jump to VIEW ALERTS option Select Reminder Reports Option:
d Reminders Due Report Select an existing REPORT TEMPLATE or return to
continue:
Select one of the following:

  I Individual Patient
  R Reminder Patient List
  L Location
  O OE/RR Team
  P PCMM Provider
  T PCMM Team

PATIENT SAMPLE: L// location

Select FACILITY: LOMA LINDA//
  1 LOMA LINDA   CA VAMC   605
  2 LOMA LINDA   CA NHC 6059AA
  3 LOMA LINDA   CA CIVH  605DS
  4 LOMA LINDA COMMUNITY HOSPITAL CA
  5 LOMA LINDA UNIVERSITY MED. CENTER CA
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1   LOMA LINDA   CA VAMC   605
Select another FACILITY:

Select one of the following:

  HA All Outpatient Locations
  HAI All Inpatient Locations
  HS Selected Hospital Locations
  CA All Clinic Stops(with encounters) CS Selected Clinic Stops
  GS Selected Clinic Groups

Determine encounter counts for: HS//   Selected Hospital Locations

LOCATION:      REC RM
Select another LOCATION: ??

Select another LOCATION: nursing (2ND ONLY)      117
  1 NURSING (2ND ONLY) MISCELLANEOUS 1A-01E
  2 NURSING (2ND ONLY) ZZ GIM WILLIS
  3 NURSING (2ND ONLY) PULM REHAB RN (3NE)
  4 NURSING (2ND ONLY) ZZ CARDIO PREV RESEARCH FRASER
  5 NURSING (2ND ONLY) RHEUM GOLD INJ/3NE
Press <RETURN> to see more, '^' to exit this list, OR CHOOSE 1-5: 3   PULM
REHAB RN (3NE)      CRPROVIDER,SIX Select another LOCATION: bhost
  1 BHOST SUPPORT GP/MHC SUITE CRPROVIDER,SEVEN
  2 BHOST/ADDICTIVE BEHAVIOR GP   CRPROVIDER,EIGHT
  3 BHOST/ADJUSTMENT GROUP CRPROVIDER,NINE
  4 BHOST/ANGER MANAGEMENT II CRPROVIDER,TEN
  5 BHOST/ANGER MANGEMENT I CRPROVIDER,11

```

```

Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1  BHOST SUPPORT GP/MHC SUITE CRPROVIDER,SEVEN Select another
LOCATION:

Select one of the following:
  P Previous Encounters
  F Future Appointments

PREVIOUS ENCOUNTERS OR FUTURE APPOINTMENTS: P// revious Encounters

Enter ENCOUNTER BEGINNING DATE: t-1y ?? ??
This must be a past date. For detailed help type ??. Enter ENCOUNTER
BEGINNING DATE: t-365 (MAY 22, 2002)
Enter ENCOUNTER ENDING DATE: t (MAY 22, 2003)

Enter EFFECTIVE DUE DATE: May 22, 2003// (MAY 22, 2003) Select SERVICE
CATEGORIES: AI//
Select one of the following:

  D Detailed
  S Summary

TYPE OF REPORT: S// ummary

Select one of the following:
  I Individual Locations only
  R Individual Locations plus Totals by Facility
  T Totals by Facility only

REPORT TOTALS: I// r Individual Locations plus Totals by Facility

Select a REMINDER CATEGORY: DM Testing Category
...OK? Yes// (Yes)

Select another REMINDER CATEGORY: jg TEST
...OK? Yes// (Yes) Select another REMINDER CATEGORY:
Select individual REMINDER: VA-WH PAP SMEAR FOLLOW-UP NATIONAL Select
another REMINDER:

Create a new report template: N// O
Print Delimiter Separated output only: N// O Save due patients to a patient
list: N// y YES Select PATIENT LIST name: jg list
Are you adding 'jg list' as a new REMINDER PATIENT LIST? No// (No) ??

Select PATIENT LIST name: ?
Answer with REMINDER PATIENT LIST NAME, or REPORT/EXTRACT PARAMETER
Choose from:
RM MAM Due
RM PAP Due

You may enter a new REMINDER PATIENT LIST, if you wish
Answer must be 3-96 characters in length

Select PATIENT LIST name: JG LIST
Are you adding 'JG LIST' as a new REMINDER PATIENT LIST? No// Y (Yes)
DEVICE: HOME// VIRTUAL CONNECTION

Sorting Encounters / Elapsed time: 0:02:40

Evaluating Reminders done

```

May 22, 2003 3:20:05 pm Page 1

Clinical Reminders Due Report - Summary Report

Report Criteria:

Patient Sample: Location  
 Location: Selected Hospital Locations (Prior Encounters) PULM REHAB RN (3NE)  
 REC RM  
 BHOST SUPPORT GP/MHC SUITE  
 Reminder Category: DM Testing Category  
 JG TEST  
 Individual Reminder: VA-WH PAP SMEAR FOLLOW-UP  
 Date Range: 5/22/2002 to 5/22/2003  
 Effective Due Date: 5/22/2003

Date run: 5/22/2003 3:03:47 pm

Summary report: Individual Locations plus Totals by Facility

Service categories: AI

- A - AMBULATORY
- I - IN HOSPITAL

Enter RETURN to continue or '^' to exit:

May 22, 2003 4:22:02 pm Page 2

Clinical Reminders Due Report - Summary Report

Facility: LOMA LINDA 605  
 Reminders due 5/22/2003 - BHOST SUPPORT GP/MHC SUITE for 5/22/2002 to 5/22/2003

	# Patients with Reminders	
	Applicable	Due
	-----	---
1 DM Blood Pressure > 140/90	6	6
2 Exercise Education	7	6
3 Influenza Vaccine	2	2
4 Hemoglobin A1C	2	0
5 IHD Lipid Profile	2	2
6 Pneumovax	3	3
7 Diabetic Eye Exam	2	2
8 Alcohol Screening (CAGE)	8	4
9 AIMS Test	3	2
10 Diabetic Eye Exam	2	2
11 Mammogram	6	1
12 AIMS Test	3	2
13 PPD Employees Only	8	8

Enter RETURN to continue or '^' to exit:

May 22, 2003 4:22:03 pm Page 3

Clinical Reminders Due Report - Summary Report

Facility: LOMA LINDA 605  
 Reminders due 5/22/2003 - BHOST SUPPORT GP/MHC SUITE for 5/22/2002 to 5/22/2003

	# Patients with Reminders	
	Applicable	Due
	-----	---
14 Weight (BMI>27)/Nutrition	8	1
15 Mammogram	6	1
16 AIMS Test	3	2

17	Weight 8 0		
18	Blood Pressure > 140/90	6	3
19	FOBT/Colon Cancer Screening	6	4
20	PSA Elevated	0	0
21	PSA Counseling v1	0	0
22	Discharge CHF Diagnosis	0	0
23	Weight and Nutrition Screen	8	8
24	Pneumovax	0	0
25	Pneumovax	3	3
26	Influenza Vaccine	2	2

Enter RETURN to continue or '^' to exit:

May 22, 2003 4:22:04 pm Page 4

Clinical Reminders Due Report - Summary Report

Facility: LOMA LINDA 605  
 Reminders due 5/22/2003 - BHOST SUPPORT GP/MHC SUITE for 5/22/2002 to 5/22/2003

	# Patients with Reminders	
	Applicable	Due
	-----	---
27 VA-WH PAP SMEAR FOLLOW-UP	0	0

Report run on 8 patients.

Patient List JG LIST created by CRPROVIDER,ONE on May 22, 2003@15:20:05

List contains 0 patients, report run on 8 patients. Enter RETURN to continue or '^' to exit:

May 22, 2003 4:22:04 pm Page 5

Clinical Reminders Due Report - Summary Report

Facility: CRSITE,ONE  
 Reminders due 5/22/2003 - PULM REHAB RN (3NE) for 5/22/2002 to 5/22/2003

	# Patients with Reminders	
	Applicable	Due
	-----	---
1 DM Blood Pressure > 140/90	58	58
2 Exercise Education	38	23
3 Influenza Vaccine	1	1
4 Hemoglobin A1C	14	5
5 IHD Lipid Profile	18	18
6 Pneumovax	5	1
7 Diabetic Eye Exam	16	15
8 Alcohol Screening (CAGE)	75	50
9 AIMS Test	0	0
10 Diabetic Eye Exam	16	15
11 Mammogram	0	0
12 AIMS Test	0	0
13 PPD Employees Only	74	71

Enter RETURN to continue or '^' to exit:

May 22, 2003 4:22:04 pm Page 6

Clinical Reminders Due Report - Summary Report

Facility: CRSITE,ONE  
 Reminders due 5/22/2003 - PULM REHAB RN (3NE) for 5/22/2002 to 5/22/2003

# Patients with Reminders		Applicable	Due
		-----	---
14	Weight(BMI>27)/Nutrition	64	9
15	Mammogram	0	0
16	AIMS Test	0	0
17	Weight	75	15
18	Blood Pressure > 140/90	58	18
19	FOBT/Colon Cancer Screening	71	38
20	PSA Elevated	6	6
21	PSA Counseling v1	37	27
22	Discharge CHF Diagnosis	0	0
23	Weight and Nutrition Screen	75	75
24	Pneumovax	3	1
25	Pneumovax	5	1
26	Influenza Vaccine	1	1

Enter RETURN to continue or '^' to exit:

May 22, 2003 4:22:04 pm Page 7

Clinical Reminders Due Report - Summary Report

Facility: CRSITE,ONE  
 Reminders due 5/22/2003 - PULM REHAB RN (3NE) for 5/22/2002 to 5/22/2003

# Patients with Reminders		Applicable	Due
		-----	---
27	VA-WH PAP SMEAR FOLLOW-UP	0	0

Report run on 75 patients.

Patient List JG LIST created by CRPROVIDER,ONE on May 22, 2003@15:20:05

List contains 0 patients, report run on 75 patients. Enter RETURN to continue or '^' to exit:

May 22, 2003 4:22:04 pm Page 8

Clinical Reminders Due Report - Summary Report

Facility: CRSITE,ONE  
 Reminders due 5/22/2003 - TOTAL REPORT for 5/22/2002 to 5/22/2003

# Patients with Reminders		Applicable	Due
		-----	---
1	DM Blood Pressure > 140/90	64	64
2	Exercise Education	45	29
3	Influenza Vaccine	3	3
4	Hemoglobin A1C	16	5
5	IHD Lipid Profile	20	20
6	Pneumovax	8	4
7	Diabetic Eye Exam	18	17

```

8 Alcohol Screening (CAGE) 83 54
9 AIMS Test 3 2
10 Diabetic Eye Exam 18 17
11 Mammogram 6 1
12 AIMS Test 3 2
13 PPD Employees Only 82 79

Enter RETURN to continue or '^' to exit:

May 22, 2003 4:22:04 pm Page 9

Clinical Reminders Due Report - Summary Report
Facility: CRSITE,ONE
Reminders due 5/22/2003 - TOTAL REPORT for 5/22/2002 to 5/22/2003
# Patients with Reminders
Applicable Due
-----
14 Weight(BMI>27)/Nutrition 72 10
15 Mammogram 6 1
16 AIMS Test 3 2
17 Weight 83 15
18 Blood Pressure > 140/90 64 21
19 FOBT/Colon Cancer Screening 77 42
20 PSA Elevated 6 6
21 PSA Counseling v1 37 27
22 Discharge CHF Diagnosis 0 0
23 Weight and Nutrition Screen 83 83
24 Pneumovax 3 1
25 Pneumovax 8 4
26 Influenza Vaccine 3 3

Enter RETURN to continue or '^' to exit:

May 22, 2003 4:22:04 pm Page 10

Clinical Reminders Due Report - Summary Report
Facility: CRSITE,ONE
Reminders due 5/22/2003 - TOTAL REPORT for 5/22/2002 to 5/22/2003
# Patients with Reminders
Applicable Due
-----
27 VA-WH PAP SMEAR FOLLOW-UP 0 0

Report run on 83 patients.

Patient List JG LIST created by CRPROVIDER,ONE on May 22, 2003@15:20:05

List contains 0 patients, report run on 83 patients. The following
Location(s) had no patients selected
REC RM (CRSITE,ONE)

End of the report. Press ENTER/RETURN to continue...

```

### 14.3 Reminders Due Report – Patient List Template

```
Select Reminder Reports Option: d Reminders Due Report
```

Select an existing REPORT TEMPLATE or return to continue: PATIENT LIST REPORT

VA-IHD PATIENT LIST Q1/2000  
 ...OK? Yes// (Yes)

Report Title: VA-IHD PATIENT LIST Q1/2000  
 Report Type: Summary Report  
 Patient Sample: Patient List  
 Patient List: VA-\*IHD QUERI 2001 M5 PTS WITH QUALIFY AND ANCHOR VISIT  
 Category: 1 SLC REMINDER CATEGORY  
 Template Name: PATIENT LIST REPORT  
 Date last run: JUN 21, 2002@13:22:49

WANT TO EDIT 'PATIENT LIST REPORT' TEMPLATE: N// O

Enter EFFECTIVE DUE DATE: Jan 15, 2003// (JAN 15, 2003)

Print Delimiter Separated output only: N// O

DEVICE: HOME// ANYWHERE

Evaluating reminders done

Jan 15, 2003 10:44:49 am Page 1

Clinical Reminders Due Report - Summary Report

Report Criteria:

Report Title: VA-IHD PATIENT LIST Q1/2000  
 Patient Sample: Patient List  
 Patient List: VA-\*IHD QUERI 2001 M5 PTS WITH QUALIFY AND ANCHOR VISIT  
 Reminder Category: SLC REMINDER CATEGORY  
 Effective Due Date: 1/15/2003  
 Date run: 1/15/2003 10:43:34 am  
 Template Name: PATIENT LIST REPORT

Enter RETURN to continue or '^' to exit:

Jan 15, 2003 10:44:49 am Page 2

Clinical Reminders Due Report - Summary Report for 1/15/2003

		# Patients with Reminders	
		Applicable	Due
		-----	---
1	PAIN SCREENING	0	0
2	ITC Pneumovax	0	0
3	SLC Life style Education	5	5
4	Pain Management Reminder	0	0
5	Hepatitis C Risk Assessment	6	2
6	DR'S DIABETIC REVIEW	5	5
7	Smoking Cessation Education	3	3
8	Pneumovax	3	3
9	ITC 2001 diabetes example	0	0
10	ITC 2001 Mammogram Example	0	0
11	SLC Diabetic Foot Care Education	5	5
12	Diabetic Eye Exam	5	5

13	SLC Cancer Screen	1	1
14	Ischemic HD/Post MI Follow Up	0	0
15	Breast Exam	0	0
Enter RETURN to continue or '^' to exit:			
Jan 15, 2003 10:44:59 am Page 3			
Clinical Reminders Due Report - Summary Report for 1/15/2003			
		# Patients with Reminders	
		Applicable	Due
		-----	---
16	Advanced Directives Education	6	2
17	LTC Oversight Visit	6	6
18	EXCHANGE CHANGES	0	0
19	Tobacco Cessation Education	2	2
20	JG TOBACCO USE SCREEN	6	6
21	Problem Drinking Screen	6	6
22	Weight and Nutrition Screen	5	5
23	Alcohol Abuse Education	2	2
24	Weight 6 6		
25	Exercise Education	2	2
26	Patch5 VA-Pain Screening	6	6
Report run on 6 patients.			
End of the report. Press ENTER/RETURN to continue...			

## 14.4 Reminder Due Report – Patient List

Select Reminder Managers Menu Option: RP	Reminder Reports
D Reminders Due Report R Reminders Due Report (User) U User Report Templates T Extract EPI Totals L Extract EPI List by Finding and SSN Q Extract QUERI Totals V Review Date Report	
You have PENDING ALERTS	
Enter "VA to jump to VIEW ALERTS option Select	
Reminder Reports Option: D	Reminders Due Report
Select an existing REPORT TEMPLATE or return to continue:	
Select one of the following:	
I Individual Patient R Reminder Patient List L Location O OE/RR Team P PCMM Provider T PCMM Team	

```

PATIENT SAMPLE: L// Reminder Patient List

Select REMINDER PATIENT LIST: ?
Answer with REMINDER PATIENT LIST NAME, or REPORT/EXTRACT PARAMETER Do you
want the entire REMINDER PATIENT LIST List? Y (Yes)
  Choose from:
  A COPIED LIST
  A SECOND LIST FOR DELETION
  MODIFIED TEMPLATE 2001 DENOMINATOR 001
  NEW EXTRACT PARAMETER 2000 Q2 DENOMINATOR 001
  PJH IHD QUERI - STEP 1 RESULTS
  PJH IHD QUERI - STEP 2 RESULTS
  PJH IHD QUERI - STEP 3 RESULTS
  PJH TEST PARAMETER 2001 DENOMINATOR 001
  VA-IHD QUERI 2000 Q2 IHD PATIENTS WITH ANCHOR
  VA-IHD QUERI 2000 Q2 IHD PATIENTS WITHOUT ANCHOR
  VA-IHD QUERI 2000 Q3 IHD PATIENTS WITH ANCHOR
  VA-IHD QUERI 2000 Q3 IHD PATIENTS WITHOUT ANCHOR
  VA-IHD QUERI 2002 Q2 IHD PATIENTS WITH ANCHOR
  VA-IHD QUERI 2002 Q2 IHD PATIENTS WITHOUT ANCHOR
  VA-IHD QUERI REPORT Dec 30, 2001 - Jun 28, 2002 IHD PATIENTS WIT

Select REMINDER PATIENT LIST: NEW EXTRACT PARAMETER 2000 Q2 DENOMINATOR
001
Select another PATIENT LIST:

Enter EFFECTIVE DUE DATE: Jul 10, 2002// (JUL 10, 2002)

Select one of the following:

  D Detailed
  S Summary

TYPE OF REPORT: S// Detailed

Display All Future Appointments: N// O Print full SSN: N// O
Select individual REMINDER: You must select a reminder!
Select REMINDER DEFINITION NAME: VA-QUERI REPORT IHD ELEVATED LDL
NATIONAL
Select another REMINDER:

Create a new report template: N// O

Print Delimiter Separated output only: N// O

DEVICE: HOME// ANYWHERE
done

Jul 10, 2002 10:46:17 am Page 1

Clinical Reminders Due Report - Detailed Report
Report Criteria:
Patient Sample: Patient List
Patient List: NEW EXTRACT PARAMETER 2000 Q2 DENOMINATOR
001

Reminder: VA-QUERI REPORT IHD ELEVATED LDL Appointments: Next Appointment
only
Effective Due Date: 7/10/2002
Date run: 7/10/2002 10:45:22 am

```

End of the report. Press ENTER/RETURN to continue...

## 14.5 Extract QUERI Totals – *Not Used by IHS*

```
D Reminders Due Report
R Reminders Due Report (User)
U User Report Templates
T Extract EPI Totals
L Extract EPI List by Finding and SSN
Q Extract QUERI Totals
V Review Date Report
```

You have PENDING ALERTS  
Enter "VA to jump to VIEW ALERTS option

Select Reminder Reports Option: Q Extract QUERI Totals  
START WITH NAME: FIRST// ?

TO SORT IN SEQUENCE, STARTING FROM A CERTAIN NAME, TYPE THAT NAME  
Enter the 3-30 character name to identify the extract.  
START WITH NAME: FIRST// ??

The NAME is the combination of a unique abbreviation for the type of extract (e.g., LREPI), the YY/MM representing the ending year and month of the extract date range, and the run date in the format YYMMDD. The date and time of the run is an identifier.

The following is an example of lookup information:

```
160 LREPI 00/05 061500 Jun15,2000@14:52:36
161 LREPI 00/06 073100 Jul15,2000@14:55:40
162 LREPI 00/07 081500 Aug15,2000@15:42:24
163 LREPI 00/05 082200 Aug22,2000@02:44:54
164 LREPI 00/08 082500 Aug25,2000@14:24:59
```

START WITH NAME: FIRST//

<Enter>

START WITH NAME: FIRST// 164

GO TO NAME: LAST// <Enter>

DEVICE: ANYWHERE Right Margin: 80// <Enter>

REMINDER EXTRACT SUMMARY LIST

JAN 10,2003 09:14 PAGE 1

-----  
VA MH QUERI 2000 M2

Date Range: FEB 1, 2000-FEB 28,2000

Extract Date: JAN 3, 2003

Extract Sequence: 001

Reminder: VA-DEPRESSION SCREENING

Station: CRSITE ONE

Patient List: VA-MH QUERI 2000 M2 QUALIFYING VISIT

Reminder Totals:	Total	Applicable	N/A	Due	Not Due
	1000	899	101	200	699

Finding Totals:

Sequence: 001

Finding Group: VA-DEPRESSION SCREEN NON APPLICABLE

Term: DEPRESSION DIAGNOSIS  
 Group Type: MOST RECENT FINDING PATIENT COUNT  
 Group Status: TOTAL PATIENTS  
 Finding Count by Reminder Status:

Total	Applicable	N/A	Due	Not Due
20	20	0	20	0

Sequence: 002  
 Finding Group: VA-DEPRESSION SCREEN NON APPLICABLE  
 Term: PSYCHOTHERAPY  
 Group Type: MOST RECENT FINDING PATIENT COUNT  
 Group Status: TOTAL PATIENTS  
 Finding Count by Reminder Status:

Total	Applicable	N/A	Due	Not Due

Sequence: 003  
 Finding Group: VA-DEPRESSION SCREEN NON APPLICABLE  
 Term: ANTIDEPRESSANT MEDICATION  
 Group Type: MOST RECENT FINDING PATIENT COUNT  
 Group Status: TOTAL PATIENTS  
 Finding Count by Reminder Status:

Total	Applicable	N/A	Due	Not Due

Sequence: 004  
 Finding Group: VA-DEPRESSION SCREEN RESULT  
 Term: DEPRESSION SCREEN NEGATIVE  
 Group Type: MOST RECENT FINDING PATIENT COUNT  
 Group Status: APPLICABLE PATIENTS  
 Finding Count by Reminder Status:

Total	Applicable	N/A	Due	Not Due

Sequence: 005  
 Finding Group: VA-DEPRESSION SCREEN RESULT  
 Term: DEPRESSION SCREEN POSITIVE  
 Group Type: MOST RECENT FINDING PATIENT COUNT  
 Group Status: APPLICABLE PATIENTS  
 Finding Count by Reminder Status:

Total	Applicable	N/A	Due	Not Due

Sequence: 006  
 Finding Group: VA-REFUSED DEPRESSION SCREEN  
 Term: REFUSED DEPRESSION SCREENING  
 Group Type: MOST RECENT FINDING COUNT  
 Group Status: TOTAL PATIENTS  
 Finding Count by Reminder Status:

Total	Applicable	N/A	Due	Not Due

Extract Sequence: 002  
 Reminder: VA-POS DEPRESSION SCREEN FOLLOW UP

Station:	CRSITE HCS				
Patient List:	VA-MH QUERI 2000 M2 QUALIFYING VISIT				
Reminder Totals:	Total	Applicable	N/A	Due	Not Due
	1000	300	700	10	690
Finding Totals:					
Sequence:	001				
Finding Group:	VA-POS DEPRESSION SCREEN FOLLOW UP				
Term:	DEPRESSION SCREEN NEGATIVE				
Group Type:	MOST RECENT FINDING PATIENT COUNT				
Group Status:	TOTAL PATIENTS				
Finding Count by Reminder Status:					
	Total	Applicable	N/A	Due	Not Due
Sequence:	002				
Finding Group:	VA-POS DEPRESSION SCREEN FOLLOW UP				
Term:	DEPRESSION ASSESS INCONCLUSIVE (?MDD)				
Group Type:	MOST RECENT FINDING PATIENT COUNT				
Group Status:	TOTAL PATIENTS				
Finding Count by Reminder Status:					
	Total	Applicable	N/A	Due	Not Due
Sequence:	003				
Finding Group:	VA-POS DEPRESSION SCREEN FOLLOW UP				
Term:	REFERRAL TO MENTAL HEALTH				
Group Type:	MOST RECENT FINDING PATIENT COUNT				
Group Status:	TOTAL PATIENTS				
Finding Count by Reminder Status:					
	Total	Applicable	N/A	Due	Not Due
Sequence:	004				
Finding Group:	VA-POS DEPRESSION SCREEN FOLLOW UP				
Term:	DEPRESSION TO BE MANAGED IN PC				
Group Type:	MOST RECENT FINDING PATIENT COUNT				
Group Status:	TOTAL PATIENTS				
Finding Count by Reminder Status:					
	Total	Applicable	N/A	Due	Not Due
Extract Sequence:	003				
Reminder:	VA-ANTIPSYCHOTIC MED SIDE EFF EVAL Station: CRSITE HCS				
Patient List:	VA-MH QUERI 2000 M2 QUALIFYING VISIT				
Reminder Totals:	Total	Applicable	N/A	Due	Not Due
	1000	3	997	1	2
Finding Totals:					
Sequence:	001				
Finding Group:	VA-ANTIPSYCHOTIC DRUGS				
Term:	AIM EVALUATION NEGATIVE				
Group Type:	MOST RECENT FINDING PATIENT COUNT				
Group Status:	TOTAL PATIENTS				
Finding Count by Reminder Status:					

	Total	Applicable	N/A	Due	Not Due
Sequence: 002					
Finding Group:	VA-ANTIPSYCHOTIC DRUGS				
Term:	AIM EVALUATION POSITIVE				
Group Type:	MOST RECENT FINDING PATIENT COUNT				
Group Status:	TOTAL PATIENTS				
Finding Count by Reminder Status:					
	Total	Applicable	N/A	Due	Not Due
Sequence: 003					
Finding Group:	VA-ANTIPSYCHOTIC DRUGS				
Term:	REFUSED ANTIPSYCHOTICS				
Group Type:	MOST RECENT FINDING PATIENT COUNT				
Group Status:	TOTAL PATIENTS				
Finding Count by Reminder Status:					

### 14.5.1 Future Appointments

A new prompt has been added that will only display if Show All future appointment is selected. The prompt is Display Appointment Location. If you answer Y, the clinic name will appear with the future appointment date/time. If you enter N, only the date/time will display.

If the patient is an outpatient, it will sort by next appointment date. If the patient is a currently an inpatient and has an outpatient appointment schedule, it will sort by the Room-Bed location.

When displaying the next appointment if the patient is an inpatient, the Room-Bed will be displayed followed by (Inp.) then the next appointment will display under this data. If you select Display All future appointments, the appointment will display under the patient name.

```
D Reminders Due Report

Select an existing REPORT TEMPLATE or return to continue: AGP AGP

...OK? Yes// <Enter> (Yes)

Report Title: AGP
Report Type: Detailed Report
Patient Sample: Location
Facility: CBOC
VAMC1 HCS
Location: Selected Clinic Stops (Future Appoints.)
GENERAL SURGERY 52
GENERAL SURGERY 401
Reminder: 1 VA-IHD LIPID PROFILE Template Name: AGP ERROR
Date last run: SEP 10, 2004@14:57:28

WANT TO EDIT 'AGP ERROR' TEMPLATE: N// Y
```

```

Combined report for all Facilities: N// YES
Enter APPOINTMENT BEGINNING DATE: Sep 10, 2004// <Enter> (SEP 10, 2004)
Enter APPOINTMENT ENDING DATE: T+30 (OCT 10, 2004)

Enter EFFECTIVE DUE DATE: Sep 10, 2004// <Enter> (SEP 10, 2004)
Combined report for all Clinic Stops : N// YES
Display All Future Appointments: N// YES

Display Appointment Location: N// YES Sort by Next Appointment date: N//
YES Print full SSN: N//<Enter> 0
Print Delimiter Separated output only: N// <Enter> 0 Save due patients to
a patient list: N// <Enter> 0 DEVICE: HOME// <Enter> ANYWHERE

Sorting appointments D|D/D-
Evaluating Reminders done
    
```

Sep 10, 2004 3:11:12 pm Page 1

Clinical Reminders Due Report - Detailed Report

```

Report Criteria:
Report Title: AGP ERROR
Patient Sample: Location
Location: Selected Clinic Stops (Future Appoints.)
GENERAL SURGERY 52
GENERAL SURGERY 401
Reminder: VA-IHD LIPID PROFILE
Appointments: All Future Appointments
Date Range: 9/10/2004 to 10/10/2004
Effective Due Date: 9/10/2004
Date run: 9/10/2004 3:10:51 pm
Template Name: AGP ERROR
Combined report: Combined Facility and Combined Locations
    
```

Enter RETURN to continue or '^' to exit: <Enter>

Sep 10, 2004 3:11:12 pm Page 2

Clinical Reminders Due Report - Detailed Report

```

Combined Report: VAMC1 HCS (000), CBOC (000)
Reminders due 9/10/2004 - COMBINED LOCATIONS for 9/10/2004 to 10/10/2004
    
```

IHD Lipid Profile: 4 patients have reminder due

Date Due	Last Done	Next Appt	
1	CRPATIENT,ONE (1996)	DUE NOW	N/AA-6 (Inp.)
2	CRPATIENT,TWO (8829)	DUE NOW	N/A
3	CRPATIENT,THREE (5656)	DUE NOW	N/A
4	CRPATIENT,FOUR (1462)	DUE NOW	N/A

```

Report run on 4 patients.
Applicable to 4 patients.
    
```

Enter RETURN to continue or '^' to exit: <Enter>

Sep 10, 2004 3:11:17 pm Page 3

## Clinical Reminders Due Report - Detailed Report

The following Location(s) had no patients selected

GENERAL SURGERY 52

End of the report. Press ENTER/RETURN to continue...

D Reminders Due Report  
 R Reminders Due Report (User) U User Report Templates  
 T Extract EPI Totals  
 L Extract EPI List by Finding and SSN Q Extract QUERI Totals  
 V Review Date Report  
 G GEC Referral Report

You have PENDING ALERTS

Enter "VA to jump to VIEW ALERTS option

Select Reminder Reports Option: D Reminders Due Report

Select an existing REPORT TEMPLATE or return to continue: AGP AGP  
 ...OK? Yes// <Enter> (Yes)

Report Title: AGP ERROR  
 Report Type: Detailed Report  
 Patient Sample: Location  
 Facility: CRSITE ONE  
                   CRSITE TWO HCS  
 Location: Selected Clinic Stops (Future Appoints.)  
                   GENERAL SURGERY 52  
                   GENERAL SURGERY 401  
 Reminder: 1 VA-IHD LIPID PROFILE  
 Template Name: AGP ERROR  
 Date last run: SEP 10, 2004@15:10:51

WANT TO EDIT 'AGP ERROR' TEMPLATE: N// <Enter> 0

Combined report for all Facilities : N// YES

Enter APPOINTMENT BEGINNING DATE: Sep 10, 2004// <Enter> (SEP 10, 2004)

Enter APPOINTMENT ENDING DATE: T+30 (OCT 10, 2004)

Enter EFFECTIVE DUE DATE: Sep 10, 2004// <Enter> (SEP 10, 2004)

Combined report for all Clinic Stops : N// YES

Display All Future Appointments: N// YES

Display Appointment Location: N//<Enter> 0

Sort by Next Appointment date: N// YES

Print full SSN: N//<Enter> 0

Print Delimiter Separated output only: N//<Enter> 0

Save due patients to a patient list: N//<Enter> 0 DEVICE: HOME//  
 <Enter> ANYWHERE

Sorting appointments D|D/D- Evaluating Reminders done

Sep 10, 2004 3:11:36 pm Page 1

Clinical Reminders Due Report - Detailed Report

Report Criteria:

Report Title: AGP ERROR Patient Sample: Location  
 Location: Selected Clinic Stops (Future Appoints.)  
 GENERAL SURGERY 52  
 GENERAL SURGERY 401  
 Reminder: VA-IHD LIPID PROFILE  
 Appointments: All Future Appointments  
 Date Range: 9/10/2004 to 10/10/2004  
 Effective Due Date: 9/10/2004  
 Date run: 9/10/2004 3:11:19 pm  
 Template Name: AGP ERROR  
 Combined report: Combined Facility and Combined Locations

Enter RETURN to continue or '^' to exit:

Sep 10, 2004 3:11:36 pm Page 2

Clinical Reminders Due Report - Detailed Report

Combined Report: VAMC1 HCS (000), CBOC (0000)  
 Reminders due 9/10/2004 - COMBINED LOCATIONS for 9/10/2004 to 10/10/2004

IHD Lipid Profile: 4 patients have reminder due

		Date Due	Last Done	Next Appt
		-----	-----	-----
1	CRPATIENT,ONE (1996)	DUE NOW	N/A	A-6 (Inp.) 9/13/2004
2	CRPATIENT,TWO (8829)	DUE NOW	N/A	B-1 (Inp.) 9/20/2004
3	CRPATIENT,THREE (5656)	DUE NOW	N/A	9/15/2004
4	CRPATIENT,FOUR (1462)	DUE NOW	N/A	9/10/2004

Report run on 4 patients.  
 Applicable to 4 patients.

Enter RETURN to continue or '^' to exit: <Enter>

Sep 10, 2004 3:11:41 pm Page 3

Clinical Reminders Due Report - Detailed Report

The following Location(s) had no patients selected

GENERAL SURGERY 52

End of the report. Press ENTER/RETURN to continue... <Enter>

D Reminders Due Report  
 R Reminders Due Report (User) U User Report Templates  
 T Extract EPI Totals  
 L Extract EPI List by Finding and SSN  
 Q Extract QUERI Totals  
 V Review Date Report

```

G  GEC Referral Report

You have PENDING ALERTS
Enter "VA to jump to VIEW ALERTS option

Select Reminder Reports Option: D  Reminders Due Report

Select an existing REPORT TEMPLATE or return to continue:  AGP ERROR AGP
ERROR
...OK? Yes// <Enter>  (Yes)

Enter RETURN to continue or '^' to exit:

                                     Sep 10, 2004 3:11:36 pm  Page 2

                Clinical Reminders Due Report - Detailed Report

Combined Report: VAMC1 HCS (000), CBOC (0000)
Reminders due 9/10/2004 - COMBINED LOCATIONS for 9/10/2004 to 10/10/2004

IHD Lipid Profile: 4 patients have reminder due

Report Title:  AGP ERROR
Report Type:   Detailed Report
Patient Sample: Location
Facility:     CRSITE ONE CRSITE HCS
Location:     Selected Clinic Stops (Future Appoints.)
              GENERAL SURGERY 52
              GENERAL SURGERY 401

Reminder:     1  VA-IHD LIPID PROFILE
Template Name: AGP ERROR
Date last run: SEP 10, 2004@15:11:19

WANT TO EDIT 'AGP ERROR' TEMPLATE: N//<Enter> 0
Combined report for all Facilities : N// YES

Enter APPOINTMENT BEGINNING DATE: Sep 10, 2004// <Enter>  (SEP 10, 2004)
Enter APPOINTMENT ENDING DATE: T+30 (OCT 10, 2004)

Enter EFFECTIVE DUE DATE: Sep 10, 2004// <Enter> (SEP 10, 2004)

Combined report for all Clinic Stops : N// Y

Enter Y or N. For detailed help type ??.

Combined report for all Clinic Stops : N// YES

Display All Future Appointments: N//<Enter>      0

Sort by Next Appointment date: N//<Enter> 0

Print full SSN: N//<Enter> 0

Print Delimiter Separated output only: N// <Enter> 0

Save due patients to a patient list: N// <Enter> 0

DEVICE: HOME// <Enter>  ANYWHERE

```

Sorting appointments D|D/D-

Evaluating Reminders done

Sep 10, 2004 3:12:01 pm Page 1

Clinical Reminders Due Report - Detailed Report

Report Criteria:

Report Title: AGP ERROR  
 Patient Sample: Location  
 Location: Selected Clinic Stops (Future Appoints.)  
 GENERAL SURGERY 52  
 GENERAL SURGERY 401  
 Reminder: VA-IHD LIPID PROFILE  
 Appointments: Next Appointment only  
 Date Range: 9/10/2004 to 10/10/2004  
 Effective Due Date: 9/10/2004  
 Date run: 9/10/2004 3:11:42 pm  
 Template Name: AGP ERROR  
 Combined report: Combined Facility and Combined Locations

Enter RETURN to continue or '^' to exit:

Sep 10, 2004 3:12:01 pm Page 2

Clinical Reminders Due Report - Detailed Report

Combined Report: VAMC1 HCS (000), CBOC2 (0000)  
 Reminders due 9/10/2004 - COMBINED LOCATIONS for 9/10/2004 to 10/10/2004

IHD Lipid Profile: 4 patients have reminder due

		Date Due	Last Done	Next Appt
		-----	-----	-----
1	CRPATIENT,ONE (1996)	DUE NOW	N/A	A-6 (Inp.) 9/13/2004
2	CRPATIENT,TWO (8829)	DUE NOW	N/A	B-1 (Inp.) 9/20/2004
3	CRPATIENT,THREE (5656)	DUE NOW	N/A	9/15/2004
4	CRPATIENT,FOUR (1462)	DUE NOW	N/A	9/10/2004

Report run on 5 patients.  
 Applicable to 5 patients.

Enter RETURN to continue or '^' to exit:

Sep 10, 2004 3:12:05 pm Page 3

Clinical Reminders Due Report - Detailed Report

The following Location(s) had no patients selected

GENERAL SURGERY 52

End of the report. Press ENTER/RETURN to continue...

```
D Reminders Due Report
R Reminders Due Report (User)
U User Report Templates
T Extract EPI Totals
L Extract EPI List by Finding and SSN
Q Extract QUERI Totals(NOT USED BY IHS)
V Review Date Report
G GEC Referral Report (NOT USED BY IHS)
```

```
You have PENDING ALERTS
Enter "VA to jump to VIEW ALERTS option
```

```
Select Reminder Reports Option:
```

## 14.6 GEC Referral Report – *Not Used by IHS*

This option is used to generate GEC Reports. GEC (Geriatrics Extended Care) are used for referral of geriatric patients to receive further care.

## 15.0 Reminder Patient List Management

Reminder Patient Lists and List rules are new concepts introduced with Version 2 reminders. List rules are rules used to compile lists of patients. The extract process for QUERI relies on national list rules to identify the patient cohort for the extract.

There are three types of list rules:

- Finding rules are used to collect patients with specific term findings in a date range.
- Patient List rules are used to collect patients from existing patient lists.
- Rule sets contain Finding rules and Patient List rules and the logic to create patient lists by adding, selecting, or removing patients collected by the component finding or patient list rules.

Syn.	Name	Option Name	Description
LRM	List Rule Management	PXRM LIST RULE MANAGEMENT	This option allows creation of list rules, which can be used in patient list creation. Nationally released list rules are the basis of the reminder extract process.
PLM	Patient List Management	PXRM EXTRACT PATIENT LIST	This option manages reminder patient lists. Local patient lists may be created from list rules, copied to OE/RR teams, copied to other patient lists, or deleted. Local patient lists and national patient lists (from the extract process) are listed. Individual lists may be displayed or printed or used to run health summaries.

### 15.1 List Rule Management

You must create rule sets and list rules before you can create a patient list. Rule sets contain list rules that use operations which set criteria for including, excluding, or combining different groups of patients.

```

Select Reminder Patient List Menu Option: LRM List Rule Management

List Rule Management      Jan 28, 2005@10:57      Page: 1 of 1
                                     2 Classes
Item Rule Set Name      Class
1  VA-*IHD QUERI 412 PTS WITH QUALIFY AND ANCHOR VISIT NATIONAL
2  VA-*IHD QUERI 412 PTS WITH QUALIFY AND ANCHOR VISIT on LLA M NATIONAL
3  VA-*IHD QUERI PTS WITH QUALIFY AND ANCHOR VISIT NATIONAL
4  VA-*IHD QUERI PTS WITH QUALIFY AND ANCHOR VISIT on LLA MEDS NATIONAL
5  VA-*IHD QUERI PTS WITH QUALIFY NATIONAL
6  VA-*MH QUERI QUALIFYING PC VISIT LOCAL
7  VA-*MH QUERI QUALIFYING MH VISIT LOCAL

+ Next Screen      - Previous Screen      ?? More Actions      _____

CV  Change View      DR  Display/Edit Rule
CR  Create Rule      QU  Quit
Select Item: Quit// 1

      Name: VA-*IHD QUERI 412 PTS WITH QUALIFY
      AND ANCHOR VISI Number: 12
      Class: NATIONAL

Description: IHD 412 patients with qualifying and anchor visits.

      Rule Type:      RULE SET Start Date:

      Start Date:
      Stop Date:

Component Rules
-----
Sequence: 001
List Rule: VA-*IHD QUERI PATIENT LIST
(QUALIFY AND ANCHOR) Description: IHD
patients from extract sequence 002.

      Rule Type: PATIENT LIST RULE
      Patient List: VA-*IHD QUERI yyyy Mon PTS WITH QUALIFY AND
      ANCHOR VISIT Operation: ADD PATIENT
Start Sequence: Start
List: Permanent List:

      Sequence: 002
      List Rule: VA-*IHD QUERI 412 DIAGNOSIS
      Description: Patients with 412 diagnosis in past five years.
      Rule
      Type: FINDING RULE
      Reminder Term: IHD
      412 DIAGNOSIS
      Start Date: RSTART-5Y
      Operation: SELECT
      Start Sequence:
      Start List:
      Permanent List:

ED  Edit Rule      QU  Quit
Select Item(s): Next Screen//      NEXT SCREEN
    
```

Figure 15-1: Part 1

```

Display/Edit Rule                               Jan 28, 2005@10:57:33   Page: 3 of 3
+
  Edit History
  -----
Edit Date: AUG 29,2002      11:21      Edit By: CRPROVIDER,THREE

Edit Comments:

+ Next Screen      - Prev Screen      ?? More Actions
  ED Edit Rule                               QU Quit
Select Item(s): Quit// Quit
    
```

Figure 15-2: Part 2

## 15.2 Patient List Management

The output for the Patient List Management are shown in the following screen captures.

```

Select Reminder Patient List Menu Option: plm Patient List Management

Reminder Patient List      Jan 05, 2005@10:48:49      Page: 1 of 3
Available Patient Lists.
Item Reminder Patient List Name      Created      Patients
1      IHD TEST      18
2      LIST      1/9/03@11:36:52      0
3      NAME      12/31/02@11:56:10      23
4      TEST      0
5      VA-*IHD QUERI 2000 M1 PTS WITH QUALIFY VISIT      12/2/02@14:45:48      2
6      VA-*IHD QUERI 2000 M2 412 PTS WITH QUALIFY AN      11/27/02@13:43:10      6
7      VA-*IHD QUERI 2000 M2 412 PTS WITH QUALIFY AN      11/27/02@13:43:28      0
8      VA-*IHD QUERI 2000 M2 PTS WITH QUALIFY AND AN      11/27/02@13:42:57      17
9      VA-*IHD QUERI 2000 M2 PTS WITH QUALIFY AND AN      11/27/02@13:43:22      0
10     VA-*IHD QUERI 2000 M2 PTS WITH QUALIFY VISIT      11/27/02@13:40:06      18
11     VA-*IHD QUERI 2000 M3 412 PTS WITH QUALIFY AN      11/27/02@13:24:01      6
12     VA-*IHD QUERI 2000 M3 412 PTS WITH QUALIFY AN      11/27/02@13:24:08      0
13     VA-*IHD QUERI 2000 M3 PTS WITH QUALIFY AND AN      11/27/02@13:23:55      16
14     VA-*IHD QUERI 2000 M3 PTS WITH QUALIFY AND AN      11/27/02@13:24:07      0
15     VA-*IHD QUERI 2000 M3 PTS WITH QUALIFY VISIT      11/27/02@13:23:43      18
16     VA-*IHD QUERI 2000 M4 412 PTS WITH QUALIFY AN      11/27/02@13:25:05      7

+ Next Screen      - Previous Screen      ?? More Actions

CO Copy Patient List      VW View My List      LRM List Rule Management
CR Create Patient List      PUB View Public List      QU Quit
Select Item: Next Screen// ??

The following actions are available:
CO Copy Patient List
Copy all patients in the patient list into a new local patient list.
    
```

Figure 15-3: Part 1

```

CR  Create Patient List
Use a list rule set to create a new local patient list.
LRM List Rule Management
Create or edit list rules.
QU  Quit
    
```

---

Reminder Patient List                      Jan 05, 2005@10:48:49                      Page: 1 of 3

Available Patient Lists.

Item	Reminder Patient List Name	Created	Patients
1	IHD TEST		18
2	LIST	1/9/03@11:36:52	0
3	NAME	12/31/02@11:56:10	23
4	TEST		0
5	VA-*IHD QUERI 2000 M1 PTS WITH QUALIFY VISIT	12/2/02@14:45:48	2
6	VA-*IHD QUERI 2000 M2 412 PTS WITH QUALIFY AN	11/27/02@13:43:10	6
7	VA-*IHD QUERI 2000 M2 412 PTS WITH QUALIFY AN	11/27/02@13:43:28	0
8	VA-*IHD QUERI 2000 M2 PTS WITH QUALIFY AND AN	11/27/02@13:42:57	17
9	VA-*IHD QUERI 2000 M2 PTS WITH QUALIFY AND AN	11/27/02@13:43:22	0

+ Next Screen                      - Previous Screen                      ?? More Actions

---

CO Copy Patient List                      VW View My List                      LRM List Rule Management  
 CR Create Patient List                      PUB View Public List                      QU Quit  
 Select Item: Next Screen// ??

Figure 15-4: Part 2

```

Reminder Patient List                      Jan 05, 2005@10:48:49                      Page: 1 of 3
Available Patient Lists.
Item  Reminder Patient List Name                      Created                      Patients
1      IHD TEST                                                                18
2      LIST                      1/9/03@11:36:52                      0
3      NAME                      12/31/02@11:56:10                      23
4      TEST                                                                0
5      VA-*IHD QUERI 2000 M1 PTS WITH QUALIFY VISIT                      12/2/02@14:45:48                      2
6      VA-*IHD QUERI 2000 M2 412 PTS WITH QUALIFY AN                      11/27/02@13:43:10                      6
7      VA-*IHD QUERI 2000 M2 412 PTS WITH QUALIFY AN                      11/27/02@13:43:28                      0
8      VA-*IHD QUERI 2000 M2 PTS WITH QUALIFY AND AN                      11/27/02@13:42:57                      17
9      VA-*IHD QUERI 2000 M2 PTS WITH QUALIFY AND AN                      11/27/02@13:43:22                      0
10     VA-*IHD QUERI 2000 M2 PTS WITH QUALIFY VISIT                      11/27/02@13:40:06                      18
11     VA-*IHD QUERI 2000 M3 412 PTS WITH QUALIFY AN                      11/27/02@13:24:01                      6
12     VA-*IHD QUERI 2000 M3 412 PTS WITH QUALIFY AN                      11/27/02@13:24:08                      0
13     VA-*IHD QUERI 2000 M3 PTS WITH QUALIFY AND AN                      11/27/02@13:23:55                      16
14     VA-*IHD QUERI 2000 M3 PTS WITH QUALIFY AND AN                      11/27/02@13:24:07                      0
15     VA-*IHD QUERI 2000 M3 PTS WITH QUALIFY VISIT                      11/27/02@13:23:43                      18
16     VA-*IHD QUERI 2000 M4 412 PTS WITH QUALIFY AN                      11/27/02@13:25:05                      7
    
```

+ Next Screen                      - Previous Screen                      ?? More Actions                      >>>

---

CO Copy Patient List                      DE Delete Patient List                      Qu Quit  
 COE Copy to OE/RR Team                      DSP Display Patient List  
 CR Create Patient List                      LRM List Rule Management                      QU Quit  
 Select Item: Next Screen// dsp Display Patient List  
 Select (s):                      (1-16): 5

Figure 15-5: Part 3

Reminder Patient List		Jan 05, 2005@10:48:49	Page: 1 of 1
List Name: VA-*IHD QUERI 2000 M1 PTS WITH QUALIFY VISIT (2 patients)			
Created: 12/02/2002@14:45:48			
Source: Extract Parameter - VA-IHD QUERI		Class: National	
Patient Name	DFN	Primary Facility	
1 CRPATIENT, ONE	91263	000	
2 CRPATIENT, TWO	91261	0028	
+ Next Screen		- Previous Screen	?? More Actions
CV	Change View	DEM	Demographic Report
HSA	Health Summary (All)	USR	View Users
HSI	Health Summary (Individual)		QU Quit
Select Item: Quit// <u>hsa</u> Health Summary (All)			
Print Health Summary for all patients on this list ?: N//Y YES			
Select HEALTH SUMMARY TYPE: CLINICAL MAINTENANCE			
DEVICE: HOME// ANYWHERE			

Figure 15-6: Part 4

### 15.3 Reminder Reports Patient Lists

The national patient lists created by the extract don't need any setup and are created automatically from the extract (and deleted too by the same after 5 years).

For generating local lists, sites could use reminder reports since they can specify date ranges and locations or providers but the only output available is the due report (albeit condensed if required).

However, the patient list menu allows reporting from existing patient lists (health summaries). Also the patient list option allows patients to be identified by finding. If you want a list of diabetic patients who smoke then the patients are extracted directly from the indexes rather than by parsing the visit file. The down side is that list rules and rule sets identifying findings to be collected must be created before a new list can be created. The biggest plus is that since the patient list doesn't involve reminder evaluation it is quick.

To sum up, the patient list option is a way to run health summaries on patient lists, copy them to team lists, and quickly build lists for patients with specific finding combinations.

## 16.0 Reminder Parameters

This menu contains two options: Edit Site Disclaimer and Edit Web Sites

Edit Web Sites was created in response to the NOIS, MAC-1000-60473 - Web site shows in all reminders. Sites were unable to get websites to show for an individual reminder – a default URL and website text overrides individual entries. In Version 1.5, the only way to edit or delete the default website was through VA FileMan. It was recommended that developers create an easier way for a user edit the default URL Web addresses.

Syn.	Name	Option Name	Description
ESD	Edit Site Disclaimer	PXRМ EDIT SITE DISCLAIMER	This option allows the site disclaimer used in Health Summary components to be modified.
EWS	Edit Web Sites	PXRМ EDIT WEB SITES	This option allows the reminder websites used in EHR GUI to be modified.

### Edit Site Disclaimer Example

```
Select Reminder Parameters Option: esd Edit Site Disclaimer
SITE REMINDER DISCLAIMER: No existing text
Edit? NO// y YES

==[ WRAP ]==[ REPLACE ]===< SITE REMINDER DISCLAIMER >===[ <PF1>H=Help ]===
The following disease screening, immunization and patient education
recommendations are offered as guidelines to assist in your practice. These
are only recommendations, not practice standards. The appropriate
utilization of these for your individual patient must be based on clinical
judgment and the patient's current status.

<=====T=====T=====T=====T=====T=====T=====T=====T=====T=====>=====
Press RETURN to continue...
```

### Edit Web Sites Example

```
Select Reminder Parameters Option: ews Edit Web Sites

Choose from:
  www.ihs.gov/cio/crs/

Select URL: ?
Answer with WEB SITES URL Choose from:

  www.ihs.gov/cio/crs/

You may enter a new WEB SITES, if you wish
Enter the URL for the web site. Select URL: www.ihs.gov/cio/crs/
```

## 16.1 Reminder Extract Menu

This menu contains options that manage the extract summary reports of compliance generated by the monthly extract runs. These extract summary reports detail the information transmitted to the central repository.

**Note:** At the present time, there are no national extracts and this menu is *not used by IHS*.

Prior extract summaries for a given extract type can be displayed with their HL7 transmission status and history. Reminder and finding totals of individual extract summaries may be displayed or printed if required. The patient lists generated by each extract may be displayed or used to print health summaries, if required.

Extracts and transmissions for a selected prior period may be initiated manually from this option. Existing extracts may also be re-transmitted, if required.

Syn.	Option	Option Name	Description
MA	Reminder Extract Management	PXRM EXTRACT MANAGEMENT	This option includes both local and national Extracts. <i>IHS has not defined any extracts at this time.</i>
EP	Extract Parameter Management	PXRM EXTRACT PARAMETERS	This option allows display and edit of extract parameters for a reminder extract.
EF	Extract Finding Management	PXRM EXTRACT FINDINGS	This option allows creation of extract finding rules used in the extract process.
EG	Extract Finding Group Management	PXRM EXTRACT GROUPS	This option allows creation of extract finding groups used in the extract process.
LR	List Rule Management	PXRM LIST RULE MANAGEMENT	This option allows creation of list rules that can be used in patient list creation. Nationally released list rules are the basis of the reminder extract process.  There are three types of list rule. Finding Rules identify patients with reminder term findings. Patient List Rules identify patients belonging to reminder patient lists. Rule sets contain Finding rules and Patient List rules and the logic to create patient lists by adding, selecting or removing patients collected by the component finding or patient list rules.

## 16.2 Reminder Extract Management

```

Select Reminder Extract Menu Option: ma Reminder Extract Management

Extract/Transmission Mgmt.      Apr 21, 2004@16:27:10      Page: 1 of 1
Available Extract Parameters:

Item Extract Type                Class
1 BP Reading                     LOCAL
2 JG-DEMO BP READINGS           LOCAL
3 VA-IHD QUERI                  NATIONAL
4 VA-MH QUERI                   NATIONAL

EPM Extract Parameter Management      QU Quit
VSE View/Schedule Extract

Select Item: Quit// 3
Select Action: (EPM/VSE): VSE// Examine/Schedule Extract
Examine/Schedule Extract      Apr 21, 2004@16:30:14      Page: 2 of 4

Extract Type: VA-IHD QUERI
Next Extract Period: M6/2001
Scheduled to Run:                View: Creation Date Order

+Item      Extract Summary      Date Created      Transmission Date      Auto
1 VA-      QUERI 2004 M2        02/18/2004@15:04:14  03/03/2004@11:41:19  N
2 VA-      QUERI 2004 M1        02/18/2004@15:04:02  Not Transmitted      N
3 VA-      QUERI 2001 M6/12    02/17/2004@16:00:02  Not Transmitted      N
4 VA-      QUERI 2001 M6/11    02/17/2004@12:33:34  02/17/2004@12:34:28  N
5 VA-      QUERI 2001 M6/10    12/08/2003@16:23:20  Not Transmitted      N
6 VA-      QUERI 2001 M1/05    12/08/2003@16:20:56  Not Transmitted      N
7 VA-      QUERI 2001 M1/04    11/26/2003@09:48:38  Not Transmitted      N
8 VA-      QUERI 2001 M1/03    11/24/2003@12:55:54  Not Transmitted      N
9 VA-      QUERI 2001 M6/09    10/07/2003@14:52:06  11/24/2003@11:59:51  N
10 VA-     QUERI 2001 M6/08    10/02/2003@13:06:31  Not Transmitted      N
11 VA-     QUERI 2001 M6/07    10/02/2003@13:05:06  Not Transmitted      N
ES Summary      MT Manual Transmission      Quit
Select Next Screen// NEXT SCREEN
ES Extract Summary      MI Manual transmission      QU Quit

SELECT ITEM: NEXT SCREEN//NEXT SCREEN

```

Figure 16-1: Using Reminder Extract Management

### 16.2.1 Available Actions

- CV Change View: Toggle view of extract summaries between creation date order and extract period order.
- ES Extract Summary: Display reminder and finding totals for extract summary. Also displays patient list with option to print Health Summary.

- ME Manual Extract: Initiate a new extract for a selected period with option to transmit.
- MT Manual Transmission: Initiate a transmission or retransmission of an existing extract summary.
- TH Transmission History: Display transmission history and HL7 message ID's for an existing extract.
- Extract Parameter Management: This option is shown in the following screen captures.



Extract/Transmissions Mgmt. Jan 28, 2003@11:31:30		Page: 1 of
Available Extract Parameters:		
Item	Extract Type	Class
1	VA-IHD QUERI	NATIONAL
2	VA-MH QUERI	NATIONAL
+ Next Screen      - <u>Prev</u> Screen      ?? More Actions		
EPM	Extract Parameter Management	QU Quit
VSE	View/Schedule Extract	
Select Item: Quit// <u>epm</u> Extract Parameter Management		
Select (s): (1-2): 1		
ED	Edit Extract Parameter	QU Quit
Extract Name: VA-IHD QUERI      Number:1 Class: NATIONAL Extract Type: COMPLIANCE AND FINDING TOTALS Reporting Period MONTHLY Last Reporting Period: M5/2001 Next Reporting Period: M6/2001 Last Run Date: JAN 9,2003      14:48		
Extract Sequence: 001		
-----		
Patient List:		
VA-*IHD QUERI <u>yyyy Mnn</u> PTS WITH QUALIFY VISIT EDEdit Extract		
Parameter      QU      Quit		
Select Item(s): Next Screen//      NEXT SCREEN		
Rule Set: VA-*IHD QUERI PTS WITH QUALIFY VISIT Description: IHD patients with a qualifying visit.		
List Rules:		
001	VA-*IHD QUERI DIAGNOSIS	ADD PATIENT
Description: Patients with IHD diagnosis in past 5 years.		
Rule Type: FINDING RULE Reminder		
Term: IHD DIAGNOSIS		
Start Date: RSTART-5Y		
002	VA-*IHD QUERI QUALIFYING VISIT	SELECT PATIENT Description:
Patients with visit to EPRP locations in report period.		
Rule Type: FINDING RULE		
Reminder Term: IHD QUERI		
QUALIFYING ENCOUNTER		
Start Date: RSTART		
End Date: REND		

Figure 16-3: Extract/Transmissions – Part 2

Extract/Transmissions Mgmt. Jan 28, 2003@11:31:30		Page: 1 of
Available Extract Parameters:		
Item	Extract Type	Class
1	VA-IHD QUERI	NATIONAL
2	VA-MH QUERI	NATIONAL
+ Next Screen      - <u>Prev</u> Screen      ?? More Actions		
EPM	Extract Parameter Management	QU Quit
VSE	View/Schedule Extract	
Select Item: Quit// <u>epm</u> Extract Parameter Management		
Select (s): (1-2): 1		
ED	Edit Extract Parameter	QU Quit
Extract Name: VA-IHD QUERI      Number:1 Class: NATIONAL Extract Type: COMPLIANCE AND FINDING TOTALS Reporting Period MONTHLY Last Reporting Period: M5/2001 Next Reporting Period: M6/2001 Last Run Date: JAN 9,2003      14:48		
Extract Sequence: 001		
-----		
Patient List:		
VA-*IHD QUERI <u>yyyy Mnn</u> PTS WITH QUALIFY VISIT EDEdit Extract		
Parameter      QU      Quit		
Select Item(s): Next Screen//      NEXT SCREEN		
Rule Set: VA-*IHD QUERI PTS WITH QUALIFY VISIT Description: IHD patients with a qualifying visit.		
List Rules:		
001	VA-*IHD QUERI DIAGNOSIS	ADD PATIENT
Description: Patients with IHD diagnosis in past 5 years.		
Rule Type: FINDING RULE Reminder		
Term: IHD DIAGNOSIS		
Start Date: RSTART-5Y		
002	VA-*IHD QUERI QUALIFYING VISIT	SELECT PATIENT Description:
Patients with visit to EPRP locations in report period.		
Rule Type: FINDING RULE		
Reminder Term: IHD QUERI		
QUALIFYING ENCOUNTER		
Start Date: RSTART		
End Date: REND		

Figure 16-4: Extract Parameter Management – Part 3

```

ED  Edit Extract Parameter          QU  Quit
Select Item(s): Next Screen//      NEXT SCREEN

003 VA-*IHD QUERI AMI DIAGNOSIS WITHIN 60 DAYS      REMOVE PATIENT
Description: Patients with Inpatient AMI Diagnosis within 60 days.
Rule Type:      FINDING RULE
Reminder Term:  IHD AMI DIAGNOSIS WITHIN 60 DAYS

004 VA-*IHD QUERI ASSOCIATE PRIMARY CARE STATION    ADD FINDING
Description: Associate primary facility.
Rule Type:      FINDING RULE
Reminder Term:  IHD STATION CODE

Extract Reminders and Related Finding Total Rule:

001 Reminder:  VA-IHD LIPID PROFILE
Finding Rule:  VA-IHD LIPID PROFILE FINDINGS

001 Finding Group: VA-IHD PATIENT
ED  Edit Extract Parameter          QU  Quit
Select Item(s): Next Screen//      NEXT SCREEN

Most recent finding patient counts for TOTAL patients
Terms: IHD DIAGNOSIS
      UNCONFIRMED IHD DIAGNOSIS

002 Finding Group: VA-IHD LIPID PROFILE
Utilization in period finding counts for TOTAL patients
Terms: LDL
      OUTSIDE LDL <100
      OUTSIDE LDL 100-119
      OUTSIDE LDL 120-129
      OUTSIDE LDL >129
      ORDER LIPID PROFILE HEALTH FACTOR
      OTHER DEFER LIPID PROFILE
      REFUSED LIPID PROFILE

003 Finding Group: VA-IHD LIPID LOWERING MEDS (LLA)
Most recent finding patient counts for APPLICABLE patients
ED  Edit Extract Parameter          QU  Quit
Select Item(s): Next Screen//      NEXT SCREEN

Terms: LIPID LOWERING MEDS
002 Reminder:  VA-IHD ELEVATED LDL
Finding Rule:  VA-IHD ELEVATED LDL FINDINGS

001 Finding Group: VA-IHD PATIENT
Most recent finding patient counts for TOTAL patients
Terms: IHD DIAGNOSIS
      UNCONFIRMED IHD DIAGNOSIS

002 Finding Group: VA-IHD ELEVATED LDL
Utilization in period finding counts for TOTAL patients
Terms: LDL 120-129
      LDL >129
      OUTSIDE LDL <100
      OUTSIDE LDL 100-119
      OUTSIDE LDL 120-129

ED  Edit Extract Parameter          QU  Quit
Select Item(s): Next Screen//      NEXT SCREEN

```

Figure 16-5: Edit Extract Parameter Part 1

```

                                OUTSIDE LDL >129
                                LIPID LOWERING THERAPY MGMT - 2M
                                LIPID LOWERING THERAPY MGMT - 6M
                                REFUSED ELEVATED LDL THERAPY LIPID
                                MEDS CONTRAINDICATED

                                003 Finding Group: VA-IHD LIPID LOWERING MEDS (LLA)
                                Most recent finding patient counts for TOTAL patients
                                Terms: LIPID LOWERING MEDS

Extract Sequence: 002
-----
Patient List:
    VA-*IHD QUERI yyyy Mnn PTS WITH QUALIFY AND ANCHOR VISIT

Rule Set:    VA-*IHD QUERI PTS WITH QUALIFY AND ANCHOR VISIT
Description: IHD patients with qualifying and anchor visits.
ED  Edit Extract Parameter      QU  Quit
Select Item(s): Next Screen//    NEXT SCREEN

List Rules:
001 VA-*IHD QUERI PATIENT LIST (QUALIFY VISIT, NO ANCHOR)  ADD PATIENT
Description:  Patients with qualifying visit from extract sequence 001.
    Rule Type:  PATIENT LIST RULE
    Patient List: VA-*IHD QUERI yyyy Mnn PTS WITH QUALIFY VISIT

002 VA-*IHD QUERI ANCHOR VISIT                                SELECT PATIENT
Description:  IHD QUERI QUALIFYING patient with anchor visit.
    Rule Type:  FINDING RULE
Reminder Term: IHD QUERI ANCHOR ENCOUNTER
    Start Date: RSTART-24M
    End Date:  REEND-13M

    Extract Reminders and Related Finding Total Rule:

    001 Reminder: VA-*IHD LIPID PROFILE REPORTING
ED  Edit Extract Parameter      QU  Quit
Select Item(s): Next Screen//    NEXT SCREEN

    Finding Rule: VA-*IHD LIPID PROFILE REPORT FINDINGS

    001 Finding Group: VA-IHD PATIENT
    Most recent finding patient counts for TOTAL patients
    Terms: IHD DIAGNOSIS
    UNCONFIRMED IHD DIAGNOSIS

    002 Finding Group: VA-IHD LDL
    Most recent finding patient counts for APPLICABLE
    patients
    Terms: LDL <100
    LDL 100-119
    LDL 120-129
    LDL >129
    OUTSIDE LDL <100
    OUTSIDE LDL 100-119
    OUTSIDE LDL 120-129
    OUTSIDE LDL >129
ED  Edit Extract Parameter      QU  Quit
Select Item(s): Next Screen//    NEXT SCREEN
    002 Reminder: VA-*IHD ELEVATED LDL REPORTING
    Finding Rule: VA-*IHD ELEVATED LDL REPORT FINDINGS

```

Figure 16-6: Edit Extract Parameter Part 2

```

Extract Sequence: 003
-----
Patient List:
    VA-*IHD QUERI yyyy Mnn 412 PTS WITH QUALIFY AND ANCHOR VISIT
Rule Set:    VA-*IHD QUERI 412 PTS WITH QUALIFY AND ANCHOR VISIT
Description: IHD 412 patients with qualifying and anchor visits.
List Rules:
001 VA-*IHD QUERI PATIENT LIST (QUALIFY AND ANCHOR) ADD PATIENT
    Description: IHD patients from extract sequence 002.
    Rule Type: PATIENT LIST RULE
    Patient List: VA-*IHD QUERI yyyy Mnn PTS WITH QUALIFY AND ANCHOR VISIT
ED  Edit Extract Parameter      QU  Quit
Select Item(s): Next Screen//   NEXT SCREEN

002 VA-*IHD QUERI 412 DIAGNOSIS SELECT PATIENT
    Description: Patients with 412 diagnosis in past five years.
    Rule Type: FINDING RULE
    Reminder Term: IHD 412 DIAGNOSIS
    Start Date: RSTART-5Y

    Extract Reminders and Related Finding Total Rule:

    001 Reminder: VA-*IHD 412 LIPID
        PROFILE REPORTING
        Finding Rule: VA-*IHD 412 LIPID PROFILE REPORT FINDINGS

    001 Finding Group: VA-IHD 412 PATIENT
        Most recent finding patient counts for TOTAL patients
        Terms: IHD 412 DIAGNOSIS
            UNCONFIRMED IHD DIAGNOSIS

ED  Edit Extract Parameter      QU  Quit
Select Item(s): Next Screen//   NEXT SCREEN

    002 Finding Group: VA-IHD LDL
        Most recent finding patient counts for APPLICABLE patients
        Terms: LDL <100
            LDL 100-119
            LDL 120-129
            LDL >129
            OUTSIDE LDL <100
            OUTSIDE LDL 100-119
            OUTSIDE LDL 120-129
            OUTSIDE LDL >129

    002 Reminder: VA-*IHD 412 ELEVATED LDL REPORTING
        Finding Rule: VA-*IHD 412 ELEVATED LDL REPORT FINDINGS

Extract Sequence: 004
-----
Patient List:
ED  Edit Extract Parameter      QU  Quit
Select Item(s): Next Screen//   NEXT SCREEN

    VA-*IHD QUERI yyyy Mnn PTS WITH QUALIFY AND ANCHOR VISIT ON LLA MEDS

Rule Set:    VA-*IHD QUERI PTS WITH QUALIFY AND ANCHOR VISIT ON LLA MEDS
Description: IHD patients with anchor and qualifying visits on LLA meds.
List Rules:

```

Figure 16-7: Extract Sequence 003

```

001 VA-*IHD QUERI PATIENT LIST (QUALIFY AND ANCHOR) ADD PATIENT
  Description: IHD patients from extract sequence 002.
  Rule Type: PATIENT LIST RULE
  Patient List: VA-*IHD QUERI yyvy Mnn PTS WITH QUALIFY AND ANCHOR VISIT

002 VA-*IHD QUERI LIPID LOWERING MEDS SELECT PATIENT Description:
  Patients on lipid lowering meds.
  Rule Type: FINDING RULE
  Reminder Term: LIPID LOWERING MEDS
  Start Date: RSTART-90D

ED Edit Extract Parameter          QU Quit
Select Item(s): Next Screen//      NEXT SCREEN

  Extract Reminders and Related Finding Total Rule:

    001 Reminder: VA-*IHD LIPID PROFILE REPORTING
      Finding Rule: VA-*IHD LIPID PROFILE REPORT FINDINGS

      001 Finding Group: VA-IHD PATIENT
        Most recent finding patient counts for TOTAL patients
        Terms: IHD DIAGNOSIS
              UNCONFIRMED IHD DIAGNOSIS

      002 Finding Group: VA-IHD LDL
        Most recent finding patient counts for APPLICABLE patients
        Terms: LDL <100
              LDL 100-119
              LDL 120-129
              LDL >129
              OUTSIDE LDL <100

ED Edit Extract Parameter          QU Quit
Select Item(s): Next Screen//      NEXT SCREEN
                                   OUTSIDE LDL 100-119
                                   OUTSIDE LDL 120-129
                                   OUTSIDE LDL >129

    002 Reminder: VA-*IHD ELEVATED LDL REPORTING
      Finding Rule: VA-*IHD ELEVATED LDL REPORT FINDINGS

Extract Sequence: 005
-----
Patient List:
  VA-*IHD QUERI yyvy Mnn 412 PTS WITH QUALIFY AND ANCHOR VISIT ON LLA MEDS
Rule Set:   VA-*IHD QUERI 412 PTS WITH QUALIFY AND ANCHOR VISIT ON LLA MEDS
Description: IHD 412 patients with anchor and qualifying visits on LLA meds.

List Rules:
001 VA-*IHD QUERI 412 PATIENTS LIST          ADD PATIENT
ED Edit Extract Parameter                    QU Quit
Select Item(s): Next Screen//      NEXT SCREEN

  Description: IHD 412 patients from extract sequence 003.
  Rule Type: PATIENT LIST RULE
  Patient List: VA-*IHD QUERI yyvy Mnn 412 PTS WITH QUALIFY AND ANCHOR VISIT

002 VA-*IHD QUERI LIPID LOWERING MEDS
  SELECT PATIENT Description:
  Patients on lipid lowering meds.
  Rule Type: FINDING RULE Reminder
  Term:      LIPID LOWERING MEDS
  Start Date: RSTART-90D

```

Figure 16-8: Extract Sequence

```

Extract Reminders and Related Finding
Total Rule:

001 Reminder: VA-*IHD 412 LIPID PROFILE REPORTING
Finding Rule: VA-*IHD 412 LIPID PROFILE REPORT FINDINGS

001 Finding Group: VA-IHD 412 PATIENT
Most recent finding patient counts for TOTAL patients
ED Edit Extract Parameter QU Quit
Select Item(s): Next Screen// NEXT SCREEN

Terms: IHD 412 DIAGNOSIS
UNCONFIRMED IHD DIAGNOSIS

002 Finding Group: VA-IHD LDL
Most recent finding patient counts for APPLICABLE patients
Terms: LDL <100
LDL 100-119
LDL 120-129
LDL >129
OUTSIDE LDL <100
OUTSIDE LDL 100-119
OUTSIDE LDL 120-129
OUTSIDE LDL >129

002 Reminder: VA-*IHD 412 ELEVATED LDL REPORTING
Finding Rule: VA-*IHD 412 ELEVATED LDL REPORT FINDINGS

ED Edit Extract Parameter QU Quit
Select Item(s): Next Screen// NEXT SCREEN

Display/Edit Extract Parameter Jan 28, 2003@11:32:24 Page: 17 of 17
+

Edit History
-----
Edit Date: NOV 22, 2002 16:29 Edit By: CRPROVIDER, THREE Edit Comments:
+ Next Screen - Prev Screen ?? More Actions
ED Edit Extract Parameter QU Quit
Select Item(s): Quit// Quit

```

Figure 16-9: Last part of extract sequence

## 16.3 Manual Extract

This allows an extract to be run for a selected period. Normally this will not affect the automatic run.

```

Select Item: Next Screen// me Manual Extract
Select EXTRACT PERIOD: Q2/2000// Q2/2005
WARNING -This period is not complete until 6/30/2005
Are you sure you want to run a VA-IHD QUERI extract for Q2 2005: N//YES
Transmit extract results to AAC: N//

```

However, if the extract period is the same as the next automatic extract, the manual extract may replace the automatic extract.

Example:

```

Select Item: Next Screen//ME Manual Extract
Select EXTRACT PERIOD: Q2/2005// <Enter>

```

```
Are you sure you want to run a VA-IHD QUERI extract for Q2 2005: N//YES
Transmit extract results to AAC : N//YES
Does this extract replace the scheduled extract: N//<Enter>
```

This updates the next extract period in the extract parameters #810.2.

## 16.4 Transmission History

This displays the transmission times and individual HL7 messages and statuses for the selected extract summary.

```
Extract Transmission History Jun 28, 2004@10:32:08 Page: 1 of 1
Extract Summary Name: VA-IHD QUERI 2004 Q2
Date Created: 05/16/2004@16:55:49
-----
HL7 Message ID      Date Transmitted      Transmission Status
66637692            06/26/2004@16:46:50  Completed
-----
+ Next Screen      - Prev Screen      ?? More Actions
Select Action:Quit//
```

## Appendix A: Q&A – Helpful Hints

**Q:** What is a National Reminder?

**A:** National reminders are Clinical Reminders and reminder dialogs that have gone through an approval process for national distribution. Some national reminders are related to statutory, regulatory, or Central Office mandates such as Hepatitis C, MST, or Pain. Other national reminders are being developed under the guidance of the VA Clinical Practice Guideline Council.

Guideline-related reminders are being developed for two reasons:

1. To provide reminders for sites that don't have reminders in place for a specific guideline (such as, HTN, HIV).
2. To provide a basic set of reminders to all sites to improve clinical care, and also allow roll-up data for measurement of guideline implementation and adherence (such as, IHD, Mental Health).

Most of the VA- and VA\*- national reminders previously distributed are being rescinded with Version 2.0 of Clinical Reminders. The installation will rename these with a ZZ prefix.

**Q:** Are there restrictions on the drugs we can order?

**A:** Check with your local VA site regarding the formulary medication choices available for lipid management.

**Q:** Is there any way to do a reminder report on an individual finding item? We want to add a check box that indicates depression is a new diagnosis. Is there a way to do a reminder report just on that one finding that will tell us how many of the patients that were seen for which this was applicable?

**A1:** Set up a local reminder with that one finding as a resolution finding. Define the reminder USAGE field as Reports, and then it will not appear on the cover sheet.

**A2:** Put the finding in the reminder, make the frequency 1 day, and put an OR for the resolution logic and AND for the COHORT logic. This will provide output in the CM or health summary that gives the date it was last done. Therefore, not only is a list of folks who have the finding provided, but also when it was entered.

**Q:** We started receiving multiple PXRМ errors in the error trap today. A user queued three clinical reminder reports on 1/13/04 beginning at 3pm. This a.m. the FBOT reminder was edited. A finding item was deleted from the cohort and resolution logic. The person who updated the reminder did not disable the reminder. Could the fact the reminder was not disabled before it was edited, cause the errors to be generated?

We should be able to make changes to the reminders without affecting reports that are already running or are queued to run. What caused this problem to occur, editing the reminder without disabling it first or is there a software problem that needs to be fixed?

**A:** A clinical reminder is a basically a file setup/definition for a search logic. When the reports are queued, the code sets variables for this search logic and also makes dynamic lookups into the file setup. So if the file setup/logic is edited while the process is running, then executing code in the stack is looking for data (also known as, definition) which no longer exists or has been changed. The result is undefined errors.

Recommendations:

1. For users with the ability to queue reminder reports/searches, only allow queuing starting Friday afternoon. Then do not edit any reminders from Friday afternoon until Monday morning. Most reminder reports should finish in this timeframe.
2. If a user needs to run the report before the weekend. Then make a copy of the reminder and run the report off the copy. Then edits could be made to the original reminder definition without affecting the running process. The report will reflect the logic/findings of the copy.

### Forced Value in Dialogs

**Q:** We have an element that has a single ICD code in it and whenever this template is used, we want this ICD code to be entered and for it to automatically go in as the primary diagnosis. We can get the ICD code to be automatically entered, but cannot seem to create a forced value prompt from the PXRМ PRIMARY DIAGNOSIS prompt that works correctly. If I set the forced value to PRIMARY or to PRIMARY DIAGNOSIS, it does not seem to work and the diagnosis is always recorded as the secondary diagnosis.

Here is the element:

```

NAME: TX V CODE FOR TB SCREENReplace
DISABLE:
CLASS: LOCAL// SPONSOR:
REVIEW DATE: RESOLUTION TYPE: ORDERABLE ITEM: FINDING ITEM: V74.1//
DIALOG/PROGRESS NOTE TEXT:
Enter ICD Code for "Screening for TB" (V code for checkout)
Edit? NO// y YES

ICD Code for "Screening for TB" (V code for checkout)

ALTERNATE PROGRESS NOTE TEXT: No existing text
Edit? NO//
EXCLUDE FROM PROGRESS NOTE: YES// SUPPRESS CHECKBOX: SUPPRESS// Select
ADDITIONAL FINDINGS:
RESULT GROUP/ELEMENT: Select SEQUENCE: 5//
SEQUENCE: 5//

```

```

ADDITIONAL PROMPT/FORCED VALUE: PXRМ PRIMARY DIAGNOSIS
//
OVERRIDE PROMPT CAPTION: START NEW LINE:
EXCLUDE FROM PN TEXT: YES// REQUIRED: NO//
Select SEQUENCE:
Input your edit comments. Edit? NO//

```

Here is the forced value that does not work:

```

Forced value NAME: ICD PRIMARY DIAGNOSIS Replace
DISABLE Forced value: CLASS: LOCAL// SPONSOR:
REVIEW DATE:
FORCED VALUE: PRIMARY//
RESTRICTED TO FINDING TYPE: POV//

```

**A:** Here's an undocumented feature. If you want the Primary diagnosis to automatically be populated, define a Prompt as below and apply it to the appropriate dialog element.

```

Forced value NAME: FORCE PRIMARY DIAGNOSIS Replace
DISABLE Forced value: CLASS: LOCAL// SPONSOR:
REVIEW DATE:
FORCED VALUE: 1// << Value of 1 will set the field TRUE. RESTRICTED TO
FINDING TYPE: POV//

```

Notes:

(1) Jun 16, 2003@15:52:40 Is this dialog just being used as a TIU template and not as a Reminder dialog ? Let me play with this a bit.

(2) Jun 16, 2003@15:58:31 It is both. Help me out - why would that make a difference?

(3) Jun 16, 2003@16:08:39 Forced value NAME: ICD PRIMARY DIAGNOSIS Replace but in the element.

ADDITIONAL PROMPT/FORCED VALUE: PXRМ PRIMARY DIAGNOSIS  
Wouldn't you put this: ICD PRIMARY DIAGNOSIS above?

(4) Right - I had to take out the one that did not work ICD PRIMARY DIAGNOSIS and put back in the national one so that the nurses could check the box for primary diagnosis - I'd strongly prefer that they not have to even see or check that box from PXRМ PRIMARY DIAGNOSIS - hence the attempt to make it default/force the value to primary.

Here's a FORCE Primary Dx from our account that seems to work:

```

Forced value NAME: FORCE PRIMARY DIAGNOSIS Replace
DISABLE Forced value:
CLASS: LOCAL// SPONSOR:
REVIEW DATE:

```

```
FORCED VALUE: 1// << Value of 1 will set the field TRUE. RESTRICTED TO
FINDING TYPE: POV//
```

I tested the Primary DX prompt on my account and it does identify the dx in the encounter box without any user intervention as Primary.

(5) Thanks - how did you know to use a '1'? - I could not find that in any documentation.

(6) We had one in our account. I guess we can call this an undocumented feature.

**Q:** When Clinical Maintenance is run on a reminder that is applicable due to a problem list entry, why is today's date pulled rather than the date of problem list entry?

**A:** There are two dates associated with ICD9 diagnoses found in PROBLEM LIST. There is the date entered and the date last modified. The PRIORITY field is used to determine if a problem is chronic or acute. If the problem is chronic, Clinical Reminders will use today's date in its date calculations; otherwise it will use the date last modified. Problems that are "chronic" can never expire. Note that it only uses active problems unless the field USE INACTIVE PROBLEMS is yes.

**Q:** Can I use a drug for patient cohort logic? I thought that I could, but then I tried the drug and use the logic of and it shows that the patient is not applicable for this reminder.

**A:** You can use a DC or Drug Class as a finding as I've done on the reminder for Beta Blocker after an acute MI. Here's what it looks like:

```
Select Reminder Definition: v1-beta BLOCKER AFTER MI LOCAL Select one of the
following:
A All reminder details
G General
B Baseline Frequency
F Findings
L Logic
D Reminder Dialog
W Web Addresses Select section to edit: f Findings Findings
Choose from:
DC CV100 <---- That one right there!!!! HF ACTIVE OUTSIDE RX FOR BETA
BLOCKER
HF INACTIVATE BETA BLOCKER AFTER ACUTE MI RT LOW PULSE
RT LOW SYSTOLIC BP TX ASTHMA
TX HEART BLOCKS
TX PRO-ACUTE MYOCARDIAL INFARCTION

Select FINDING:
```

**Q:** Allocation Errors. The user errored-out while running a clinical reminder in the EHR.

```

$ZE= ETRAP+4^XWBTCP:1, %DSM-E-ALLOC, allocation failure
S XWBERC=$$EC^%ZOSV,XWBERR=$C(24)_ "M ERROR=" _XWBERC_$C(13,10)_ "LAST
REF=" _$$LG
R^%ZOSV_$C(4)
Last Global Ref: ^PXRMD(801.41,570,1)

```

**A:** It seems that two nodes were configured below the standard partition size. Once the partition size parameters were updated and the nodes re-booted, errors stopped.

**Q:** Frequency Problem: Why is this Reminder not due as expected? Rank Frequency (as relates to this problem) appears to be correct:

```

1 Colonoscopy taxonomy (resolves 10 yr)
2 Colonoscopy Done Elsewhere (resolves 10 yr)
6 FOBT taxonomy (for lab test) (resolves 1 yr)
*****
This particular patient shows:
STATUS --DUE DATE-- --LAST DONE--
Resolved 8/13/2011 8/13/2001
*****
8/13/2001 Laboratory test: Blood Occult feces; value - Neg
11/10/1999 (E) Health Factor: COLONOSCOPY ELSEWHERE
*****

```

We expect to see a DUE DATE of 11/10/2009 - 10 yrs. from the Colonoscopy. Instead, he shows 10 years from the Lab Test date of 8/13/2001.

**A:** For each item that had a Rank Frequency within the Reminder, make sure there is an Effective Period and for each element with Rank Frequency, put in the Minimum Age field even though it's the same as the Baseline Frequency. Once those were entered, the reminder works beautifully, calculating the correct date. So, now we know to enter all the fields applicable if a Rank Frequency is entered, even if it appears to be duplication of information.

**Q:** I have been asked about when viewing the CPRS GUI cover sheet, Clinical Reminders have statuses of DUE NOW and some have just dates. I understand the status of Due Now but am unsure as to why the due dates appear instead of Due Now.

Clinicians are stating it is confusing to them when viewing the Cover Sheet, because they overlook the due dates and only process the Due Now's. Can someone please shed a little light on this, so I may explain to the clinical staff?

**A:** The Date due column in elementary form is calculated with the date that the reminder was last satisfied and the Baseline frequency of the reminder. There are a number of factors that can affect the DUE DATE as the complexity of the reminder grows, but this is a basic definition. If the reminder was never satisfied, then the Due Date cannot be calculated, and therefore, the system displays DUE NOW.

**Q:** Our Director of Managed Care runs reminder reports every month on 20 Clinical Reminders on his providers and also provides info for the teams, and so on.

We have run into a problem, particularly with the HTN Reminders. They are based on BP > 160/100. The reminder resolves based on intervention health factors, but gets re-triggered if BP is over threshold.

This is the problem. Reports are run monthly, if the Primary Care Provider addressed the reminder on the 15th of the month, and the patient is seen in the ER on the 29th. And on the 29th the BP is over threshold. When the report is run, it shows as patient is due, thus counting against the provider even though they had addressed it on the 15th.

Have any other sites run into a similar problem and what have you done about it?

**A:** We run ours monthly also, but what I have done is to take the some of the reminders that are displayed to users in CPRS and copy them to use as reporting reminders only. Then I can change the frequency due or the effective period slightly to make them better for reporting. For example, because so many diagnoses of COPD are inaccurate, the reminder displayed to users looks back 2 years but for reporting, we only look back one year. For yearly interventions, I have the reporting reminders actually due only every 13 months - that way if they saw the pt. at the beginning of December and the reminder was not due yet but became due at the end of December, then I do not penalize them when running the report for December.

**Q:** I would like to have the ICD9 and procedure codes displayed as choices in a clinical reminder dialog for a current visit just like they are displayed when you have the Codes (e.g. Immunization Codes) displayed for the Historical visits.

I have placed an element in my dialog with the Taxonomy for Influenza. However, I cannot get them to display like they are displayed for a historical visit (procedure). I put in the TX Immunization codes and then tried to edit under DI - I changed the Dialog Header test, the current visit DX dialog HDR, the Historical Visit DX Dialog Hdr, etc. I also added the selectable procedure codes.

Does anyone know how we can force this to occur for current diagnoses and procedures?

**A:** If you have a TX finding item in a dialog, then you should be prompted for both current and historical entries unless the dialog parameters are disabled. Suggest you check PROCEDURE and DIAGNOSIS finding parameters are enabled as follows:

```
Select Dialog Parameters Option: fp General Finding Type Parameters
Selection List Jan 16, 2003@13:27:54 Page: 1 of 1
Finding Type Parameters

Item Finding Type Parameter
```

```

1  PROCEDURE (CPT)
2  EDUCATION TOPIC
3  EXAM
4  HEALTH FACTOR
5  IMMUNIZATION
6  ORDERABLE ITEM
7  DIAGNOSIS (POV)
8  SKIN TEST
9  VITAL MEASUREMENT

+ Next Screen - Prev Screen?? More Actions >>> PT List/Print All  QU
  Quit
Select Item: Quit// 1

Finding Type Parameter List  Jan 16, 2003@13:28:06  Page: 1 of 1
FINDING TYPE PARAMETER NAME: CPT - Procedure (Taxonomy)

Resolution Status  Prefix//Suffix & Prompts/Values/Actions  Status
-----
1  DONE AT ENCOUNTER /  Enabled

/done.
1] PXRМ QUANTITY
2] PXRМ COMMENT

2  DONE ELSEWHERE (HISTORICAL)/  Enabled

/Previously done.
1] PXRМ QUANTITY
2] PXRМ VISIT DATE
3] PXRМ OUTSIDE LOCATION
4] PXRМ COMMENT
+ Next Screen - Prev Screen ?? More Actions
INQ      Inquiry/Print      QU Quit
Select number of Resolution Status to Edit: Quit//

```

**Q:** Which takes precedence: finding modifiers on terms or finding modifiers in the reminder definition?

**A:** In most cases a finding modifier on a term takes precedence over the modifier in the definition. An exception to this is the Occurrence Count. The reason for this can be understood by looking at an example. Let's say a term has been mapped to three findings with an Occurrence Count of 1 for finding 1, 2 for finding 2, and 3 for finding 3. If the maximum number of occurrences is found for each finding then how do you determine how many occurrences to display? In this case we would have 6 occurrences so we have the possibility of displaying anywhere between 1 and 6 of them. The solution is to display the number of occurrences specified at the definition level.

**Q:** How do you add a Finding item twice to a reminder? For example in the National HTN reminder for >140/90. Vital Measure measurement is in the logic twice. FI (11) and FI (13) with 2 separate conditions.

```
Finding Item: BLOOD PRESSURE (FI(11)=VM(1)) Finding Type: VITAL MEASUREMENT
Use in Patient Cohort Logic: AND
Condition: I $P(V,"/",1)>139!($P(V,"/",2)>89)
```

```
Finding Item: BLOOD PRESSURE (FI(13)=VM(1)) Finding Type: VITAL MEASUREMENT
Use in Patient Cohort Logic: AND NOT
Condition: I $P(V,"/",1)>160!($P(V,"/",2)>100)
```

**A:** Enter the finding in quotes.

### Reminder Exchange Tip

If you try to exchange a reminder containing a location list from one system to another and there is an inconsistency or mismatch between systems in the AMIS stop code, you will get the following error message. (in this case the system has two selectable entries for stop code 560 - DSS/IRM will correct)

```
REMINDER LOCATION LIST entry NEXUS STOP CODES FY05 is NEW, what do you want
to do?

Select one of the following:
C Create a new entry by copying to a new name
I Install
Q Quit the install
S Skip, do not install this entry
Enter response: i Install
Name associated with AMIS stop code does not match the one in the packed
reminder:
AMIS=560
Site Name=ZZSUBSTANCE ABUSE - GROUP
Name in packed reminder=SUBSTANCE ABUSE - GROUP
The update failed, UPDATE^DIE returned the following error message:
MSG("DIERR")=1^1
MSG("DIERR",1)=701
MSG("DIERR",1,"PARAM",0)=3
MSG("DIERR",1,"PARAM",3)=GYNECOLOGY MSG("DIERR",1,"PARAM","FIELD")=.01
MSG("DIERR",1,"PARAM","FILE")=810.90011
MSG("DIERR",1,"TEXT",1)=The value 'GYNECOLOGY' for field CREDIT STOP TO
EXCLUDE in CREDIT
STOPS TO EXCLUDE SUB-FIELD in CLINIC STOP LIST SUB-FIELD in file REMINDER
LOCATION LIST is not valid.
MSG("DIERR","E",701,1)
REMINDER LOCATION LIST entry NEXUS STOP CODES FY05 did not get installed!
Examine the above error message for reason.
```

## Appendix B: Status Enhancements

The status field in the reminder definition has been modified to work with Reminder terms. Assumptions for the rules for this prompt:

1. The status field will not appear if the term has different types of finding items (for example, Radiology procedure and a drug finding item).
2. If the term contains drug finding items or taxonomies, the user will see the status field, but they will not be able to edit the field if the values in the RX TYPE are different or the Taxonomy types are different.
3. If the Reminder Term contains drugs finding items, the only status that will display will be the status that corresponds to the RX TYPE at the term level. And a blank RX TYPE will be considered as if the user enters “ALL” at the RX TYPE.
4. The Reminder Definition RX TYPE will override the term RX TYPE. So if the user has set up multiple drug finding items in the term and the RX TYPE is set to Inpatient and then they set the RX TYPE at the definition level to Outpatient, the user will only be able to select statuses that correspond to a RX TYPE of Outpatient.

RXTYPE controls the search for medications. The possible RXTYPES are:

- A - All
- I - Inpatient
- N - Non-VA meds
- O - Outpatient

You may use any combination of the above in a comma-separated list. For example I,N would search for inpatient medications and non-VA meds. The default is to search for all possible types of medications. So a blank RXTYPE is equivalent to A.

### Default Statuses

Finding Type Name	Status
Inpatient Pharmacy	active
Outpatient Pharmacy	active, suspended
Orderable Item	active
Problem List	active
Radiology	active

### Non-VA Meds

Changes in the RXTYPE field were made to support the use of non-VA meds in Reminders.

“A” replaces the previous “B”. During the installation of V. 2.0, all “B” values will be changed to “A”. If RXTYPE is null, then it will be treated like an “A”. If RXTYPE includes non-VA meds, they will be searched for automatically, with no changes to the definition or term. This works as follows: Non-VA meds are stored by Pharmacy Orderable item and not by dispense drug; however, a dispense drug entry can have a pointer to the Pharmacy Orderable Item. If the pointer exists and RXTYPE allows it, then a search for the corresponding non-VA med will be made.

### Status List

Version 2 provides a Status List for finding types that have a status:

- Inpatient pharmacy
- Outpatient pharmacy
- Orders
- Problem list
- Radiology

To be true, a finding has to have a status on the list, which is a change from V. 15, where status was not used for drugs. Your reminders that use these finding types may work differently in V. 2.0.

### Pharmacy Statuses

#	Status	Description
*	Wildcard	A wildcard entry allows searches for all statuses.
1	ACTIVE (NOI)	Rx is active – edit, renewal, D/C, copy, refill, partial, and so on, could be done.
2	DATE OF DEATH ENTERED (N)	Rx discontinued because of death.
3	DELETED (O)	Manual delete by the supervisor – same as Rx does not exist; never shown in the profile or reports.
4	DISCONTINUED (NOI)	Any D/C via the backdoor –Manual D/C, D/C due to Renewal, D/C due to duplicate drug, D/C due to Drug- Drug interaction.
5	DISCONTINUED (EDIT) (OI)	Any edit through the backdoor for an active Rx that results in a new Rx will have this set. This will be displayed in the patient profile with status 'DE.'

#	Status	Description
6	DISCONTINUED (RENEWAL) (I)	Any edit through the backdoor for an active Rx that results in a renewal.
7	DISCONTINUED BY PROVIDER (O)	D/C via CPRS by the provider.
8	DONE (O)	Not used.
9	DRUG INTERACTIONS (O)	Pending due to Drug Interactions.
10	EXPIRED (OI)	Expired Rx, copy, partials, D/C are allowed.
11	HOLD (OI)	When a Rx is put on hold, no action is allowed except D/C until it is taken off hold.
12	NON-VERIFIED (I)	CPRS orders completed by a pharmacy tech. (not holding PSORPH key), need verification by a Pharmacist (holder of PSORPH key); Inpatient.
13	NON-VERIFIED (O)	CPRS orders completed by a pharmacy tech. (not holding PSORPH key), need verification by a Pharmacist (holder of PSORPH key); Outpatient.
14	ON CALL (I)	On call via CPRS by the provider.
15	PROVIDER HOLD (O)	On hold via CPRS by the provider.
16	PURGE (I)	Purged Rx.
17	REFILL (O)	Not used.
18	REINSTATED (I)	An active Rx that has been reinstated.
19	RENEWED (I)	An active Rx that has been renewed.
20	SUSPENDED (O)	An active Rx that has a future fill date.

N=Non-VA Meds; O=Outpatient; I=Inpatient

### Editing a Status List

You are prompted for a status only for those findings that have a status.

Example: (under Reminder Definition Management Option R/E Add/Edit Reminder Definition)

```

Select section to edit: Findings

Reminder Definition Findings

Choose from:
DR A AND D OINTMENT 2OZ   Finding #: 2
RT AGP LDL               Finding #: 1

Select FINDING: DR.A

Searching for a DRUG, (pointed-to by FINDING ITEM) A AND D OINTMENT 2OZ
DE350 TUBE
...OK? Yes// (Yes) Editing Finding Number: 2

```

```

FINDING ITEM: A AND D OINTMENT 2OZ// REMINDER FREQUENCY:
MINIMUM AGE: MAXIMUM AGE: RANK FREQUENCY:
USE IN RESOLUTION LOGIC:
USE IN PATIENT COHORT LOGIC: BEGINNING DATE/TIME:
ENDING DATE/TIME: OCCURRENCE COUNT: RXTYPE: A// CONDITION:
CONDITION CASE SENSITIVE: USE COND IN FINDING SEARCH: FOUND TEXT:
No existing text
Edit? NO//
NOT FOUND TEXT:
No existing text
Edit? NO//

Statuses already defined for this finding item: ACTIVE
DATE OF DEATH ENTERED
Select one of the following:

* WildCard
1 ACTIVE (NOI)
2 DATE OF DEATH ENTERED (N)
3 DELETED (O)
4 DISCONTINUED (NOI)
5 DISCONTINUED (EDIT) (OI)
6 DISCONTINUED (RENEWAL) (I)
7 DISCONTINUED BY PROVIDER (O)
8 DONE (O)
9 DRUG INTERACTIONS (O)
10 EXPIRED (OI)
11 HOLD (OI)
12 NON VERIFIED (I)
13 NON-VERIFIED (O)
14 ON CALL (I)
15 PROVIDER HOLD (O)
16 PURGE (I)
17 REFILL (O)
18 REINSTATED (I)
19 RENEWED (I)
20 SUSPENDED (O)

Select a Medication Status from the status list or enter '^' to Quit: 2
DATE OF DEATH ENTERED (N)

Statuses already defined for this finding item: ACTIVE
DATE OF DEATH ENTERED
Select one of the following: A  ADD STATUS
D  DELETE A STATUS
DA DELETE ALL STATUSES S  SAVE AND QUIT
Q  QUIT WITHOUT SAVING CHANGES
Enter response: S SAVE AND QUIT
Removing old Statuses from the file
Adding current status list to the file
Statuses already defined for this finding item:
ACTIVE
DATE OF DEATH ENTERED

Select one of the following:
A  ADD STATUS
D  DELETE A STATUS
DA DELETE ALL STATUSES
S  SAVE AND QUIT
Q  QUIT WITHOUT SAVING CHANGES

```

Enter response:

New reminder status: CNBD for **Can Not Be Determined**.

### Clinical Maintenance display

```
--STATUS-- --DUE DATE-- --LAST DONE--
DEMO REMINDER - WITH GROUP  CNBD  CNBD  01/11/2001
Cohort:
Reminder Term: DEMO HYPERTENSION DIAGNOSIS Encounter Diagnosis:
02/20/1997 401.9 HYPERTENSION NOS rank: SECONDARY Prov. Narr. - UNKNOWN

Resolution: Last done 01/11/2001
Reminder Term: DEMO SYS >90 <131
Vital Measurement: BLOOD PRESSURE
01/11/2001; rate - 120/76

Information:
Reminder Term: DEMO DIS < 80
Vital Measurement: BLOOD PRESSURE
01/11/2001; rate - 120/76

Information about the reminder evaluation:
Patient does not meet any age criteria!
There is no reminder frequency!
```

The “Information about the reminder evaluation:” section is new.

A warning message will be sent when the status can't be determined.

### Example:

```
Subj: Reminder evaluation warnings [#37193] 10/25/04@10:55 5 lines
From: POSTMASTER (Sender: CRPROVIDER,ONE G) In 'IN' basket. Page 1 *New*
----- The
following warnings were encountered:
No reminder frequency - cannot compute due date!
While evaluating reminder JG-DEMO REMINDER
For patient DFN=54
The time of the evaluation was 10/25/2004@10:55:18
Enter message action (in IN basket): Ignore//
```

## Appendix C: Rules of Behavior

The Resource and Patient Management (RPMS) system is a United States Department of Health and Human Services (HHS), Indian Health Service (IHS) information system that is **FOR OFFICIAL USE ONLY**. The RPMS system is subject to monitoring; therefore, no expectation of privacy shall be assumed. Individuals found performing unauthorized activities are subject to disciplinary action including criminal prosecution.

All users (Contractors and IHS Employees) of RPMS will be provided a copy of the Rules of Behavior (RoB) and must acknowledge that they have received and read them prior to being granted access to a RPMS system, in accordance IHS policy.

- For a listing of general ROB for all users, see the most recent edition of *IHS General User Security Handbook* (SOP 06-11a).
- For a listing of system administrators/managers rules, see the most recent edition of the *IHS Technical and Managerial Handbook* (SOP 06-11b).

Both documents are available at this IHS Web site: <http://security.ihs.gov/>.

The ROB listed in the following sections are specific to RPMS.

### C.1 All RPMS Users

In addition to these rules, each application may include additional RoBs that may be defined within the documentation of that application (e.g., Dental, Pharmacy).

#### C.1.1 Access

RPMS users shall

- Only use data for which you have been granted authorization.
- Only give information to personnel who have access authority and have a need to know.
- Always verify a caller's identification and job purpose with your supervisor or the entity provided as employer before providing any type of information system access, sensitive information, or nonpublic agency information.
- Be aware that personal use of information resources is authorized on a limited basis within the provisions *Indian Health Manual* Part 8, "Information Resources Management," Chapter 6, "Limited Personal Use of Information Technology Resources."

RPMS users shall not

- Retrieve information for someone who does not have authority to access the information.
- Access, research, or change any user account, file, directory, table, or record not required to perform their *official* duties.
- Store sensitive files on a PC hard drive, or portable devices or media, if access to the PC or files cannot be physically or technically limited.
- Exceed their authorized access limits in RPMS by changing information or searching databases beyond the responsibilities of their jobs or by divulging information to anyone not authorized to know that information.

### C.1.2 Information Accessibility

RPMS shall restrict access to information based on the type and identity of the user. However, regardless of the type of user, access shall be restricted to the minimum level necessary to perform the job.

RPMS users shall

- Access only those documents they created and those other documents to which they have a valid need-to-know and to which they have specifically granted access through an RPMS application based on their menus (job roles), keys, and FileMan access codes. Some users may be afforded additional privileges based on the functions they perform, such as system administrator or application administrator.
- Acquire a written preauthorization in accordance with IHS policies and procedures prior to interconnection to or transferring data from RPMS.

### C.1.3 Accountability

RPMS users shall

- Behave in an ethical, technically proficient, informed, and trustworthy manner.
- Log out of the system whenever they leave the vicinity of their personal computers (PCs).
- Be alert to threats and vulnerabilities in the security of the system.
- Report all security incidents to their local Information System Security Officer (ISSO)
- Differentiate tasks and functions to ensure that no one person has sole access to or control over important resources.
- Protect all sensitive data entrusted to them as part of their government employment.

- Abide by all Department and Agency policies and procedures and guidelines related to ethics, conduct, behavior, and information technology (IT) information processes.

### C.1.4 Confidentiality

RPMS users shall

- Be aware of the sensitivity of electronic and hard copy information, and protect it accordingly.
- Store hard copy reports/storage media containing confidential information in a locked room or cabinet.
- Erase sensitive data on storage media prior to reusing or disposing of the media.
- Protect all RPMS terminals from public viewing at all times.
- Abide by all Health Insurance Portability and Accountability Act (HIPAA) regulations to ensure patient confidentiality.

RPMS users shall not

- Allow confidential information to remain on the PC screen when someone who is not authorized to that data is in the vicinity.
- Store sensitive files on a portable device or media without encrypting.

### C.1.5 Integrity

RPMS users shall

- Protect their systems against viruses and similar malicious programs.
- Observe all software license agreements.
- Follow industry standard procedures for maintaining and managing RPMS hardware, operating system software, application software, and/or database software and database tables.
- Comply with all copyright regulations and license agreements associated with RPMS software.

RPMS users shall not

- Violate federal copyright laws.
- Install or use unauthorized software within the system libraries or folders.
- Use freeware, shareware, or public domain software on/with the system without their manager's written permission and without scanning it for viruses first.

### C.1.6 System Logon

RPMS users shall

- Have a unique User Identification/Account name and password.
- Be granted access based on authenticating the account name and password entered.
- Be locked out of an account after five successive failed login attempts within a specified time period (e.g., one hour).

### C.1.7 Passwords

RPMS users shall

- Change passwords a minimum of every 90 days.
- Create passwords with a minimum of eight characters.
- If the system allows, use a combination of alpha-numeric characters for passwords, with at least one uppercase letter, one lower case letter, and one number. It is recommended, if possible, that a special character also be used in the password.
- Change vendor-supplied passwords immediately.
- Protect passwords by committing them to memory or store them in a safe place (do not store passwords in login scripts or batch files).
- Change passwords immediately if password has been seen, guessed, or otherwise compromised, and report the compromise or suspected compromise to their ISSO.
- Keep user identifications (IDs) and passwords confidential.

RPMS users shall not

- Use common words found in any dictionary as a password.
- Use obvious readable passwords or passwords that incorporate personal data elements (e.g., user's name, date of birth, address, telephone number, or social security number; names of children or spouses; favorite band, sports team, or automobile; or other personal attributes).
- Share passwords/IDs with anyone or accept the use of another's password/ID, even if offered.
- Reuse passwords. A new password must contain no more than five characters per eight characters from the previous password.
- Post passwords.
- Keep a password list in an obvious place, such as under keyboards, in desk drawers, or in any other location where it might be disclosed.

- Give a password out over the phone.

### C.1.8 Backups

RPMS users shall

- Plan for contingencies such as physical disasters, loss of processing, and disclosure of information by preparing alternate work strategies and system recovery mechanisms.
- Make backups of systems and files on a regular, defined basis.
- If possible, store backups away from the system in a secure environment.

### C.1.9 Reporting

RPMS users shall

- Contact and inform their ISSO that they have identified an IT security incident and begin the reporting process by providing an IT Incident Reporting Form regarding this incident.
- Report security incidents as detailed in the *IHS Incident Handling Guide* (SOP 05-03).

RPMS users shall not

- Assume that someone else has already reported an incident. The risk of an incident going unreported far outweighs the possibility that an incident gets reported more than once.

### C.1.10 Session Timeouts

RPMS system implements system-based timeouts that back users out of a prompt after no more than 5 minutes of inactivity.

RPMS users shall

- Utilize a screen saver with password protection set to suspend operations at no greater than 10 minutes of inactivity. This will prevent inappropriate access and viewing of any material displayed on the screen after some period of inactivity.

### C.1.11 Hardware

RPMS users shall

- Avoid placing system equipment near obvious environmental hazards (e.g., water pipes).
- Keep an inventory of all system equipment.

- Keep records of maintenance/repairs performed on system equipment.

RPMS users shall not

- Eat or drink near system equipment.

### C.1.12 Awareness

RPMS users shall

- Participate in organization-wide security training as required.
- Read and adhere to security information pertaining to system hardware and software.
- Take the annual information security awareness.
- Read all applicable RPMS manuals for the applications used in their jobs.

### C.1.13 Remote Access

Each subscriber organization establishes its own policies for determining which employees may work at home or in other remote workplace locations. Any remote work arrangement should include policies that

- Are in writing.
- Provide authentication of the remote user through the use of ID and password or other acceptable technical means.
- Outline the work requirements and the security safeguards and procedures the employee is expected to follow.
- Ensure adequate storage of files, removal, and nonrecovery of temporary files created in processing sensitive data, virus protection, and intrusion detection, and provide physical security for government equipment and sensitive data.
- Establish mechanisms to back up data created and/or stored at alternate work locations.

Remote RPMS users shall

- Remotely access RPMS through a virtual private network (VPN) whenever possible. Use of direct dial in access must be justified and approved in writing and its use secured in accordance with industry best practices or government procedures.

Remote RPMS users shall not

- Disable any encryption established for network, internet, and Web browser communications.

## C.2 RPMS Developers

RPMS developers shall

- Always be mindful of protecting the confidentiality, availability, and integrity of RPMS when writing or revising code.
- Always follow the IHS RPMS Programming Standards and Conventions (SAC) when developing for RPMS.
- Only access information or code within the namespaces for which they have been assigned as part of their duties.
- Remember that all RPMS code is the property of the U.S. Government, not the developer.
- Not access live production systems without obtaining appropriate written access, and shall only retain that access for the shortest period possible to accomplish the task that requires the access.
- Observe separation of duties policies and procedures to the fullest extent possible.
- Document or comment all changes to any RPMS software at the time the change or update is made. Documentation shall include the programmer's initials, date of change, and reason for the change.
- Use checksums or other integrity mechanism when releasing their certified applications to assure the integrity of the routines within their RPMS applications.
- Follow industry best standards for systems they are assigned to develop or maintain, and abide by all Department and Agency policies and procedures.
- Document and implement security processes whenever available.

RPMS developers shall not

- Write any code that adversely impacts RPMS, such as backdoor access, "Easter eggs," time bombs, or any other malicious code or make inappropriate comments within the code, manuals, or help frames.
- Grant any user or system administrator access to RPMS unless proper documentation is provided.
- Release any sensitive agency or patient information.

## C.3 Privileged Users

Personnel who have significant access to processes and data in RPMS, such as, system security administrators, systems administrators, and database administrators, have added responsibilities to ensure the secure operation of RPMS.

Privileged RPMS users shall

- Verify that any user requesting access to any RPMS system has completed the appropriate access request forms.
- Ensure that government personnel and contractor personnel understand and comply with license requirements. End users, supervisors, and functional managers are ultimately responsible for this compliance.
- Advise the system owner on matters concerning information technology security.
- Assist the system owner in developing security plans, risk assessments, and supporting documentation for the certification and accreditation process.
- Ensure that any changes to RPMS that affect contingency and disaster recovery plans are conveyed to the person responsible for maintaining continuity of operations plans.
- Ensure that adequate physical and administrative safeguards are operational within their areas of responsibility and that access to information and data is restricted to authorized personnel on a need-to-know basis.
- Verify that users have received appropriate security training before allowing access to RPMS.
- Implement applicable security access procedures and mechanisms, incorporate appropriate levels of system auditing, and review audit logs.
- Document and investigate known or suspected security incidents or violations and report them to the ISSO, Chief Information Security Officer (CISO), and systems owner.
- Protect the supervisor, superuser, or system administrator passwords.
- Avoid instances where the same individual has responsibility for several functions (i.e., transaction entry and transaction approval).
- Watch for unscheduled, unusual, and unauthorized programs.
- Help train system users on the appropriate use and security of the system.
- Establish protective controls to ensure the accountability, integrity, confidentiality, and availability of the system.
- Replace passwords when a compromise is suspected. Delete user accounts as quickly as possible from the time that the user is no longer authorized system. Passwords forgotten by their owner should be replaced, not reissued.

- Terminate user accounts when a user transfers or has been terminated. If the user has authority to grant authorizations to others, review these other authorizations. Retrieve any devices used to gain access to the system or equipment. Cancel logon IDs and passwords, and delete or reassign related active and backup files.
- Use a suspend program to prevent an unauthorized user from logging on with the current user's ID if the system is left on and unattended.
- Verify the identity of the user when resetting passwords. This can be done either in person or having the user answer a question that can be compared to one in the administrator's database.
- Shall follow industry best standards for systems they are assigned to, and abide by all Department and Agency policies and procedures.

Privileged RPMS users shall not

- Access any files, records, systems, etc., that are not explicitly needed to perform their duties
- Grant any user or system administrator access to RPMS unless proper documentation is provided.
- Release any sensitive agency or patient information.

# Glossary

## **AAC SAS Files**

AAC SAS files contain data that is equivalent to data stored in the Reminder Extract Summary entry in the Reminder Extract Summary file. AAC manages SAS files for use by specifically defined users.

## **Applicable**

The number of patients whose findings met the patient cohort reminder evaluation.

## **Due**

The number of patients whose reminder evaluation is due.

## **Extract Parameter**

Parameters that define how to identify the patient cohort. A national extract entry is defined for each extract process. This entry defines an extract name, how often to automatically run the named extract process, the rules used to identify target patients, what reminders should be run against what patient list, what type of finding counts to accumulate, and where to transmit results.

## **Extract Summary**

An extract summary containing the results of an extract process is created by this process in the Extract Summary File. This Extract Summary entry will help coordinators track the extract process through successful transmission processing by AAC.

## **Extract Run**

A periodic extract job based on the Extract Parameter definition. The extract job creates an entry in the Reminder Extract Summary file. The extract job automatically starts a transmission job to transmit the extract summary data to a queue at the AAC. The successful completion of the Extract Run schedules the next periodic Extract Run.

## **Finding Count Rules**

A Finding Count Rule defines the group of findings to accumulate, the type of finding total, and whether to use the TOTAL or APPLICABLE patient cohorts to calculate finding counts.

## **Finding Group**

Group of Reminder Terms within the Extract Parameter File used for counting purposes.

**Finding Totals**

Totals derived using Finding Count Rules.

**HL7 Transmissions**

HL7 transmission packages contain HL7 messages that are processed between the transmitting system and AAC.

**List Rules**

A List Rule is a set of rules that define which findings shall be used to determine whether a patient should be added or removed from a patient list.

**National Database**

All sites running Mental Health QUERI software transmit their data to a new compliance totals database at the AAC.

**Not Applicable**

The number of patients whose findings did not meet the patient cohort reminder evaluation.

**Not Due**

The number of patients whose reminder evaluation status is not due. Reminder Definitions comprise the predefined set of finding items used to identify patient cohorts and reminder resolutions. Reminders are used for patient care and/or report extracts.

**Reminder Dialog**

Reminder Dialogs comprise a predefined set of text and findings that together provide information to the EHR GUI, which collects and updates appropriate findings while building a progress note.

**Reminder Patient List**

A list of patients that is created from a set of List Rules and/or as a result of report processing. Each Patient List is assigned a name and is defined in the Reminder Patient List File. Reminder Patient Lists may be used as an incremental step to completing national extract processing or for local reporting needs. Patient Lists created from the Reminders Due reporting process are based on patients that met the patient cohort, reminder resolution, or specific finding extract parameters. These patient lists are used only at local facilities.

**Reminder Terms**

Predefined finding items that are used to map local findings to national findings, providing a method to standardize these findings for national use.

**Reminder Totals**

Totals that are accumulated from the reminder evaluation process based on the APPLICABLE, NOT APPLICABLE, DUE, AND NOT DUE statuses.

**Report Reminders**

Reminders may be defined specifically for national reporting. Report Reminders do not have a related Reminder Dialog in the EHR, and are not used by clinicians for patient care. However, Clinical Reminders that are used in the EHR may also be used for national reminder reporting. All reminders targeted for national reporting are defined in Extract Parameters.

**Reporting Period Extract**

The extracts may be for monthly, quarterly, or yearly processing. The extracts are formatted and transmitted to the national database via HL7 messaging using a report format.

**Total**

The total number of patients in a patient list (denominator) based on the criteria defined in the Reminder List Rule file.

**Transmission Run**

The Transmission Run is started automatically by the Extract Run, but may also be manually scheduled. The extract process starts the Transmission Run just before completing the Extract Run. The Transmission Run transmits extract summary data to an AAC queue via HL7 transmissions. This data updates the Reminder Extract Summary entry for the reporting period.

## Acronym List

<b>AAC</b>	Austin Automation Center
<b>AIMS</b>	Abnormal Involuntary Movement Scale
<b>API</b>	Application Programmer Interface
<b>CAC</b>	Clinical Application Coordinator
<b>CPRS</b>	Computerized Patient Record System
<b>DBIA</b>	Database Integration Agreement
<b>EPRP</b>	External Peer Review Program
<b>GUI</b>	Graphical User Interface
<b>HSR&amp;D</b>	Health Services Research and Development
<b>HL7</b>	Health Level 7
<b>IHD</b>	Ischemic Heart Disease
<b>MDD</b>	Major Depressive Disorder
<b>OQP</b>	Office of Quality and Performance
<b>QUERI</b>	Quality Enhancement Research Initiative
<b>SAS</b>	Simple Authentication and Security
<b>SRS</b>	Software Requirements Specifications
<b>VHA</b>	Veterans Health Administration
<b>VISN</b>	Veterans Integrated Service Networks
<b>VISTA</b>	Veterans Health Information System and Technology Architecture

## Contact Information

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

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

**Web:** <http://www.ihs.gov/helpdesk/>

**Email:** [support@ihs.gov](mailto:support@ihs.gov)